

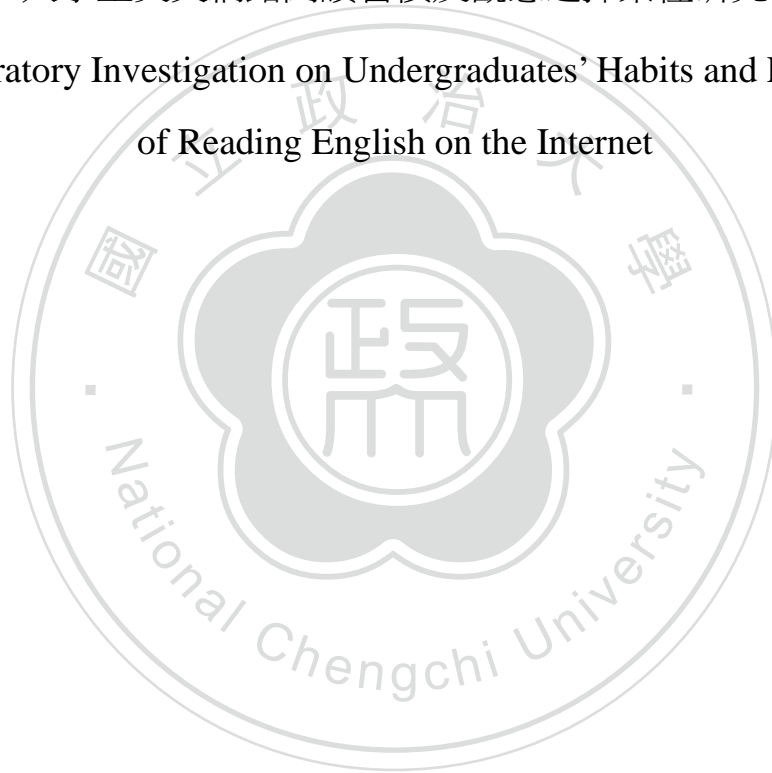
國立政治大學英國語文學系碩士班碩士論文

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大學生英文網路閱讀習慣及觀感之探索性研究

An Exploratory Investigation on Undergraduates' Habits and Perceptions  
of Reading English on the Internet



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of Reading English on the Internet



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## TABLE OF CONTENTS

Acknowledgements.....	iii
List of Tables.....	vi
List of Figures.....	viii
Chinese Abstract.....	ix
English Abstract.....	xi
Chapter One: Introduction .....	1
Background.....	1
Rationales of the Study .....	5
Purpose of the Study .....	7
Research Questions.....	7
Significance of the Study .....	8
Definition of Terms.....	9
Chapter Two: Literature Review.....	12
The Nature of Internet Reading: Features, Disadvantages, and Advantages.....	12
Research on Reading Habits .....	19
Research on Learners' Perceptions of Internet Reading in L2.....	37
Summary .....	47
Chapter Three: Methodology .....	49
Rationale for Research Method .....	49
Participants and Rationale for Participant Recruitment.....	51
Data Collection Procedures.....	54
Data Analysis .....	62
Summary .....	64
Chapter Four: Findings .....	65
EFL Undergraduates' Internet English Reading Habits.....	65
Differences of Online English Reading between Seniors and Freshmen .....	139
Summary .....	146
Chapter Five: Discussions and Conclusions.....	147
Summary of the Major Findings .....	147
Pedagogical Implications .....	162
Limitation of the Study .....	167
Suggestions for Future Research .....	167
Concluding Remarks.....	169
References.....	171

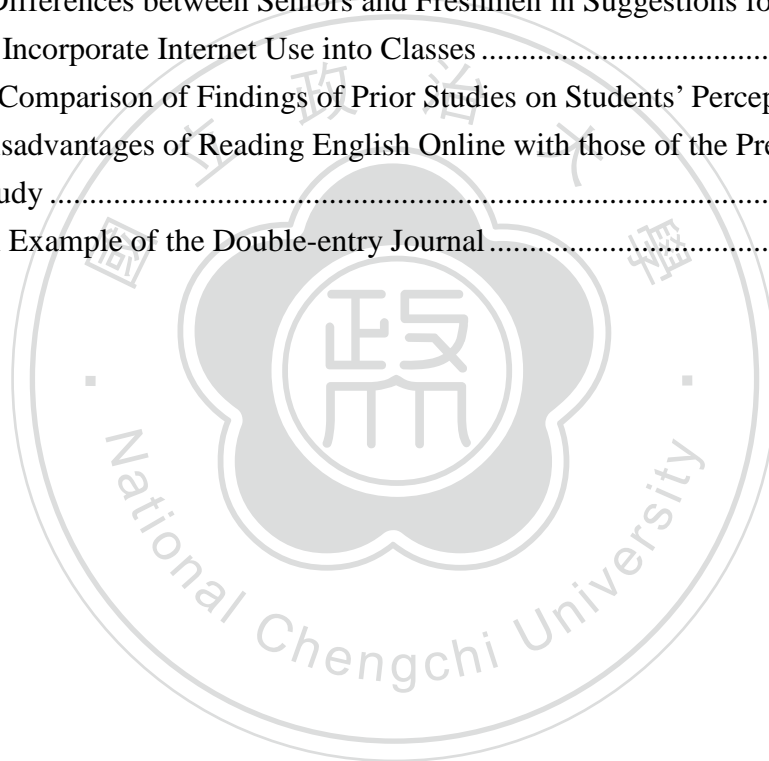
Appendixes .....	179
Appendix A: Participation Consent Form (English Version).....	179
Appendix B: Participation Consent Form (Chinese Version) .....	180
Appendix C: Focus Group Interview Questions (English Version).....	181
Appendix D: Focus Group Interview Questions (Chinese Version).....	182



## LIST OF TABLES

Table 2-1 Comparison of Print Reading and Electronic Reading.....	16
Table 2-2 A Comparison of the Results from Previous Related Studies.....	29
Table 2-3 Chang’s Taxonomy of Internet Reading Behaviors .....	32
Table 2-4 Major Reasons for Reading Online and on Paper .....	35
Table 2-5 A Comparison of Previous Studies on Students’ Perceptions on Reading Different Text Formats .....	42
Table 2-6 A Comparison of Previous Related Studies on Students’ Perceptions on Web-based Learning Programs .....	46
Table 3-1 Focus Group Interview Schedule.....	56
Table 3-2 Ten Interview Questions for Focus Group Interview .....	59
Table 4-1 Students’ Responses to Purposes of Reading English Online .....	66
Table 4-2 Frequency of Types of Internet English Reading Materials .....	75
Table 4-3 Websites for Sources of English Reading Materials for Literature Works ..	76
Table 4-4 Websites for Sources of English Reading Materials for News, Columns, and Editorials .....	77
Table 4-5 Websites for Sources of Multimedia Materials.....	78
Table 4-6 Websites for Blogging.....	78
Table 4-7 Websites for Sources of English Reading Materials for Information about Movies.....	79
Table 4-8 Websites for Sources of English Reading Materials from E-magazines .....	80
Table 4-9 Websites for Sources of English Reading Materials in Fictions.....	80
Table 4-10 Websites for Sources of English Reading Materials from E-newsletters ..	81
Table 4-11 Frequency of Topics of Interest in Internet English Reading Materials ....	82
Table 4-12 Frequency of Reading English Online on a Weekly Basis .....	83
Table 4-13 Factors Influencing the Selection of Internet English Reading Materials ..	87
Table 4-14 Methods to Improve Reading Comprehension While Reading Online .....	97
Table 4-15 Nine Resources of Online Dictionary the Participants Frequently Consult .....	97
Table 4-16 Disadvantages of Reading English Online .....	106
Table 4-17 Advantages of Reading English Online .....	118
Table 4-18 Suggestions for Teachers Intending to Incorporate Internet Use into Classes.....	126
Table 4-19 Differences between Seniors and Freshmen in Purposes of Reading English Online .....	140
Table 4-20 Differences between Seniors and Freshmen in Types of Internet Reading	

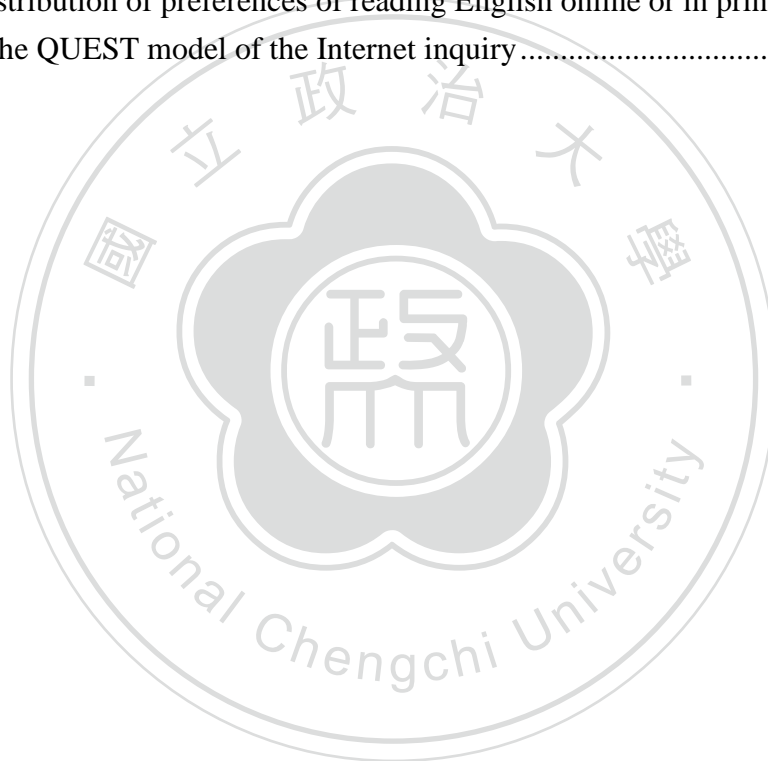
Materials .....	141
Table 4-21 Differences between Seniors and Freshmen in Topics of Interest of Reading Materials .....	141
Table 4-22 Differences between Seniors and Freshmen in Factors affecting the Selection of Internet Reading Materials .....	142
Table 4-23 Differences between Seniors and Freshmen in Methods to Improve Reading Comprehension Online .....	143
Table 4-24 Differences between Seniors and Freshmen in Disadvantages of Reading English Online .....	144
Table 4-25 Differences between Seniors and Freshmen in Advantages of Reading English Online .....	145
Table 4-26 Differences between Seniors and Freshmen in Suggestions for Teachers to Incorporate Internet Use into Classes .....	146
Table 5-1 A Comparison of Findings of Prior Studies on Students' Perceptions of Disadvantages of Reading English Online with those of the Present Study .....	157
Table 5-2 An Example of the Double-entry Journal .....	166





## LIST OF FIGURES

Figure 1. An explanatory model of reading behavior .....	20
Figure 2. An overall picture of the procedures of data collection.....	62
Figure 3. The cached link shown on the result page.....	93
Figure 4. Yahoo! Babel Fish translator .....	100
Figure 5. The function of passage translation provided by Yahoo Mini Pen.....	100
Figure 6. The function of translate this page on Google search engine.....	101
Figure 7. The function of the look-up of words from Yahoo Mini Pen .....	101
Figure 8. The function of the look-up of words by Google Instant Translator.....	102
Figure 9. Distribution of preferences of reading English online or in print .....	124
Figure 10. The QUEST model of the Internet inquiry.....	164



國立政治大學英國語文學系碩士班  
碩士論文提要

論文名稱：大學生英文網路閱讀習慣及觀感之探索性研究

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論文提要內容：

隨著網路的發展，人們的閱讀習慣和閱讀行為一直不斷的進化與改變。過去的研究指出在這數位化的年代，更多的網路閱讀習慣的研究需要再進一步的進行與更新，以便英語教育者更加了解英文學習者如何使用網路幫助他們的英語學習。本研究欲探討大學生如何運用網路幫助他們的英語學習，此研究主要探索大學生英文網路閱讀的習慣以及他們對於英文網路閱讀的觀感。此外，此研究更進一步探討大一學生和大四學生在英文網路閱讀及觀感上是否有差異。

本研究採取質性研究，以北台灣兩所大學為例，參加本研究的學生一共有四十九位學生，分別有二十五位大四英文系學生以及二十四位大一英文系學生。資料收集主要採用焦點團體訪談的方式，以半結構式的訪談方式採訪了十八組學生。學生的訪談資料收集後，將訪談內容轉為逐字稿以進行內容分析。

本研究主要發現，學生上網閱讀英文的主要目的是完成學校作業。學生喜歡在網路上閱讀和課業有關的文章、比較聳動以及容易記住、輕鬆的文章主題（例如：休閒活動和藝術）。學生也喜歡在網路上挑選比較簡短、比較具有信賴度和權威性的文章閱讀。根據網路上各種英語學習資源以及學生所提供的資料來分類，本文中整理出學生經常使用的英文學習網站，以供參考。此外，在網路上閱

讀英文時，學生比較有動機閱讀有多媒體呈現的文章內容。當在網路閱讀英文時，遇到閱讀理解有問題，學生通常利用線上網路字典或是網路即時翻譯的功能，以幫助他們對文章的理解。

學生提出在網路閱讀英文有些缺點，包含缺乏靈活性、容易分心和迷失方向、提供過多的資訊、缺乏人體工學的考量。此外，學生也提出網路閱讀的優點。學生認為在網路閱讀可以讓他們省時、省錢的得到資訊、得到快速更新的資訊以及其他人的觀點、得到不同形式的資訊、與他人溝通、製作自己的閱讀檔案、增進英文學習、同時處理很多事務。學生也提出一些建議給有意願使用網路教學的老師，以便老師能夠了解他們的真正的需求與困難。例如，他們希望老師能夠推薦他們有用的網站、教導他們網路搜尋技巧、並且能夠將網路的使用真正的融入課堂中。

本研究也發現大一學生和大四學生在網路閱讀習慣及觀感最主要的相異之處在於大四學生比大一學生習慣將英文融入他們的日常生活中，以便他們透過網路來增加學習英文環境的機會。此外，大四學生比較能夠有技巧性地運用網路資源，以解決他們在網路閱讀上遇到的問題。相反地，大一學生仍然需要老師教導他們一些技巧來解決在網路上閱讀所遇到的問題，以及教導他們如何分辨可信賴和不可信賴的網站。

希望本研究的發現可以讓教育者瞭解大學生如何使用網路來幫助他們的英語學習，以及網路的使用如何影響他們的閱讀習慣。文末進一步提出相關建議，作為教育學者們教學上的參考。

## English Abstract

With the advancement of the Internet, people's reading habits and behaviors have been evolving and reshaped. Previous studies indicated that more research on reading habits in this digital age is necessary to be further investigated and updated to eke out EFL educators' understanding of EFL learners' uses of the Internet to facilitate their English learning. This study attempts to explore how undergraduate students use the Internet to facilitate their English learning by delving into their habits and perceptions of reading English on the Internet and whether there is any difference between undergraduate freshmen and seniors.

The present study adopted a qualitative research method. The participants are forty-nine EFL English major undergraduates with twenty-five seniors and twenty-four freshmen from two universities in northern Taiwan. The major way to collect data is focus group interviews, which are semi-structured interviews with eighteen focus interview groups of the participating students. The interview data were transcribed in verbatim and analyzed in accordance with content analysis method.

The major findings of the habits of reading English online revealed that the participants basically held positive attitude towards and grew into the habit of reading English on the Internet. They read English online for the purpose of doing schoolwork and they preferred reading contents related to their courses, with light topics such as leisure and art, with sensational and catchy topics, in short length, or with more reliability and authority. The English learning websites that the participants usually went to were also provided for pedagogical references. Moreover, the participants were much more motivated to read English online when the reading contents were accompanied with multimedia. Upon facing reading comprehension problems, they usually turned to online dictionaries or online instant translators to improve their

understanding of the contents they were reading on the Internet.

The students' perceptions of disadvantages of reading online included inflexibility, distraction and disorientation, oversupply of information, and lack of ergonomic concerns. Apart from the disadvantages of reading English on the Internet, the participants put forth a number of valuable merits of reading online, including time and cost saving in gaining information, gaining rapidly-updated information, others' perspective, accessing information in divers forms, interacting with others, making documents, benefiting English learning, and multitasking. As for the suggestions made to the teachers intending to integrate the Internet use into classes, the participants hoped that teachers could recommend them useful websites, teach them search skills, and infuse the Internet into the classroom setting.

The major findings of the differences between the seniors and the freshmen were that the seniors were more accustomed to incorporating English language into their daily lives in order to increase more chances to immerse themselves in English learning environments through the Internet than the freshmen. In addition, the seniors were more resourceful in using the Internet to help themselves with problems they met while reading online. Contrarily, the freshmen still needed teachers' training on how to solve their reading comprehension with more methods and on how to distinguish reliable websites from incredible ones.

Finally, it is expected that the findings of this study can provide educators with more understanding about how undergraduates utilize the Internet to facilitate their English learning and how their reading habits are influenced by the widespread use of the Internet. Besides, a number of pedagogical implications and instructional suggestions are presented at the end of this thesis for educators' teaching references.

## CHAPTER ONE

### INTRODUCTION

#### *Background*

Reading is indispensable for second or foreign language (henceforth, L2) learners and it has been of the spotlight of L2 research. According to Anderson (1999), reading is the prerequisite skill that all language learners must be equipped with because the development of good reading abilities can greatly help them in the development of various academic areas. In addition, a variety of reading modes, such as extensive reading, pleasure reading, and free volunteering reading, have been heatedly discussed and advocated in an attempt to provide L2 learners with abundant comprehensible input (Krashen, 2004) to acquire grammar, and reading and writing literacy, and further boost their language development. As a consequence, it is obvious that developing good English language proficiency does depend on good English reading habits.

Nevertheless, several studies on learners' reading habits have indicated that learners at college level hardly ever read unless they are required to read under compulsion, such as the imminence of examinations, papers deadline, report presentations, and so forth (Mokhtari & Sheorey, 1994; Pandian, 2001; Smithies, 1983). In other words, for students, reading is nothing but a utilitarian activity (Mokhtari & Sheorey, 1994), meaning that reading is only associated with passing examinations or academic workloads instead of pleasure and acquisition of up-to-date knowledge (Pandian, 2001; Smithies, 1983; Yang, 2007). Likewise, Taiwanese EFL learners seem to not take reading English as their leisure reading activity. According to a transnational survey (United Daily News, 30 November 07)<sup>1</sup> conducted by

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<sup>1</sup> The source of this information was covered in 聯合新聞網, called United Daily News in Chinese, on November 30<sup>th</sup> in 2007 and it was extracted on March 4<sup>th</sup> in 2008. The news website is as follows: [http://mag.udn.com/mag/campus/storypage.jsp?f\\_ART\\_ID=99848](http://mag.udn.com/mag/campus/storypage.jsp?f_ART_ID=99848)

Progress in Reading Literacy Study (PRLS) in 2007 to investigate students' reading habits across 45 countries, the result shows that Taiwanese students' reading habits and literacy are ranked as 22 among 45, which worries the education authorities and teachers here in Taiwan. Therefore, it can be assumed that Taiwanese students seem to lack habits of reading English in their leisure time. If English language educators desire to enhance learners' ability to acquire subject-matter knowledge as well as their English language competence simultaneously, the importance of understanding and developing their reading habits should not be underestimated.

Currently, with the advent of information computer technologies (hereafter, ICTs) such as Internet or World Wide Web (henceforth, WWW), "people nowadays tend to rely heavily on computer-based resources (such as writing email, watching online videos, reading online news, transmitting instant messages through MSN, exchange information in online chat rooms or discussion areas) than paper-based ones (such as reading newspapers, magazines, novels, writing mails, and sending postcards)" (Shen, 2006, p.559). In this perspective, reading in this information-bombarded age is no more restricted to reading print books since a large number of electronic versions of printed materials can be easily accessed and obtained on the WWW. "This phenomenon may change the way people perceive about reading and how printed materials are being utilized to facilitate reading" (Karim & Hasan, 2007, p.2). Viewed in this vein, a curious question accordingly emerges from this technology-dominated phenomenon in language education: Are language learners' reading habits affected by the revolution of ICTs and how are they affected?

Many reading scholars propose that with the advancement of the Internet and new technologies, people's reading habits and behaviors have been profoundly influenced and thus evolving in several ways (Coiro, 2003; Eagleton & Dobler, 2007; Karim & Hasan, 2007; Henry, 2006; Leu, 2007; Liu, 2005; McPherson; Sutherland-Smith,



2002). First of all, owing to the demand of globalization, abilities to comprehend online information in both native language and foreign language, especially in English, have become a major concern in the field of L2 teaching and learning (Jurado, 2007; Warschauer & Healey, 1998). Additionally, according to Crystal (1997), “an estimated 85% of electronically stored information in the world is in English, so it is important for English language teachers to look at the social, economic, cultural and linguistic consequences of the global spread of the English language influenced by the development of the Internet”(cited in Shin & Son, 2007, p.3). In this regard, the Internet serves as an inexhaustible repertoire of teaching and learning resources that provide L2 educators with access to a diversity of teaching materials and L2 learners with authentic target language environments (Altun, 2003; Anderson, 2003; Hanson-Smith, 2003; Walz, 2001a & 2001b). It is accordingly unquestionable that nowadays most L2 learners resort to the Internet before hardcopy books for personal and school-based reading and they can read as many genres and multimedia forms of materials as they want.

Secondly, with openness and multiplex presentations of reading materials on the Internet, reading on the Internet is not just reading texts posted on websites. Almost all Internet reading materials accompany with hyperlinks embedded in reading contents for further information and details, namely non-linear hypertexts, and display with multimedia, movie clips, audio, video, and graphical cues (Altun, 2000; Hanson-Smith, 2003; Son, 1998). Furthermore, Warschauer and Healey (1998) propose that the Internet provides many channels of communication to bridge learners of a language with other speakers of the target language around the world synchronously (e.g., Messenger and chat room) or asynchronously (e.g., e-mail and blog). All these characteristics allow Internet users and readers to be exposed to information-dense contexts under the WWW employing different ways to obtain



information that they desire to search for. In brief, Internet reading reinforces comprehension, facilitates discovery approach, and enhances learning strategies for L2 learners' autonomous learning.

Thirdly, the nature of Internet reading is an interplay of reading comprehension and web literacy that requires learners' ability to find, scan, digest, and store Internet information (Coiro, 2003; Eagleton & Dobler, 2007; Henry, 2003; Sutherland-Smith, 2002). To be exact, L2 learners who read target language on the Internet should be prepared with not only the command of the target language to comprehend texts but also the additional Internet-based reading skills and navigational skills to specifically bring them closer to target resources in the labyrinthine system of Internet (Coiro & Dobler, 2007; Huang, 2006). Following this line, a growing body of studies which specifically intend to explore L2 learners' actual Internet reading strategies use and performances has been conducted in hope of seeking for the best instruction to enhance L2 learners' reading performances on the new format of reading in the digital age (Altun, 2003; Anderson, 2003; Chun, 2001; Huang, 2006; Konishi, 2003; Tseng, 2006).

L2 learners' perceptions of reading target language on the Internet is another focus that the educators need to pay attention to because no matter how many resources can be conveniently accessed on the Internet, they still have difficulty reading target language on the Internet (Huang, 2006; Kung & Chuo, 2002; Kung, 2005; Tseng, 2008; Soon et al, 2004; Stepp-Greany, 2002). In order to come up with pedagogical suggestions for educators to help themselves design better Internet-based instructions for their courses as well as help L2 learners deal with the difficulties of reading English on the Internet and take advantage of Internet resources or their English learning, L2 learners' perceptions of reading on the Internet should not be underscored.

To recapitulate, people's reading habits have negatively and positively influenced by the exponential growth of diversified formats of authentic English-dense information displayed on the Internet and the prevalent use of the Internet. Even though it is generally agreed that people's reading styles have changed along with the implementation of brand-new technologies, how Taiwanese EFL learners' reading habit change and how they perceive Internet English reading to foster their English learning remain at issue. As Shen (2006) pinpoints,

*“If computers have replaced the traditional literacy world, it is noteworthy that educators, publishers, writers, and software engineers might cooperate with each other to create more interesting and economic online materials for students based on the knowledge of students' reading habits and reading behaviors.”* (p.560)

Inspired by Shen's viewpoint, the present study attempts to investigate EFL English majors' Internet reading habits and perceptions for English educators to improve their Internet reading performances and help them make better use of the online English learning resources by understanding EFL English majors' Internet practices to enhance their English learning.

### ***Rationales of the Study***

Based on the background of the significance of L2 reading and Internet reading in the digital age in the previous section, the rationales of the present study and the niches found from the previous studies are expounded in the following four aspects. Firstly, despite that the Internet provides language learners with access to affluent authentic target-language information (Warschauer & Healey, 1998), whether learners' language learning can be ameliorated still depends on their reading habits and perceptions. EFL students are often considered lacking proper reading habits, and reading for many of them is merely a preparation for examinations (Yang, 2007).

Even if they choose to read, English would not be their choice of language (Kung, 2005; Mokhtari & Sheorey, 1994). Besides, Li (2006) also mentions that the low proficiency levels of most Taiwanese EFL learners can be attributed to their lack of interests in and habits reading English and interests. Concerning these phenomena, several questions arise: Do EFL learners read English materials on the Internet in reality? If they do, *why, when, how often, what genres, and what topics* would they like to read?

Secondly, some research indicates that reading habits vary on education level whether it is in printed-text reading or Internet reading (Chen, 2007; Mokhtari & Sheorey, 1994; Shen, 2006). This interesting finding brings up a question that has not been taken into consideration in the extant literature: Are there differences of Internet reading habits and perceptions between university freshmen and seniors? If so, what are the differences?

Thirdly, as discussed previously, patterns of reading have been reshaped by the advent of Internet, more research on reading habits in the digital age is necessary to be further updated to eke out EFL educators' understanding of Taiwanese EFL learners' uses of the Internet. However, so far, there is relatively scant research particularly focusing on learners' Internet reading habits and perceptions conducted in Taiwan (Shen, 2006) even though there is a growing body of research attempting to explore their actual Internet reading strategies use, which refers to "the conscious actions that learners take to improve their language learning" (Anderson, 2003, p.3).

Finally, as to the research methodology per se, almost all the previous related research is conducted using questionnaires quantitatively without probing deeply into other possibilities of reading habits and perceptions. To fill this gap, this study adopts interviews to qualitatively investigate EFL learners' Internet reading habits and perceptions with the goal to delve into more insights into their English learning from

the Internet.

In conclusion, with the four rationales listed above, how Taiwanese EFL undergraduates perceive reading English on the Internet as well as how they use the Internet to improve English learning as well as broaden horizons in their daily lives remain to be qualitatively uncovered.

### ***Purpose of the Study***

In conformity with the motivation stated above, the purpose of the present study is threefold. The first purpose attempts to understand how the rapid advancement of the Internet affects cohorts of English major freshmen's and seniors' English reading habits in respect to their Internet reading purposes, genres, topics, frequency, variables influencing their reading choices, and ways to improve reading comprehension. The second purpose intends to probe into their perceptions of Internet reading in terms of advantages, disadvantages, challenges, suggestions to instructors, and preferences of Internet reading and printed text reading. The last purpose is to understand if there is any difference between university freshmen and seniors in terms of their Internet reading habits and perceptions. In doing so, more pedagogical suggestions can be generated to help language educators cater for university students of needs and help learn to best perform during Internet reading. Overall, understanding EFL learners' Internet reading habits and perceptions will inform language educators of how to integrate the Internet into class effectively and resourcefully and web designers to supply more effective Internet devices to facilitate L2 learners' language learning through the Internet.

### ***Research Questions***

Grounded upon the purposes stated above, the current study intends to answer

the following research questions.

1. What Internet reading habits do EFL undergraduates have?
2. What perceptions do EFL undergraduates have for reading English on the Internet?
3. What are the differences between freshmen and seniors in terms of their Internet reading habits and perceptions?

### *Significance of the Study*

This study is significant for the following: future research, language educators, and language learners. To begin with, given that there is scant research on examining EFL learners' Internet reading habits and perceptions specifically for English learning, this study will be beneficial, through its qualitative methodology, to fill this hiatus and to enrich the exiting literature in regard to the tertiary students' Internet reading habits and perceptions.

Secondly, as far as the language educator is concerned, as Kymes (2005) states, "only when educators truly understand how readers approach Internet reading materials and hypertexts, how critical judgments are made online, and what strategies are routinely used by them will educators be able to know what needs to teach for better reading in online environments" (p.499). Viewed in this point, the findings of this study can directly contribute invaluable insights into how exactly Taiwanese university students read on the Internet to the educators. With these insights, the educators can teach the students to equip themselves with successful and effective Internet reading skills so as to cope with reading in this electronically-bombarded information age.

Lastly, as for EFL learners, through the teacher's refined instructional guidelines for Internet reading stemming from the understating of their Internet reading habits

and perceptions, they will become more adept at Internet reading processes and cultivate more skills to make effective use of Internet resources for English learning and further their autonomous learning.

### ***Definition of Terms***

Four main terms used throughout this study are defined as follows for better understanding of the specific scope of this study.

#### **(1) Reading**

The definition of *reading* varies from people to people and depending on the scope of each research and study. Nuttall (1978) defines *reading* as the recognition of words we meet in print and the learning of speaking and pronunciation. Some people think that *reading* equals information reception, others deem that it should involve the occurrence of thinking, and still others consider it as an activity demanding long time to read an article or a text (Chang, 2003). However, reading does not happen without the reader's intentions. As Nuttall (1978) proposes, "reading is not only a linguistic exercise but also an engagement to get meaning out of a text for some purposes, such as obtaining facts, ideas, enjoyment, and feelings of community" (p.3-4). To be specific, Rivers and Temperley (1978) even classify the following reasons that second language learners may need or want to read:

- to obtain information for some purpose or because we are curious about some topic
- to obtain instructions on how to perform some task for our work or daily life
- to keep in touch with friends by correspondence or to understand business letters
- to know when or where something will take place or what is available

- to know what is happening or what has happened (as reported in newspapers, magazines, reports)
- for enjoyment or excitement

(Rivers and Temperley, 1978, p.187)

To better understand EFL undergraduates' Internet reading habits in the broad perspective of reading, this study adopts the Rivers and Temperley's definition of reading. In brief, reading does not merely occur when readers read long articles and texts, but when readers read any types of reading materials.

## **(2) Internet reading**

The definition of *Internet reading* can interchange with *online reading* (Coiro & Dobler, 2007; Leu, 2007), *hypertext reading* (Altun, 2000, 2003; Konishi, 2003), *e-reading* (Chang, 2003), and *web-reading* (Sutherland-Smith). In this study, *Internet reading* corresponds to the term, *online reading*, used by Leu (2007) to differentiate from *offline reading* that simply requires readers to read information on a single screen without being situated within social practices, texts, and contexts that need online reading act. Therefore, Internet reading requires readers to obtain information from the open networked system of the Internet. All in all, with the reading defined above, Internet reading in this study refers to reading any forms of digital English documents that can be obtained through the Internet, such as multimedia, emails, e-newsletters, e-zines, e-novels, e-books, news, literature, journal articles, online information, sales, sports, bulletin board system (BBS), chat room postings, and so forth.

## **(3) Internet reading habits**

*Reading habits* have been defined as a combined preferences for the types of reading materials read, the topics of reading materials, the volume of reading completed on a daily or weekly basis, the frequency and the amount of time devoted

to each type of reading, the sources of reading materials, the factors influencing the selection of reading materials, the occasions for reading, and the motives for reading, the availability of reading areas, and the activeness in the acquisition of reading materials (Chen, 2007; Dimitrijevic & Gunton, 1975; Karim & Hasan, 2007; Kaur & Thiyagarajah, 1999; Kung, 2005; Mokhtari & Sheorey, 1994; Pandian, 2000; Shaikh, 2004; Shen, 2006). However, consistent with the research questions of this study, the respects of *Internet reading habits* encompassed in this study are as follows: purposes of reading English materials on the Internet, genres and topics of IEMs usually read, frequency of reading on the Internet, factors affecting selections of IEMs, and ways to improve comprehension in reading on the Internet.

#### **(4) Internet reading perception**

Founded on several research (Altun, 2001, 2003; Davis & Lyman-Hager, 1997; Huang, 2006; Kung & Chuo, 2002; Kung, 2005; Son, 2003; Tseng, 2006, 2008), *Internet reading perception* is investigated respecting disadvantages and difficulties, advantages of reading Internet English materials, differences and preferences of reading Internet materials and printed materials, and suggestions to instructors who would like to integrate Internet English reading into courses.

Following several definitions of the key terms, the next chapter starts with a theoretical framework by introducing Internet reading in terms of its nature and its differences from printed-text reading. Besides, relevant research on learners' Internet reading habits and learners' perceptions of Internet reading in L2 is reviewed.



## CHAPTER TWO

### LITERATURE REVIEW

This chapter encompasses four sections. The first section reports the theoretical background by the introduction of the Internet reading, including its impact on reading, its advantages and disadvantages, and its comparison with paper-based reading. The second section presents previous empirical research on language learners' paper reading habits and Internet reading habits. The third reviews previous research on language learners' perceptions and attitudes towards paper reading and Internet reading. The last section concludes this whole chapter with a summary.

#### **The Nature of Internet Reading: Features, Disadvantages, and Advantages**

As discussed previously, it is the feature of nonlinear hypertext that distinguishes the Internet reading from offline reading or screen reading. Therefore, it is essential to introduce the nature of the Internet reading based on the attribution of the hypertext. Hypertext is characterized by two features: nonlinearity and multimedia. The first feature is its non-sequential text and structure organized to allow readers or users to freely explore banks of nonlinear information through a myriad of hyperlinks which are usually indicated by a keywords set in underlined blue type, and meanwhile take their own control of these dynamic hyperlinks to construct their personal pathways in this open-wide system (Altun, 2000; Son, 1998). Additionally, Sutherland-Smith (2002) claimed that hyperlinks enable online readers to instantly jump from a text to a footnote or reference, to an online dictionary, to a picture or a movie, to another language, another country, or even outer space. The possibilities of hyperlinks seem so limitless and enticing that all types of information seem just a click away. This particular feature not only lends itself to various orders of information processing but also distinguishes itself from traditional printed text reading.

The second feature, based on Altun's (2000) concept, is that hypertext is

interactive, digitized, and displayed in various forms accompanied by hypermedia or multimedia with movie clips, audio, video, animation, and graphical files, which allow users or readers to be exposed to various formats of information-dense contexts. Hypermedia, according to Beatty (2003), involves linking only two types of media (e.g. *text + sound* or *text + photographs*) while multimedia tends to feature several media types simultaneously. In brief, hypertext is an electronically presented text connected to other sites throughout the World Wide Web in a variety of forms, so it is available in every language and on every topic imaginable every time to everyone.

Nevertheless, Hanson-Smith (2003) proposed that not all Internet reading materials are accompanied with multimedia or hyperlinks. Instead, she viewed Internet-based materials as of three types: (1) text repositories, (2) electronically mediated texts, and (3) computer-mediated communications (henceforth, CMCs). Text repositories, in conformity with Son's (2003) term of non-hypertext, are online materials virtually replicating the format of paper materials, with the addition of hyperlinked references and search capabilities. They are often comfortably read by being downloaded and printed out. Electronically mediated texts are created and edited by authors, both amateur and professional, for their own purposes, whether informational, emotive, or propagandistic. These documents are characterized by hypermedia and linking, so they are supposed to be read online. CMCs, native to electronic media, offer interactive authentic language on blogs, BBS, electronic lists, e-mail, chat rooms, instant messaging, and so on, which can present their own perplexities for the reader.

All in all, with the features of nonlinearity and multimedia embedded in the Internet, McPherson (2005) listed how the Internet has impacted students' reading respectively as follows.

### Internet's impacts on reading

- (1) A nonlinear hypertext environment places greater demand on a reader's shot-term memory.
- (2) Hypertext encourages student control over and engagement with content.
- (3) Students report being more engaged with content when multiple presentation modes (e.g., reading, viewing, and listening) occur simultaneously.
- (4) Internet-based learning activities make reading enjoyable for students, foster use of critical reading skills, and promote reading fluency.
- (5) The Internet provides authentic reading materials that, in turn, encourage students to read more.
- (6) Reading is contextualized in multimedia environments. (p. 60)

In addition to these Internet's impacts on reading, McPherson (2005) further outlined the following disadvantages and advantages the Internet brings to readers.

#### Disadvantages

- Readers sometimes get lost and waste time navigating the links.
- Advertising can be distracting and have ethical implications.
- Webpage design often parallels information text structures, making it difficult for young readers to read.
- Readability of Webquests and linked websites is often more difficult than students' independent reading ability. (p. 60)

#### Advantages

- Multimedia can increase the readability of text-heavy pages.
- Webquests often link to authentic reading materials and deal with essential questions.
- Students are motivated to read online materials.
- It exposes students to information text structures.

- Materials can be incorporated into a home literacy program. (p. 60)

As seen from the nature of Internet reading reviewed above, reading on the Internet seems more complicated than reading in print in that online reading does demand readers to be more critical and interactive to cope with hyperlinks embedded in hypertexts and to enhance their online reading comprehension by making good use of existing Internet resources. To better understand how complex the online reading processing is, the differences between the two reading modes are explicated in the next section.

### **Differences between Internet Reading and Printed Text Reading**

Given that this study aims to delve into EFL learners' perceptions on paper reading and Internet reading, the differences between Internet reading and paper reading needs to be addressed. The discrepancies are divided into two dimensions: (1) reading behaviors and (2) additional skills and strategies demanded to facilitate online reading.

With respect to reading behaviors, Hanson-Smith (2003) elaborately compared different reading behaviors between reading printed texts and reading Internet-based materials such as electronic media and CMCs as displayed in Table 2-1. Table 2-1 clearly shows that instead of turning pages for linear and static information displayed in books, online readers need to scroll down web pages for the rest of the reading content, decide whether to click the embedded hyperlinks for multiple forms of further information and references, and have more accesses to communicate with other online users through asynchronous BBS and emailing or synchronous discussion groups.

Table 2-1 Comparison of Print Reading and Electronic Reading<sup>2</sup>

Reading Paper Print Texts	Reading Electronic Media	Reading CMCs
(1) Single or multiple columns	(1) Scrolling multiple columns and/or frames	(1) Single scrolling column, but interlaced, undefined threads, and possible simultaneous audio, video, and multiple chats in several windows
(2) Illustrations	(2) Embedded or linked graphics, animations, sound files, movies	(2) Embedded or linked media
(3) Footnotes, appendices, references	(3) Links to other pages, other portions of the text or other Websites, both embedded in the text and in frames, headers, and footers	(3) Links
(4) Limited functions for footnotes and references	(4) Multiple functions for hyperlinks, (e.g., illustration or example), for mode-change, (e.g., survey or shopping cart), and for advertising and so on	(4) Multiple functions for hyperlinks, perhaps fewer than in Web pages
(5) Static advertising	(5) Commercial distracters	(5) Animated advertisements, pop-unders and pop-overs, buttons, scrolling banners, etc. May have commercial distracters, depending on the mail service provider; spam

<sup>2</sup> This table is excerpted from Hanson-Smith article: Reading Electronically: Challenges and Responses to the Reading Puzzle in Technologically-Enhanced Environments, which can be accessed through: <http://www.readingmatrix.com/articles/hanson-smith/>.

Different reading formats demand different reading skills and strategies.

Consequently completely relying on the L2 traditional paper reading skills such as skimming and scanning cannot suffice for the successful Internet reading. It involves even more perplexed cognitive processing in which learners' learning literacy is remolded with the rapid advancement of technology. With this concern, Leu (2007) advocates *New Literacies Perspectives* to accentuate the prerequisite skills needed to read on the Internet. Leu (2007) defines the new literacies of online reading comprehension as:

*“the skills, strategies, and dispositions necessary to successfully use and adapt to the rapidly changing information and communication technologies and contexts that continuously emerge in our world and influence all areas of our personal and professional lives. These new literacies allow us to use the Internet and other ICT to identify important questions, locate information, analyze the usefulness of that information, synthesize information to answer those questions, and then communicate the answers to others.”* (Leu, 2007, p.10)

Viewed in this light, reading on the Internet requires not only L2 learners' command of the target language but also web literacy in terms of finding, scanning, digesting, and storing Internet information.

Aside from the new literacies perspectives, Sutherland-Smith (2002) also recommended additional eight techniques that are necessitated to teach students to read web-based texts. Students should be guided: (1) To use the “snatch-and-grab” reading approach, meaning that readers should skim or scan text to identify keywords or phrases and grab the demanded text. This method emphasizes the broad nature of searching and the desire to obtain a great deal of material in a limited time frame. (2) To focus on refining keyword searches narrow the scope of their search to find information more efficiently. (3) To follow clear search guidelines and purposes to help overcome their deficiency of technical and task orientation skills. This technique,

in line with Hammond's proposition (1993), can promote the use of available information, prevents passive browsing, and increases the possibility of making well-motivated choices when searching for information (cited in Picchio & Blasón, 2003, p.88). (4) To use the "chunking" technique to search for online information by breaking down a complex topic into manageable chunks. This technique can encourage students with poor search or organizational skills to perceive a problem from other perspectives rather than head-on about assigned topics. (5) To overcome frustration with technology, especially when the results they click on do not live up to their expectations. Hence, it is vital for teachers to help students develop a range of strategies to tackle traditional unmet reading predictions in the online reading environment. (6) To employ preset lists of shortcuts or bookmarks to reliable websites and hints for them to effectively organize their lists of useful website addresses. (7) To limit the number of links to lessen their confusion, accordingly to help them refocus on keywords, questions, or tasks. (8) To critically evaluate nontextual features such as images, graphics, or any multimedia components to assist them to discern credible and reliable visual elements. To boost students' ability to assess online information, this technique can be further integrated with Fellog's (2000) and Kirk's (1996) six criteria for students to evaluate a website: authorship, publishing body, point of view or bias, referral to other sources, and currency of the information (cited in Picchio & Blasón, 2003, p.89).

To sum up, as Sutherland-Smith (2002) pointed out, even though, compared to paper texts, the Internet indeed provides students much more opportunities to enrich and expand concepts of literacy, to what extent the Internet technology can advantage them remains dependent on how teachers help them maximize their online reading skills.

## **Research on Reading Habits**

To date, there is a paucity of research with specific and exact reference to investigating L2 learners' Internet reading habits, referring to reading frequency, reading attitudes, reading preferences, reading purposes, reading sources, amount of reading time, and factors influencing reading choices. As a result, this section initially reviews several empirical studies on L2 learners' reading habits to glean a general snapshot of their reading phenomena. Finally, several studies which are specifically delved into Internet users' reading habits are red to unveil research niches.

### ***Studies on L2 Learners' Reading Habits***

Several studies have been conducted to explore learners' general reading habits for L2 educators to gain insights into L2 learners' reading practice in an attempt to help them improve their reading proficiency and skills. Findings derived from these studies have revealed that L2 students' reading habits are associated with such influential factors as gender (Camiciottoli, 2001; Hung, 2003; Pandian, 2000), age (Pandian, 2000), education level (Mokhtari & Sheorey, 1994; Pandian, 2000), other foreign languages proficiency (Gallagher & Dickens, 2006; Mokhtari & Sheorey, 1994), academic profession (Pandian, 2000), types and topics of reading materials (Hung, 2002; Kaur & Thiyagarajah, 1999; Lee, 2005; Pandian, 2000; Smithies, 1983), reading attitudes (Camiciottoli, 2001; Hung, 2002), experiences in English contacts (Camiciottoli, 2001; Pandian, 2000), and other home and ethnicity variables (Pandian, 2000). Overall, to clearly display a picture of variables taken effects on university students' reading habits, Pandian (2000) formulated an explanatory model of reading behavior, which is presented below as Figure 1.



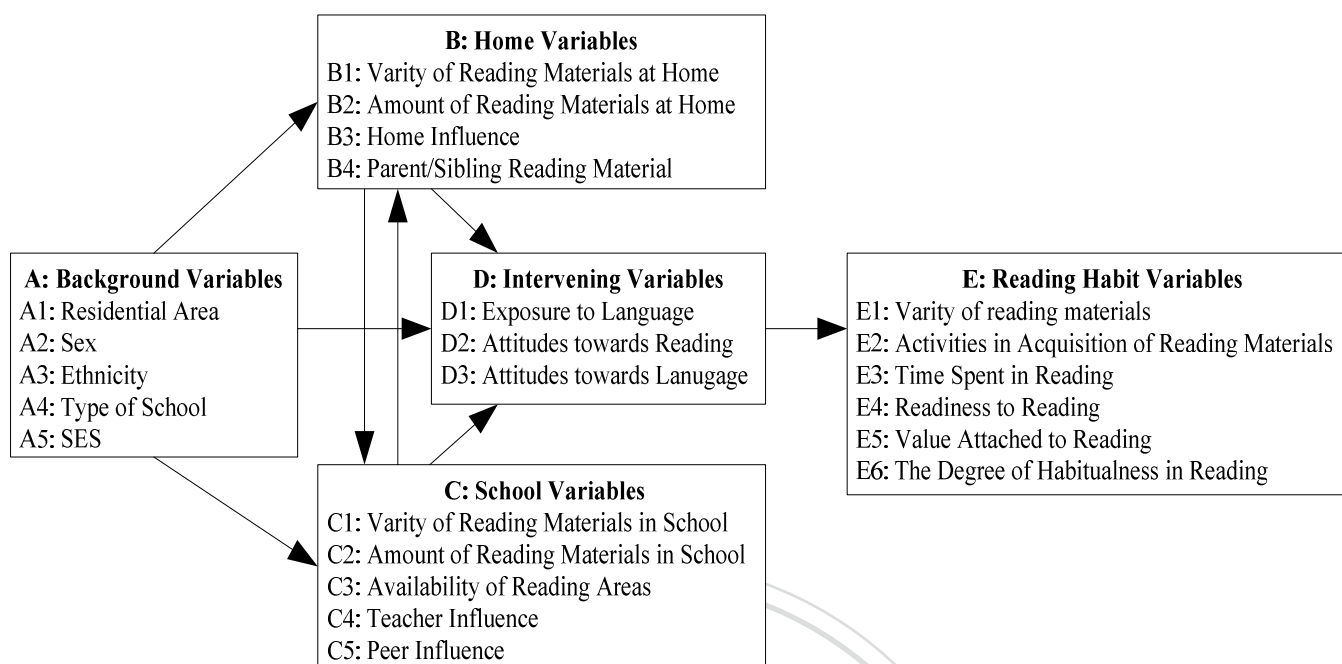


Figure 1. An explanatory model of reading behavior

Viewed from this model, it is obvious that the development of reading habits is intricate since it must interact with at least four factors: (1) individual background characteristics, (2) home factors, and (3) school factors, and (4) other intervening variables such as attitudes to reading and language and exposure to language.

### ***Studies on English as a Second Language Learners' Reading Habits***

To precisely inquire into on L2 learners' reading habits, several studies have focused on English as a Second Language (hereafter, ESL) learners were found (Kaur & Thiyagarajah, 1999; Mokhtari & Sheorey, 1994; Pandian, 2000; Smithies, 1983). Smithies (1983) conducted a survey to investigate the non-textbook reading preferences and habits of about 400 students at a technological institution in Papua New Guinea. The result showed that the students read relatively little. They did read attentively only when they knew there would be a check upon their reading in terms of a quiz, a test, or examination, or planned integration of required reading in lectures, seminars, and tutorials. It indicated that reading was associated with work rather than

with pleasure. With regard to reading preferences, those who did read for pleasure inclined to read fiction (67%), comics, magazines, and newspapers (22%), and study-related books (18%). The author suggested several ways to promote students' general reading habits. First of all, teachers should make sure that course texts are actually read by giving short quizzes and incorporating prescribed reading into classroom presentations. Secondly, requiring students to do reading reports on books they read in regardless of academic materials or non-academic materials. Thirdly, books selected for students should cater for their language level for better understanding of contents. Finally, Smithies (1983) argued that notwithstanding recent technological advances, the essentials of reading will never disappear.

Enlightened by Smithies' research, Mokhtari & Sheorey (1994) conducted an empirical study to survey 158 ESL international students in different levels of English proficiency (high vs. low) and education (63 graduates vs. 95 undergraduates) to find out whether different English proficiency and education levels would significantly affect their reading habits. The first finding respecting the amount of reading time and the types of reading materials revealed that high English proficiency group spent significantly more time reading and read a wide variety of academic reading materials than low English proficiently group. However, the researchers further found that, however well or poorly these students read, they spent more time on academic reading than any other type of reading in college. Otherwise stated, ESL students either did not devote time to doing non-academic or pleasure reading in English is not their language of choice when it comes to reading non-academic reading materials. Moreover, the education level also made a difference in that the result showed that graduate students read more widely and spent more time reading for study than undergraduates. The second result concerning the students' perceptions of reading ability in English and first language was that the participants with high English

proficiency tended to rate themselves higher in evaluating their reading skills than those with low English proficiency. In other words, the participants who felt positive about themselves as readers spent more time reading and read more widely than those who rated themselves lower in their English proficiency. With this regard, the researchers stressed that reading is an activity involving a strong connection between behavior and attitude. The third finding regarding the students' perceptions of weakness in reading exhibited that the low English proficiency students viewed a lack of adequate vocabulary as the major barricade to their reading fluency. In addition, more graduate students thought a dearth of adequate reading speed thwarted their English reading efficiency and thus overall English proficiency. The final finding pertaining to the perceptions of needed improvements in reading skills was that the students, regardless of education levels and English proficiency levels, needed assistance with reading their textbooks with the subsequence of newspapers, journals, research papers, and other reading materials. On a whole, it is noticeable that even ESL learners who normally use English in their daily lives still have linguistic difficulties reading in English, spend less time reading nonacademic materials, and require instructions to leverage their reading speeds and comprehension in academic reading.

Likewise, Kaur & Thiyagarajah (1999) aimed to survey and interview 63 Malaysian ESL freshman undergraduates, recruiting from the Bachelor of Arts in English Language and Literature Studies (ELLS) programme, to probe into their general English reading habits. The first finding relating frequency of reading showed that most of them devoted around 3-5 hours per week to reading literary works (such as poetry and drama) and ELT books (69.8) with the following of newspapers (28.6%), and novels (25.4%) while they spent less an hour reading comic books (60%), letters (38.1%), and journals (38.1%). Only 1-2 hours per week were spent on the reading of

magazines with female students preferring magazines such as Cleo, Home Scene, Motherhood and Reader's Digest and the male students favoring Time, Newsweek, and so forth. Through the structured interviews the researchers found that this discrepancy resulting from the participants' deficiency of confidence in reading literary texts prescribed by their lecturers. Besides, the participants mentioned they had read more diverse types of English materials before entering the university. The second result respecting the students' perceptions on their reading ability manifested that the participants generally perceived themselves as being efficient readers of the various types of reading materials like newspapers, magazines and letters. Nevertheless, it was interesting to find that nearly half participants did not rate themselves as highly in reading and comprehending the prescribed course texts such as literary works (48.6%) and ELT books (44.4%). The reason for this finding is that the participants claimed they had to grapple with difficulties caused by linguistic load, long texts, semantic problems, terminology, and unfamiliarity with poems and plays. The third discovery regarding the students' motivation to read in English revealed that most of the students were aware of their roles as mature students and showed very positive attitudes towards reading. Most of them read in English because they feel it can improve their English language abilities and some want to become good English language teachers upon graduation. Likewise, most of them (74.67%) read for obtaining good grades in all their courses and only 42.8% for pleasure reading, which truly reflect their Asian characteristics of being goal-oriented and expecting to succeed at the university. The last finding about preparation time spent on courses indicated that 84.1% of the participants spent 6-10 hours more a week in doing assignments, 42.8% claimed to spend 3-5 hours reading relevant course texts, and 41.2% of them spent the same amount of time making notes for their courses. Surprisingly, it was found that very little time was spent working on the computer. As

a result, the researches advocated that students should be encouraged to capitalize on the Internet as a tool to tap valuable reading resources which can promote autonomous learning.

To delineate a profile of habitual readers in English from three dimensions of personal factors, school factors, and home factors, another research in ESL setting done by Pandian (2000) implemented a questionnaire survey on readership behavior among 674 undergraduates (277 male and 397 female students) and 975 secondary students (537 female and 438 male students) with multiethnic, multicultural, and multilingual background in Malaysia. According to Pandian, readership behavior denotes reading ability and willingness to read for information and leisure as well as reading practices that engage different print and audio and visual contents. The finding revealed that Malaysian undergraduates and secondary school students are more likely to be a habitual reader in English if they:

- come from a family with a higher socioeconomic status (henceforth, SES).
- come from a home where there is a greater variety and amount of materials in English, more home influence and reading models at home.
- have attended a school with a greater variety and amount of materials in English, with more teachers who encourage students to read and more friends who read English.
- have more exposure to English.
- have a more positive attitude towards reading in English.

The final remark from Pandian's study proposed that it is no longer useful to regard reading as an intra-personal. Contrarily, it has to be strongly promoted as an interpersonal, social or family related activity since parents, siblings, teachers, or peers can direct their efforts and contributions to the development of positive reading behavior. What is more, the author strongly encouraged the need to provide students

with more multimedia and ICTs exposure and to instill positive attitudes towards language and reading, specifically in the area of English language learning.

### ***Studies on EFL or Other Language Learners' Reading Habits***

Interest in examining reading habits was also found in several studies considering EFL and other language students (Camiciottoli, 2001; Gallagher & Dickens, 2006; Hung, 2003; Lee, 2005). Camiciottoli (2001) administered a questionnaire to 182 Italian EFL students to examine their reading habits and attitudes relevant to leisure-time reading in English without any type of academic follow-up activities. The result indicated that while English reading habits had not grown on most of the students, their attitudes towards it remained positive in that they reported that they were short of (1) time to read due to school studies, (2) access to English materials, and (3) knowledge of selection of reading materials. Moreover, given that Italian language is replete with English loanwords words and widespread concept of certain culture such as “fast food” and “shopping mall”, the students generally had favorable attitudes and highly valued English reading. The researcher further found that the more experiences of reading in Italian (L1) and more English learning environment students were immersed in, the more willingness and time they would like to devote to. Unexpectedly, a paradoxical outcome was found: fewer years of previous English study were related to more positive reading attitudes. The accountant of this result is that the students stayed less confident of their reading abilities in spite of several years of English learning. The last finding in terms of gender difference revealed that due to different career aspirations, the males were much more frequent readers of other types such as magazines and newspapers than the females. The author concluded the research by suggesting the incorporation of extensive reading into original curriculum to breed their English reading habits.

Parallel to the Camiciottoli's study, Hung (2003) undertook a survey to 144 EFL

Taiwanese non English-majored collegians to probe into their pleasure reading practices. The first finding revealed that the students who experienced some forms of pleasure reading in the classroom settings embraced positive attitude to these activities. The second outcome demonstrated that most students spent less than an hour doing outside readings monthly, indicating that their habits of leisure time reading had not been cultivated. Specifically inquiring into English materials the students preferred reading, the author found that magazines, comic books, and short stories or fiction were the most favored choices, indicating that the short readings were much more favorable than lengthy ones such as non-fiction articles or articles from the Internet/E-news. Accounting for the disfavor of English reading materials from the Internet, the author pointed out that since online information, for L2 readers, is too broad to select a suitable materials, too linguistically authentic to comprehend, and too long to sustain their patience in reading continuously. The third finding showed that in spite of the existence of gender difference, generally the most favorable reading genres were comics, movies, TV tie-ins, and humor while biography, classics, and war were the least favorable. Additionally, the most favorable reading topics of nonfiction articles were leisure/recreation, film/music, and fashion whereas the least favored topics were violence, business, politics, and design. Generally speaking, Taiwanese students tend to prefer light topics rather than serious topics or classical works to mitigate their pressure from schools. To enhance learners' language proficiency and develop their intellect, the author proposed that reading materials should be chosen in congruence with their interests. The fourth outcome revealed that linguistic difficulties related to vocabulary, grammar, and content were the major obstacle refraining them from reading more for pleasure. To counteract this problem, the author suggested teachers provide learners with guidance to choose proper reading materials and an array of books of various levels. At last, it was found



that the students embraced positively attitudes towards reading and their reading attitudes were significantly correlated with their reading frequency outside school where a stress-free reading atmosphere abounded in. In this respect, the author suggested teachers create cozy vibes where learners can indulge in their reading with more pleasure and frequencies.

Lee (2005) administered a survey to 101 Korean EFL undergraduates to examine what types of English contact or activities and how much English they were exposed to outside the class, which involved 16 activities in listening, speaking, reading, and writing. The general result found that the majority of the participants did not write or speak in English. Further analysis concerning weekly hours spent reading English materials outside the class indicated that the majority of the participants did not spend any single hour on English reading under five different conditions: reading newspaper or magazine (73%), literature such as novels or poems (76%), course-related materials (44%), emails or the Internet (65%), and English learning materials such as TOEFL or TOEIC textbooks (81%). As evidenced from the statistics, even if the students would like to engage in English reading, most of their reading activities were predominantly confined to course-related materials with the subsequence of emails, Internet, newspapers, and magazines. Consequently the participants' English reading habits were not cultivated apparently.

Gallagher & Dickens (2006) did a questionnaire survey to obtain a snapshot of reading attitudes, perceptions and habits of foreign languages learners with different target language proficiency levels (ab initio students and experienced students) and education level (from freshman through senior) from seven UK universities. 601 questionnaires were returned by learners of Spanish, German, French, Italian, Portuguese, Chinese, Arabic and Russian. The first result, in the aspect of learners' perceptions of their FL reading competence, showed that even though 42% of the



students agreed that they were doing well in L2 reading and 29% could read quickly in L2, they still encountered difficulties stemming from lack of foreign culture knowledge. A significant discrepancy further indicated that the freshmen held less confidence in their reading speed and proficiency than the seniors while the significant difference between ab initio and experienced students was not reached. The second result concerning L2 reading habits showed that seniors read more often than freshmen and nearly half (47%) of the students confessed that they did not get enough practice at L2 reading. Enquired why to read in L2, 97% of the students claimed that reading in L2 could improve their language skills, 77% would make them a more knowledgeable person, and 60% could learn more about foreign language culture. The third finding regarding the students' attitudes to reading different genres in L2 revealed that magazines and newspapers were much more likely to be read than the poetry across four years of students. Generally speaking, nearly a quarter of the students felt literature reading instrumentally useful for improving language skills yet difficult. To be specific, more freshmen felt reading L2 literature more difficult than useful while seniors felt reading L2 literature more useful than difficult. The last result found that all year students considered vocabulary and grammar as two major difficulties landed in texts and therefore would like to resort to vocabulary in a dictionary to gain better comprehension. Further result also showed that freshmen were more likely to ask others for help, to use a translation, and to translate the text to seek better understanding of the text while seniors were more likely to re-read the text, to break up the text, and to research the subject. Recommendations in this research accentuated the importance of building up learning experiences for ab initio students to develop their positive attitudes and confidence in L2 reading and promoting more extensive reading.

To summarize and compare all the research on reading habits discussed above,

the following table 2-2 presents the research focus and results of each study.

Table 2-2 A Comparison of the Results from Previous Related Studies

Research Focus	Research Findings	
1. Purposes of reading in L2	Reading in L2 is utilitarian.	<ul style="list-style-type: none"> <li>● Reading is generally associated with schoolwork or attainment of good grades rather than with pleasure (Kaur &amp; Thiyagarajah, 1999; Lee, 2005; Mokhtari &amp; Sheorey, 1994; Smithies, 1983). Hence, foreign language students read attentively and frequently only when there is assessment such as examinations or quizzes.</li> </ul>
	Reading in L2 is beneficial for language, culture, and knowledge acquisition.	<ul style="list-style-type: none"> <li>● Students claim that reading in L2 can improve their language skills, make them a more well-informed person, and learn more about foreign culture (Gallagher &amp; Dickens, 2006; Kaur &amp; Thiyagarajah, 1999).</li> </ul>
	Habits of pleasure reading in L2 are underdeveloped.	<ul style="list-style-type: none"> <li>● Pleasure or leisure-time reading habits in L2 are not grown on most students because when it comes to reading non-academic materials, English is not their language of choice (Camiciottoli, 2001; Hung, 2003; Lee, 2005; Mokhtari &amp; Sheorey, 1994).</li> </ul>
	Either education level or L2 proficiency influences L2 reading habits.	<ul style="list-style-type: none"> <li>● Students from high education level or with high English ability are prone to read more widely and devote more time to reading for study than those from low education level or with low English ability (Gallagher &amp; Dickens, 2006; Mokhtari &amp; Sheorey, 1994).</li> </ul>
2. Genres, topics, and types of reading materials	ESL students	<ul style="list-style-type: none"> <li>● Smithies (1983): The students from New Guinea who do pleasure reading are intended to read fiction, comics, magazines, newspapers, and subject-related books in order.</li> </ul>
		<ul style="list-style-type: none"> <li>● Kaur and Thiyagarajah (1999): The students from Malaysia spend 3-5 hours weekly on literary books (i.e. poetry and drama) ELT</li> </ul>

		books, newspapers, and novels and 1-2 hours on magazines. However, they spent less than an hour on comic books, letters, and journals.
	EFL students	<ul style="list-style-type: none"> <li>● <b>Short-length contents:</b> Hung (2003): The students from Taiwan would like to read magazines, comic books, and other short stories or fiction in their leisure time; therefore, they are intended to read short readings rather than lengthy ones from nonfiction or Internet/E-news</li> <li>● <b>Leisure reading</b> Hung (2003): Considering the reading genres, comics, movies, TV tie-ins, and humor are the most favored while biography, classics, and war are the least favored.</li> <li>● <b>Light topics:</b> Hung (2003): Concerning the reading topics, Taiwanese students prefer leisure/recreation, film/music, and fashion instead of violence, business, politics, and design. Hence, they tend to prefer readings with light topics.</li> <li>● Lee (2005): The students from Korea spend less time on English learning materials such as TOEFL or TOEIC references, newspapers, magazines, literature, emails, or articles from the Internet.</li> </ul>
3. Perceptions of reading ability in L2	ESL students	<ul style="list-style-type: none"> <li>● Mokhtari and Sheorey (1994): The students with high English proficiency tend to be positive about their reading ability.</li> <li>● Kaur and Thiyagarajah (1999): The students generally perceived themselves as efficient readers of the various types of reading materials except for course-related ones.</li> </ul>
	EFL students	<ul style="list-style-type: none"> <li>● The language students remained less confident of their reading abilities despite several years of the foreign learning (Camiciottoli, 2001; Gallagher &amp; Dickens, 2006).</li> </ul>

4. Attitudes to reading in L2	Foreign language learners	<ul style="list-style-type: none"> <li>● The foreign language learners generally tend to embrace positively attitudes towards reading (Camiciottoli, 2001; Hung, 2003; Kaur &amp; Thiagarajah, 1999; Pandian, 2000).</li> </ul>
5. Perceptions of reading difficulties in L2	Foreign language learners	<ul style="list-style-type: none"> <li>● Linguistic problems are the major barriers to the reading proficiency such as new vocabulary, long texts, semantic problems, terminology, and unfamiliarity with poems, plays, and target cultures (Kaur &amp; Thiagarajah, 1999; Hung, 2003; Mokhtari &amp; Sheorey, 1994).</li> <li>● There are several logistical difficulties restricting the students' reading such as lack of time to read because of school studies, access to English materials, and knowledge of selection of reading materials (Camiciottoli, 2001).</li> <li>● The high education level students think a dearth of adequate reading speed hinder their reading efficiency and proficiency (Mokhtari &amp; Sheorey, 1994).</li> </ul>

### ***Studies on Internet Reading Habits***

Despite that scant studies have been undertaken to investigate L2 learners' Internet reading habits, few are found to examine whether the ICT has an impact on teachers' and students' reading habits (Chang, 2003; Shaikh, 2004; Shen, 2006). The following literature illustrates general reading habits and it is expected to help shed some light to this L2 study on English learners' Internet reading habits.

Chang (2003) reports an exploratory study on the e-reading activities of academic faculty members on the Internet by means of an in-depth interview with twenty-four members from five universities in northern Taiwan. It is found that the faculty members' e-reading behavioral patterns can be categorized in accordance with the following four major theses: diverse situations, multiple sources of reading materials, five influential factors of e-readings, and impacts of e-reading, including

disadvantages and advantages of reading online. The result of reading habits are re-organized and translated into English by the researcher of the present study in Table 2-3 in detail. On the whole, the faculty members' Internet reading activities are mostly task-oriented and affected by such factors as task type, format of online document, feature of online information, reading context, and individual factor. Furthermore, it also found that the nature and motivation of reading do not change much in the digital environment; however, the reading materials have been more diversified. At last, some technology-enhancing reading activities were found to emerge such as forwarding emails and after-reading information processing behavior. Generally speaking, the results are conducive to the analysis of the present study, albeit not directly related to L2 learners' Internet reading behaviors. Besides, as Chang mentioned, further study on examining undergraduates' online reading habits should be undertaken to inform educators how the Internet affects academia and education and what issues it engenders.

Table 2-3 Chang's Taxonomy of Internet Reading Behaviors<sup>3</sup>

Internet Reading Behavior	Description	Category	
Diverse situations	Situations in which the informant prompts to read on the Internet	Task-oriented	Research context
			Teaching context
			Learning context
			Social context
			Daily life context
		Publication context	
		Non-task-oriented	Pleasure reading context
Multiple sources of reading materials	Avenues that the informant use to obtain information	E-journal	
		E-database	
		E-mail	
		E-newsletter	

<sup>3</sup> This table was designed and translated by the researcher of this study based on Chang's (2003) results from an exploratory study on E-reading behaviors of academic faculty.

		E-news	
		Academic organization website	
		Bulletin board system (BBS)	
Influential factors of e-readings	Factors that decide whether to read on screen or in print, and whether to do intensive reading or skimming reading	Task type	Degree of task urgency
			Field of professional expertise
			Degree of relation to the target information
			Requests from others
		Format of document	Font size
			Length of the content
			Topic and the content
			Classification of the website framework
			Size of the reading file
		Feature of Internet information	Credibility
			Novelty
			Sensation
			Repetition
		Reading context	Accessibility
			Hardware equipment
			Reading interface
		Individual factor	Reading situation
Interest			
Curiosity			
Sufficient time			
Habitual routine			
	Ability to comprehend the text		
Internet characteristics that affect Internet reading	Reasons why the informant would resort to Internet information instead of printed information	Document-perspective	Informativity
			Technologicality
			Economicality
		Reader-perspective	Situationality
			Desirability
	Individuality		
Disadvantages of Internet reading	Drawbacks that the Internet features	Health problem	
		Internet addict	

	impede Internet reading	Time constraint
		More time spent on judging the usability and reliability of the information
		Disorientation arising from a plethora information
		Information cognitive overload arising from a plethora information
Advantages of Internet reading	Benefits that the Internet features facilitate Internet reading	Convenience of access to a variety of information
		Expansion of information and knowledge areas
		Enriching daily life such as by communication
		Obtaining a variety of useful help

Shaikh (2004) carried out a study to quantitatively evaluate the reading habits of Internet users across five document types: journal articles, news, newsletters, literature, and product information via email invitation to complete an online survey that asks the participants how likely they were to read a document online or on paper. The respondents were from a variety of professions, including students, technology, education, self-employed, homemakers, executives medical, and other professions. The first finding indicated that academic or journal articles were primarily read in printed form, while documents such as online news, newsletters, and product reviews were read mainly online because academic or journal articles are large in size and much more important to the participants. Moreover, the participants reported that they avoid using online sources for reading literature. Therefore, as Shaikh advocated, there is a clear need for print versions of the online material in the domain of academic/journal articles. The second finding, displayed in Table 2-4 below, revealed the three major factors determining whether a document was printed or read online are size, importance, and intended purpose of document. Still, although Shaikh's research was not qualitatively done to explore L2 learners' reading habits across the online reading documents, it prompts research niches for the current study to probe

into what types and forms of online English reading materials do L2 learners would like to read for English learning and as well as what are reasons for them to read online or on paper.

Table 2-4 Major Reasons for Reading Online and on Paper

Major reasons for reading online	Major reasons for reading on paper
1. Small size of short documents	1. Big size of long documents
2. Importance/interest in document	2. Importance/interest in document
3. For entertainment purpose	3. Need for future reference
4. Quality of online document	4. For research or presentation purpose
5. Convenient information access	5. Ability to highlight or comment on
6. Ease of navigation	6. Complexity of the document
7. Type of information	7. Comfort reading and tangibility
	8. Portability

Intending to investigate whether computer technology had an impact on EFL college students' reading habits, a survey conducted by Shen (2006) to determine if 124 EFL college students' online reading habits and their demographic variables, such as gender, age, CJEE (College Joint Entrance Exam) scores, employment status, and online hours were related. The first result indicated that college EFL students' reading habits indeed changed from paper-based to internet-based reading with 83.9% of students reading online information often every day and 69.3% of them reading emails every day. In contrast, only 31.4% of them read newspapers, and 33.1% of them read magazines often every day. In respect of contents of online reading, the second finding enumerated the top 8 activities students do online daily: checking emails (100%), listening to music (96.8%), chatting with friends (96%), using Messenger (hereafter, MSN) (95.2%), reading online information (88.7%), viewing online photo albums (85.5%), using *Yahoo Messenger* (76.6%), and shopping online (54%). The third result regarding online information that the college students read more are online news, emails, sales information, movie review, and fashion news.



However, the least read online information is jokes (4%), journal articles (4%), stories (7%), job (7%), and comic strips (7%). The fourth finding concerning the topics of interest, the ranking sequence that students reported is entertainment, news and media, computer and internet, recreation and sports, references, arts and humanities, and health. At last, the results also indicated that the participants' demographic variables are relevant to their reading habits as follows. (1) Gender difference showed that more female students than male students read news online, and male students read sports review and jokes online more often than female students. (2) Age difference indicated that younger students read news, sales information, and horoscopes online more often than older students. (3) Different education level revealed that juniors read newspapers more often than sophomores or seniors, while seniors read magazines more often than sophomores and juniors. (4) Students with lower CJEE scores read more magazines than students with higher scores, while students with higher CJEE scores read jokes online more often. Students with lower CJEE scores read more weather news online. Students with CJEE scores between 61 and 80 read online health information and sports information more often than those with lower scores. (5) Students who work read novels more often than who aren't. (6) Students who spent more than 6 hours online tend to read movie review often. From reviewing this study, it is apparent to notice that EFL learners' reading habits have been influenced by not only the Internet use and demographic variables. However, what is of great pity is that this study does not particularly delve into the effectiveness of Internet on EFL learners' English learning.

To conclude, previous studies concerning Internet reading habits elucidate that behaviors of reading online or reading on paper are different depending on individual purposes, formats, genres, topics, and accessibility of reading documents, and website design. To assist English educators in Taiwan to acquire a better grasp of how they

can facilitate students' English learning both inside and outside the classroom through the Internet, it is pertinent, at first, to probe into their Internet English reading habits. In this way, the educators are able to reinforce learners' autonomous learning and develop their reading habits through the Internet and meanwhile instruct them to sensibly adopt online information by motivating their critical reading and by preventing their misuse of online information.

### **Research on Learners' Perceptions of Internet Reading in L2**

To date, a burgeoning body of studies has been done to understand how EFL students perceive the integration of computer use and the Internet into their English learning either inside or outside classes so as to develop and refine teachers' online programs to cater for students' learning circumstances (Altun, 2003; Davis & Lyman-Hager, 1997; Huang, 2006; Kung & Chuo, 2002; Kung, 2005; Son, 2003; Soon, Suan, Baniamin, & Mamet, 2004; Stepp-Greany, 20002; Tseng, 2006). This aligns with Barkhuizen's suggestion that teachers conduct frequent assessments of learners' perspectives and involve them in planning and implementing alternative activities (cited in Wang, 2005). Furthermore, to better understand how students perceive online reading, their perceptions on reading different types of texts cannot be ignored. Because if educators know how students actually engage with digital texts and vs. printed texts, educators are liable to design a more satisfactory lesson plan for students to learn with comfort. Unfortunately, there is scant study on learners' preferences for reading from a printed text or from a computer screen (Spencer, 2006), let alone in the L2 research field. Hence, learners' perspectives on reading different formats of texts are also the focus of this study. Altogether, this following section reviews the relevant studies on L2 learners' perceptions of Internet reading on the basis of the two streams: perceptions of reading different text formats and perceptions

of web-based learning programs.

### ***L2 Learners' Perceptions of Reading Different Text Formats***

Prior to the incorporation of the Internet with L2 teaching, there is interest in researching on learners' perceptions of the effectiveness of the computerized L2 reading gloss. Davis and Lyman-Hager (1997) interviewed 42 undergraduates of French to elicit their attitudes toward the use of computerized gloss in reading program. The result revealed that many students who were quite satisfied with this program described that reading with the computer was "helpful", "time-saving", "easy", and "enjoyable". Another finding considering the students' different experiences of reading from a computer screen and from a printed text showed that their first exposure to the computerized gloss was a rather pleasant experience. To be exact, some students felt that reading with a computerized gloss was more likely to obtain a coherent understanding of a text without wasting time checking up in the dictionary and could make them more independent language learners, and the others even hoped that more materials would be available in computer-glossed format to aid their French learning. At last, the most striking finding showed that the students' perceptions of the amount comprehended differed from the reality of the amount comprehended, indicating that they appeared to be "false comprehenders". With this respect, the authors ultimately recommended that students need more training to comprehensively use computer programs in the most beneficial ways to not only facilitate their vocabulary checkup but also promote their reading comprehension.

A similar study by Son (2003) interviewed nine Korean as a foreign language (KFL) learners to examine their reactions to the three text formats of reading: paper-based (PF) accompanied by glossaries, computer-based non-hypertext format (NHF), and computer-based hypertext format (HF) accompanied by online glossaries with sound. The first result showed that PF was the most favored reading format

because the students claimed to be most familiar with it and it allowed them to make notes. Secondly, the students deemed that HF facilitated their reading process and comprehension due to its instant access to adjunct information through hyperlinks. Thirdly, NHF was generally disfavored because the vocabulary information was presented separately from the reading passages, which made the students feel time-consuming and annoying to go back and forth between the passage screen and the vocabulary list screen. Interestingly, despite the disfavor, some students still considered NHF to be beneficial for their vocabulary learning in terms of making them to memorize words.

Another research to investigate the effects of different reading formats, Altun (2003) investigated six ESL undergraduates' understanding of and perceptions about hypertext readings in an academic reading context. The participants were engaged in both linear and nonlinear formats in four different genres: exposition, hyper-fiction (i.e. fiction in hypertext format), non-fiction, and narration. The first finding suggested that the students regarded the hypertext as a valuable bank of information only when they were exposed to the linear hypertext because it was easy for them to make decisions about what was important and what was not. However when the students were encountered with nonlinear hypertext, especially the genre of hyper-fiction, they perceived it as a maze where they had to search for strategies like making choices or finding an end to the story and thus they felt disoriented easily. Therefore Altun (2003) argued that language learners should be equipped with language reading and computer literacy to maintain effective hypertext reading proficiency.

Tseng (2006) undertook a research to investigate the effects of reading printed texts and hypertext on 92 Taiwanese EFL students' reading comprehension and their perceptions of advantages, disadvantages, and difficulties for reading text on the web

pages. The result showed that the students performed better on paper test than they did online. Furthermore, the students perceived that the advantages of Internet reading were its convenience for searching information and its features of animated pictures. Contrarily, the major difficulties and disadvantages they experienced were that they (1) got eyestrains easily, (2) could not take notes or underline any words on computer screens, (3) had to read many English words, (4) could not get access to computers everywhere and anytime they would like, (5) failed to stay concentrated on readings on screens, (6) skipped lines easily and thus it was hard to locate a certain word while reading on screens, and (7) did not like the websites with bright backgrounds and small font sizes, which aggravated the difficulty in reading. Realizing that the students were encountered with many difficulties while reading on the Internet, the author called on teachers' attentions to the accent of teaching students how to read texts on the Internet and suggested a three-phase class: work-in phase to familiarize learners with vocabulary and background information about topics, work-on phase to ask them to read online, and work-out phase to examine their reading comprehension and have further discussion over readings. By doing so, learners' learning performance will not be impeded by the eyestrains from reading on screens and different online text presentations.

Huang (2006) investigated 30 English-major undergraduates' preferences and views on reading in printed texts and online texts. The result showed that the students did not express their preferences over online reading because they reported to get eyestrains easily, information overload from multimedia presentation modes, and distractions from advertising and commercial popups. Despite these inconveniences, they positively valued the function of hyperlinks that could dispense with their inconvenience of flipping hard to get information. In addition, the students tended to skim and scan more when reading online than on printed texts since the boldface and

heading features on online texts were more obvious and convenient for scanning and some unreliable online information did not even require their careful reading.

Therefore, the contents could not be retained in their mind for long. When inquired about the greatest difference between reading online and in printed texts, the students reported that reading online contained fast circulated information that could provide them with an instant access to a variety of information. Contrarily, reading in printed text gave them a sense of security and a better grip on reality because they could touch it, own it, and take notes on it.

Comparing Altun's (2003) and Son's (2003) finding, it is found that there is a discrepancy lying in the students' preferences of nonlinear hypertexts. Nonlinear hypertexts are much more favored in Son's study than in Altun's. This difference occurred because the hypertext the students was offered in Son's study was the definition of vocabulary to tackle the reading comprehension breakdown while the hypertext the students obtained in Altun's study was the various subsequences of the reading content to accomplish their own reading that demands more higher-level reading skills. Consequently, the students seem more intended to receive short contents to enforce reading understanding instead of long ones on the screen. In this perspective, features of different hypertexts can affect learners' perceptions of reading. As Son (2003) proposed, more future research should be ventured to probe the use of hyperlinks on the websites to optimize learners' reading performance.

This section is concluded in Table 2-5 to compare each reviewed study in the three dimensions: students' preference of text formats and the disadvantages and advantages of reading different text formats.

Table 2-5 A Comparison of Previous Studies on Students' Perceptions on Reading Different Text Formats

Researcher	Preference of Text Format	Disadvantage	Advantage
Davis and Lyman-Hager (1997)	The students preferred the computerized gloss with reading articles on screen.	The students who read with the aid of computerized gloss appeared to be "false comprehenders".	The computerized gloss could help the students to obtain a coherent understanding of a text without wasting time checking up unknown words.
Son (2003)	The students preferred PF and HF to NHF.	It was time consuming to go back and forth between the reading article screen and the word list screen while reading NHF.	Reading PF could allow the students to jot down notes, reading HF could facilitate reading process and comprehension with the aid of hyperlinks to unknown words, and reading NHF could benefit vocabulary learning.
Altun (2003)	The students preferred linear hypertexts.	The non-linear hypertexts viewed as a maze that could cause disorientation.	The linear hypertext viewed as a valuable bank of information.
Tseng (2006)	The students performed better on the paper test than the online test.	The encountered problems were eyes strains, many words to read, Internet inaccessibility, shortage of concentration, designs of the websites, skipping lines, and inability to take notes.	Internet reading was convenient for searching for information and its features of animated pictures.



Huang (2006)	The students did not clearly articulate their preference over online texts.	The students not only got eyestrains and distractions from bombarded information from various presentation modes, but also lost the memory of the online reading content.	The function of hyperlinks could save the students' time to flip hard to search for further information. Besides, a variety of information can be instantly accessed.
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### *L2 Learners' Perceptions of Web-based Learning Programs*

Soon, Suan, Baniamin, and Mamat (2004) conducted a qualitative study to interview 24 learners of Mandarin, French, and Arabic to gain their perceptions on the feasibility of employing web-based instruction (WBI) to supplement the on-campus foreign language in UiTM in Malaysia. The first result revealed that nearly all of the students embraced a negative attitude WBI since they preferred regular on-campus classes where (1) the vital need of interaction between teachers and classmates could be met and thus immediate feedback about their accuracy was offered, (2) the encumbrance of technical problems could be waived, and (3) more and better concentration could be put to lecturers' teaching niceties. Nevertheless, WBI was not without its merits. All the students more or less had pleasant experiences of WBI because (1) its diversity of online information and interactive activities with instantaneous feedback could gain more knowledge about target culture and could improve language skills such as games and quizzes, (2) its multimedia features such as sounds and animations could motivate their learning, (3) its convenience could save their time and energy to go to the libraries searching for demanded information and to look up unfamiliar words in dictionary. Namely, WBI activities had learning to occur anytime and anywhere for the students. The third upshot indicated that the students with lower proficiency level in target language harbored negative perceptions



of WBI activities because there were so abundant unfamiliar words and information that they could not even understand the text and stay searching focus and hence lost their confidence in learning through this program. On the contrary, those with positive views on WBI acknowledged that they not only learned about target language but also the computer and technology competency that made them irresistibly explore the computer activities subsequently. The authors strongly encouraged teachers to provide learners with sufficient instructions to help out in their changing of more positive perceptions of learning through the websites.

Stepp-Greany (2002) administered a questionnaire to investigate 358 Spanish language learners' perceptions of the effects of the technology-enhanced language program on their foreign language learning experiences. The results revealed that the students attributed an important role to the instructors and perceived that their cultural awareness, listening and reading skills, and independent learning skills were generally enhanced. Furthermore, most of the students believed that they had learned how to be resourceful in finding the meaning of difficult words or phrases on their own and even developed confidence as independent knowledge navigators. Despite that, it was found that time pressures, such as more time demanded to spend on the Internet activities, played a negative role in students' perceptions of the effectiveness of new technology integrating into class. At last, the author concluded that more instructors' facilitations in any technology-assisted classroom should be increased, especially for those low proficiency learners, to boost better independent learning.

Several similar studies are also found in Taiwan. Kung and Chuo (2002) conducted a questionnaire survey to investigate how the 49 French-major collegians perceived English learning through the five teacher-selected ESL websites in a web-based program and what problems and difficulties they encountered. The result generally affirmed the students' positive preference for the use of the

teacher-recommended ESL websites to supplement in-class instruction. However, they did not consider the adopted websites to be appropriate for their English proficiency and related to the course content. Moreover, they claimed to need more instructions regarding where the sites were and how to use them, indicating that they were lack of experiences of using online educational resources. Spending too much time and getting disconnected were perceived as the main problems for the students to complete their assignment in this program. At last, the authors found that even though the students generally felt the web-based program interesting, their revisiting these websites on their own remained passive due to the following five reasons: (1) lack of time, (2) lack of pressure from teachers, (3) inaccessibility to computer equipment, (4) more other convenient media for English learning, and (5) unsuitability of the Internet content such as new words, difficult navigation, tedious materials, unavailability of materials for writing reports.

In the similar vein, Kung (2005) did another similar study to investigate 48 English-major collegians' online reading habits, reactions towards web-based assignments, perceptions towards what was gained, and difficulties encountered. The result indicated that despite a variety of resources available to the students on the Internet, they hardly ever used them in their English learning. Therefore, they needed to be guided in using and finding useful resources. Besides, the students found the web-based assignments worthwhile, interesting, and beneficial for learning English since they were able to find useful websites, learn new vocabulary, improve reading skills, and learn how to search for data. More students hence felt like surfing more English websites. In conformity with the result from the last research, difficulties encountered were (1) too much time spent on the Internet, (2) eyestrains, (3) inaccessibility to Internet, (4) inability to find a good website, and (5) a lot of new vocabulary. To help students to search for innovative ways to enrich the learning

experience, the author suggested that teachers help them with the acquisition of online navigation and search skills.

The research findings of the reviewed studies on students' perceptions on web-based learning program in this section are summarized and compared in the two dimensions of advantage (such as the development of target cultural awareness, improvement of language skills, encouragement of independent learning) and disadvantage (time demanded, technical problems, a plethora of new words, deficiency of instructions in websites use, the appropriateness of the selected websites) in Table 2-6.

Table 2-6 A Comparison of Previous Related Studies on Students' Perceptions on Web-based Learning Programs

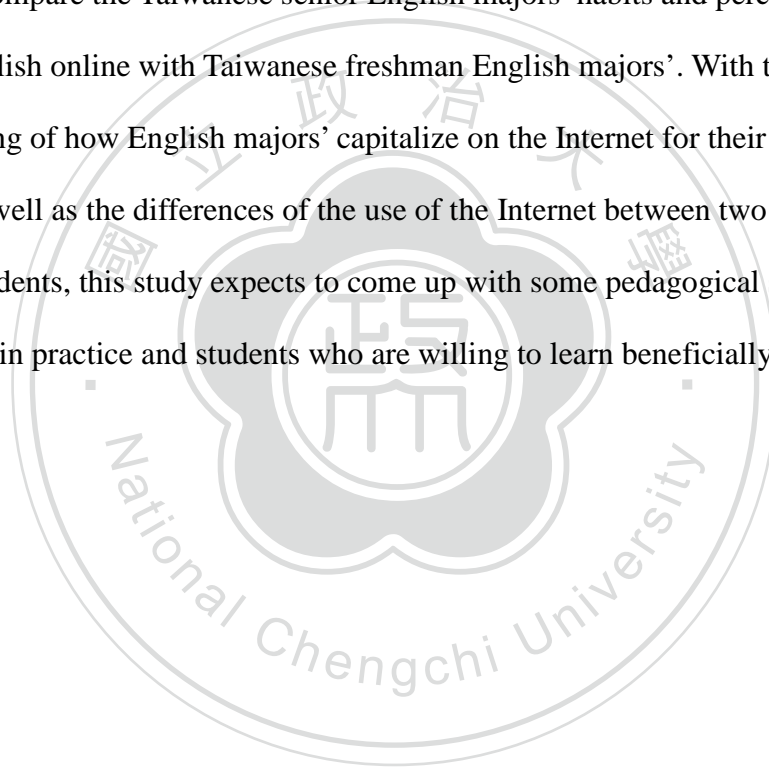
Researcher	Advantage	Disadvantage
Soon et al. (2004)	<ul style="list-style-type: none"> <li>(1) A variety of online information and activities helps with the acquisition of target culture and the improvement of language skills.</li> <li>(2) Multimedia features can easily ignite learning motivations.</li> <li>(3) Information can be obtained easily.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Reading online lacks real interaction between teachers and peers.</li> <li>(2) Reading online is full of encumbrance of technical problems.</li> <li>(3) Reading online is easily distracted by other online features.</li> <li>(4) Too many unfamiliar words and information are not favored by students with lower target language proficiency.</li> </ul>
Stepp-Greany (2002)	<ul style="list-style-type: none"> <li>(1) The web-based program enhances students' cultural awareness, and reading and listening skills.</li> <li>(2) Students learn to be resourceful in searching for information online and</li> </ul>	<ul style="list-style-type: none"> <li>(1) It is time-demanding to finish Internet activities.</li> <li>(2) Insufficient instructors' facilitations can lead to low-achieving students' negative perceptions about the value of web-based</li> </ul>

	develop learning skills to be independent knowledge navigators.	learning programs.
Kung and Chuo (2002)	(1) Teachers-recommended ESL websites are useful tools to learn English and supplement in-class instruction.	(1) Students with limited experiences of using online educational resources need more teaching instructions. (2) Students' main problems of completing online assignments are spending too much time and having technical problems, such as Internet disconnection.
Kung (2005)	(1) Web-based assignments allow students to learn new words, improve reading skills, and learn how to search for wanted information. (2) Students feel like reading online websites in English.	(1) Too much time spent, eyestrains, the Internet inaccessibility, and too many new words are main hindrances to online English reading. (2) Students are unable to find a good website.

### Summary

With the advancement of Internet technology incorporation into our daily lives, our habits and perceptions of reading have been changing, particularly in the education settings. As several studies reviewed above, many educators have tried to utilize the computer technology or any learning program with the use of the computer to enrich the students' learning process and to reinforce their learning products. However, no matter what instruments or what computer learning programs the researchers used in the studies reviewed above, with the students having different English proficiency levels and English learning backgrounds and the continuous update of new technologies, the outcomes of their learning and their viewpoints on

these web-based or computer-based learning programs remain worth being explored. In addition, from reviewing previous research, it is found that an aspect of research has been overlooked, which is the understanding of Taiwanese English majors' habits and perceptions of reading English on the Internet. In addressing this issue, the present study attempts to gain the understanding of how Taiwanese English majors employ the Internet to enhance their English learning. To further understand how differently the Taiwanese English majors read English on the Internet, this study also intends to compare the Taiwanese senior English majors' habits and perceptions of reading English online with Taiwanese freshman English majors'. With the understanding of how English majors' capitalize on the Internet for their English learning as well as the differences of the use of the Internet between two education levels of students, this study expects to come up with some pedagogical suggestions for teachers in practice and students who are willing to learn beneficially through the Internet.



## CHAPTER THREE

### METHODOLOGY

This chapter delineates the overall research design that this study employed to investigate EFL undergraduates' Internet reading habits and perceptions. It introduces the main research method adopted in this study, reports how the participants were recruited, illustrates the pilot study, describes how the data were collected, and how the data were analyzed respectively as follows.

#### **Rationale for Research Method**

The choice of the research method depended on the purposes and research questions of the present study. Different from previous relevant studies conducted using surveys and questionnaires to quantitatively investigate learners' Internet reading habits and perceptions, the overall research design of the current study was grounded on and conducted by means of focus group interviews to probe the informants' Internet reading habits and perceptions in detail and in depth. The following presents the introduction to focus group interview in terms of its definition, rationales of application, and advantages to justify the research method utilized in this study.

*Focus group interview*, coined and defined by Merton and Kendall (1946), is an exploratory and qualitative research method administered to apply to a situation where participants have a specific experience of or opinion about the topic under investigation. They further propose that within focus group interview, “an explicit interview guide is implemented, subjective experiences of participants are explored in relation to predetermined to research questions (cited in Gibbs, 1997). Kreuger (1988) briefly defines a focus group interview as a “carefully planned discussion designed to obtain perceptions in a defined area of interest in a permissive, non-threatening environment” (cited in Lewis, 1995, 2000, p.2). In this respect, focus group interview

is an interview conducted by gathering a group of targeted participants to have a face-to-face and interactive discussion on specific research topics under the guidance of trained interviewers.

As for the rationale and purpose of applying focus group interview research, Gibbs (1997) stated that this research method is mainly adopted to tap into respondents' attitudes, feelings, beliefs, experiences, and reactions in a natural way. Gibbs further cites Stewart and Shamdasani's (1990) viewpoints on the main purposes of this research method. They enumerate focus group interview is used to

- obtain general background information about a topic of interest;
- generate research hypotheses that can be submitted to further research and test using more quantitative approaches;
- stimulate new ideas and creative concepts;
- diagnose the potential for problems with a new program, service or product;
- generate impressions of products, programs, services, institutions, or other objects of interest;
- learn how respondents talk about the phenomenon of interest which may facilitate quantitative research tools;
- interpret previously obtained qualitative results

(cited in Lewis, 1995, 2000, p.3).

In respect of the benefits that focus group interview brings to the research, Kitzinger (1995) believes that it is “the attribute of interaction and group dynamics within the focus group interview that enables the participants to use their own language to comfortably reveal their views of the target issues, to discuss and ask questions of each other, and to reconsider their own understandings of their specific experiences”. In addition, Morgan (1988) points that a focus group interview allows researchers to discover what issue is salient crucial and why it is salient (cited in

Gibbs, 1997).

All in all, seeing that the rationales and advantages of conducting a focus group interview are quite correspondent to the purposes of this study---to do an exploratory investigation on the undergraduates' habits and perceptions of reading English on the Internet, the focus group interview method was accordingly utilized to benefit the researcher in probing for clarification, soliciting greater details, and gaining multiple interpretations and insights into each participant's responses under the pressure-free interview environments.

## **Participants and Rationale for Participant Recruitment**

### ***Rationale for Participant Recruitment***

The participant selection of this study is justified by the following three criteria. First of all, since this study intends to investigate and then compare English major freshmen's and seniors' Internet reading habits and perceptions, the participants recruited in this study consist of English major freshmen and seniors. Secondly, in the hope of contributing a variety of findings, the researcher drew participants from two universities. Therefore, more well-rounded and diverse results can be expected. Thirdly, some qualitative researchers have recommended that when the researchers know relatively little about a phenomenon, investigating a small number of participants to provide rich information and a more focused analysis is more likely to provide clearer directions to the research question (Altun, 2000; Coiro & Dobler, 2007). With this regard, the number of participants of the two education level, seniors and freshmen, from the two universities were appropriately limited.

### ***Participants***

The participants recruited to this study comprised 49 undergraduate volunteers. With the convenience of sample, the participants were selected in part or in whole at



the convenience of the researcher of the current study. Moreover, in order to obtain a diversity of findings, this study intended to recruit the participants from two universities that the researcher had an access to. In so doing, the findings from the interview data would not be too confined to the participants recruited from one school. As a result, there were 25 participants drawn from one of a top-ranking universities in northern part of Taiwan (hereafter, university A) and 24 participants from one of a top-ranking private universities in northern part of Taiwan (hereafter, university B).

In addition, in order to answer the third research question---what are the differences between freshmen and seniors in their habits and perceptions of reading English on the Internet---the participants were also enrolled based on their education levels. The English major freshmen, who lacked experiences of using English as their medium to search for information on the Internet during their studies at high school, were assumed to be novice at reading English on the Internet. However, the English major seniors, who had three more years of academic English learning experiences, were assumed to be more skilled at utilizing English as medium to search for information in English. By comparing the seniors' and freshmen's habits and perceptions of reading English on the Internet, it is hoped that the huge differences can be discovered in order to come up with more pedagogical suggestions for educators to well prepare the freshmen with more skills to cope with the complexity of reading English on the Internet.

All participants were recruited by the researchers' personal invitation with the distributions of the Chinese version of consent form (See Appendix B for Chinese version and English translation version in Appendix A) on partaking in this research. Before the researchers' recruitment, the researcher contacted some professors of the English department from both of the universities in order to gain their permissions to recruit participants. Having gained the permissions from several professors, the

researcher immediately embarked on making arrangements for paying around eight visits to both universities to respectively draw volunteer participants from seniors and freshmen of university A and seniors and freshmen of university B.

To be more concrete and clear, the participants came from seven classes in total. The senior participants from university A were recruited from the course of *Consecutive and Simultaneous Interpretation* while the senior participants from university B were recruited from the course of *Business English* and *Advanced English*. In addition, the freshmen participants from university A were drawn from the course of *English Listening and Oral Training* and *English Writing* while the freshmen from university B were drawn from the course of *English Listening and Oral Training* in two different classes.

During the researcher's personal invitation in their class time, the Chinese version of the consent forms was distributed to recruit the voluntary participants to form several cohorts of focus group interview sessions. In the consent form, the purpose and research method of this study were at first introduced. Aside from this, as Gibbs (1997) mentions, some incentives are necessary to recruit enough participants. With this respect, each voluntary participant was told to offer one hundred dollars for one-hour focus group interview to get more participants involved in this study. Preceding their decision making, they were assured that it was alright if they were unwilling to participate in this study. Besides, they were also encouraged to group themselves. Thereby, it would be so much easier for the researcher in arranging the focus groups and scheduling the interviews. Moreover, the confidentiality of their interview details was also guaranteed. Finally, if the students were willing to take part in this study, they were required to leave their contact information, including e-mail addresses or phone numbers, through which the researcher could further schedule focus group interview sessions. After several recruitments, the researcher divided the

willing participants into several groups and then made appointments with each one of them.

The background of the participants is described as follows. 49 participants were all English majors. Although they came from different universities and different education levels, they shared the similar required English courses, such as the introduction to western literature, approaches to literature, English writing, and English oral and listening training. Moreover, the native language of all the participants is Mandarin Chinese with two exceptions from Malaysia. Even though these two overseas compatriots from Malaysia where English is the official and second language, they reported they are very able to read in Chinese. They claimed that they are similar to other Chinese students because they would also like to read in Chinese. Therefore, the data they provided did not impede the analysis of this study.

### **Data Collection Procedures**

To obtain data, this study was mainly conducted by means of focus group interviews with interview questions that were overall audio-recorded with a recorder. The following first elaborates on the arrangement of focus group interviews, followed by the procedures of audio-recorded focus group interviews, the design of interview questions, a pilot study, and finally an overall picture of the procedures of data collection.

### ***Arrangement of Focus Group Interview***

Following the recruitment, the researchers started to make arrangements of the focus group interview by initially grouping the participants and then scheduling the interview time with them. Concerning the method to group the participants, the participants were mainly organized based on their education level (i.e. seniors or freshmen), the number of the participants included in a group, their available time left

on the consent form, and the group they had already made and listed on the consent form.

To be specific, the participants at first had to be grouped with the same education level on the premise so that the interview data could be more likely to present the differences of Internet English reading habits and perceptions between the two different education level groups. Furthermore, according to Krueger (1988), to appropriately group the participants, a group of four to six participants is suggested for better discussion over an issue. After meeting the two criteria mentioned above, the researcher further assembled the participants based on the group they made themselves. And for those who had no group, the researcher randomly assigned them in a group based on their same available time. Eventually, the total number of the participants is 49 with 18 focus group interviews consisting of eight groups of freshmen and 10 groups of seniors. However, due to the difficult time arrangement and the participants' unexpected absence, the number of the participants varied.

As for the interview location and date, the researcher and the participants made an appointment on when and where to meet up to have an interview by either phone or through e-mail. During the scheduling time and place, the researcher promised the participants to have interviews at their convenience. Therefore, all the interviews were conducted on or nearby campus. By so doing, the participants did not have to worry about the inconvenience that this interview participation might cause. The place where the interviews were conducted was various, encompassing the coffee shop, available classroom, and school cafeteria.

Concerning the interview duration, the total time spent on the 18 interviews is 613 minutes (around 10.22 hours) while the average time of the interview approximates 34 minutes. In addition, the range of the focus group interview is from 25~49 minutes. Table 3-1 illustrates the composition of the focus groups and the

interview schedules in detail.

Table 3-1 Focus Group Interview Schedule

Education Level	Interview Date	Time	Number of Participants	Group Number
Seniors at school A	2008/03/25	49 minutes	3	Group 1
Seniors at school A	2008/03/26	36 minutes	1*	Group 2
Seniors at school A	2008/03/28	39 minutes	2	Group 3
Seniors at school A	2008/03/28	37 minutes	2	Group 4
Seniors at school A	2008/03/28	43 minutes	3	Group 5
Seniors at school A	2008/04/02	30 minutes	2	Group 6
Seniors at school B	2008/04/21	30 minutes	3	Group 7
Freshmen at school A	2008/04/24	37 minutes	3	Group 8
Freshmen at school A	2008/04/24	43 minutes	3	Group 9
Seniors at school B	2008/04/25	32 minutes	3	Group 10
Seniors at school B	2008/04/30	30 minutes	4	Group 11
Seniors at school B	2008/04/30	30 minutes	2	Group 12
Freshmen at school B	2008/05/16	27 minutes	4	Group 13
Freshmen at school B	2008/05/16	25 minutes	2	Group 14
Freshmen at school B	2008/05/16	25 minutes	3	Group 15
Freshmen at school B	2008/05/28	30 minutes	3	Group 16
Freshmen at school A	2008/05/30	32 minutes	3	Group 17
Freshmen at school A	2008/06/02	38 minutes	3	Group 18
TOTAL	12 days	613 minutes (10.22 hours)	49	18 groups

*Note.* The number of the participants highlighted with an asterisk \* in group 2 is one. In fact, there were supposed to two participants included in this group. Unfortunately, one of the participants failed to attend the interview because she suddenly had an emergent personal business to deal with. Therefore, there was only one participant. Although this seems to fail the standard of the participant recruitment of a focus group interview, the interview data that the rest of the participants provided are quite saturated and rich.

### *Procedures of Audio-recorded Focus Group Interviews*

Prior to the interview, the interviewed groups were notified that the interview was going to be recorded with an MP3 to help the researcher to keep track of their responses and interactions for further research analysis. Moreover, since the type of the interview conducted in this study is semi-structured, which is informal and flexible and allows new questions to be brought up during the interview, the participants were strongly encouraged to feel comfortable to share whatever that came into their mind and that actually there were no fixed or exact answers to each interview questions. Therefore, they could feel free to share opinion under pressure-free atmosphere.

During the interview of this study, the researcher asked the participants the questions in order of the ten previously designed interview questions (See Table 3-3). The discussion on each interview question did not end until the participants had no single opinion to share. However, if there was still any idea flashing into their mind in the middle of the discussion on another asked interview question, they were always welcome to point it out. In addition, if an opinion the participants provided was not specific enough to the researcher, the researcher would ask the interviewees to illustrate it with some personal experiences or to elaborate on it. If the respondents' discussion was off topic, the researcher still let them finish their discussion first, and then used another way to specify and illustrate the interview question again. This way, the participants could discuss the issue the researcher pointed out on the right track. Along with the interview, the researcher caught the main themes of their discussions and jotted them down as references for interview transcription in verbatim and data analysis.

Following the focus group interview, the participants were given one hundred dollars for their participation in this study as the researcher had promised to grant

them for appreciation for their cooperation. At last, the researcher inquired the participants' willingness for the researcher to contact them either by phone or through email in order to ask them to shed light on some blurry statements recorded.

### *Interview Questions*

Four considerations were taken into while the researcher designed the interview questions. Firstly, the interview questions were developed in English (See Appendix C) and then translated and delivered in Chinese (See Appendix D). The reason to do so is to have the participants better understand the interview questions since their mother tongue is Chinese and to have the researcher present this study in English. By using Chinese to deliver the interview questions, the participants' discomfort listening to English or using English to respond can be diminished and thus their understandings of inquiry questions are further boosted. Seeing this, each of focus group interviews of this study was conducted in Chinese so as to elicit more insights from the pressure-free respondents, who were not anxious about which English words or sentence patterns to use during the interviews. Instead, with the use of Chinese, more thoughts and expressions were articulated.

Secondly, corresponding to Stewart and Shamdasani's (1990) suggestion that for the participants to respond from various dimensions, a dozen questions is the maximum and they should be open-ended and unstructured (cited in Lewis, 1995, 2000, p.4). In this respect, the researcher designed a ten-open-ended-question interview guide. Ten interview questions, based on both the research questions and the literature, embraced two issues: the first issue is about online English reading habits with six sub-questions, and the second issue is about online English reading perceptions with five sub-questions. The overall interview questions are enumerated in Table 3-2.

Table 3-2 Ten Interview Questions for Focus Group Interview

Interview Questions
<p><i>Issue 1: Online English Reading Habits</i></p> <ol style="list-style-type: none"> <li>1. When and why do you like to read English materials on the Internet?</li> <li>2. What types of Internet English reading materials do you like to read, such as English news? Why do you read them?</li> <li>3. What topics of Internet English reading materials are you interested in reading, such as subject-related information? Why do you like these topics?</li> <li>4. How often do you read English materials on the Internet on a weekly basis?</li> <li>5. What influences your choices of Internet English reading materials? For example, the length and the presentation of the Internet content.</li> <li>6. If you encounter some problems affecting your comprehension during the Internet reading, such as new vocabulary, what are some typical ways to solve these problems?</li> </ol> <p><i>Issue 2: Online English Reading Perceptions</i></p> <ol style="list-style-type: none"> <li>7. What do you think are the challenges and disadvantages of reading English on the Internet?</li> <li>8. What do you think the advantages of reading English on the Internet?</li> <li>9. Do you prefer reading English materials on the Internet to printed ones? Why?</li> <li>10. If your English teacher is going to integrate the Internet English reading into the course, what are some suggestions would you like to make? Why?</li> </ol>

Thirdly, to assure the validity of the interview questions, ten interview questions were revised with the following procedures. First of all, the researcher generated questions according to the research purposes. Afterwards, the question that had problems were selected by the thesis advisor and then discussed and revised by the



thesis advisor and the researcher in order to conduct a pilot study. Then, a pilot study (the details presented in the following section) was conducted to examine whether the modified interview questions were more understandable for the participant. Finally, reviewing the pilot-study interview process and results, the researcher modified the questions again and developed them to the present interview guideline.

Fourthly, to probe into more interesting insights, the interviews were kept flexible to accommodate other related issues arisen during the interview discussions.

### *Pilot Study*

A pilot study was conducted for the following two purposes. First of all, it was implemented prior to the formal implementation of the current study in order to examine the validity, feasibility, and appropriateness of each interview question, to see if there existed any problems in the interview procedures. Each participant was accordingly encouraged to express any confusion from the interview questions for the researcher to ponder over the questions again. Secondly, the pilot focus group interview provided an approximation of how much time each focus group would entail, which could be used as reference for the formal implementation.

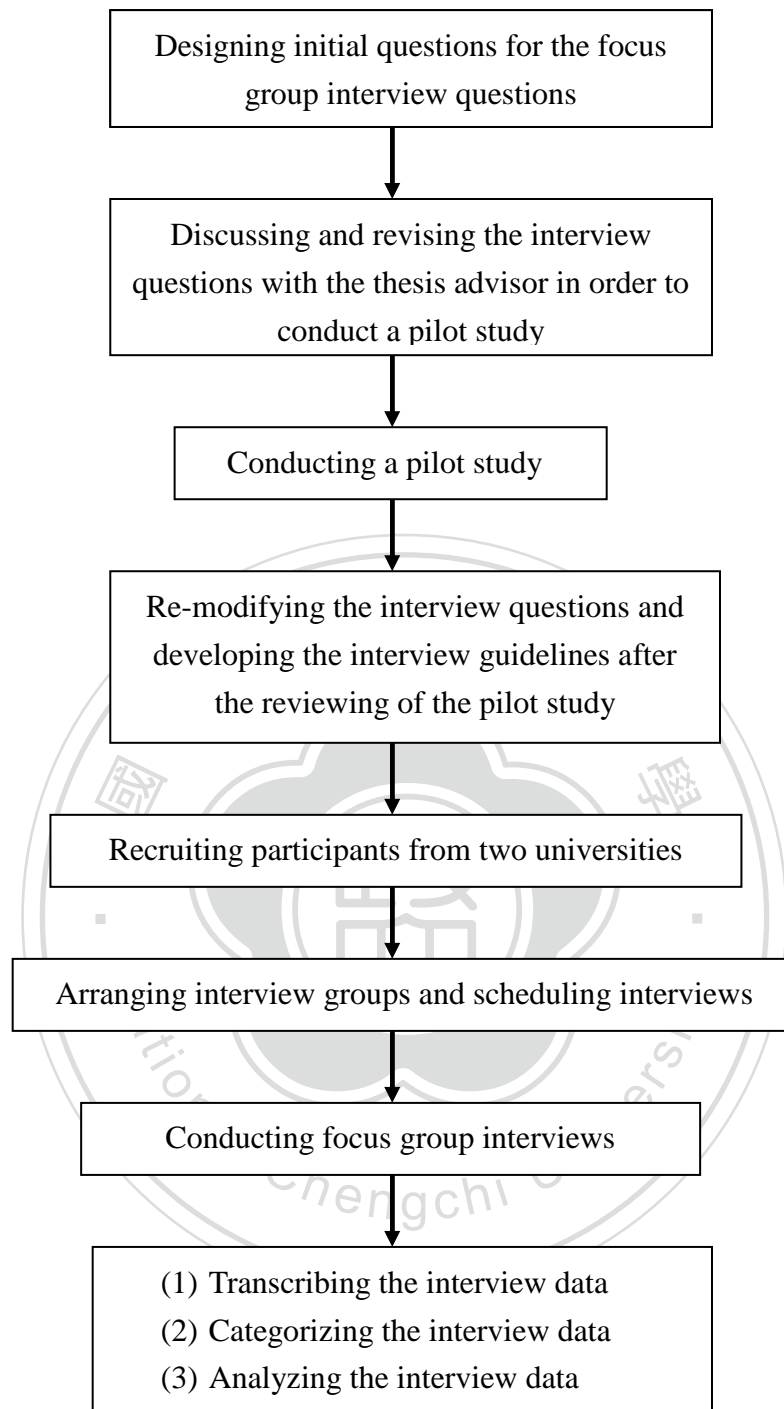
One interviewed group composed of four English major freshmen from National Taipei University (NTU) was recruited on March 20, 2008 for about thirty to thirty-five minutes. During the interview, the participants were confused about the definition of Internet English reading in this study. Most of them thought it was confined to only reading Internet English articles, and one of them considered it as reading all formats of English information online. To avoid these ambiguities, the researcher added the definition of Internet English reading on the interview guideline and all the interviews in the formal study would start with this definition. Hence, this problem helped improve the question guidelines and consequently the participants would steer clear of the confusions and ambiguities.

Moreover, in responding to the question concerning the similarities and differences of reading Internet English materials and printed English materials, the participants in the pilot study could not think of any similarity between them. Therefore, this question was revised to solely center on the differences instead of similarities.

### ***Data Collection Procedures***

In summary, there are eight main phases of data collection involved. At the first phase, the researcher designed initial questions for the focus group interviews. At the second stage, the researcher consulted the thesis advisor to revise the interview questions to examine the appropriateness of the interview questions. Next comes to the third and fourth phases, a pilot study was conducted to re-modify the focus interview questions by examining their corrections and comprehensibility of the interview questions. Then the researcher went to the fifth phase to recruit the participants from two universities to voluntarily join in this study by asking them to sign the distributed consent form. After the recruitment, at the sixth stage, the voluntary participants were informed of their group for the focus group interview.

The actual study began at the seventh phase by conducting the scheduled focus group interviews. At the last phase, upon the interview data gleaned, the data were transcribed, categorized, and analyzed. All in all, the overall picture of the procedures of the data collection in this study is visualized in Figure 2.



*Figure 2.* An overall picture of the procedures of data collection

### **Data Analysis**

The interview data of this study were mainly analyzed in qualitative method along with the calculation of percentage and frequency. To generate a coding scheme to analyze the data gathered from the focus group interviews, all the obtained data

were analyzed in accordance with Zhang and Wildemuth's (2009) qualitative content analysis method to modify the taxonomy of Internet reading behaviors from Chang's (2003) study that has been reviewed in literature review (See p.35-36 of this study). Since Zhang and Wildemuth published a very clear guideline for the qualitative analysis of content, the researcher decided to follow their procedures of qualitatively analyzing the data gathered from the focus group interviews.

Zhang and Wildemuth's qualitative analysis is involved with eight phases of coding procedures: “ (1) transcribing and arranging interview data (2) deciding the unit of analysis, referring to the basic unit of text that can be assigned to a coding unit to represent a single theme consistent with the nature of the research question, (3) developing categories and coding scheme from units, (4) testing coding on sample text, (5) coding all text, (6) examining coding consistency, (7) drawing conclusions from the coded data, and (8) reporting results” (p.3-5).

Between the coding procedures and drawing conclusions, the researcher counted the frequencies of the coded data to address research question 1 and 2. The frequencies of each coded data were calculated and then turned into percentage to address each interview questions. The procedures to calculate the coded data differs in accordance with each interview question, which will be explicated in the result part. To tackle research question 3 related to the differences between the seniors and freshmen participants in terms of their habits and perceptions of reading English online, the data among the two groups were compared in percentage and in total frequencies of coded data. Overall, the presentation of percentage and frequency of coded data along with the interview contents can lead to better and more comprehensive understanding of the participants' online reading habits and perceptions.

Additionally, to avoid bias, the researcher worked with another two analysts to

code the same data from transcriptions and then computed the rate of the consistent coding to consolidate the inter-rater reliability check. Two co-coders participating in this study were two female graduate students in the same TESOL program in NCCU. The reason why these two co-coders were invited to code the data together is that both of them have been through the similar procedures of co-coding the transcribed data in their previous research during their studies in the TESOL program. Furthermore, one of them was also conducting a similar research at the time, so the co-coder was even more familiar with the procedures for coding similar data. After coding all the transcriptions, the researcher then asked the two co-coders to code respectively part of the data based on the two issues of the interview questions. As a result, one co-coder was asked to code the first five interview questions pertaining to the participants' habits of reading English online while the other was asked to code the last five interview questions concerning the participants' perceptions of reading English on the Internet. Before co-coding, the researcher explained the sample of coding scheme to the co-coders in an attempt to achieve consistent coding and then encouraged them to point out any code they disagreed with. If any disagreement appeared, the researcher and the co-coders negotiated and discussed over it and then tried to reach consensus and resolve the discrepancies. In this study, the final inter-rater reliability ratio reached approximately 89.3% and 89.2% respectively.

### **Summary**

This chapter elaborates on the research design of this study and the following chapter proceeds to report on the findings, discuss the findings, and clearly explain the method to compute the percentage and frequency of coded data corresponding to each interview question.

## CHAPTER FOUR

### FINDINGS

This chapter reports on the analyses and findings in three dimensions corresponding to the three research questions. Meanwhile, the answers to the three research questions are addressed. The first section presents the results related to EFL undergraduates' Internet English reading habits. The second section discusses EFL undergraduates' perceptions of Internet English reading. The third section reveals the discrepancies between freshmen and seniors in Internet reading habits and perceptions of Internet reading habits.

#### **EFL Undergraduates' Internet English Reading Habits**

This section presents the participants' responses to the six interview questions concerning their reading habits in the following six perspectives: (1) purposes of reading online, (2) types and online sources reading materials frequently read, (3) topics of interest in Internet English reading materials, (4) frequency of online reading, (5) factors affecting choices of online reading sources, and (6) methods to improve reading comprehension online. Each perspective will be statistically presented at first and then discussed with some interview excerpts in detail.

#### ***Students' purposes of reading English online***

The first interview question attempts to find out under what situations or for what purposes students would like to read English through the Internet. From the interview data, students' purposes of reading English online can be categorized into seven types: (1) to do schoolwork or prepare for examinations, (2) to cater for personal interests, (3) to learn English, (4) to gain information hardly available in Chinese, (5) to better comprehend reading contents, (6) to communicate with others, and (7) to maintain identity as an English major.

The total number of frequency in reporting the purposes of reading English online by the participants is displayed in Table 4-1. The number of responses is the number of the participants who reported the particular purpose they read English online. Since the interview questions are open-ended questions, the participants were able to provide more than one kind of online reading purposes. However, even if the participant mentioned a certain type of purpose more than once, the frequency of this type of purpose reported by the participant was considered once. Although the total number of the participants is 49, with some of them failing to provide a certain purpose, there are some missing cases. Besides, the percentage of each reported purpose of reading on the Internet was calculated by dividing the number of the particular purpose that the students reported by the total number of all the purposes the students mentioned during the focus group discussion. As for each percentage followed by each number of responses in Table 4-1, it shows the percentage of the total number of participants who reported the purpose of reading English online.

Table 4-1 Students' Responses to Purposes of Reading English Online

Purposes	%	N
Do schoolwork or prepare for exams	27	48 (98%)
Cater for personal interests	21	37 (76%)
Gain information hardly available in Chinese	14	25 (51%)
Learn English	13	23 (47%)
Better comprehend reading contents	12	21 (43%)
Communicate with others	9	17 (35%)
Maintain identity as an English major	4	7 (14%)
TOTAL	100	177

*Note.* [N] = the number of the responses the participants gave concerning their purposes of reading English on the Internet.

Among seven purposes of reading English online, the purpose of doing schoolwork or preparing for exams (27%) outnumbers the other purposes, followed

by the purposes of catering for personal interests (21%), gaining information hardly available in Chinese (14%), learning English (13%), better comprehending reading contents (12%), communicating with others (9%), and maintaining identity as an English major (4%).

Among 49 students, 48 students (98%) reported that they read English online is to do schoolwork or prepare for coming examinations, 37 students (76%) to cater for their personal interests, 25 (51%) to gain more information hardly available in Chinese, 23 students (47%) to learn English, 21 students (43%) to better comprehend reading contents, 17 students (35%) to communicate with others, and 7 students (14%) to maintain identity as an English major. The following section explains each purpose in detail.

***Purpose 1: Do schoolwork or prepare for exams***

The result reveals that almost all students' (98%) reading English online because of the intention to search for information to help with textbook reading, do term papers, or prepare for oral presentations and exams. Delving into the reason why most of the students read English online for schoolwork or preparation for examinations, it is found that some students were inclined to cut corners in order to reduce reading workload assigned by their teachers. They not only obtain the information related to the reading the teacher assigns, such as brief introductions, analyses, and summaries, but also read others' comments on the reading to pick up some ideas to prepare for the upcoming exam, as evidenced by the following focus group discussion:

P3: Whenever the test is coming, I go to Sparknotes.com to prepare for the test, such as the test on American Literature. I frequent this website a lot.

Compared to reading 30 pages from the textbook, I think Spark Notes, Cliffs Notes, and Wikipedia are really good to use. I can obtain a lot of ideas of the same literature topic I am reading by reading online information within only two web pages. (SG #10)

P2: I read English online when I need to find the summaries of a particular



literature reading for literature courses, quizzes, or exams. I've never actually finished reading the whole reading text the teacher assigned.

P1: That's true. The words in the summaries are much easier to understand.

P3: Right. The summaries are shorter than the whole text. (FG#8)

***Purpose 2: Cater for personal interests***

In regard to the second ranking of the purposes of reading English online, thirty-seven students (76%) reported that they read English on the Internet in order to search for information that is irrelevant to schoolwork but corresponding to their personal interests and hobbies or to know others' opinions on the same topic they are interested in for pleasure reading. Probing into the data, many students brought up that they were interested in reading online to seek information relevant to the movies or TV shows that they had watched or music they had listened to in an attempt to either obtain further information or gain better understanding of the movies, as shown in the following interview excerpts:

P2: I have been watching many American TV dramas, so I have been reading some related information about them on their official websites. But recently the Writers Guild of America (i.e. a labor union representing writers of television and film and employees of television and radio news) has gone on strike, so recently I have paid more attention to their information about when they will come back for work. (SG#4)

P1: I also look for some information about movies stars and singers after watching their movies or listening to their songs. (SG #2)

P2: Since I like to go to the movies, I usually watch the movie previews or read their introductions to the movies that I am interested in. (SG #7)

P3: I read others' comments on some movies that I have seen to get deeper understanding of the movies. (FG#15)

Furthermore, the interview data also indicated that some students' interest in reading English online is transferred from their habit of reading printed texts they used to have and is to save money. Some students with money consciousness mentioned that with the use of the Internet, they did not have to pay a lot for a costly foreign magazine.

P1: I like reading English magazines online like Vogue, Elle, Cosmopolitan, and National Geography. Foreign magazines are so expensive that I don't want to buy them in print. So, I have to read them on the Internet. (SG#6)

P2: I also read Economist magazine on the Internet because the magazine is way too expensive. (FG#8)

P2: I like reading American magazines called Life and Style and US, so I frequent their official websites to read their updated news every day. Reading on their websites does save me a lot of money because their magazines I used to buy here in Taiwan were very expensive. A magazine costs around 200 NT dollars. (SG#4)

Inspecting the students' responses, it is further discovered that students' reading English online to cater for their interests seems to pertain to teachers' initiation, referring to the teacher's introduction of certain topics or issues that may further motivate student's interest and inquiry and accordingly lead them to learn beyond schoolwork purpose. A student mentioned that:

P3: I read English online because I'm taking a course related to Middle East and our teacher wants us to pay more attention to the current news of Middle East. Unfortunately, there is little news related to this area, so I have to go to BBC news for the news about this area. In class, the teacher asks us about what we have read about Middle East. Also, I like to read about it because I am interested in certain topic that our teacher brought up in class. I think this area is always in turmoil, it is worth our attention. (SG #5)

In addition to developing student's interest to enquire for more information through the Internet, teacher's initiation can beneficially foster student's online reading habit, as exemplified by a student:

P1: Because when I was a freshman, I found that my English reading proficiency was not that good at that time, I decided to read New York Times, which was highly recommended by some of my teachers. They said that New York Times is well-written and more bias-free. Now, I add New York Times to my favorite website list, so I am used to reading it every day to keep up with current international news. (SG #4)

***Purpose 3: Gain information hardly available in Chinese***

Twenty-five students (51%) noted that their reading English online is in an

attempt to obtain information that is hardly come by in Chinese, ranked as the third frequently reported purpose of reading English online. The following quotations demonstrate this respect:

P3: Another reason I would like to read English on the Internet is that when there isn't any Chinese resource I can find, I have to read in English. For instance, I am one of the fans of IL Divo, which is an Italian signer team. Since this singer team is not that famous here in Taiwan, I have to search for their information on their official websites and of course it [the information] must be presented in English. (SG#1)

P2: I also like to go to *YouTube* to watch something interesting for entertainment. Say, I remember a cartoon called "Family Guy" that I used to watch in the States. After coming back to Taiwan, I can only follow this cartoon by watching it through the Internet on the *YouTube* website because it is not even aired here in Taiwan. So, with the Internet, I can access information outside Taiwan very swiftly and easily. (SG#7)

Moreover, some students pointed out that by means of typing search keywords in English much more updated and comprehensive information can be accessed and found, as presented below:

P1: I also find that results usually come out more by the use of English search keywords than by Chinese ones. (SG#6)

P1: I usually read on Wikipedia, but I only read its English version instead of Chinese version because it provides much more complete information in English than in Chinese. (SG#4)

P1: The information in Chinese is comparatively less than in English. Usually I can get the latest information about Avril (a female pop singer) on the English websites.

P2: That's right. Information here in Chinese is updated more slowly than in English. So, foreign websites can usually provide the first-hand information and news. (SG#17)

A student expressed that she would like to read English online to get better understanding of unfamiliar areas of knowledge that seems to be difficult to gain in books:

P2: Sometimes if I am not familiar with a topic, I would like to search for the related information online. Like last time my teacher asked me a question

about “Whom John Smith wants to drink coffee with?” Questions like this are really hard to find answers through finding a book, so it is better to search the Internet tool such as *Google* at first to see if there is any answer. (SG#6)

***Purpose 4: Learn English***

Twenty-three students (47%) pointed out that their reading English on the Internet is intended to learn English, namely reading online to improve English language proficiency, to learn authentic and colloquial English expressions, or to pick up proper English pronunciation.

An interviewee specifically noted that the Internet really created a very natural English learning milieu for him to learn English, as shown below:

P3: I want to improve my English ability through reading online. I don't want to learn English by memorizing a vocabulary book that teaches us how to easily cram ourselves with about 2000 essential words. Books like this are way too cramming. However, I want to learn English by being exposed to an English environment where I can learn English more naturally instead of cramming lots of words into my mind. (FG #17)

Some of the students finding reading online can especially promote their listening ability states that:

P3: When I want to improve my English listening ability, I usually type TaiSha (太傻) on search engine to find this website that can link me to the other three websites: BBC, CNN, and VOA. I usually go to VOA because I think the words they use are easy and plain to understand.

(FG #16)

P2: I listen to English news to practice listening and reading abilities. (SG #4)

P3: I go to some websites to improve my English listening ability. (SG #4)

Aside from enhancing the students' English listening ability, some of the students considered reading online to be conducive to their acquisition of authentic and colloquial English vocabulary and daily life expressions.

P2: I love “*Gossip Girls*” (an American drama television series). Sometimes I would like to know how they articulate some expressions because the way they talk is really authentic and connected to daily lives. The characters are senior high students, so the words they use are rather up-to-date. (SG #4)

P2: To me, reading English on the Internet is sort of compulsory because I usually push myself to read English every day to improve my English proficiency and I also want to learn more vocabulary every day. (SG #6)

P3: I go to the website to watch movies or American TV shows such as *Friends* and *Gilmore Girls* and sometimes read their scripts to learn daily life English and to check if I guess right about the definition of the words they used in the show. (FG #13)

A student particularly pointed out that the Internet can benefit her learning of British English accent through watching videos from *YouTube*. She said:

P2: I enjoy watching videos on *YouTube*. By watching videos about make-up tutorials on *YouTube*, I have heard many different kinds of English accents because there are so many make-up visagistes from different countries. Plus, I want to learn British accent. (FG #8)

#### ***Purpose 5: Better comprehend reading contents***

Twenty-one students (43%) mentioned that their reading English online is to better understand the reading contents. They did so by clearing up confusions through looking up vocabulary or terminologies, or searching for relevant information in diverse forms.

P1: I remember while I was reading “*Da Vinci Code*”, I read something related to rose. Since I didn’t know what it is about, I searched it through the Internet. Then it showed me some images which were really interesting and deepened my reading memory. So, I think reading a book with searching for some related information online is like I am trying to complete a puzzle and detective game. Now, I have been used to reading books with the help of the Internet to reinforce my memory of what I have read. (SG #6)

P2: If I can’t understand the literature content after reading the textbook, I can find some related information here, and then I can understand more about it. (SG #6)

P3: I love listening to CD. When I cannot understand what the singers are singing, I go to Internet to find some reading articles or lyrics about the songs. (SG #1)

P1: I think videos on the websites are very beneficial for my literature study. For instance, last time I went to *YouTube* to find a video about a literature work the teacher assigned us to read. Then I found a relevant video and watched it. I found it is very useful for making me better understand that work.

***Purpose 6: Communicate with others***

Seventeen students (35%) considered communicating with others in English their purpose of reading English online, meaning that they keep in touch with friends or teachers in English through such ways as emails, Skype, instant messengers, or leaving messages on weblogs. This view is displayed as follows:

P2: Sometimes I chat with my friends in English through MSN because their English is very good. If the interlocutor uses English through MSN, I respond to them in English, too.

P3: If I have to email to foreign professors, I always email in English. (FG#9)

P2: It is very convenient to share what I read, listen or watch on the Internet to my other friends through MSN and then we would have discussion.

P1: That's right. I can just copy and paste the link to the MSN and they can read, watch, or listen to the information I find. (SG#12)

Despite the fact that communicating with others is regarded as the purpose of reading English online, two students stated a problem that communicating with others in English seems to be less likely owing to the lack of interlocutors who are willing to communicate with them in English in their daily contexts:

P1: Sometimes I post messages on the blog and then my friends will respond to my messages or we would discuss over the information. But only friends from the English department would like to discuss with us [referring to the two participants themselves] in English.

P2: Yes. Not everyone would like to use English. (SG#12)

***Purpose 7: Maintain an identity as an English major***

Seven students (3.93%) emphasized that reading English online is to maintain their identities as English majors, revealing their view that English majors should read more in English to not only enhance their English proficiency but also distinguish themselves from other non-English majors, as explicated below:

P3: I think it is a matter of our dignity since we are English majors.

P2: I think because we are English majors, our English proficiency is expected and we are supposed to be much better than any other majors. (SG#1)

P3: I think I am an English major, so it is very reasonable for me to read in

English. We, as English majors, should be distinguished ourselves from other majors.

P1/P2: That's right.

P1: If there is an English version of a book available, then there is no need to read the one in Chinese version.

P2: Don't read the translated one. (FG#17)

### ***Types of Internet English reading materials***

An examination of the second interview question pertains to what types of English reading materials the participants read when they surf the Internet. To be specific, this section intends to uncover what genres of reading materials the students read online and what medium they employ to read online.

From the interview data, eight types of English reading materials emerge, exhibited in Table 4-2 below. The table illustrates the types and media of online reading materials in order of the frequencies of the participants' interview data. The results indicate that the participants incline to (1) search for reviews, comments, analyses, essays, or summaries of literature works (24%), (2) read news, columns, and editorials (24%), (3) enjoy multimedia (18%) (4) read or write on weblogs (13%), (5) watch previews or read reviews, comments, analyses, or summaries of movies (9%), (6) read e-magazines (6%), (7) read fictions, and (8) read e-newsletters (3%).

The number of responses is the number of the participants who reported the particular type of Internet English reading materials. Each participant was allowed to provide more than one type of Internet English reading materials. Nonetheless, even if the participants reported a certain type of English reading materials more than once, the frequency of that certain type of English materials was considered once. In addition, the percentage of each reported type of online English reading materials was calculated by dividing the number of the particular type of online reading materials that the students reported by the total number of all the types the students mentioned



during the focus group discussion. Concerning each percentage followed by each number of the type of reading material in Table 4-2, it displays the percentage of how many participants reported on the types of Internet English reading materials.

Table 4-2 Frequency of Types of Internet English Reading Materials

Types of Internet Reading Materials	%	N
Reviews, comments, analyses, essays, or summaries of literature works	24	44 (90%)
News, columns, editorials	24	43 (88%)
Multimedia	18	32 (65%)
Weblogs	13	24 (49%)
Previews, reviews, comments, analyses, or summaries of movies	9	17 (35%)
E-magazines	6	11 (22%)
Fictions	3	6 (12%)
E-newsletters	3	5 (10%)
<b>TOTAL</b>	<b>100</b>	<b>182</b>

*Note.* [N] = the number of responses the participants gave concerning the type of reading materials they read on the Internet.

The following explains each type of online reading materials and presents the website names together with their addresses the participants provided in the interviews in order to obtain a more comprehensive picture of what types of online English materials appeal to the students. In addition, the websites presented below can benefit teachers in their preparation for courses in the future.

***Type 1: Reviews, comments, analyses, essays, or summaries of literature works***

The result shows that most of the participants (90% with 44 respondents) reading online English materials related to reviews, comments, analyses, essays, or summaries of literature works. The reason why information relevant to English literature masterpieces was mostly reported to be read is that the participants tried to reduce the reading workload from an original literature piece presented in a book. By merely reading short summaries and analyses of a literature work, the participants could easily gain the general idea of the literature work without reading it through a whole



book. As well as the reduction of reading work from textbooks, the participants also wanted to gain others' viewpoints on the same literature they were assigned to read. Namely, the participants usually read comments and reviews on the assigned literature works. By doing so, they seemed to be easy to handle the imminent examination. This finding, by and large, is correspondent to their main purpose of reading English online that has been discussed in the first interview question. It is even more evident that the participants reading English online mainly aimed to search for reviews, comments, analyses, essays or summaries of literature works for the preparation for the tests, presentations, or term papers. Table 4-3 lists the websites the participants frequent to help with their schoolwork.

Table 4-3 Websites for Sources of English Reading Materials for Literature Works

Website Name	URL
Spark Notes	<a href="http://www.sparknotes.com/">http://www.sparknotes.com/</a>
Grade Saver	<a href="http://www.gradesaver.com/">http://www.gradesaver.com/</a>
Cliffs Notes	<a href="http://www.cliffsnotes.com/WileyCDA/">http://www.cliffsnotes.com/WileyCDA/</a>
Book Rags	<a href="http://www.bookrags.com/">http://www.bookrags.com/</a>
E-Notes	<a href="http://www.enotes.com/">http://www.enotes.com/</a>
Answers.com	<a href="http://www.answers.com/">http://www.answers.com/</a>
Wikipedia	<a href="http://en.wikipedia.org/wiki/Main_Page">http://en.wikipedia.org/wiki/Main_Page</a>

### ***Type 2: News, columns, editorials***

News-related information is the second mostly reported type of reading materials the participants were mostly exposed to (88% with 43 respondents). The reason why news-related information ranked high is that the participants have accumulated a lot of experiences of accessing to English news on the Internet under the previous teachers' instructions and driven by their personal interest. Some of the participants said that once they were guided and introduced to read on certain news websites by the teachers, then later they would gradually get accustomed to frequenting these news websites to obtain the latest information in their free time even if they did not

take that course anymore. Table 4-4 displays the websites for sources of English reading materials for news, columns, and editorials.

Table 4-4 Websites for Sources of English Reading Materials for News, Columns, and Editorials

Website Name	URL
<i>International News</i>	
CNN	<a href="http://www.cnn.com/">http://www.cnn.com/</a>
BBC	<a href="http://www.bbc.co.uk/">http://www.bbc.co.uk/</a>
National Public Radio	<a href="http://www.npr.org/">http://www.npr.org/</a>
New York Time	<a href="http://www.nytimes.com/">http://www.nytimes.com/</a>
Washington Post	<a href="http://www.washingtonpost.com/">http://www.washingtonpost.com/</a>
ICRT	<a href="http://www.icrt.com.tw/">http://www.icrt.com.tw/</a>
Voice of America	<a href="http://www.voanews.com">http://www.voanews.com</a>
The China Post	<a href="http://www.chinapost.com.tw/">http://www.chinapost.com.tw/</a>
Taipei Times	<a href="http://www.taipetimes.com/News/">http://www.taipetimes.com/News/</a>
The Student Post	<a href="http://www.studentpost.com.tw/">http://www.studentpost.com.tw/</a>
<i>Sports News</i>	
UEFA: Union of European Football Associations	<a href="http://www.uefa.com/">http://www.uefa.com/</a>
FIFA: Fédération Internationale de Football Association	<a href="http://www.fifa.com/">http://www.fifa.com/</a>
MLB: Major League Baseball	<a href="http://mlb.mlb.com/index.jsp/">http://mlb.mlb.com/index.jsp/</a>
WWE: World Wrestling Entertainment	<a href="http://www.wwe.com/">http://www.wwe.com/</a>
ATP: Association of Tennis Professionals	<a href="http://www.atpworldtour.com/">http://www.atpworldtour.com/</a>

### ***Type 3: Multimedia***

The third mostly reported type of online reading materials comes to multimedia (65% with 32 respondents). Multimedia, based on the participants' interview data, include video watching and music listening. According to the participants, since there are a cornucopia of free TV programs to view, free movies and foreign drama series to download, and free music to enjoy, they usually take these advantages to get themselves more exposed to environment filled with English language. Their English language skills as well as knowledge consequently are enhanced by watching and listening to these multimedia materials. Table 4-5 shows the websites where the

participants usually visit to obtain multimedia materials.

Table 4-5 Websites for Sources of Multimedia Materials

Website Name	URL
YouTube	<a href="http://www.youtube.com/">www.youtube.com/</a>
Big Think	<a href="http://bigthink.com/">http://bigthink.com/</a>
Yahoo Music	<a href="http://new.music.yahoo.com/">http://new.music.yahoo.com/</a>
MySpace Music	<a href="http://music.myspace.com/">http://music.myspace.com/</a>
Slack Time	<a href="http://www.slack-time.com/">http://www.slack-time.com/</a>
CBS	<a href="http://www.cbs.com/">http://www.cbs.com/</a>

#### ***Type 4: Weblogs***

Almost half of the participants (49% with 23 respondents) reported that they visit their friends' or classmates' weblogs or write on their own weblogs. Some participants mentioned that they actually seldom read weblogs in English because few of their friends would like to blog in English except for some friends from English major. However, being assigned to write and respond in English on their own personal or classmates' weblogs by the teachers, they grew to be used to reading and writing on their and others' weblogs. Furthermore, the participants said they also expand their circles of friends by blogging since weblogs are places where they can occasionally encounter people from different countries. Table 4-6 demonstrates where the participants usually blog.

Table 4-6 Websites for Blogging

Website Name	URL
Facebook	<a href="http://www.facebook.com/">http://www.facebook.com/</a>
Blogger	<a href="https://www.blogger.com/start">https://www.blogger.com/start</a>
Word Press	<a href="http://wordpress.org/">http://wordpress.org/</a>
Windows Live	<a href="http://home.live.com/">http://home.live.com/</a>

#### ***Type 5: Previews, reviews, comments, analyses, or summaries of movies***

Seventeen participants (35% of all the participants) reported that they sometimes turn to the Internet to watch previews of the news movies and to read others'

comments, analyses, or summaries of movies they have seen. To them, movie watching is a very typical leisure time activity and the use of the Internet to search for movie-related information can benefit them before and after their appreciation of the movies. Before going to the movies, they first read others' reflections after movies and recommendations to judge whether the movie is worth watching. Moreover, in order to get an early glimpse of the new movie or its information, the participants usually frequent certain foreign websites to watch the preview. After watching the movie, if they find they cannot fully understand it, they turn to the Internet to clear their confusions by reading other views' analyses and interpretations on the same movie they see. Table 4-7 provided the websites where the participants usually go to search for movie-related information.

Table 4-7 Websites for Sources of English Reading Materials for Information about Movies

Website Name	URL
Video Detective	<a href="http://www.videodetective.com/">http://www.videodetective.com/</a>
IMDB: The Internet Movie Database	<a href="http://www.imdb.com/">http://www.imdb.com/</a>
Spike.com	<a href="http://www.spike.com/">http://www.spike.com/</a>
Sony Pictures:	<a href="http://www.sonypictures.com/">http://www.sonypictures.com/</a>

#### ***Type 6: E-magazines***

Interestingly, eleven female participants (22% of all the participants), but not any of the male participants stated that they enjoy reading magazines on the Internet because they can read these online magazines for free. From Table 4-8, it can be observed that the magazines the participants mentioned are all imported from other countries and therefore the price might not be affordable for them. As a result, with the use of the Internet, the participants can always google the magazine websites to read the magazine online for free.

Table 4-8 Websites for Sources of English Reading Materials from E-magazines

Website Name	URL
Life & Style	<a href="http://www.lifeandstylemag.com/">http://www.lifeandstylemag.com/</a>
US Magazine	<a href="http://www.usmagazine.com/">http://www.usmagazine.com/</a>
Hello Magazine	<a href="http://www.hellomagazine.com/">http://www.hellomagazine.com/</a>
Economist	<a href="http://www.economist.com/">http://www.economist.com/</a>
Time	<a href="http://www.time.com/time/">http://www.time.com/time/</a>
Reader's Digest	<a href="http://www.rd.com/">http://www.rd.com/</a>
Vogue	<a href="http://www.style.com/vogue/">http://www.style.com/vogue/</a>
ELLE	<a href="http://www.elle.com/">http://www.elle.com/</a>
Wired	<a href="http://www.wired.com/">http://www.wired.com/</a>

### ***Type 7: Fictions***

Fictions are the less favored type of English reading materials on the Internet. According to the interview data, the fiction includes short stories and novels. Six participants (12% of all the participants) reported that they read fictions online. This result indicates that it seems that the participants seldom read fictions online. Inquired why the participants barely read fictions on the Internet, they explained that the fiction was so lengthy that they felt uncomfortable reading it online as well as incapable of reading through it. They would rather read the fiction in print than on the Internet. Compared to the other types of Internet English reading materials discussed above, the participants had a tendency to read nonfictions such as news and information online. Table 4-9 displays the websites where the participants read fictions.

Table 4-9 Websites for Sources of English Reading Materials in Fictions

Website Name	URL
Fan Fiction Net	<a href="http://www.fanfiction.net/">http://www.fanfiction.net/</a>
Project Gutenberg	<a href="http://www.gutenberg.org/wiki/Main_Page">http://www.gutenberg.org/wiki/Main_Page</a>
Chicken Soup for the Soul	<a href="http://www.chickensoup.com/">http://www.chickensoup.com/</a>

### ***Type 8: E-newsletters***

The last type of online English reading materials is e-newsletter. An e-newsletter

refers to a regularly distributed small publication containing updated news of interest mainly to a special group and its subscribers. In the present study, only 5 participants (10% of all the participants) said that although they usually subscribed to a certain e-newsletter from their favorite websites, they rarely thoroughly went through the reading since sometimes the topic failed to cater to their personal interests.

E-newsletters accordingly were easy to be ignored in their e-mail inbox. The

e-newsletters the participants pointed out are presented in Table 4-10.

Table 4-10 Websites for Sources of English Reading Materials from E-newsletters

Website Name	URL
Christian Dior	<a href="http://www.dior.com/prehomeFlash.htm/">http://www.dior.com/prehomeFlash.htm/</a>
New York Times	<a href="http://www.nytimes.com/">http://www.nytimes.com/</a>
Chicken Soup for the Soul	<a href="http://www.chickensoup.com/">http://www.chickensoup.com/</a>

### ***Topics of interest in Internet English reading materials***

The third interview question intends to explore what topics of the online English reading materials the students are interested in and why they like reading these topics. The participants' interview data were analyzed and classified by the news topic categories displayed on the official website of The China Post<sup>4</sup>. The main reason for the adoption of the news categories from The China Post to categorize the participants' responses is that the reading topics from The China Post are more categorized and subcategorized as well as more suitable, compared to others' news websites, to correspond to the participants' responses.

Overall, the participants' favorite topics were put into seven categories, five of which were adopted from The China Post, and the rest of the two were adopted from the participants' interview data. Besides the main categories, there are several

<sup>4</sup> The China Post is one of the English-language newspapers published here in Taiwan. It is usually regarded as one of the best authentic reading materials for English learning.

subcategories under two main categories, which will be elaborated in the following part. On the whole, the categories of favorite reading topics found in this study are (1) arts and leisure, (2) international news and crucial issues, (3) life, (4) literature-related information, (5) sports, (6) health, and (7) English learning or teaching.

The total number of each favorite topic that the participants liked to read on the Internet is shown in Table 4-11. The total number of frequency in each favorite reading topic is the count of the total number of responses that fell into that certain main category of reading topic of interest. Since the interview question is an open-ended question, the participants were allowed to give more than one favorite reading topics. Furthermore, the percentage was calculated by dividing the number of particular reading topic of interest by the total number of all reading topics of interest.

Table 4-11 Frequency of Topics of Interest in Internet English Reading Materials

Topics of Interest	%	N
Arts and leisure	48	48
International news and crucial issues	15	15
Life	13	13
Literature-related information	9	9
Sports	9	9
Health	3	3
English learning or teaching	3	3
TOTAL	100	100

*Note.* [N] = the number of the responses the participants gave concerning the reading topic they were interested in.

As illustrated in Table 4-11, the favorite reading topics ranked in order of the frequency are arts and leisure (48%), international news and crucial issues (15%), life (13%), literature-related information (9%), sports (9%), health (3%), and English learning or teaching (3%). According to the participants, topics pertaining to arts and leisure encompass arts, celebrity news, food, music, movies, and lifestyles. Besides, reading topics on life comprise environment, fashion, science technology, and offbeat.

Overall, the results of the participants' preferred reading topics suggest that they tend to regard reading online as a kind of pastime and that they would rather spend more time reading something light and relaxing than something dry, dull, and serious.

### ***Frequency of reading English online***

The fourth interview question aims to find out how often the students read English on the Internet on a weekly basis. Participants indicated six levels of reading English online: (1) every day, (2) four to five times a week, (3) three to four times a week, (4) two to three times a week, (5) one to two times a week, and (6) never. The results illustrated in Table 4-12 indicate that more than half of the interviewees (51.92%) reported that they read English on the Internet almost every day, followed by one to two times (20.41%), three to four times (14.29%), two to three times (6.12%) and never (6.12%), and four to five times (2.04%).

Table 4-12 Frequency of Reading English Online on a Weekly Basis

Frequency	%	N
Every day	51	25
Four to five times	2	1
Three to four times	14	7
Two to three times	6	3
One to two times	20	10
Never	6	3
Total	100	49

*Note.* [N] = the number of the responses the participants gave in answering how many times they read English on the Internet on a weekly basis.

It is known that computer technologies indeed have huge impact on people's reading habits in many ways. For some of the participants, they understand the significance of easy access to authentic information from the Internet and accordingly avail themselves of all the resources the Internet equipped with to facilitate their



English learning. Nevertheless, for the participants with less experiences of reading English online, they seem not to have the habit of reading English online yet. The following section elaborates on the reasons why some of the participants read English online every day while some fail to do so.

### ***Reasons for reading English online every day***

As shown in Table 4-12, the most frequently reported frequency of reading English online is every day (51%). Investigating into the responses the interviewees provided, five reasons are found.

First of all, three students mentioned that they have to read English online every day due to their subscriptions to e-newsletters:

P1: Almost every day.

P2/P3: Right, I think almost every day.

P1: Because I have subscriptions. They are sent by email every day.

P2/P3: That's right. (SG#1)

Secondly, to obtain updated information is another reason to motivate the students to read English on the Internet every day:

P1: Because I want to know if there is any updated information about music or sale.

P2: Right, because entertainment is updated every day, I read it almost every day to keep up with new entertainment information. (SG#1)

P1: Every day because the Internet is the most accessible resource.

P2: Me too. Also, I am watching many American dramas, so I would like to keep myself updated about their news. There'll be the newest episode of each drama, so I want to know new information about them. (SG#4)

P1: It seems we read English online every day. Because the information on English websites is always updated very fast, the information must be much newer. (FG#8)

Thirdly, some students even described that reading English online every day is their personal habit or daily routine.

P1: Every day because I am used to reading on the Internet.

P2: Me too. And I like the feelings of typing the keyboard because it seems more

concrete to type than to write. I think am addicted to the Internet. (SG#6)

P1: I think it is hard to avoid not going to the foreign websites.

P2: Even if I have no time, at least I would read the news headings. (SG#12)

P2: Now, I don't really care about if I am going to read in English online because it seems natural and habitual for me to read in English. So, I don't bother to take out my dictionary to check the new vocabulary. (FG#8)

Fourthly, a student believed that reading English on the Internet every day can help her cultivate English reading habit and thus enhance her English abilities:

P1: Almost every day because I use the Internet almost every day. Plus, I used to feel troublesome to read English. However, I am an English major now, and I should push myself to read English every day in order to develop English reading habits and further improve my English ability. (FG#12)

At last, the reason for reading English online every day is to search for information and glean all the information found in preparation for the approaching exams:

P1/P3: Every day when the test is coming.

P3: Because there are so many important things to memorize and so much information to search for through the Internet that I need more time to collect information online. (FG#9)

P1: Every day, especially when the test is coming or when the report deadline is coming, I read even more. (FG#17)

### ***Reasons for hardly ever reading English online***

Regardless of the high percentage of reading English online every day, some students said they seldom or never read English online, which altogether takes up 26% of the participants. Asked why they read English online so rarely, a student stated that there is no need to read English online owing to the abundance of Chinese information, as shown below:

P2: Because I think there is a lot of Chinese information available, why do I have to read in English? (SG#5)

Furthermore, some students confessed that they actually did not develop the habit of reading English online. Accordingly, they would like to read English on the Internet only when the teacher planned a test or required them to do assignment

through the Internet. This view is clarified by the following statements:

P3: Once a week because I read online in English only when I have to do my assignment through the Net to post my reflections and feedbacks to other classmates' articles and the teacher's articles. (SG#10)

P3: Once a week because our oral training teacher asks us to improve our listening ability by listening English news online. So, every week I have to listen to the news and write down what I listen to from online news report. Then I listen to it again and again to correct what I have written. She asks us to do this because she wants our English listening improve by self-study online, so she doesn't require us to hand in the listening scripts we write. (FG#17)

P1: Basically, I never read in English online on weekly basis. I only read it when the test is coming or when the report deadline is coming. (FG#18)

P2: I seldom read online but I read online when the test is coming.

P3: I read English online once a week.

R: Why do you read in English on the Internet rarely?

P3: Because I don't make it the habit to read online in English. (SG#11)

### ***Factors affecting the selection of Internet reading materials***

Interview Question 5 tries to find out what factors would affect students' selection of reading materials while reading on the Internet. Five main themes with twelve subcategories emerge from participants' responses: (1) format of documents or websites, (2) feature of online information, (3) users' personal factor, (4) users' task purpose, and (5) cost. The results are demonstrated in Table 4-13.

The subtotal number of each main factor, highlighted in bold in the table below, is the total number of the frequency in reporting some subcategorized factors that affect the participants' choices of English reading materials while reading online. The participants were able to point out more than one main category of affecting factor, but even if they pointed out the same subcategorized factor more than once, the frequency was taken as once. For the total number of frequency in all factors, it was calculated by adding the subtotal number of each main category of factor. As for the

percentage of each subcategorized factor, it was computed by dividing the frequency of each subcategorized factor by the total number of frequency in that certain main factor so as to further reveal the distribution of the subcategorized factor under certain main category of factor. Moreover, the percentage of each main factor was calculated by dividing the subtotal number of frequency of each main factor by the total number of frequency of all main factors.

Table 4-13 Factors Influencing the Selection of Internet English Reading Materials

Factors	Subcategories	N	%
Format of documents or websites	Length of reading content	18	33
	Website design	15	27
	Text presented with multimedia	10	18
	Use of words and text difficulty	6	11
	Font size	4	7
	Size of reading file	2	4
<b>SUBTOTAL</b>		<b>55 (43%)</b>	
Feature of online information	Reliability and authority	14	48
	Catchiness and sensation	12	42
	Novelty	3	10
<b>SUBTOTAL</b>		<b>29 (23%)</b>	
Users' task purpose	Information relativity	27	90
	Schoolwork	3	10
<b>SUBTOTAL</b>		<b>30 (23%)</b>	
Users' personal factor	Personal interest	8	67
	Habit and routine	4	33
<b>SUBTOTAL</b>		<b>12 (9%)</b>	
Cost		2	
<b>SUBTOTAL</b>		<b>2 (2%)</b>	
<b>TOTAL</b>		<b>128 (100%)</b>	

*Note.* [N] = the number of the responses the participants gave concerning the factor that affected their selection of English reading materials while reading online.

As evidenced by the information presented in Table 4-13, the most influential factor in students' choices of online English reading materials is the feature of online

information (43%). The second most reported influential factor is the quality of format of documents or websites (23%) and the users' task purpose (23%). The last two least reported factors are users' personal factor and cost, taking up 9% and 2% of all factors respectively. Each of the factors is discussed in the following.

***Factor 1: Feature of documents or websites***

In regard to features of documents or websites, this category takes 43% of all the responses with six subcategories: font size (7%), length of reading content (33%), website design (27%), size of the reading file (4%), use of the words and text difficulty (11%), and text presented with multimedia (18%).

Among the six subcategories, it can be seen that length of reading content (33% with 18 reported responses) is the most concerned for students to select online English reading materials. Most of them expressed that they do not favor articles with lengthy contents while reading on the Internet, as indicated in the following excerpts from the interview:

P2: I don't like reading long articles with many words.

P1: If the article is too long, I will print it out to read.

P2: That's right. I think surfing the Net is to look for information, so I don't want to search for information in a long content. If I need to read long articles, I would rather read a book. (SG#7)

Interestingly, among the eighteen responses, only two responses embraced positive attitude toward reading long-length contents on the Internet. One of the participants thought that the longer the information is provided on the Internet, the richer the information is, while the other commented that reading short online information usually required the reader to pay for reading full texts. The interview excerpts are shown below:

P1: I don't want to read with long-length content.

P2: Really? But sometimes we have to read the long content because long-length content seems to provide richer information. (FG#18)

P1: If the content is too short, I don't read it because it will ask us to pay for full text. (SG#11)

The second highly reported factor was website design (27% with 15 responses). One-third of the respondents paid attention to whether the website provides clear and organized categories or not in deciding which contents to read. Students' comments are presented as follows:

P1: Also, the website design will affect my decision, too. For instance, if the color of the website is too bright, I will close it. (SG#9)

P2: What's more, I like to choose the content with good layout. If the website layout is not that good, I will not read it. (SG#4)

Online reading texts presented with multimedia (18% with 10 responses) is the third top factor influencing the students' choice making while reading online. The students seem to be easily attracted by a variety of forms of reading texts, such as reading contents displayed in images, videos, animations, or audios. Consequently, reading texts accompanied with multimedia can help motivate students' reading online. This viewpoint was articulated by some of the interviewees as follows:

P3: And its presentation must be accompanied with some images and other media.

P1/P2: Right.

R: Why do you need images and other multimedia?

P3: Because it would be very vivid and it wouldn't be tiring to get the information.

P2: Right, if there are multimedia available, then I will choose to view the multimedia instead of reading words.

R: Why?

P2/P3 We are just lazy.

P1: It is like a proverb called "A picture is worth a thousand words". (SG#1)

P1: I don't choose the website with only words.

P2: Right. It is uncomfortable to read with words only.

P1: It will be so much better to have animations. (FG#14)

Reading online in English is different from reading online in Chinese in that English is not the participants' mother tongue. Six respondents (11%) reported that

while selecting an English reading material on the Internet, they would choose the one to read based on its use of English vocabulary and its level of difficulty. Some of them thought that they would not read the texts with a lot of new vocabulary or difficult words:

P2: I choose the websites that provide easy and plain words for me to comprehend.

R: What do you mean?

P2: Like some online articles are written with very difficult words that are not related to our lives, so they are not easy to read. Then I would give up reading and jump to another easier website. (SG#12)

P1: Also, if the use of words is too difficult or hard to understand, I won't keep reading it. Like the words Times use are really hard to understand.

P2/P3: I think the words New York Times use are difficult, too.

P1: Right. I think the reading content in New York Times is so America style that I cannot understand what it means.

P2: Yes, I think it involves a lot of American cultures. (SG#1)

Font size of the word (7% with 4 responses) and size of reading file (4% with 2 responses) are the last two factors affecting students' choices of reading materials. The participants pointed out that they would choose to read the text with appropriate font size of the words. As for the influence of size of reading file, the participants mentioned they would lose their patience to wait for getting into the website if the reading file is so big, as stated in the following:

P2: If it takes a long time get into the website, I will give it up and go to another one. (FG#16)

### ***Factor 2: Feature of online information***

With respect to the factor from the feature of online information, it takes 23% of all the responses. From the interview data, the characteristics of online information can be classified into three subcategories: reliability and authority (48%), novelty (10%), and catchiness and sensation (42%).

Among three subcategories of features of online information, the feature of



reliability and authority takes the highest percentage (47% with 14 responses). The students said that their Internet reading selection relies on whether the information is credible and where the source of information is from. Therefore, most of them reported that they would go to the websites belonging to governments, organizations, institutions, or schools. Listed below are students' responses in this regard:

P2: I usually examine website sources. Like I usually see whether the website addresses are ended with gov, org, edu or not. I think the information from these formal and official websites is much more reliable. (FG#17)

P3: I usually judge the website source. For example, I usually see if the website belongs to a person or an organization or a company like government or official website. So, it still depends on my goal. If I need more professional information, I won't go to the personal website because usually it may provide biased information. (SG#5)

P2: I would like to know the source of the website. Like if I want to know some information about global warming which may be from three rescourses, such as Discovery, Scientist, and others' blogs, I will choose Discovery and Scientist because they have their brand names. It is more reliable to read them. (SG#4)

Interestingly, two of the students raised an issue that even information derived from some supposedly reliable websites, such as Wikipedia, remain subjected to the readers' screening by reading the warning sign displayed on the webpage. The respondents said that Wikipedia would show a sign that indicates whether the information it shows needs further verification or additional citations. The following quotes are from the interviews:

P3: But sometimes even a good [supposedly reliable] website such as Wikipedia may contain problems. Sometimes it warns you this article is cited from other sources so its reliability needs to be confirmed.

P1: Right. The information on the webpage sometimes comes with a yellow line telling you that this piece of information is not complete and not that reliable, so more improvement should be made. (SG#5)

The second influential feature of online information is catchiness and sensation (42% with 12 responses). The factor of catchiness and sensation of online information refers to whether the information is catchy or sensational enough to arouse the



participants' interest in reading. The participants made the following remarks:

P2: It (The selection of online reading materials) depends on whether the topics are interesting or not. If the topic is interesting, but the content is boring, then I stop reading. (FG#15)

P3: I usually choose the topic interesting to me, such as topic related to chocolate.

P4: Me too. I also choose catchy or crucial topics to read. I think in international news there are more special topics that I have never thought about. For instance, last time I read an article about eating chocolate to save our environment. (FG#13)

P1: Also, catchy topics or headings can draw my attention to read it. (FG#9)

P1: I like choosing to read exciting and sensational topics. (SG#3)

Novelty of online information, denoting that whether the online information is up-to-date or new, takes the last place (10% with 3 responses) among the three features of online information that affected the participants' reading selection. The following responses exemplify this factor of online reading selection:

P1: Usually, I would like to read online because there is updated information or entertainment information. (SG#4)

P3: I usually choose the latest websites or the newly updated ones. (SG#7)

P2: It depends on the updated date because I want to find the updated or latest information. (SG#12)

### ***Factor 3: Users' task purpose***

23% of all the participants reported that their selection of English reading materials on the Internet depends on their different task purposes. Under this main theme, two subcategories related to purpose were generated: information relativity (90% with 27 responses) and schoolwork (10% with 3 responses).

Twenty-seven participants commented that their online reading selection depends on the information relativity, referring to whether the information is related to the target searching purpose. Most of them provided their search skills to obtain the most relevant information through the Internet. Four types of search skills were found. First of all, some of them mentioned that they usually search for information with more

keywords so as to narrow down the number of search results, as shown in the following quotes:

P2: Moreover, I usually type long keywords in an attempt to find the most correspondent information. (SG#12)

P2: I usually use more keywords while typing searching for information through search engines to narrow down the scope of information. It is easier to find the information I want. (FG#13)

P3: I usually use the clear keywords because I can find the most related information. So, I usually type author along with its literature work. (FG#16)

The second reported search skill is to capitalize on the cached link displayed on the search results list, as illustrated in a participant's remark:

P2: If I look for certain information, I use the cached function to show the locations where the keywords hide. Then I just read the part with the cached keywords. (FG#9)

The cached link is served to highlight all the seeking keywords embedded in the reading contents to facilitate the online reader's query for the desired information. As a result, by means of clicking on the cached link, the online reader can access a webpage's cached version and thus they can be led to the information much more pertinent to their seeking target. The cached link<sup>5</sup> shown on the result page is illustrated below:



Figure 3. The cached link shown on the result page

The third search skill is to merely choose the frequently-visited websites shown on the results page. Some participants expressed that they valued the top five websites

<sup>5</sup> The graph of the cached link shown on the result page is excerpted from *Google Guide* at: [http://www.googleguide.com/cached\\_pages.html](http://www.googleguide.com/cached_pages.html)

from the search result or they selected the reading materials from the hotlist provided on the webpage. The following are statements made by the respondents:

P1: Also, I select what I want to read from the hotlist, too. For example, there is a hotlist on *YouTube* which tells you which video is now gaining the most popularity from the Internet viewers. (FG#8)

P2: I usually select the first five website links from results page because they show the most relevant information I am looking for. Besides, I can't read through all website links listed in the results. (FG#7)

The last search skill is to scan through the introduction to each website from the results page. The participants said that before diving into the reading materials, they usually read through the introduction of the website to judge whether it contains the relevant information they are searching for, as evidenced from their interviews as follows:

P1: Once the search engine generates the results I usually read through the website titles and introductions to the websites to see if there is any relevant information related to what I am searching for. If the title is too long, I don't choose it. (FG#13)

P2: Besides, as far as search engine is concerned, I usually read the introduction to the website after the search results page comes out. Then I read through it to see if there is any keyword I am looking for. (FG#8)

Doing schoolwork (10% with 3 responses) is the second purpose that influences the participants' selection of online reading materials. 3 students reported that their reading choices depend on their schoolwork assigned by their teachers, as shown in their interview comments:

P2: It depends on the syllabus schedule. Like, I follow the literature syllabus schedule to decide what I am going to read on the Internet. (SG#3)

P2: It depends on the topic that is needed urgently for reports. (SG#4)

P3: It still depends on my goal. Like, if I need more professional information, I won't go to the personal website because usually it may provide biased information. But if I need to read for entertainment, I would like to choose something more fun and interesting. (SG#5)

#### ***Factor 4: Users' personal factor***

The students' reading selection also depends on their individual factor, which takes 9% of all the responses. From the interview data, two themes are found: students' personal interest (67% with 8 responses) and their habit and routine of the Internet use (33% with 4 responses).

The participants reported that they usually chose English reading materials that are correspondent to their personal areas of interest and their favorite topics. Some respondents' quotes in this view are listed below:

P3: I choose articles based on my preference of the topics. For instance, last time I browsed through a website about American history. I chose to read an article about 911. (FG#16)

P1: Also, I like to read something I am interested in, but I do less academic reading online. For instance, last Saturday, baseball player, Chien-ming Wang, won the game. After the game, New York Times immediately wrote an article about his brilliant performance on this game. (SG#4)

Additionally, personal reading habit and routine also come into play in the students' choices of reading materials. The participants said that they are used to frequenting certain websites as long as they hook up on the Internet in search for information, illustrated as follows:

P2: I choose the familiar website such as Wikipedia.

P1: Basically, I go to Wikipedia at first and then go to *Google* search engine.

P3: I usually go to *Yahoo Knowledge* at first because there may be many people discussing over the same topic I want to search for or sometimes they provide the websites by which I can directly connect to the related websites. Most of the time, I choose Wikipedia. (SG#11)

#### ***Factor 5: Cost***

When it comes to selecting reading materials through the Internet, cost of online information is another concern. Two of the participants (2%) pointed out they would not pay for reading online, as shown in the quote below:

P1: I don't choose the website charging money to read a whole content. (FG#11)

### ***Methods to improve reading comprehension on the Internet***

Interview Question 6 attempts to know what typical methods the students employ to enhance their English reading comprehension while reading online. Eight predominant methods found from the participants' interview data were listed in descending order of the percentage: use online dictionary (32%), use instant translator (28%), skip unknown words (18%), use search engine (8%), resort to Chinese websites (5%), ask people online (3%), visualize the reading content (3%), and click hyperlinks (2%). The result is exhibited in Table 4-14 below.

The total number of each method is the number of the frequency in reporting that particular method by the participants. The participants could report as many types of methods as they wanted. However, no matter how many times each participant reported on the certain method in the interview, the frequency was counted once. Although the total number of the participants is 49, with some of them failing to provide a certain purpose, there were some missing cases. Moreover, the percentage of each method was computed by dividing the number of each reported method by the total number of the reported methods. As for each percentage followed by each number of responses in Table 4-14 was calculated by dividing the number of the participants who reported on that particular method by the total number of the participants to show the percentage of how many participants reported that certain type of method.

Table 4-14 Methods to Improve Reading Comprehension While Reading Online

Methods	%	N
Use online dictionary	32	28 (57%)
Use instant translator	28	24 (49%)
Skip unknown words	18	16 (33%)
Use search engine	8	7 (14%)
Resort to Chinese websites	5	4 (8%)
Ask people online	3	3 (6%)
Visualize the reading content	3	3 (6%)
Click hyperlinks	2	2 (4%)
<b>TOTAL</b>	<b>100</b>	<b>87</b>

Note. [N]= the number of the responses the participants gave concerning a certain method they used to help with their reading comprehension while reading on the Internet.

#### **Method 1: Use online dictionary**

More than half of the participants (57% with 28 students) utilized the online dictionary to help with their reading comprehension while reading on the Internet.

Nine resources of online dictionary they reported to consult are listed in Table 4-15 below:

Table 4-15 Nine Resources of Online Dictionary the Participants Frequently Consult

Name of Online Dictionary	Website Access
1. Yahoo Dictionary	<a href="http://tw.dictionary.yahoo.com/">http://tw.dictionary.yahoo.com/</a>
2. The Free Dictionary	<a href="http://www.thefreedictionary.com/">http://www.thefreedictionary.com/</a>
3. Urban Dictionary	<a href="http://www.urbandictionary.com/">http://www.urbandictionary.com/</a>
4. OneLook Dictionary	<a href="http://www.onelook.com/">http://www.onelook.com/</a>
5. Webster's Online Dictionary	<a href="http://www.websters-online-dictionary.org/">http://www.websters-online-dictionary.org/</a>
6. Dictionary.com	<a href="http://dictionary.reference.com/">http://dictionary.reference.com/</a>
7. AskOxford	<a href="http://www.askoxford.com/?view=uk">http://www.askoxford.com/?view=uk</a>
8. Cambridge Dictionaries Online	<a href="http://dictionary.cambridge.org/">http://dictionary.cambridge.org/</a>
9. Answers.com	<a href="http://www.answers.com/">http://www.answers.com/</a>
10. Wiktionary	<a href="http://en.wiktionary.org/wiki/Wiktionary:Main_Page">http://en.wiktionary.org/wiki/Wiktionary:Main_Page</a>

Regardless of a variety of online dictionaries available, the participants did not resort to them without sensible considerations. Two participants stated that their

selection of online dictionary depends on the type of vocabulary they come across. As long as they encountered words seeming to be recent coinages or colloquialisms, they would consult *Urban Dictionary*, which comprised a plethora of slang words and phrases. Two participants' comments are presented below:

P2: If the words seem too new or too informal and authentic, I usually look up their meanings through [urbandictionary.com](http://urbandictionary.com).

P1: Right, it contains a lot of words and slang. (SG#1)

*Yahoo Dictionary* is the most reported online dictionary that the participants consulted. Some of the participants valued its convenience and simplicity owing to both of its offer of English-Chinese as well as Chinese-English references and the offer of the most common interpreted meaning of the word. This expedites their look-up of new vocabulary by saving time spent in reading through all the English definitions from English online dictionaries in an attempt to select the most appropriate meaning corresponding to the reading content. The participants made the following remarks:

P3: I think *Yahoo Dictionary* usually can provide us with the most common meaning of the word. But, if I use [Dictionary.com](http://Dictionary.com), I have to read through all the definitions to select the proper meaning that can be fit for the reading content. I think it is not easy for the English beginner to use [Dictionary.com](http://Dictionary.com) because it turns out that we (freshmen) have to look up second, third or even more words to get the understanding of the first original searching word.

P2: Totally. That's why sometimes I have to open two windows to look up the new words. (FG#17)

P2: *Yahoo Dictionary* is not bad because it provides English-Chinese and Chinese-English functions for me to look up words. (SG#4)

Additionally, two participants also pointed out the offer of antonyms and synonyms from *Yahoo Dictionary* is very beneficial, as shown in the following quotes:

P2: I go to *Yahoo Dictionary* because it can provide not only definitions, but also synonyms and antonyms. (FG#14)

P3: I like using *Yahoo Dictionary* because it provides a lot of antonyms and



synonyms. I can learn more words with similar meanings. (SG#10)

Compared to *Yahoo Dictionary*, some English online dictionaries from foreign websites were regarded as much more beneficial for their familiarity with the use of the words along with sentence examples. The following responses from the participants can further exemplify this view:

P1: I use *Webster Online Dictionary*. It is a very useful website because as for each word it provides not only definition, but also some examples. This way, I can clearly know how to use this word or its common uses and structures. (SG#12)

P1: I look up words through Answers.com. It is like *Wikipedia* that provides lots of information. I can find whatever I want on this website, even for the trivial information that can't be found at *Wikipedia*. It also has the dictionary function that offers word history, definitions, and sentence examples. (SG#2)

### **Method 2: Use instant translator**

The second mostly-used method to enhance their English reading comprehension during reading online is to utilize instant translators. Instant translators, based on the participants' responses, refer to any translation website, online instant translator, or translation software, such as *Yahoo Mini Pen Translator*, *Dr. Eye*, *Google Instant Translation*, *Yahoo! Babel Fish Translation*, and the function of *Translation This Page* provided by *Google* search engine. Though all these means, they were led to both the meaning of the unknown word and understanding of the incomprehensible reading passage.

It is discovered that the participants appreciated the online translator in two respects. First, they could either immediately obtain the translation of a whole paragraph to better understand the gist in spite of awkward Chinese grammar or translate the whole website into Chinese. Listed below are some of the participants' comments along with the graphic illustration of the translator in this regard:

P1: I cut the incomprehensible part of the reading and paste it to *Yahoo! Babel Fish* to translate it into Chinese. Although the quality of the translation may



not be good, I can still can some ideas. (SG#1)

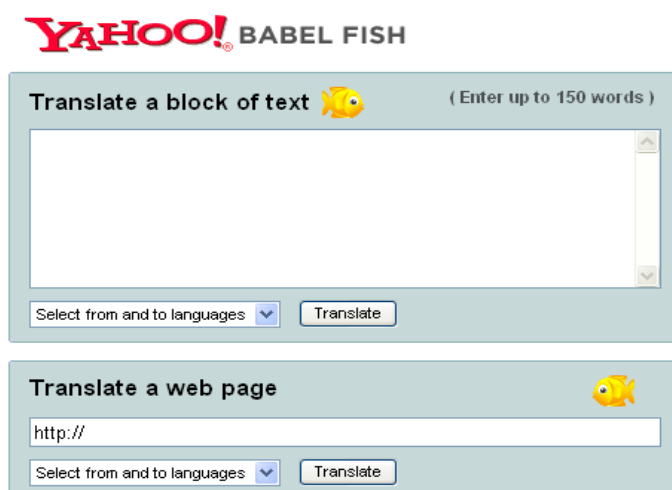


Figure 4. Yahoo! Babel Fish translator<sup>6</sup>

P2: If I want to better know a whole paragraph, I usually paste the whole paragraph to *Yahoo Mini Pen Translator* and then it can translate the paragraph right away. But the quality of Chinese grammar is poor. (SG#3)



Figure 5. The function of passage translation provided by *Yahoo Mini Pen*<sup>7</sup>

P1: I use the language conversion function embedded on *Google* webpage to translate English contents into Chinese ones. Although the quality of translation is not good, I can still get better understanding of the content. (SG#5)

<sup>6</sup> The graphic illustration of *Yahoo! Babel Fish* translator is excerpted from <http://babelfish.yahoo.com>.

<sup>7</sup> The graphic illustration of *Yahoo Min Pen* is excerpted from <http://tw.mini.yahoo.com/search.html>.



Figure 6. The function of translate this page on *Google* search engine<sup>8</sup>

Secondly, the use of *Yahoo Mini Pen*, *Dr. Eye*, and *Google Instant Translator* can save the participants' time to type the unknown words to search for definitions. The participants reported that these three text translators can immediately display the definition of the words in Chinese as long as they put the mouse cursor on the top of the unknown words. The remarks from interviewees together with the illustration of this function are presented as follows:

P1: Also, recently there is software called *Yahoo Mini Pen*. Sometimes it helps a lot, but sometimes it doesn't. I can underline the new word using the mouse cursor to control this pen and then the definition will pop up in another window right away. (SG#3)



Figure 7. The function of the look-up of words from *Yahoo Mini Pen*<sup>9</sup>

P2: I think *Google* provides a function of translation by which I can get the Chinese definition of the unknown words once I lay the mouse cursor on them. (SG#7)

<sup>8</sup> The graphic illustration of the translation function on *Google* search engine is extracted from [http://www.googleguide.com/favorite\\_languages.html](http://www.googleguide.com/favorite_languages.html).

<sup>9</sup> The graphic illustration of *Yahoo Mini Pen* is excerpted from <http://tw.mini.yahoo.com/search.html>.

Teen retailers, once thought recession proof, have suffered in this current downturn. For example Abercrombie & Fitch, which has maintained its premium price points, saw same-store sales dip an incred

premium: 額外費用; 貼水; 獎金; 獎賞; 保險費; 手續費; wo 利息; 報酬; 出類拔萃的; 特製的

stores stand out. The Buckle, a Nebraska-based retailer that offers a wide range of brand-name selections at its

Figure 8. The function of the look-up of words by *Google Instant Translator*<sup>10</sup>

### **Method 3: Skip unknown words**

Despite the fact that many participants brought up some useful online dictionary references, sixteen participants (33%) responded that they skip unknown words frequently. Namely, they did not look up the new vocabulary they encountered while reading online. Most of them thought if the incomprehensible part of reading content does not hamper their understanding of the main idea, they do not bother to consult any online language tools, as evidenced from their interview comments as follows:

P1: I usually skip the unknown words if I already get the gist of the content. But if the words keep showing up, I would like to look up the words through *Yahoo Dictionary*. (FG#13)

P2: If the new word doesn't hinder me from reading through the whole content, I won't look it up, especially in my leisure reading. (SG#3)

### **Method 4: Use search engine**

Drawing upon the search engine like *Google* is another way that seven participants (14%) reported to help with their online reading comprehension. To them, search engines seem to serve as English corpora that are able to facilitate them to capture the common use of the word used on the Internet. All of the seven participants also pointed out that they normally google the words; thus *Google* search engine is a good repertoire of vocabulary. This view is expressed by the following participants:

P1: Or I search for some information on *Google* with key phrases in the passage to see its typical usages in writing. Afterwards, when I go back to the reading content, I can infer some meanings. (SG#6)

<sup>10</sup> The graphic illustration of the look-up of words by *Google Instant Translator* is made by the researcher by excerpting the reading passage shown on the screen with function of Print Screen System Request on the keyboard.

P2: I use *Google Instant Translator*. But, if there is no definition for the query word found, I copy the word on search engine to find the definition. Then I can browse the query word which is highlighted in the website introductions in the results list. (FG#15)

***Method 5: Resort to Chinese websites***

Four participants (8%) stated that the consultation of Chinese website, such as *Yahoo Knowledge* or BBS, is conducive to improving their comprehension during online reading. To them, *Yahoo Knowledge* and BBS are open places for people to discuss over some issues, including the discussion of how to express some Chinese ideas in English. The interview with a focus group consisting of three participants is listed below:

P3: I go to *Yahoo Knowledge*.

P1: Right.

R: But it is not English website.

P3: But people usually ask something about English words or expressions there.

If people know the related topics, they post their opinions and answers there. For instance, yesterday I saw people discussing how to say 撞牆期 [to reach a point where you cannot make any more progress] in English. Most of the time, they discuss over the correctness of certain English expressions, so there are usually more than one answer provided for readers' references.

P1: Yeah! The Internet users are quite friendly.

P2: Right. I sometimes go to BBS to check some English expressions.

R: But how do you know the information online is trustworthy?

P3: Sometimes you can see the information sources. If the people who find that the answers provided there are wrong, they will correct answers by providing the correct ones. (SG#10)

***Method 6: Ask people online***

Three participants (6%) pointed out that they can ask their friends about the incomprehensible parts of readings through the online communication device, such as Instant Messenger.

P1: If my native speaker friends are online while I am reading online, I usually ask them [about my reading comprehension problems] directly. (SG#4)

P1: [I deal with my online reading comprehension problems] through MSN. I

usually copy and paste the sentences I can't understand to ask my friends to tell me. (SG#12)

**Method 7: Visualize the reading content**

Another method conducive to the participants' online reading comprehension is to visualize the reading content through the image and video search. Three participants (6%) mentioned that the use of *YouTube* and *Google Images* provided them a bright and specific idea of the meanings of the incomprehensible phrases or words so as to understand the reading content. Two participants discussed over this viewpoint as follows:

P2: I would like to search the unknown phrases or keywords through *Google Images*, and thus I can better understand what I am reading about by browsing through its images. After getting the glimpse of these images, then I go to other websites to search for related information and then apply the meanings I get from the images search into what I read so as to see which meaning is suitable to the content I read.

P1: That's right. I think that after I look up images about the unknown words or sentences extracted from the reading content, I suddenly realize that it is not that hard to understand their meanings. Like last time I googled a keyword extracted from the content out of *The Historian*. It is a novel about Dracula. After googling, I realized that this reading passage is really easy to understand. And this whole passage mainly talks about "sandwich". (SG#6)

The other participant viewed *YouTube* as another useful resource to help with her further understanding of an unfamiliar topic. This participant stated:

I think *YouTube* is another good choice. For instance, last time I read an article about the most classic MV, which was claimed to be Michael Jackson's "Thriller". I knew nothing about this MV, so I went to *YouTube* to watch this MV to get myself familiarized with it. (SG#4-P1)

**Method 8: Click hyperlinks**

Two students (4%) regarded hyperlinks as another beneficial means leading them to further information of an issue. To them, *Yahoo Mini Pen* not only provides the definition of query word, but its hyperlinks can guide them to relevant information on other websites as well. Detailed interview concerning this idea is shown below:

P3: Right. There is also a profile section [in *Yahoo Mini Pen*] which can lead you to more information about an issue. For example, if *Yahoo Mini Pen* shows the result regarding a political group that I have no idea about, I can go to its profile section [another function on *Yahoo Mini Pen*] to get further information related to this topic.

P1: Right, it is just like some underlined words that can be linked to other websites or further information.

R: So, do you mean hyperlinks?

P1/P3: Yes. (SG#5)

### **EFL Undergraduates' Perceptions of Online English Reading**

This section presents the participants' perceptions of reading English on the Internet in terms of the disadvantage and advantage of reading English online, personal preferences of reading English online or in print, and their suggestions for teachers who intend to incorporate Internet technology into the curriculum. Each respect is analyzed statistically together with the interview excerpts.

#### ***Disadvantages of reading English online***

Interview Question 7 was asked to find out what types of disadvantages of reading English online the participants there are. To be specific, the question tries to probe into what elements may hinder the participants from reading English through the Internet.

The results of the participants' views of disadvantages of reading English online are presented in Table 4-16. As seen in the table, there are nine main types of disadvantages found from the interview data: (1) inflexibility, (2) distraction and disorientation, (3) lack of ergonomic concerns, (4) oversupply of information, (5) lack of reliability, (6) lack of portability and tactile satisfaction, (7) problems from reading materials, (8) failure to read in detail, and (9) unfamiliarity with foreign webpages. Apart from the main categories of the disadvantage, several subcategories under the certain categories are enumerated to further illustrate the participants' perceptions.



In Table 4-16, the subtotal number of each main category of disadvantage, highlighted in bold, is the total number of the frequency in reporting some subcategorized disadvantages of reading on the Internet. The participants were allowed to point out more than one main category of online reading disadvantage. However, even if the participants mentioned the same subcategorized drawback of reading online more than once, the frequency was taken as once. The total number of frequency in all disadvantages was calculated by adding the subtotal number of each main category of disadvantage. As for the percentage of each subcategorized disadvantage, it was computed by dividing the frequency of each subcategorized disadvantage by the total number of frequency in that certain main category of disadvantage in order to reveal the percentage that each subcategory of disadvantage takes. In addition, the percentage of each main disadvantage was calculated by dividing the subtotal number of frequency of each main category of disadvantage by the total number of frequency in all main categories of disadvantage.

Table 4-16 Disadvantages of Reading English Online

Disadvantage	Subcategories	N	%
Inflexibility	1. Incapacity of taking notes and highlighting	33	65
	2. Difficulty in relocating the used websites	13	25
	3. Drudgery to flip between screens or scroll windows to read	5	10
	<b>SUBTOTAL</b>	<b>51</b>	<b>(21.3%)</b>
Distraction and disorientation	1. Hyperlinks, websites, or online communication devices	22	46
	2. Getting lost in words or skipping lines	15	31
	3. Advertisements or pop-ups	9	19
	4. Misleading search results	2	4
<b>SUBTOTAL</b>	<b>48</b>	<b>(20.0%)</b>	
Oversupply of information	1. Less information absorbed or transferred to long-term memory	20	50
	2. Difficulty in searching for target information	7	17.5
	3. Incomplete or disorganized information	7	17.5
	4. Failure to give sense of achievement or inform the reading progress	6	15

	<b>SUBTOTAL</b>	<b>40 (16.7%)</b>	
Lack of ergonomic concerns		38	
	<b>SUBTOTAL</b>	<b>38 (15.8%)</b>	
Lack of portability or tactile satisfaction	1. Lack of portability	17	65
	2. Lack of tactile satisfaction	9	35
	<b>SUBTOTAL</b>	<b>26 (10.8%)</b>	
Lack of reliability		22	
	<b>SUBTOTAL</b>	<b>22 (9.2%)</b>	
Problems from reading materials		6	
	<b>SUBTOTAL</b>	<b>6 (2.5%)</b>	
Failure to read in detail		6	
	<b>SUBTOTAL</b>	<b>6 (2.5%)</b>	
Unfamiliarity with foreign webpages		3	
	<b>SUBTOTAL</b>	<b>3 (1.3%)</b>	
	<b>TOTAL</b>	240	100%

*Note.* [N] = the number of the responses the participants gave concerning the disadvantage of reading on the Internet.

Among nine kinds of barriers of reading English on the Internet, inflexibility (21.3%) surpasses the other drawbacks, followed by distraction and disorientation (20.0%), oversupply of information (16.7%), lack of ergonomic concerns (15.8%), lack of portability or tactile satisfaction (10.8%), lack of reliability (9.2%), problem from reading materials (2.5%), failure to read in detail (2.5%), and unfamiliarity with foreign webpages (1.3%).

### ***Disadvantage 1: Inflexibility***

Fifty-one responses (21.3%) were reported that reading online is not as flexible as reading in print because they are not able to highlight and take notes, have difficulty relocating the websites they used before, and feel drudgery to flip between screens or scroll windows to read.

Thirty-three respondents highly valued the capacity of taking notes, underlining,



annotating, and highlighting while reading in print. They felt they can jot down any comment, reflection, or definition of vocabulary on the margin at their will. Without highlighting and annotating allowed while reading online, they easily failed to remember and concentrate on reading contents. A participant's interview excerpt exemplifies this view:

P1: [One advantage is that] I can't underline [while reading online]. If I don't underline, I will forget about what I have read previously. And then I can't connect the previous part of reading with the following part of reading. So, it seems that there is no connection in this article. (SG#5)

P1: I like to take notes, write down my thoughts, and circle unknown words while reading novels, which can't be made online. If I read on the Internet, I don't have to memorize what I have read. All I want is to absorb the knowledge. (SG#6)

Thirteen participants felt it difficult to relocate the websites that were used before due to the accidental close of the webpage window, failure to add the webpage to the favorite list, and the removal of the websites. Compared to online reading, reading in print is more flexible for them to mark the book page they last read by using bookmarks or making dog ears on the book. In addition, even if the computer offers Internet users the function to save the website links in My Favorite, some website links may be subjected to removal, and therefore they are disconnected and readers can no longer get through the information from these websites. The following are the comments from the participants' interviews regarding this perspective:

P1: I also think it is hard to find the same interesting websites that I have read before. Plus, sometimes when I close this website [window], I can't find it anymore or it may take long time to re-search for it. Like last time, while I was looking for a good purse and reading the description of this purse, accidentally, I closed the window, and I couldn't find it anymore. So, reading on the Internet is different from reading in print because I can use a bookmark to know where I stopped, but I can't do this while reading on the Internet. (SG#3)

P1: Sometimes, some website is expired or removed, so I can't find it anymore.  
(FG#8)

Five participants found online reading is less flexible than reading in print since they have to flip between screens or scroll windows to read through the whole reading content instead of easily turning book pages. This kind of reading mode discomforted the participants and indirectly led them to disorientation from searching information.

P1: It is very troublesome to look up news words while reading on the Internet because I have to switch between windows. If I read printed materials, I can jot down the definition around the margin. (SG#2)

P1: It is easy to remember the content I have read in print, but hard on the Internet because dragging the scroll down can disorient me to locate the important parts. (SG#3)

### ***Disadvantage 2: Distraction and disorientation***

Forty-eight responses (20.0%) were reported to show the disadvantage of reading English online lies in the distraction and disorientation stemming from advertisements or pop-ups, hyperlinks, other websites, or online communication devices, misleading search results, and getting lost in words or skipping lines.

Twenty-two participants reported their online reading is easily disoriented by a plethora of hyperlinks that lead to more information or other websites as well as distracted by instant messenger. As a consequence, they hardly ever finished reading through a reading content. As long as finding the reading content failed to meet their interest, they moved on to other choices of website links so as to engage in something more interesting. This way, to them, online reading is not merely involved with reading but with multitasking tasks. Among the multitasking tasks, reading with MSN on was particularly emphasized as the main hindrance to careful reading, as stated by two groups of participants as follows:

P1: I am usually distracted by MSN while reading online.

P2: That's right. I get distracted by *Yahoo Messenger*.

R: So, do you usually do more than one thing while reading online?

P3: Of course. I usually do multitasking jobs online.

R: But it seems that this is benefit instead of shortcoming.

P1/P3: But sometimes surfing the Internet can distract us from studying hard.

P3: I don't even turn on the MSN these two weeks because the midterm exam is coming. (SG#7)

P1: I get distraction very easily. I usually use several websites at the same time, so I keep several windows open. If what I read is boring, I will click another link to read.

P4: Me too. I get distracted easily, especially when I have my MSN on. Plus there are so many hyperlinks linked to other websites. (FG#13)

According to nine participants, the reading content on the Internet is quite dynamic in lieu of static in that it entails many icons, pop-ups, and advertisements. All of these distracters drew their attentions and exasperated them and therefore thwarting their reading experiences, as the participants declared below:

P1: There are many distractions from advertisements. Sometimes there is a long advertisement inserted in the middle of the reading content, which hampers my thinking flow during my reading. (SG#6)

P2: I can stay more focused while reading books.

P1: Right, because the reading content in print seems to be static, but it seems to more dynamic on the Internet. I can always find pop-ups or something different is happening on the Internet. (FG#14)

Noteworthy, some of them especially pointed out their puzzlement about why many advertisements are embedded on foreign websites compared to those on Chinese counterparts, as presented in the following excerpt:

P1: I don't know why there are so many advertisements on foreign websites?

P2: That's right. And there are so many pop-ups. They are really annoying. And I even feel angry to click them away.

P1: I do believe there are more advertisements on foreign websites than on Chinese ones. (FG#8)

Furthermore, getting lost in words or skipping lines accounts for the participants' distraction during online reading. Fifteen participants noted the reading content on the Internet is composed of so many words in small font size that they lose track of the line they are reading or totally get lost in words.

P3: I am the same with them. Besides, if there are too many words, I will get lost in words or skip lines easily.

P2: Right. Or sometimes I misread the words without awareness, and therefore I misunderstand the meaning. (FG#9)

P1: By the way, I skip lines easily.

P3: Right. I also have this problem.

P2: So, I use the cursor to read online. I feel like I am an old man. (FG#8)

The last distraction factor can be caused by the misleading results, meaning that reading online can be disoriented by search results that mislead the reader to irrelevant information. Two participants explained:

P2: I think there is so much information online that sometimes I feel some information is not really relevant to my searching keywords. For example, last time I found a website telling that it offered the analysis of the poem *Fish* by Elizabeth, so I entered it. To my disappointment, there is no analysis of this poem but only its original text. The introduction to this website cheated on me. (FG#13)

P1: I usually find that the information to which the hyperlinks lead me digresses from my searching targets. (SG#5)

### ***Disadvantage 3: Oversupply of information***

Forty responses (16.7%) concerning the oversupply of information were articulated to present the third disadvantage of online reading in four respects. First of all, 20 participants commented that amid reading on the Internet, less information can be either completely absorbed or transferred to long-term memory owing to the abundance of information on the Internet. A participant exemplified this drawback below:

P3: There is too much information on the Internet but I can't intake all the information I have found, so sometimes I have to print it out to read. (FG#13)

Moreover, according to two participants, being bombarded with a lot of information on the Internet cannot leave them space to contemplate on and further digest what they read. Therefore, they confessed that reading online is to become informative and knowledgeable in lieu of cramming a lot of information. Two

participants explicated:

P3: I think the information I read from the Internet comes easily and goes easily. So, reading on the Internet for me is to get informative instead of remembering all I have read. (SG#1)

P2: I think reading online is to get knowledge. However, it can't give me any space to think, but reading in print can. So, sometimes when I read in print, I stop a little while to think what I have just read previously. (SG#6)

The second disadvantage stemming from the oversupply of information is its incompleteness and disorganization in reading contents. Seven participants thought although the Internet is replete with the excess of information, it fails to provide information as exhaustively and systematically as books because they discerned that the online information seems to overlap among websites. This viewpoint insinuates that online information is virtually provided in width instead of in depth. Consequently, the participants would like to consult the book when more detailed information is in need; otherwise, the use of the Internet would be considered the top priority.

P3: Although it is easy to find information I need online, it is not provided as complete as books. For instance, Wikipedia can't provide us with detailed and complete information as an encyclopedia.

P2: I agree with you because I feel there are many websites offering the same information. So, it seems that online information can be easily copied from some websites to others. Sometimes I feel although there are many results matching my search keywords, the information they provide is not that comprehensive and relevant. So, I think I can get more comprehensive and detailed understanding of a topic through reading books. (FG#9)

The third weakness from the excess of information is that it brings about the difficulty in searching for target information. As a result, seven participants reported they should spend a lot of time searching for the target information or screening the information to meet their needs. Viewed in this respect, the more information the Internet provides does not always guarantee the more convenience it may suit the online reader, as exemplified by a participant:

P1: Sometimes the Internet is not that convenient because there is so much information that may not suit my purpose. Then I have to spend lots of time surfing the Internet to search for what I really need. (FG#13)

Failure to check the reading progress and further leading to failure to gain a sense of achievement is the fourth drawback to the oversupply of information on the Internet. According to six participants, there is such abundant information on the Internet that they seem not to finish reading though it someday. In this respect, online reading could neither visually represent the left workload of reading contents for them and nor could they check their reading progress. Eventually they found it frustrated to come by a feeling of achievement out of bombarded information shown online. Two participants expressed:

P2: I think reading through a book can cause a sense of achievement because I like to turn over the book pages and make them look old. If I read on the Internet, I don't have this sense because I will think there are more other reading articles out there waiting for me to read. (SG#5)

P2: [I like reading in print] because if I read books, I can keep checking upon my reading schedule and progress. (SG#12)

#### ***Disadvantage 4: Lack of ergonomic concerns***

Thirty eight participants said that reading online is lack of ergonomic concerns. Lack of ergonomics means that reading on the Internet can bring about physical problems that are detrimental to their personal health and human body, such as eyestrains or worsening of eye vision, pain or aching in wrists or elbows, stiffness of sore neck, tightness of shoulder muscles, general fatigue or tiresome, headache or dizziness, and exposures to radiation emission. The discussion among the participants with this respect is provided below:

P2: Besides, reading online may cause neck or shoulder pains.

P1/P3: Right.

P2: Unlike reading a book, I can read it wherever I want such as on my bed.

P1/P2/P4: Yes.

P1: Besides, the brightness of the monitor harms my eyes, too.

P2: Yes, and it further causes dizziness. (SG#11)

***Disadvantage 5: Lack of portability or tactile satisfaction***

Lack of portability and tactile satisfaction is one of the disadvantages of reading online. Twenty-six participants mentioned that compared to reading in print, reading on the Internet cannot be carried out wherever or whenever they would like to read. On top of it, without reading in print, they felt deprived of truly feelings of touching and grappling books in their hands. Two participants commented:

P2: I feel there is a distance between the Internet and me because the reading content is still shown on the screen. However, if I read a book, I feel that I possess this book. So, whenever I want to read, I can just grab it and read it without logging in and turning on the computer. (SG#6)

P1: Reading books is much more portable [than reading online] and I can carry it easily at will. Beside, not everyone has a notebook to carry around to read online. Even if I have a notebook at hand, there is not always wireless Internet connection available. (SG#12)

As viewed from the two responses above, reading online is not as portable as reading in print and it also creates the distance between readers and reading contents by not providing concrete and tangible reading materials to meet their feelings of possession.

***Disadvantage 6: Lack of reliability***

The lack of reliability is pointed out to be another drawback of reading on the Internet. Twenty-two participants expressed that information from the Internet is less reliable and trustful than that from printed texts. They thought that Internet is more like a reservoir containing a plethora of information that can be easily subjected to edition and modification by any online users anytime with their own perspectives. Therefore, the Internet may show a lot of information in subjective, biased, and personal stances. On the contrary, information shown in books has already undergone the proofreading before being published. This respect is exhibited in the participants' interviews as follows:

P3: It [The difference between reading online and reading in print] is like the



difference between Wikipedia and Encyclopedia Britannica. Although using the Encyclopedia Britannica is much slower than Wikipedia, it is more reliable to use latter since it has few mistakes. (SG#7)

P1: I think sometimes the information is wrong because everyone can edit on Wikipedia. The information can be wrong.

P2: Right, it's lack of reliability. Sometimes Sparknotes.com also gives wrong information because everyone can share their opinions and reflections on the literature work they have read. There is no precise information. (SG#3)

### *Disadvantage 7: Problems from reading materials*

Reading contents presented on the Internet are not without flaws. Six participants found that there are some problems embedded in the reading content itself. For one thing, online information is replete with many misspellings and grammar mistakes. One student said, "There are many typos or misspellings on the websites. So, sometimes I can't find the definition of the word" (FG#14-P2). For another, online information from foreign countries abounds culturally-embedded information and colloquial words; therefore, their understanding of the reading passage is thwarted. This view is exemplified by two dialogues in two focus groups below:

P1: [The disadvantage of online reading] lies in the reading content itself. I think it is very difficult to understand the news presented on New York Times website.

P2: That's true and even the news on BBC is, too.

P1: Right, and CNN as well.

P2: That's why I usually on China Post online. The news there is easier to read than foreign news websites. (FG#14)

P1: [The most difficult Internet reading resources] is Times. The diction they use is really over my head.

P2/P3: New York Times.

P1: Yes. I think the content in New York Times is so America style that I cannot understand what it means.

P2: That's true, and its content too culturally-embedded. (SG#1)

Furthermore, filthy language abounding with online information is another problem emerging from online reading content. Since online information can be shared and posted by anyone without meticulously using the words, online writers



may use some dirty languages and expressions at their will without restrictions.

Interestingly, a participant pointed out this issue as follows:

P2: I found that many foreigners like to express their feelings with four letter words, but Chinese don't. Like last time, when I read an e-magazine about fashion, I found that the editor used f letter words to criticize some famous celebrities' taste of their style and outfit. They use these strong words to express their opinions.

Further asked why they felt the phenomenon of using foul words on the Internet is at disadvantage, the participants responded:

P1: If the young readers without a good discipline read online articles having dirty words, they may get a reason to use the f... word. So, I think articles with some foul words on the Internet may set the bad example for online readers somehow. (SG#6)

#### ***Disadvantage 8: Failure to read in detail***

According to six participants, failure to read in detail while reading online is another shortcoming. Different from reading in print, reading online particularly requires readers to skim and scan through the reading content so as to quickly snatch the target information they need in lieu of concentrating on every single word in context. This different kind of reading mode is also associated with the disadvantage of oversupply of online information mentioned previously. Due to a sea of information on the Internet, readers may lose their patience to read carefully to pinpoint the locale of the target information. Accordingly, reading modes of skimming and scanning seem to be detrimental to online readers' full comprehension and memory of the online contents, as exemplified below:

P2: [Another disadvantage is that] because I always scan through the content while reading online, I never remember what I have read. (FG#8)

P1: I can concentrate more while reading the printed text because I analyze and read sentence by sentence carefully. But if I read on the Internet, I skip some parts of the content by skimming and scanning the reading content. (SG#4)

### ***Disadvantage 9: Unfamiliarity with foreign webpage frameworks***

Being so used to our local website frameworks, three participants referred to their unfamiliarity with foreign webpage frameworks as one of the disadvantages of online reading. Being unfamiliar with foreign websites, the participants felt confused and intimidated once they enter each of them. They said they at first overwhelmed by many English words and then felt confused about how to operate this website. One participant described his related experience in the following statement:

P3: Sometimes I feel it is difficult to operate foreign websites. I think their website frameworks are so different from ours that I am not familiar with their interface. For instance, last time I went to Amazon.com, I found it hard to use. In addition, I found the presentation of the foreign blogs is different from ours, too.

### ***Advantages of reading English online***

Right after the disadvantages of reading online, interview Question 8 was asked to find out how the participants perceive reading English on the Internet in terms of its advantages. From the focus group interviews, eight kinds of advantages were found and ranked as follows: (1) saving time or cost in obtaining information (30.7%), (2) obtaining rapidly-updated or wide range of information (20.5%), (3) obtaining others' perspectives (11.0%), (4) accessing information in diverse forms (11.0%), (5) interacting or communicating with others (10.2%), (6) making reading documents (7.1%), (7) benefiting English learning (7.1%), (8) multitasking (2.4%). Table 4-17 presents the detailed information.

The number of responses is the number of the participants who reported the particular advantage of reading online. Since the interview questions are open-ended questions, the participants were able to provide more than one kind of online reading purposes. In spite of this, even if the participant mentioned a certain category of

advantage more than once, the frequency of this category of advantage reported by the participant was taken as once. Although the total number of the participants is 49, with some of them failing to provide a certain type of advantage, there are some missing cases. Furthermore, the percentage of each reported advantage of reading on the Internet was computed by dividing the number of the particular advantage that the students reported by the total number of all the advantages the students brought up during the focus group discussion. As for each percentage followed by each number of responses in Table 4-17, it is to reveal the percentage of the total number of participants who reported a certain edge of reading English online.

Table 4-17 Advantages of Reading English Online

Advantage	%	N
Save time or cost in obtaining information	30.7	39 (79.6%)
Obtain rapidly-updated or wide range of information	20.5	26 (53.1%)
Obtain others' perspectives	11.0	14 (28.6%)
Access information in diverse forms	11.0	14 (28.6%)
Interact or communicate with others	10.2	13 (26.5%)
Make reading documents	7.1	9 (18.4%)
Benefit English learning	7.1	9 (18.4%)
Multitask	2.4	3 (6.1%)
TOTAL	100	127

*Note.* [N] = the number of the responses that the participants gave concerning the advantages of reading English on the Internet.

#### ***Advantage 1: Save time or cost in obtaining information***

The most reported advantage of reading on the Internet (30.7% with 39 responses ) is that it is time and cost saving to obtain the information from the Internet by utilizing certain search skills to specifically pinpoint the searching keywords that lead to desired information. The participants mentioned that they can easily glean the wanted information online without wasting time paying a particular visit to the school libraries or rentals to browse through all the books related to the

target information and then check out books. The following discussions demonstrate this viewpoint.

P1: It is very convenient and fast to obtain information without going to the library to browse through many books to get the book I really want.

P2: Right. It is very easy to find the target keywords through the Internet, but it is much harder to search for keywords in the book.

P3: Yes. You have to finish reading a whole book to find the keyword. The computer can help you find or you can try ctrl + f to find the keyword much more conveniently and easily. (SG#5)

Besides, for English learners, reading foreign magazines written in English is definitely not uncommon. However, with a high price of an imported magazine, they seem to feel uneconomical because they probably cannot finish reading through it. Fortunately, with reading these magazines on the Internet, learners do not have to spend any single penny on book purchases. Therefore, some of the participants agreed that reading through the Internet does save them a great deal of money, as a participant stated below:

P2: I think it is very convenient and money-saving.... Besides, reading on the Internet does save me a lot of money because *Life and Style* magazine I used to buy here in Taiwan is very expensive, which is about 150 to 200 dollars. (SG#4)

***Advantage 2: Obtain rapidly-updated or wide range of information***

Eagleton and Dobler (2007) stated that one of the major advantages of Internet text over printed text is timeliness or currency. This is correspondent with the second advantage found in this study. Twenty-six participants (53.1%) thought that with information being rapidly updated and expanded on the Internet, they are easily accessible to the up-to-date and instantaneous information as well as a valuable bank of information in a wide variety of fields, as evidenced in a discussion among three participants:

P3: Internet can provide a wider range of information than books. If I type an author, I can not only learn about his life and background, but also the

background of his era.

P1: Online information is more instantaneous.

P2: Right. Sometimes there are some keywords embedded the content, which can lead us to further reading extensively.

P1: That's right. (SG#10)

Another participant even appreciated the powerful search engine through the Internet to find a very interesting article online:

P1: I can even read more information that has not known by many people. For example, last time I read an online article about Thomas Jefferson had a mistress. That is really fascinating. (SG#4)

This statement demonstrates that reading online can provide readers different fields of information that books cannot provide them with.

***Advantage 3: Obtain others' perspectives***

P2: I enjoy reading entertainment gossips on the Internet because I can also read others' comments on the same article I have read. So, I can know others' perspectives on the same article. If I read books or magazines, I absolutely don't have chances to read others' opinions like this. (SG#4)

The statement made by a participant presented above shows that reading in print differs from reading on the Internet because the latter can benefit readers to view things from different angles and further gain others' different comments or recommendations for the same topic that others have interest in. In the current study, fourteen participants (28.6%) pointed out this advantage of reading online. In this way, reading online seems to change the traditional reading mode from bilateral interactions between the reader and the reading text to trilateral interactions by adding another third party---commenting features. With the better use of this function, a participant said:

P2: Usually, when I listen to certain type of songs on the Internet, I can also see many recommendations from others who also listen to this type of music. They always recommend the similar music style I am listening to. So, I can

know lots of information about my favorite type of music. (SG#3)

Therefore, with more channels to gain information through the Internet, readers' thoughts can save from being fossilized as a participant specifically exemplified:

P2: Let me take make-up for an example. If I go to foreign websites, I learn that how bold the foreign visagistes design or apply face make-up on their models. Compared to visagistes here in Taiwan, I think foreign visagistes are more willing to try something new and fresh. (FG#8)

***Advantage 4: Access information in diverse forms***

Fourteen participants (28.6%) thought it is advantageous to obtain online information presented in different forms such as words, videos, images, graphics, audios, and so forth. Most of them really appreciated these free multimedia functions because they season their online reading experiences with more videos and audios. In addition, for English learners, the use of the videos was considered to be the most useful method to reach better understanding of English contexts in written, as two participants expressed:

P1: I am more impressed by the online news presented with images and words. It is more helpful for comprehension not only by reading images but also by listening to its audio descriptions. (SG#2)

P1: I think videos on the websites are very beneficial for my literature class such as *YouTube*. For instance, last time I went to *YouTube* to find a video about a literature work the teacher assigned us to read. Then I found it and watched it on *YouTube*. After watching several videos, I found they are very useful to make me better understand that literature work. (FG#16)

***Advantage 5: Interact or communicate with others***

P1: I think the Internet provides a function of interaction with others. For example, I can ask others some questions and then I can immediately get some responses from them. If I read books, I cannot ask questions to books and expect them to reply to my questions. (SG#5)

The excerpt shown above indicates another advantage of reading online is to interact and communicate with other online users during reading on the Internet.

Thirteen participants (26.5%) reported that it is very convenient to keep in touch or have discussions with friends and classmates through instant Internet communication devices such as instant messengers and weblogs. They said while reading on the Internet, they can not only read the online article by themselves, but also ask about comprehension questions or share the same article with their friends or classmates by merely pasting the website links on the Internet. A group discussion respecting this point is presented below:

P1: Sometimes if I cannot understand any colloquial words on foreign websites, I can ask my friends through MSN. I can just copy and paste a website link to the MSN and they can read, watch, or listen to the information I find. Or sometimes I post it on the blog and then my friends will leave me messages or we will discuss over the information sometimes. (SG#12)

***Advantage 6: Make reading documents***

To make reading documents is another benefit from reading online that nine participants (18.4%) brought up in the interview. They felt it is easy and free to combine all the target information found from the Internet as their reading documents that can be printed out later for careful reading. Additionally, with the use of computer, online readers can collect, excerpt, edit, and customize all the information they need from the Internet. As a result, they can save time from laboriously jotting down the information found online. A participant responded:

P1: It is easy for me to copy and paste the information I want. Besides, it will be so much better as long as there is a printer because I can print out any information I gather right away. Then, it will not waste my time to write down it. Also, I can change the color and the font of the words, which can suit my needs. (SG#10)

***Advantage 7: Benefit English learning***

Nine participants regarded the benefit for English learning as another merit of reading online. Generally speaking, they thought their English proficiency can improve. However, according to them, the improvement seems to be merely confined



to English reception proficiency, namely English reading and listening proficiency. Consequently, most of them viewed vocabulary learning is the main improvement from reading online, as a participant said, “Through reading on the Internet, I can learn new vocabulary and thus improve English ability” (FG#9-P2). Overall, this perspective is specified in the interview with three participants below:

P1: Probably we are gradually accumulating and improving our English language ability, especially listening and reading abilities.

P2: Yes, but it is hard for me to get used to some different accents.

P1: Besides, I can learn vocabulary. I like jotting down the unknown words while reading English news online.

R: Why?

P1: Because words on the news websites seem to be more professional. If I read on *YouTube*, I don't memorize the words.

P2: But I don't check or memorize the words unless some certain words keep showing up in the same article. So, if I find an article full of some certain words which arouse my attentions, I will look it up and memorize it.

P3: Me too. I usually skip the unknown words. I only check up the words when I can't understand the content.

R: So, can these online resources help improve your English ability?

P2: Yes, but it [reading online] only improves reading and listening [proficiency].

P1: That's right but not speaking [proficiency]. (FG#8)

#### ***Advantage 8: Multitask***

The last advantage of reading online is multitasking, meaning that it is easy to do many things on the Internet such as reading and listening to music at the same time, searching for definitions of newly encountered vocabulary, or reading more than two reading contents through different windows. Surprisingly, there are only three participants (6.1%) thinking of doing many tasks simultaneously online as a benefit because most of them (22 participants) felt doing many things online seems to lead them to distractions, as mentioned in the previous section. A participant, on the contrary, valued this feature by stating that:

P2: I think reading online can help me look up new words and do the reading at



the same time. So, I can read even faster. Besides, if there is something I don't know in the content, I can check it through the Internet immediately (FG#15)

### *Preferences of reading English online or in print*

In order to know the participants' preferences of reading English online, interview question 9 required the participants to express how they prefer to read, online, in print, or in both ways, and why. The result presented in Figure 9 reveals that regardless of many advantages that reading on the Internet can bring, only 10% of the participants (5 participants) exclusively preferred reading online, 39% (19 participants) exclusively in print, and 51% (25 participants) both in print and online.

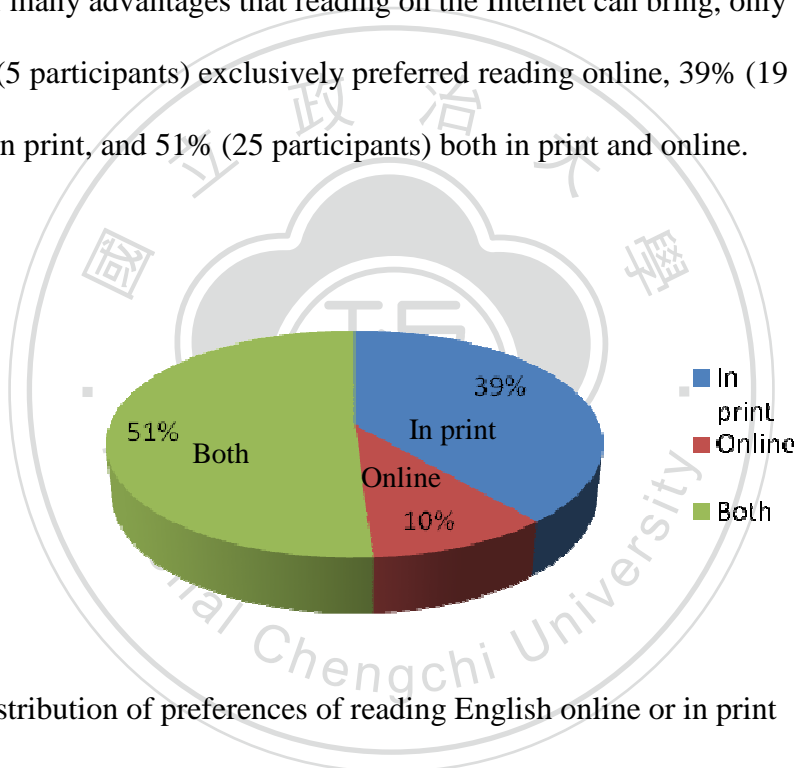


Figure 9. Distribution of preferences of reading English online or in print

Interestingly, it is found that the reason why more participants (19 participants) particularly preferred to read in print than online (5 participants) happens to be related to the disadvantages of reading online they remarked in their interviews that were reported in prior section. Nineteen participants favored to read in print since they felt that reading in print are more liable to: (1) concentrate on reading contents, (2) underline and take notes, (3) remember reading contents more, (4) possess and collect books, (5) read almost everywhere, (6) maintain eyes health, and (7) read more

educational information.

In addition, from the interview data, it is found that the reason why there are only five participants particularly favoring to read online is connected with the advantages of reading online that were touched on previously. Five of them would rather read online because they spilled that the Internet can provide them with (1) a wide range of reading topics and materials, (2) the latest information, (3) the convenient access to desired information, (4) others' opinions and perspectives, (5) multimedia information, and (6) chances to do multitasking.

More than half of the participants (25 participants) reported that they prefer reading both online and in print in accordance with their reading purposes. To them, different reading purposes can lead them to read in different ways; therefore, they did not particularly like reading in either way.

#### ***Suggestions for teachers to incorporate Internet use into classes***

Interview question 10 asked the participants about their pedagogical suggestions to their teachers who intend to integrate the Internet English reading into their courses. Because the participants must have experienced their teachers' instructions with the use of the Internet technology before, this question intended to require them to recall their prior experiences of employing the Internet in preparation for their teachers' assignments. To be specific, they were required to spill the problems they had encountered, based on which they then had to provide some suggestions to solve them.

The findings of the participants' suggestions to their teachers are presented in Table 4-18. As shown in the table, there are six main themes of suggestions found from the interview data. The participants suggested teachers (1) recommend useful websites with 43% of all the responses, (2) teach search skills with 16%, (3) create

e-learning websites with 16%, (4) appropriately assign online tasks with 11%, (5) create opportunities for teacher-student interactions online with 7%, and (6) incorporate Internet use into classes with 7%.

In Table 4-18, the subtotal number of each main category suggestion, highlighted in bold, is the total number of the frequency in reporting some subcategorized educational suggestions for the teacher who intend to integrate the use of the Internet into the course. The participants were allowed to offer more than one main category of suggestion. However, even if the participants mentioned the same subcategorized suggestion more than once, the frequency was merely counted once. The total number of frequency in all suggestions was calculated by adding the subtotal number of each main category of suggestion. As to the percentage of each subcategorized suggestion, it was computed by dividing the frequency of each subcategorized suggestion by the total number of frequency in that certain main category of suggestion in order to show the percentage that each subcategory of suggestion takes up. In addition, the percentage of each main suggestion was calculated by dividing the subtotal number of frequency of each main category of suggestion by the total number of frequency in all main categories of suggestion.

Table 4-18 Suggestions for Teachers Intending to Incorporate Internet Use into Classes

Suggestions	Subcategories	N	%
Recommend useful websites	1. Offer students more useful websites to use	35	78%
	2. Provide searching keywords	7	15%
	3. Categorize the recommended websites	3	7%
<b>SUBTOTAL</b>		<b>45</b>	<b>(43%)</b>
Teach search skills	1. Instruct students to use recommended websites or journals	11	65%
	2. Train students to judge the reliability of online information	6	35%
<b>SUBTOTAL</b>		<b>17</b>	<b>(16%)</b>
Create e-learning	1. Provide course-related information for students	10	59%

websites to learn	2. Try not to receive assignment or give tests online	4	23%
	3. Provide a place for students to discuss	3	18%
	<b>SUBTOTAL</b>	<b>17</b>	<b>(16%)</b>
Appropriately assign online tasks	1. Graded level of reading materials	4	33%
	2. Topics of interest	3	25%
	3. Tasks given with a clear guidance	3	25%
	4. Online tasks with fun or interaction	2	17%
<b>SUBTOTAL</b>	<b>12</b>	<b>(11%)</b>	
Create opportunities for teacher-student interaction online	1. Join in discussions with students	4	57%
	2. Provide feedback to students' assignments posted online	3	43%
<b>SUBTOTAL</b>	<b>7</b>	<b>(7%)</b>	
Incorporate websites into classes	1. Manifest readings or concepts mentioned in textbooks	3	42.86%
	2. Check upon students' online learning	2	28.57%
	3. Connect local students with foreign students	2	28.57%
<b>SUBTOTAL</b>	<b>7</b>	<b>(7%)</b>	
<b>TOTAL</b>	<b>105</b>	<b>(100%)</b>	

*Note.* [N] = the number of the responses the participants gave concerning the pedagogical suggestion to the teacher who intending to use the Internet in the course.

### ***Suggestion 1: Recommend useful websites***

Forty-five responses were made by the participants to suggest that teachers should recommend them some useful websites if they intend to integrate the use of the Internet into courses. In the examination of these responses, three types of subcategories were found. They hoped teachers can not only (1) offer them more useful websites to use, but also further (2) categorize the recommended websites, and (3) provide search keywords.

Among forty-five responses, thirty-five respondents suggested teachers provide them with useful websites to search for relevant information and to deal with assignments that their teachers give. As to why they would rather want the teachers to

offer them websites than search on their own, two reasons were found.

First of all, taking it for granted that the teachers must have pre-examined a plethora of websites relevant to the courses, thirty-five respondents replied that they trust the websites the teachers recommended and therefore feel easy and safe to utilize them, as a participant commented:

P3: I remember my teacher provided us a very specific website to search for information about the 20<sup>th</sup> century. This website provides historical information and summary about each decade in different categories. So, I think it is very clear and safe to read only this specific website provided by the teacher to get information about history of the 20<sup>th</sup> century. Otherwise if I search for it through search engines, there must be various interpretations and explanations and I would have no ability to judge which one is right or wrong. (SG#5)

Another participant even appreciated and metaphorized a teacher's role into a checking post to filter out those unreliable websites resources by saying, "The teacher is like a checking post to check and examine which website is worth being used" (FG#13-P2).

The other reason why the participants wanted their teachers to provide them with websites is that they felt utilizing teachers' recommended websites can save a plenty of their time to search for an appropriate and trustworthy website. In this regard, with the use of teachers' suggested websites, they do not have to waste time finding a credible website through endlessly judging and reading. This viewpoint is manifested in a participant's interview excerpt:

P1: The teacher should provide us with some good websites; otherwise, we just spend a lot of time goofing around online to search for information. Unfortunately, the information I find often do not live up to the teacher's standards and expectations. (FG#9)

Aside from suggesting teachers offer them useful websites, three participants also hoped teachers to further categorize the websites they recommend in accordance with their English proficiency levels. They thought some English websites are difficult for

them to understand with their existing English ability. A group of two participants revealed:

P1: Teachers should provide us with some useful websites.

P2: So, before recommending the websites to students, they should review or filter some websites based on students' English proficiency levels.

P1: That's right. Because some Internet contents are really difficult for students to understand.

P2: Or they can categorize the recommended websites based on English difficulty levels. Thus, students with high English proficiency level can go to the difficult websites; while those with low English proficiency levels can go to the easier ones. (SG#12)

Seven participants also expected teachers to at least provide them with search keywords to narrow down their search scopes while reading online. If not, they could feel lost in a myriad of information on the Internet. Two participants stated:

P3: I hope teachers can provide us with some keywords and then we may have clear directions to look for the information that we really need. Otherwise, there is so much information online.

P1: Right. I think online information is very messy. If I don't have any keywords, I feel disoriented in searching for information online. (FG#16)

All in all, the participants were inclined to rely on the teacher's recommendations of useful websites and keywords so as to secure reliable information as well as reduce time spent goofing around on the Internet.

### ***Suggestion 2: Teach search skills***

Teaching search skills is the second suggestion the participants made for teachers. Seventeen participants hoped that teachers teach them how to look for information through the Internet. In this type of suggestion, two subcategories were found.

Firstly, eleven participants thought that teachers have to instruct them how to use recommended websites or online journals. To them, solely providing useful websites is not enough since they remained unfamiliar with the operation of the websites, especially foreign websites, as two participants mentioned:

P2: [Teachers should] teach us how to use the recommended websites or tell us the main features of the recommended websites.

P3: Right. Like how to use BBC website, which is really hard to use. (SG#7)

With this regard, they expected teachers to teach them how to use the websites as well as how to search for information on this particular website instead of merely giving them a list of website links. In addition, three participants even specifically indicated that they needed teachers' instruction on how to download the audio file from the Internet. Their discussion is shown below:

P1: I think teachers should suggest us some useful websites.

P2: Besides, teachers have to teach us how to use the website. Like last time, I couldn't get the audio file from NPR [National Public Radio]. So, I am thinking maybe the teacher can teach us how to use this website and download skills as well.

P1/P3: Right. Sometimes it takes a lot of time to download a file or sometimes the link cannot even generate any file. (FG#18)

Secondly, not knowing how to evaluate the websites on their own, six participants suggested teachers train them to judge the reliability of online information so as to obtain more credible and bias-free information. Two participants recalled that their teachers used to teach them how to read online information critically for the preparation for their debates by presenting them with a lot of less reliable websites. By doing so, the teacher attempted to instill them a concept that online information is not completely dependable and applicable. This view is exemplified by a discussion between the two participants in the following:

P2: Also [another suggestion], the teacher should teach us how to judge the reliability of the information from the Internet.

P3: Yes. I remember my teacher taught us how to distinguish the reliable information without bias.

P2: Right. I remember this was an oral training class and we were going to prepare for a debate, so our teacher wanted us to say something with its ground. Don't say something without any ground. He also gave us a lot of strange [less reliable] websites in an attempt to tell us that not all information on the Internet can be used. (SF#5)



In summary, teachers' instructions on how to evaluate the reliability of online information and how to operate a recommended website are two search skills that the participants suggest teachers provide in class.

***Suggestion 3: Create e-learning websites***

The third suggestion comes to the teacher's creation of e-learning websites. Seventeen participants suggested teachers create their own websites to facilitate the students' independent learning. Three sub-themes were found under this suggestion.

First of all, ten respondents advised that teachers should provide them with course-related information on e-learning platforms or weblogs for them to download and thus to learn by themselves. By means of downloading the provided materials, the participants can save their cost and time and access effortlessly much more trustful supplementary materials related to the course they take, such as handouts, supplementary reading articles, or multimedia resources.

P3: The teacher can also collect useful data or related information and then put them on their own e-learning websites for students to download. Then it will save our [students] time to search for information online because maybe the information we find may not that be as appropriate or exact as teachers'.  
(SG#11)

On top of suggesting teachers establish their own teaching websites or platforms, three participants further suggest teachers leave some space on their learning platforms for them to interact and discuss over some issues related to schoolwork, which is exemplified in an excerpt from a participant's interview:

P2: [Teachers' teaching websites are helpful], but what the most important is that teachers should provide a space for students to discuss where students can not only discuss over some issues related to the class, but also ask their teachers about some questions on the teachers' teaching websites. (SG#5)

Delving into their suggestions, the participants seemed to expect teachers' teaching platforms to be not just a place to download or upload assignments, but a venue where they can communicate and exchange ideas with each other.



Notwithstanding, the participants suggested teachers to set up their teaching websites, they hoped that teachers tried not to receive their assignments or give them tests online. They complained that they preferred taking tests in written form rather than on the Internet. This point is illustrated with three participants' unpleasant experiences of taking tests on the Internet below:

P1: Sometimes I am not really happy with using the digital learning website because my computer is frozen or shuts down all the time. The website where we take tests should be in a good condition.

P3: That is right. Last time I took an English writing test on the Internet. I ended up getting a big zero on this test because there was something wrong with the computer system.

P1/P2: I have this kind of experience, too.

P1: I think taking tests on the Internet remains user-unfriendly. (FG#9)

As seen from the interview, on the account of problems from computer like sudden computer breakdown or freezing, the participants seemed to feel negative about dealing with assignments and tests through the Internet.

To sum up, the participants not only anticipated teachers to establish online teaching platforms, but also hoped that teachers could well capitalize on their teaching websites in terms of opening the students' door of communication with their peers to further bolster their learning, and that teachers would not require the students to take tests online.

#### ***Suggestion 4: Appropriately assign online tasks***

The fourth suggestion for teachers integrating Internet use with their teaching is to appropriately assign online tasks. In the interviews, the participants hoped that the teachers can properly assign online homework by taking the following aspects into consideration: (1) graded levels of reading materials, (2) topics of interest, (3) online tasks with fun or interaction, and (4) tasks given along with a clear guidance.

Among twelve responses, four responses emphasize that the teachers have to

give the students online assignments on the basis of their English proficiency levels; otherwise, they can feel frustrated and discouraged from reading foreign websites.

Two participants accounted their personal experiences in this respect:

P1/P3: Graded materials [in terms of their English proficiency level] are also very important. Maybe the teacher should ask the students to read Reader's Digest at first and then Times magazine.

P1: Right. I remember when I was a sophomore, my teacher asked me to read Times magazine, which was really difficult for me to read at that time. (SG#1)

Seeing this, the participants expected the teacher to provide them with graded online reading materials; consequently, their confidence in reading in English can be progressively developed.

Furthermore, three responses were made to suggest the teachers to attend to their interests in reading topics ahead of assigning them online reading materials.

According to the participants, reading topics that are not dry or can be related to their daily lives are prone to arouse their interest in reading, as a participant illustrated below:

P3: I think before asking students to read long articles online, the teachers should boost students' interests in reading in English by assigning them such interesting topics as super stars [entertainment]. For instance, recently, there have been many pieces of news about Edison Chen's apology for his sex photo scandals or about Chien-ming Wang's baseball performance in Yankee . I think students seem to be more interested in discussing over topics like these. So, the teacher can try to provide students with something related to their life experiences instead of something dry. By doing so, they [the teachers] can gradually add something more academic to their reading topic list. (SG#10)

Another suggestion, interestingly enough, was made to remind the teachers to give the students online tasks with fun or interaction. It seems that the teachers always require the students to read something online, ignoring the fun and the interaction between online tasks and computer users, which are two vital elements of learning online. A participant delineated her own pleasant experience of learning English

surgical terms by means of playing English online games. She said:

[I suggests the teachers to assign us online tasks with the interaction.] Recently, I have been playing online games in English. Because I like watching an American medical drama television series, called Grey's Anatomy, one of my friends recommends I should play an online game related to surgery operation. I found it interesting. This website<sup>11</sup> is about virtual surgeries. During the game, there are many operation procedures offered for the computer users to follow. Therefore, I have to attentively listen to the instructions given and read the hints shown on the screen. It also shows a patient's x-ray photo for me to diagnose. It is very interesting and interactive. And then there is a patient lying on the operation table waiting for me to anatomize him, so I can learn the whole process of an operation. So, I like this kind of interaction the Internet provides. The interaction here means that there are some procedures for me to follow to finish a task. And from the game, I've learned a lot of English surgical terms. (SG#12)

Judging from the participant's thorough suggestion above, online assignments should not be restricted to reading per se. Instead, they should be engaged with more interactive online tasks like online games to motivate their learning. This way, they can have a good time learning English on the Internet on their own.

The last suggestion under the category of appropriately assigning online tasks is for teachers to provide clear and specific guidance on what exactly the students are required to find, to read, and to do on the Internet. Simply providing the students keywords or broad topics to search for relevant information to complete an assignment is quite perplexing and disorienting for the students to reach the teachers' standard. This view is exemplified in an interview with three participants as follows:

P2: What's more [another suggestion], I think merely giving us keywords is not enough, They [the teachers] should also give us a guidance to follow, such as what they want us to search for through the Internet, what parts of readings we should focus on, and what conclusion should be made. Without these specific guidelines, we are likely to aimlessly search for information on the Internet and thus finally hand in the paper that doesn't live up to teachers' requirement.

R: So, it manes that it is better for teachers to give you directions for you to follow

<sup>11</sup> The online game the participant provided is Game Puma.com. The website is presented below:  
<http://www.gamepuma.com/miscellaneous/Virtual-Surgery.html>

while searching for information online, right?

P1: Yes, [teachers' directions] like what they really want to read in our papers.

P3: Yes, and please don't just give us a broad topic like ecology to search for. The teachers are supposed to narrow down this topic into "global warming" or "the endangerment of polar bears". The topics should be specific like this, or we will undoubtedly spend a lot of time searching for a plethora of information on the Internet. (SG#5)

As evidenced in the participants' interview above, given that the Internet encompasses an overabundance of information, they obviously did not like to harbor ambiguous feelings about the teachers' instructions on their assignments that require the use of the Internet. As a consequence, to facilitate the students' learning performance through the Internet, the specification of assignment should be given in detail.

In summary, the participants expected that the teachers who are trying to incorporate the Internet use into the course should appropriately assign online tasks by giving them graded level of online reading materials with the topics they are interested in, with fun or interaction, and with a clear guidance.

***Suggestion 5: Create opportunities for teacher-student interactions online***

It is generally believed that e-learning websites are places open to the students who can learn more outside schools in their free time, at their own learning pace, and on their own. In spite of this, the participants in the interviews revealed that they really want to invite the teachers' interactions with them on the Internet. Accordingly, the fifth suggestion the students provided here is that the teachers can create opportunities for teacher-student interaction online by (1) joining in discussions with them as well as (2) providing feedback to their assignments posted online.

To make sure that the teachers can care about their online learning process, four responses were made to encourage the teachers' simultaneous engagement with their online discussions, which is vividly presented in the following interview with three participants:

P3: I think teachers should sometimes care about our learning. Don't just post or upload the reading materials on the e-learning platform for us to download to read. Rather, sometimes they can discuss over the reading contents with us through the Internet.

P1/P2: Right. I think they [the teachers] should also pay more attention to our learning process.

P3: That's right. if they just ask us read online without any discussion with us, it seems that reading itself is not that important. (FG#17)

Seeing that the teachers hardly ever gave them feedback on their assignments required to post on the e-learning platforms, three participants expected the teachers' remarks on their assignment on the Internet. One of the respondents recalled:

P2: I remember my teacher asked us to post what we have learned from reading on his website. But it seems that the teacher didn't read what we wrote. So, I think the teacher should read our writing and then give us his feedback. (SG#3)

Overall, for the students, the teachers' engagement in their online learning is looked upon as stimuli that can rouse their motivation to learn since with the teachers' feedback and communication, the students can feel that their learning process is valued by the teachers.

#### **Suggestion 6: *Incorporate Internet use into classroom settings***

The last category of students' suggestion to the teachers is to incorporate Internet use into classes. To incorporate website into classroom settings refers to that teachers can make better use of the websites in classes so as to (1) manifest readings or concepts included in textbooks, (2) check upon their online learning, and (3) connect the local students and the foreign students.

Based on their personal experiences of using the Internet to facilitate schoolwork, three participants strongly supported the teachers to capitalize on websites to deliver and manifest readings or concepts included in the textbooks in different ways. This enables them not only to better understand the teachers' lecturing but also to reinforce their comprehension on reading materials. A participant stated:

P2: I really recommend teachers teach with the Internet because the teaching concept can be displayed graphically for me to understand better. I remember when our teacher taught Beowulf, he told us that old English is different from modern English by using Norton website<sup>12</sup> to show their different pronunciations, so I could feel the real differences. (SG#4)

Checking upon the students' online learning is another means to practically incorporate website use into classes. This means that the teachers cannot request the students to read online without any follow-ups, such as examining the notes they take, giving tests, or summarizing or making reflections on the reading material. A student explicated:

P1: I remember my teacher told us to make a vocabulary list, to write a summary, and give our after-reading responses to the article she assigned us to read online because she wanted us to really absorb the reading content instead of merely browsing through it. What's more, she also asked us to make a file and hand it in to her for checkups. Afterwards, based on these files we handed in, she gave us tests on English vocabulary. I hope the teachers who would like us to read online can follow suit. This is because sometimes while we read on the Internet, we usually spend lot of time only browsing through the reading content in place of reading it carefully and thoroughly. (SG#4)

From the participant's statement, she seems to convey an idea that reading online as an assignment should be differentiated from that as a leisure time activity. To be specific, if online reading is taken as a compulsory assignment, the students may hold more serious attitudes towards reading on the Internet instead of perfunctorily skating through the websites. In this regard, to boost their learning effect from the Internet and make them more involved in online reading, teachers' follow-up procedures are quite essential.

The last suggestion to integrate Internet into classes is to connect the local students and the foreign students. According to two participants, the use of the Internet can bridge the distances between them and the students from around the

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<sup>12</sup> The Norton English literature website link the participant mentioned is provided below:  
<http://www.wwnorton.com/college/english/nael/>

world, allowing them to infiltrate themselves into discussions with foreign students and reduce the gaps between them. In the interview, the participants mentioned that video conferencing and the use of the webcam are two of the channels to access to foreign students. They said:

P2: I think the teachers should make use of the Internet to connect us [Taiwanese students] with students from other countries.

P1: Yes. I think we need more interactions with foreigners. Through the Internet we can reach different people from as many places as possible. It is just as I can reach every corner of the world with clicks of the mouse. Take myself as an example. To improve my English speaking and listening abilities, I create English learning environment for myself by watching American drama series and then looking for some foreigners who also watch the same dramas as me to discuss the plot either through the webcam or online forums.

P2: That's right. And this reminds me that my teacher had an idea about using the video conferencing to connect students from Tokyo. However, it was a pity that it was not administered in the end. So, I think teachers should try this way to conduct their teaching in order to increase English language learners' learning motivation. (SG#6)

The participants' description above reveals that the use of the Internet provides the students with convenient and diverse ways to synchronously interact with people from different countries and exchange their ideas in English. During this process, they can not only build up rapport with foreign students, but also leverage their English abilities. Seeing this, language teachers can initiate learners into learning with foreigners by means of any online device as a good start, and then they may gradually develop their own ways to connect themselves with the world.

To recapitulate, based on the participants' individual experiences and their expectations, they suggested the teachers integrate the Internet use into the classroom settings so that they are able to better comprehend the teaching materials, take online reading assignment more seriously, and have chances to get acquainted with and learn with students from all around the world.



## **Differences of Online English Reading between Seniors and Freshmen**

This section is to explore the difference of online reading between seniors and freshmen of the present study in terms of their habits and perceptions of reading English on the Internet respectively.

### ***Differences of habits of online reading between seniors and freshmen***

In the perspective of differences in habits of English online reading, the findings are computed by comparing the frequency of the interview responses (discussed in the previous section) of the group of the seniors with that of the freshmen. Moreover, the results will be shown in order of the interview questions, including purposes of reading online, types and topics of interest of Internet English reading materials, factors affecting the selection of Internet reading, and methods to improve reading comprehension on the Internet.

#### ***Difference 1: Purposes of reading English Online***

As Table 4-19 reveals, the main difference between seniors and freshmen in purposes of reading English on the Internet lies in communicating with others (with 23% of difference) and catering for personal interests (with 18% of difference). The difference of the percentage was calculated by the subtraction between the percentage of the seniors' responses to each category of online reading purpose and the percentage of freshmen's. This result shows that the seniors seem to be more accustomed to incorporating English language into their daily lives than the freshmen. Hence, the seniors are prone to draw on the Internet to read English information that meets their personal interest as well as to have interactions with others in English.

On the contrary, the freshmen seem to need more time to develop their English reading habits and gradually integrate English language into their everyday lives together with their use of the Internet technology in order to expand their English learning environment, hone their language skills, and meanwhile build up their online



social networks and communities.

Table 4-19 Differences between Seniors and Freshmen in Purposes of Reading English Online

Purposes	Seniors	Freshmen	D (%)
Do schoolwork or prepare for exams	25 (51%)	23 (47%)	4
Cater for personal interests	23 (47%)	14 (29%)	18*
Gain information hardly available in Chinese	14 (29%)	11 (22%)	7
Learn English	12 (24%)	11 (22%)	2
Better comprehend reading contents	13 (27%)	7 (14%)	13
Communicate with others	14 (29%)	3 (6%)	23*
Maintain identity as an English major	3 (6%)	4 (8%)	2

Note. [D] = the extent of the difference between seniors and freshmen.

[\*] = the number with an asterisk indicates the major differences between two groups.

### ***Difference 2: Types of Internet English reading materials***

Two significant discrepancies between seniors' and freshmen's types of online reading materials are found. As evidenced in Table 4-20, the seniors have more tendencies to read multimedia (with 21% of difference) and e-magazines (with 18% of the difference) on the Internet. As for the reason why more seniors would like read e-magazines online than the freshmen, it can be attributed to the participants' habits of English reading in print. To them, they have already been exposed to more English reading printed materials through at least three years of school life, they definitely know more about the language learning materials and thus facilitate them to search for relevant resources through the Internet.

In the same vein, more seniors know what videos and audios to watch and listen to and where to watch and listen for free on the Internet to create English learning environments. However, the freshmen, with a lack of exposure to English language environments, teachers' instructions, and stimuli from foreign cultures, they seem to have less access to multimedia resources than the seniors.

Table 4-20 Differences between Seniors and Freshmen in Types of Internet Reading Materials

Types of Internet Reading Materials	Seniors	Freshmen	D (%)
Reviews, comments, analyses, essays, or summaries of literature works	21 (43%)	23 (47%)	4
News, columns, editorials	20 (41%)	23 (47%)	6
Multimedia	21(43%)	11 (22%)	21*
Weblogs	14 (29%)	10 (20%)	9
Previews, reviews, comments, analyses, or summaries of movies	11 (22%)	6 (12%)	10
E-magazines	10 (20%)	1 (2%)	18*
Fictions	5 (10%)	1 (2%)	8
E-newsletters	5 (10%)	0 (0%)	10

Note: [D] = the extent of the difference between the seniors and the freshmen.

[\*] = the number with an asterisk indicates the major differences between two groups.

### ***Difference 3: Topics of Interest in Internet English reading materials***

Concerning the difference of topics of interest in online English reading materials, Table 4-21 suggests that the seniors and the freshmen are quite different in reading topics related to arts and leisure (with 28% of difference). Although both groups are interested in reading topics about arts and leisure, the seniors have more frequencies than the freshmen. This result can further corroborate that English for the seniors is not only a subject to learn, but also a language medium to acquire information in their daily lives.

Table 4-21 Differences between Seniors and Freshmen in Topics of Interest of Reading Materials

Topics of Interest	Seniors	Freshmen	D (%)
Arts and leisure	31 (63%)	17 (35%)	28*
International news and crucial issues	7 (14%)	8 (16%)	2
Life	7 (14%)	6 (12%)	2
Literature-related information	4 (8%)	5 (10%)	2
Sports	6 (12%)	3 (6%)	6
Health	1 (2%)	2 (4%)	2
English learning or teaching	2 (4%)	1 (2%)	2

Note. [D] = the extent of the difference between seniors and freshmen.

[\*] = the number with an asterisk indicates the major differences between two groups.

#### ***Difference 4: Factors affecting the selection of Internet reading materials***

Table 4-22 demonstrates a huge hiatus between the seniors and the freshmen in the factors that may influence their selection on Internet reading materials. The major difference (72% of difference) lies in the factor of feature of online information. The feature of online information in the present study is composed of reliability and authority, novelty, and catchiness and sensation. As Table 4-21 shows, the seniors pay more attention to the feature of online information than the freshmen before making their decisions on what to read. As a result, the seniors are more likely to judge the credibility and accuracy of online information for fear of the information misuse. Moreover, the freshmen's low percentage indicates that they need more training on how to sensibly discern and then adopt online information instead of being too credulous about every piece of information on the Internet.

Table 4-22 Differences between Seniors and Freshmen in Factors affecting the Selection of Internet Reading Materials

Factors	Seniors	Freshmen	D (%)
Format of documents or websites	24 (44%)	31 (56%)	12
Feature of online information	25 (86%)	4 (14%)	72*
Individual factor	7 (58%)	5 (42%)	16
Task purpose	1 (50%)	1 (50%)	0
Cost	13 (43%)	17 (57%)	14

Note. [D] = the extent of the difference between seniors and freshmen

[\*] = the number with an asterisk indicates the major differences between two groups.

#### ***Difference 5: Methods to improve reading comprehension on the Internet***

Table 4-23 displays two main differences between the seniors and the freshmen in their methods to improve online reading comprehensions. At first, the major difference (13% of difference) between two groups is that more seniors use the instant translator such as *Yahoo Mini Pen* and *Google Translator* to support them to read online. Secondly, the comparison of the total number of the seniors' methods (the total

number is 53) to tackle online reading comprehension with that of the freshmen's (the total number is 34) discloses that the seniors are more resourceful in capitalizing on the Internet to help themselves with problems than the freshmen. Overall, as the table notes, the seniors are equipped with more versatile methods than the counterparts, who did not report to solve reading problems by clicking hyperlinks, resorting to Chinese websites, asking people online, and visualizing the content.

Table 4-23 Differences between Seniors and Freshmen in Methods to Improve Reading Comprehension Online

Methods	Seniors	Freshmen	D (%)
Skip unknown words	6 (12%)	10 (20%)	8
Use online dictionary	14 (29%)	14 (29%)	0
Use instant translator	15 (31%)	9 (18%)	13*
Use search engine	6 (12%)	1 (2%)	10
Click hyperlinks	2 (4%)	0 (0%)	4
Resort to Chinese websites	4 (8%)	0 (0%)	8
Ask people online	3 (6%)	0 (0%)	6
Visualize the content	3 (6%)	0 (0%)	6
<b>TOTAL</b>	<b>53</b>	<b>34</b>	

Note. [D] = the extent of the difference between seniors and freshmen.

[\*] = the number with an asterisk indicates the major differences between two groups.

### ***Differences of perceptions of online reading between seniors and freshmen***

This part elaborates on the differences of perceptions of online reading between the seniors and the freshmen in terms of the disadvantages and advantages of reading English online and the participants' pedagogical suggestions for the teachers.

#### ***Difference 6: Disadvantages of reading English online***

The top-three differences between two groups, shown in Table 4-24, are unfamiliarity with foreign webpages (100% of difference), problems from reading materials (34% of difference), and oversupply of information (30% of difference). The freshmen are like novices reading English online, so they are still not used to reading

English a lot online and therefore they are still not that familiar with the design and the formwork of foreign websites. Conversely, the seniors are so experienced in reading English on the Internet that they can even single out some problems from online reading materials such as misspellings, grammar mistakes, and filthy languages. Interestingly, even though the seniors have more experiences of online reading, they reported more disadvantages of the excess of online information than the freshmen in terms of the difficulty in both locating the target information and obtaining the sense of achievement reading through all the information on the Internet. This finding suggests that the students, no matter advanced students or beginners, need training and instruction to counteract as many obstacles as possible and cultivate more strategies to effectively, efficiently, and precisely search for and read information online.

Table 4-24 Differences between Seniors and Freshmen in Disadvantages of Reading English Online

Disadvantages	Seniors	Freshmen	D (%)
Inflexibility	28 (55%)	23 (45%)	10
Distraction and disorientation	23 (48%)	25 (52%)	4
Oversupply of information	26 (65%)	14 (35%)	30*
Lack of ergonomic concerns	20 (53%)	18 (47%)	6
Lack of portability or tactile satisfaction	12 (46%)	14 (54%)	8
Lack of reliability	12 (45%)	10 (55%)	10
Problems from reading materials	2 (33%)	4 (67%)	34*
Failure to read in detail	3 (50%)	3 (50%)	0
Unfamiliarity with foreign webpages	0 (0%)	3 (100%)	100*
<b>TOTAL</b>	<b>126</b>	<b>114</b>	

Note. [D] = the extent of the difference between seniors and freshmen.

[\*] = the number with an asterisk indicates the major differences between two groups.

### ***Difference 7: Advantages of reading English online***

As revealed in Table 4-25, the seniors came up with more advantages of reading

English online (with 79 responses in total) than the freshmen (with 48 responses in total). To further inspect the major differences, it is found that the seniors more value the easy access to information displayed in various forms (16% of difference) and the communication with others (14% of difference). This finding corresponds to the issues discussed above in difference 1 and difference 2, illustrating that more seniors appreciate the feature of multimedia the Internet reading contributes to. To them, various forms of information not only enrich and diversify learning materials and their learning styles, but also trigger their motivation to learn on their own on the Internet.

What is more, with three more years of English learning experiences, the seniors, undoubtedly, build up their own social networks with locals or foreigners through the Internet. This explains why the seniors more appreciate the interaction feature the Internet brings them in their English language learning. This result suggests the teachers create more opportunities for the freshmen to learn languages cooperatively and interactively with local students or foreign ones.

Table 4-25 Differences between Seniors and Freshmen in Advantages of Reading English Online

Advantages	Seniors	Freshmen	D (%)
Save time or cost in obtaining information	20 (41%)	19 (39%)	2
Obtain rapidly-updated or wide range of information	16 (33%)	10 (20%)	13
Obtain others' perspectives	10 (20%)	4 (8%)	12
Access information in diverse forms	11 (22%)	3 (6%)	16*
Interact or communicate with others	10 (20%)	3 (6%)	14*
Making reading documents	6 (12%)	3 (6%)	6
Benefit English learning	6 (12%)	3 (6%)	6
Do multitasking	0 (0%)	3 (6%)	6
<b>TOTAL</b>	<b>79</b>	<b>48</b>	

*Note.* [D] = the extent of the difference between seniors and freshmen.

[\*] = the number with an asterisk indicates the major differences between two groups.

### ***Difference 8: Suggestions for teachers to incorporate Internet use into classes***

In respect to the differences between the seniors and freshmen in the pedagogical suggestions for the teachers, Table 4-26 illustrates that the seniors strongly recommended the teachers appropriately assign online tasks and incorporate Internet use into classroom settings while none of the freshmen touched on both issues. Since the seniors have been learning through the Internet under several teachers' guidance, they are more capable of pointing out what is missing in the teachers' instructions and thus require improvement. Aside from this, the seniors so appreciate their previous teachers' teaching approaches that they would like to share these pedagogical approaches with the educators as references and guidelines.

Table 4-26 Differences between Seniors and Freshmen in Suggestions for Teachers to Incorporate Internet Use into Classes

Suggestions	Seniors	Freshmen	D (%)
Recommend useful websites	21 (47%)	24 (53%)	6
Teach search skills	9 (53%)	8 (47%)	6
Create e-learning websites	9 (53%)	8 (47%)	6
Appropriately assign online tasks	12 (100%)	0 (0%)	100*
Create opportunities for teacher-student interactions online	4 (57%)	3 (43%)	14
Incorporate Internet use into classroom settings	7 (100%)	0 (0%)	100*

*Note.* [D] = the extent of the difference between seniors and freshmen.

[\*] = the number with an asterisk indicates the major differences between two groups.

### **Summary**

This chapter has presented the analyses and the discussion of the interview questions in three dimensions in order: undergraduates' habits of reading English online, undergraduates' perceptions of reading English online, and differences of online reading between seniors and freshmen. The next chapter moves on to the discussion and conclusion and finalizes this research with a concluding remark.



## CHAPTER FIVE

### DISCUSSIONS AND CONCLUSIONS

After analyzing the interview data and derive findings in the previous chapter, this chapter starts with a summary of major findings of the present study, followed by implications for pedagogical practices, limitations of this study, suggestions for future research, and finally concluding remarks.

#### **Summary of the Major Findings**

The current study attempts to investigate undergraduates' habits and perceptions of reading English on the Internet. To that end, six interview questions related to habits of reading English online and four interview questions related to perceptions of reading English online were asked to twenty-four freshmen and twenty-five seniors English major undergraduates from two universities. In accordance with the three research questions, the following section summarizes the major findings with discussions from analyses.

#### ***Research Question One***

RQ1: What Internet reading habits do EFL undergraduates have in terms of purposes and frequency of reading English online, types, topics and factors affecting the selection of online English reading materials, and ways to improve reading comprehension while reading on the Internet?

#### ***Students' purposes of reading English online***

With respect to the purpose of reading English on the Internet, it seems that the students' reading English on the Internet is mainly dominated by doing schoolwork or preparing for exams, catering for their personal interests, gaining information hardly available in Chinese, and learning English. The first most reported purpose was schoolwork, which is congruent with the findings from the literature or previous studies, indicating that reading in L2 is utilitarian for the students. Reading in L2 is

generally found to be associated with schoolwork or attainment of good grades (Kaur & Thiagarajah, 1999; Lee, 2005; Mokhtari & Sheorey, 1994; Smithies, 1983). Consequently, for the students, reading in English, which is their foreign language, in place of reading in Chinese on the Internet is most often for schoolwork, including examinations and quizzes as well as presentations and reports. As for the second most reported purpose, to cater for individual interests, it is surprisingly different from the previous studies' results. Prior studies suggested that leisure-time reading habits in English are not grown on most students because English is not their language of choice when it comes to reading non-academic materials (Camiciottoli, 2001; Hung, 2003; Lee, 2005; Mokhtari & Sheorey, 1994). Nonetheless, the current study found that around three quarters of the students are accustomed to reading English information that they are personally interested in on the Internet as their leisure-time reading activity. This difference between results of previous studies and that of the present study lies in the different medium of reading materials. With the use of the Internet, the students felt much easier and more convenient to access and locate the non-academic information that they favor to read in English. All they have to do is merely click the mouse a few times, and there is information in visual or audio forms. It is this multimedia feature that distinguishes the different results between this study and the previous studies that centered on leisure-time reading in print. This result echoes Krashen's (2007) claim that using computers for Free Voluntary Surfing (FVS) can encourage EFL students to wander through the Internet and read what interests them. As a result, pleasure reading in English can be more likely to take place when the students read on the Internet than read in print. The third most-reported purpose is to obtain the information hardly available in Chinese. As Crystal (1997) states that approximately 85% of electronically stored information in the world is written in English (cited in Shin & Son, 2007), the students seem to understand that a lot more

information can be found on the Internet if English is used as a medium to search for information on the Internet. More than half of the respondents meant to read English on the Internet given that much more information and more updated information can be accessed with English search keywords. As a result, the students seem to highly value the use of English as medium to search for information that is more up-to-date and hardly obtained in Chinese.

### *Types of Internet English reading materials*

In regard to what types and genres of English reading materials the students read on the Internet, the top three kinds of reading materials were generated: reviews, comments, analyses, essays, or summaries, of literature works, news and columns, and multimedia (i.e. video watching and music listening). As suggested by this finding, the students who majored in English seemed to heavily rely on the Internet to facilitate their schoolwork particularly related to both literature and mythology. To reduce the reading workload that the professors assign them to finish or ask them to prepare for the pending examinations in a short time, the students would try to look up some shorter subject-related information rather than reading the original contents. As a consequence, when it comes to reading in English, the students seem more liable to read short-length contents instead of long-length ones. This result is congruent with the result from Hung's (2003) study, indicating that Taiwanese students are intended to read short readings rather than lengthy ones from nonfiction or E-news. However, Hung's (2003) and Lee's (2005) findings are somewhat different from the finding of the current study in terms of the students' reluctance to read long articles from nonfiction work or Internet news. In this study, the result shows that the 88% of the students are accustomed to reading English news and comments online. According to the students' responses, their habits of reading English news on the Internet are attributed to the teachers' guides and introductions to several worldwide popular news

websites to help with the students' preparations for courses. As for reading with multimedia on the Internet, 65% of the students treasure the visual and audio features the Internet bring to them in addition to English reading texts themselves. To them, reading multimedia such listening to English songs along with reading English lyrics and watching English movies or TV shows on the Internet gives them chances to be exposed to more English learning environment where they can hone their English reading and listening skills. This result is consistent with Chan et al's (2002) finding that Hong Kong tertiary students prefer reading with multimedia on the Internet such as watching English movies and TV programs and listening to English songs to extend their English learning outside of the school.

#### ***Topics of Interest in Internet reading materials***

Concerning what reading topics the students are interested in reading in English on the Internet, the most preferred reading topic is arts and leisure, including arts, celebrity news, food, music, movies, and lifestyles. Topic related to English learning is the least favored. Compared this result with that of Hung's (2003) study that investigated Taiwanese undergraduates' favorite reading topics in print, both studies reached the same conclusion that when it comes to English reading, the students take more interest in reading such light topics as leisure, recreation, music, and movie. In light of the students' interview data, the reason why the students would like to read light topics is that if they read on the Internet, they tend not to read something heavy or with dry topics. Instead, they would rather read something fun and entertaining on the Internet after school as a way of relaxation. This not only further corroborates with Hung's (2003) finding that the students expect to read some recreational topics at ease to mitigate the pressure and tiredness from school, but also explains why the students are less interested in reading English learning materials while reading on the Internet.

#### ***Frequency of reading English online on a weekly basis***

Regarding how often the students read English on the Internet on a weekly basis, more than half of the students (25 participants) reported that they read English on the Internet almost every day while there are still some students (13 participants) confessing that they hardly or never read English online. As for the reason why the students reading English online every day is that they would like to read the e-newsletters they have subscribed to, to obtain updated information, to develop their personal habits, and to search for and collect information to prepare for the imminent examinations. As for the reason why some of the students spend little reading English online is that they think that with an abundance of Chinese information available online, there is no need for them to read English texts. According to them, reading English online is not necessary pending teachers plan an examination or make the Internet reading a mandatory assignment. This finding can be linked back to the students' main purpose of reading online, that is, to cope with everything involving schoolwork. As suggested by this finding, to increase the students' exposure to English reading on the Internet, the teachers can engage them in accomplishing tasks that require them to exploit the Internet using English as a medium. Moreover, as suggested by Kaur and Thiyagrajah (1999), students need to improve their reading habits and should be encouraged to capitalize on the Internet as a tool to tap valuable reading resources which can promote autonomous learning.

### ***Factors affecting the selection of Internet reading materials***

Considering what factors influence the students' selection of reading materials while they are reading on the Internet, top three factors were found and listed in order: the format of documents and websites, the feature of online information, and the user's task purpose. With the reference to format of documents and websites, the students are inclined to be influenced by the length of reading content, website design, use of words and text difficulty, font size, size of reading file, and whether the reading

texts presented with multimedia. Basically, the students seem reluctant to read lengthy contents online; they tend to choose shorter ones. This, again, echoes the finding discussed above that shorter reading contents are always the students' priority. Besides, websites with well-organized topic categories and layouts could easily draw the students' attractions to pay them a visit since the students can find it easy to use these websites with clear guidelines. Moreover, it is found that multimedia presentations of reading contents are highly favored. Accordingly, online information accompanied with texts, images, videos, graphics, animations, or audios can easily ignite the students' motivations to read (Soon et al, 2004; Tseng, 2006). As English learners, what matters a lot to their choices of reading materials is the difficulty level of English reading texts. The students feel resistant to read texts replete with new or unfamiliar vocabulary or tough words (Kung & Chuo, 2002; Soon et al, 2004). In this regard, whether the students read online or in print, linguistic barriers have influence on their reading proficiency and their choices of reading materials (Kaur & Thiagarajah, 1999; Hung, 2003; Mokhtari & Sheorey, 1994; Tseng, 2006). At last, the students feel more comfortable and patient to read texts with appropriate font size of words and size of reading files for them to download. This result concurs with the result of Tseng's (2006) study, indicating that small font sizes can aggravate the students' difficulty in reading. For the pedagogical concern, the teachers can teach the students skills to address this problem, such as (1) opening the reading file in another window by right clicking on the mouse, (2) adjusting the website display by clicking the view button on the menu bar and then changing the display word size to the biggest size, or (3) copying all reading contents to Word files to enlarge the words by choosing the big size. Taught with these technical skills to tackle reading problems arising from font size, the students can have more reading options and avoid reading contents in small font size.

Aside from the format of a website, feature of online information also influences the students' selection of reading materials in terms of reliability and authority, catchiness and sensation, novelty. As indicated by this finding, the students seem to be equipped with some senses of Internet reading literacies and with abilities to assess online information instead of being credulous about everything they read on the Net. In addition, catchy, sensational, and updated information can easily catch the students' attention and interest.

Users' different task purposes are at play in the students' selection of reading materials. Their purpose is to locate information that is very relevant to their search and has to do with their assignment. So, while reading on the Internet, the students usually exert their search skills to narrow down the search results to pinpoint the information they need, such as (1) searching with more keywords, (2) capitalizing on the cached link to brightly highlight the search terms, (3) only selecting the frequently-visited websites, and (4) scanning through the introduction to each website from the result page.

#### ***Methods to improve reading comprehension on the Internet***

Two mostly employed methods to help with reading comprehension while reading on the Internet are the uses of online dictionaries and online instant translators and, one least utilized yet very inspiring and noteworthy method is the visualizing of the reading content. The finding reveals that even though the participants highly treasure the convenience of online dictionaries, the participants do not simply resort to online dictionaries without sensibly choosing the appropriate online dictionary based on their purposes and their understanding of the new words. In other words, if they sense that the words they are going to look up are newly-invented or very colloquial, they would rather resort to dictionaries specializing in this area than utilize normally used dictionaries such as *Yahoo Dictionary*. In addition to convenience that an online



dictionary brings to the students, the online dictionary also provides the students more functions, such as the reference to antonyms, synonyms, and sentence examples to show how the search word is typically used. As for the use of instant translators, the students take advantages of *Yahoo Mini Pen Translator*, *Dr. Eye*, *Google Instant Translation*, *Yahoo! Babel Fish Translation*, and the function of *Translation This Page* built in *Google* search engine. Their comprehension breakdown can be immediately addressed by using the above translation tools to copy-and-paste or key in the unknown part of the reading. Other than the use of instant translator to convert the confusing part of the reading into Chinese, the students also make better use of another translation service built in the translator, which refers to the instant display of the definition of the unknown word by merely putting the mouse cursor on it.

With regard to visualizing the unknown or unfamiliar part of the reading content by searching images from *Google Images* and videos from *YouTube*, in spite of being the least reported method, it remains quite pedagogically meaningful for language learners and educators. It implies that multimedia can indeed increase the readability of text-heavy pages, illustrate complex ideas, promote new knowledge, and highlight connections between difficult concepts (Eagleton & Dobler, 2007; McPherson, 2005). This result is similar to the finding in Petrie's (2003) study, suggesting that visual language (the use of words, graphics, images, and so on to make meaning) can be used as an alternative form of text to assist language learners' reading comprehension. In the current study, *Google Images*, where the visual modality of both conceptual words and concrete words can be obtained, seems to help the students with their reading comprehension by providing them with concepts of their inquiry. Therefore, as Chinnery (2008) suggested, *Google Images* or *Google Image Labeler*, as an informative tool, should be taught to the language learners for their vocabulary development or reading comprehension.

### ***Research Question Two***

RQ2: What perceptions do EFL undergraduates have for Internet reading in terms of the drawbacks and advantages of reading English online, preferences of reading online or in print, and the students' suggestions to the teachers?

#### ***Disadvantages of reading English online***

Regardless of the convenience the Internet brings to the online readers, reading on the Internet is not without its drawbacks, particularly for English learners reading English on the Internet. Nine types of disadvantages are engendered and the top four types are: inflexibility, distraction and disorientation, oversupply of information, and lack of ergonomic concerns. Respecting the inflexibility of reading on the Net, most of the students find that they are unable to take notes and highlight any words, that it is difficult to relocate the websites, and that it is tedious to go back and forth between screens and scroll windows to read through the content. This finding implies that even though the students grow up and live in such an advanced digital age, they remain accustomed to reading in print, in which they can use annotations marginal notes at their will so as to deepen their memory and comprehension and stimulate their reflection on the text, stop reading at any page without losing the trace to get back to where they stop reading, and comfortably read full-size format of materials without scrolling and flipping between windows.

Moreover, the students think that reading English on the Internet can lead them to distraction and disorientation. They perceive reading on the Internet is a dynamic process instead of static process, in which their reading performances can be impeded by pop-ups and advertisements, embedded hyperlinks, synchronous communicative devices (i.e. *MSN* and *Yahoo Messenger*), misleading search results, and many small words that cause line skipping. This finding suggests that in order to efficiently and effectively accomplish assignments using the Internet, the students

should totally focus on their tasks by searching target information with more accurate keywords, shutting communicative devices, and ignoring all the advertisements coming along. Only with full attention paid to the task will the students not be distracted while reading online.

The excess of information provided by the Internet is another drawback. Bombarded with a myriad of information from the Net, the students feel that less information can be absorbed and let alone transferred to long-term memory. On top of it, they also find it difficult to search for target information on the Internet that is presented as exhaustively and in order as in books. Reading online additionally fails to give them sense of achievement since there are always more to read after they finish reading through a webpage. To solve the problems that the overabundance of information causes, it is advisable that the teachers assign the students online tasks with clear task purposes and goals, specific guidelines, suggested search keywords, or credible websites. In this way, the students' sense of achievement may not be dominantly gained by reading through all the information on the Internet but by accomplishing the assigned tasks.

Ergonomic concerns are another defect that can be detrimental to the students' health. They are composed of eyestrains, aggravation of eye vision, pain in wrists and elbows, stiffness and soreness of neck, tightness of shoulder muscles, fatigue, headache, and exposure to radiation emission. To avoid these health-detrimental syndromes, students are advised to read both online and in print simultaneously. In so doing, the students' eyes can take a break at least and then better online reading performances can come along accordingly (Tseng, 2006).

In summary, the foregoing results are aligned with the findings of the previous studies respectively conducted by Tseng (2006) and Huang (2006) except for few differences. Table 5-1 shows the comparison of the finding of this research with those

of Tseng's and Huang's. As seen in the table, the discrepancies lying between the present study and previous studies are lack of reliability, problems from reading materials, and unfamiliarity with foreign websites. The reason for these divergences may be that this study intends to explore the students' perceptions of reading on the Internet where a plethora of information can be obtained in lieu of reading on the selected articles that are presented on the web-based learning programs. In this perspective, coming across a lot of very authentic English information on the Internet, the students indeed need guides and tips on how to find dependable sources of information, how to deal with different layouts of foreign websites, and how to solve problems from online reading materials, such as colloquial usage, misspellings, and filthy languages.

Table 5-1 A Comparison of Findings of Prior Studies on Students' Perceptions of Disadvantages of Reading English Online with those of the Present Study

Disadvantages	Present Study	Tseng	Huang
Inflexibility	V	V	V
Distraction and disorientation	V	V	V
Oversupply of information	V	V	V
Lack of ergonomic concerns	V	V	V
Lack of portability or tactile satisfaction	V	V	V
Lack of reliability	V		
Problems from reading materials	V		
Failure to read in detail	V	V	V
Unfamiliarity with foreign websites	V		

### *Advantages of reading English online*

In spite of many disadvantages of reading English on the Internet discussed previously, there are still many valuable merits put forth by the students. The advantages of reading online found in this study includes saving time or cost in

obtaining information, obtaining rapidly-updated or wide range of information, obtaining others' perspective, accessing information in diverse forms, interacting or communicating with others, making reading documents, benefiting English learning, and multitasking. Generally speaking, this finding is actually supported by the previous studies, indicating that the Internet reading is quite convenient for the students to access to a variety of demanded information in facilitating their English learning without requiring them to pay extra visits to libraries (Huang, 2006; Soon et al, 2004; Tseng, 2008).

Nonetheless, delving into these benefits the reading on the Internet poses, it is found that all these advantages seem to be restricted to helping the students with their reception of information instead of production. In this regard, a noteworthy question is begged: Are these advantages truly beneficial for the students' learning or just for them to gather information to cope with schoolwork and examinations? In order to make sure that reading English online is not just for the collection of information and full copy of others' viewpoints, it is advisable that the teachers meticulously and purposefully design follow-up activities that can trigger the students' critical thinking, critical reading, and reflections for online reading tasks they assign the students to accomplish. In so doing, the students may not just receive all the information they read on the Internet and thereby the Internet reading can truly benefit the students' learning.

#### ***Preferences of reading English online or in print***

The result of the students' preferences of reading English online or in print is listed in order: both mediums, exclusively in print, and exclusively online. The reason for their preferences of reading online is found to be related to the advantages and disadvantages of reading on the Internet as discussed in the two previous sections and also found to be relevant to their reading purposes. This result is congruous with

Shaikh's (2004) finding, which is presented in Table 2-4. In short, it seems that if the students want to look for any information that they have never heard of, they usually go to the Internet to acquire some ideas from the scratch and then turn to books or printed materials for careful and close reading.

***Suggestions for teachers to incorporate Internet use into classes***

Based on the personal experiences of using the Internet for schoolwork, the students of the current study present six types of suggestions for educators' references. The most worth discussing suggestions are recommending useful websites, teaching search skills, and infusing the Internet use into classroom settings. As for asking teachers to recommend them useful websites, it indicates that the learners remain unable to find a good website on their own despite a variety of resources available for their English learning on the Internet (Kung, 2005). In this study, the students generally believe the websites or search keywords the teachers suggest are not only more credible enough for them to rely on but also reduce their time spent in goofing around on the Internet to find the target information. Apart from the recommendation of the websites, the students hope that the websites the teachers suggest them to use can be further classified in accordance with their English proficiency level. This way, the students with low English proficiency can at least lower their frustration of reading authentic English materials on the Internet and then gradually help them pick up the habit of reading English online and thus build up their language competence as well as confidence in reading something harder at a higher level.

As for the teaching of search skills, the students expect that the teachers do not take it for granted that they know how to search information in English on their own without the any training and guidance. On the contrary, they desperately hope that the teachers can teach them how to use the website they recommend them to use instead of just giving them a list of website addresses to link. This finding corroborates

Stepp-Greany's (2002) and Kung and Chuo's (2002) findings that low-achieving students and students with limited experiences of using online educational resources need more teaching instructions and teachers' facilitations. Kung (2005) suggests that teachers help the students with the acquisition of online navigation and search skills so as to enrich their learning experiences through the Internet. Furthermore, the students also hope the teachers to engage them with the training on how to evaluate the reliability of online information. This finding can refer to Leu's (1997) term "healthy skeptic" when describing the role that both teachers and students must play in effective Internet reading (cited in Eagleton & Dobler, 2007, p.162). This role, according to Eagleton and Dobler (2007), involves questioning and evaluating the usefulness and truthfulness of text of the website and visual information as well. With this regard, to help students read effectively on the Internet, it is educators' goal to prepare students to find, evaluate, and make good of quality information in an efficient manner.

Considering the infusion of the use of the Internet into classes, the students hope that teachers can make use of the Internet resources to manifest their lectures or concepts covered in the textbooks such as playing movies related to the literature work they are assigned to read. Moreover, they suggest the teachers can check upon their online reading performances by testing them what they are assigned to read by the teachers. This finding suggests that with the teachers' pressure and monitor on their online reading process, the students seem to learn better and more effectively (Kung & Chuo, 2002). At last, the students suggest the teachers connect them with students from different countries. In the middle of the communication with foreign students through the Internet, they can truly realize that English they have learned for more than six years is really useful and significant in their daily conversation with people from other countries through the Internet. This finding is consistent with



Singhal's (1997) advocate that communication with native speakers furthers enables language learners to compare student perspectives on an issue, and allow them to practice specific skills such as negotiation, persuading, clarifying meaning, requesting information, and engaging in true-life authentic discussion. As a consequence, teachers are advised to make better use of the Internet to (1) design some Internet activity requiring the students to exchange ideas about certain topic with foreign students in English or (2) try to incorporate either the videoconferencing or Internet-based desktop videoconferencing into classes to enrich the students' learning experiences and broaden their international horizons.

### ***Research Question Three***

RQ3: What are the differences between freshmen and seniors in terms of their Internet reading habits and perceptions?

In the present study, the senior English majors are more accustomed to infusing English language into their everyday lives than the freshman English majors. Having more years of university life and teachers' instruction and inspiration than the freshmen, the seniors have more exposure to English learning environment than the freshmen. The seniors accordingly get wise to many English learning materials and thus facilitate them to search for more relevant resources through the Internet to increase more chances to immerse themselves in English learning environments and enrich their English learning experiences. For instance, they tend to interact with others in English, hone their English skills by watching foreign English TV programs and listening to music on free websites. As a consequence, the seniors perceive the feature of multimedia that the Internet provides as a valuable reservoir of information sources. In addition, with more years of experiences of searching information in English, the seniors develop more strategies and become more resourceful in drawing

on the Internet to help themselves with problems while reading on the Internet. In other words, when an avenue to solving the problem shuts, the seniors usually make another open drawing on their accumulated experiences. In brief, English for the seniors is not only a subject to learn, but a language medium to deal with their daily lives as well.

On the contrary, with a deficiency of exposure to English learning environments and teachers' instructions, the freshmen seem to need more time, at first, to develop their habits of reading English either in print or on the Internet. And then they can gradually get used to infusing English language into their daily lives by means of the Internet technology to expand their English learning environments, sharpen English language skills, and build up their Internet social networks for English learning. Moreover, with limited experiences of searching information in English on the Internet, the freshmen need more training on how to distinguish reliable websites from incredible ones and how to solve their reading comprehension problems with more methods. In so doing, they will not be too credulous about everything they read on the Internet and will not become fixated at employing certain methods to cope with their problems emerging from their Internet reading.

### **Pedagogical Implications**

Upon reflection on the findings deriving from this exploratory study, several pedagogical implications for EFL Internet reading instruction emerge and are presented in depth as follows.

First of all, reading purposes and reading topics have great impact on students' habits of reading English on the Internet. The findings that the participants are quite willing to read English on the Internet for their schoolwork under teachers' requirements indicates that teachers can grab the chance to help students form habits

of reading English on the Internet so as to expand their English learning experiences and infuse English using in their daily lives by carefully designing Internet-based activities or tasks that enable students to seek information, acquire knowledge related to schoolwork, and hone their English language abilities. As Nowaczyk proposes (1998), measures must be implemented that link technology-enhanced language learning activities to regular class assessments so that students attribute relevancy and educational benefits to technology-enhanced instruction (cited in Stepp-Greany, 2002). Moreover, considering the fact that the participants read much more English on the Internet when the target information in Chinese can barely be found and when the reading topic is more sensational and catchy enough to trigger their motivation and curiosity to read, teachers can, based on students' English proficiency level, meticulously and appropriately assign students with the Internet-based inquiry activity for English learning with the captivating topic whose relevant information had better not be easily obtained in Chinese. Thereby, instead of over relying on employing Chinese as medium to facilitate their English learning, students can learn English through English.

Secondly, the finding that the participants expect teachers to teach them how to evaluate the reliability of information and guide them how to use unfamiliar websites suggests that teachers should not take it for granted that students know how to judge the truthfulness and usefulness of information on the Internet and that students are able to make good use of foreign websites on their own. Instead, students, especially those whose English proficiency is low and whose experience of reading English on the Internet is limited, need to become well-equipped with new literacies by teachers' special training and practice on how to best utilize the Internet resources for their autonomous learning (Leu, 2007). To this end, Eagleton and Dobler (2007) design a QUEST inquiry model for teachers to engage and support students as they tackle the

complexities of reading on the Internet. QUEST, presented in Figure 10, is an acronym that stands for the five phases of Internet inquiry in order: Questioning, Understanding Resources, Evaluating, Synthesizing, and Transforming.

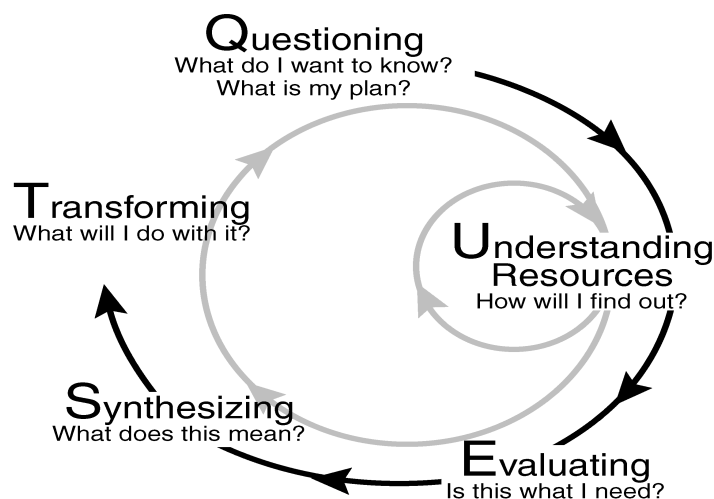


Figure 10. The QUEST model of the Internet inquiry<sup>13</sup>

At the first phase---Questioning, teachers are suggested to teach students come up with an appropriate and researchable topic, focus area, research questions, audience purpose, final format, and project planning (Eagleton & Dobler, 2007, p.79). After the topic and research questions are solidified, students come to face a challenge---how to find out answers to questions. To find out the answers, students come to the second phase---Understanding online resources, to learn strategies to identify resources, manage computers, utilize the Internet, choose search tools and select keywords (Eagleton & Dobler, 2007, p.139). Once online resources are found, students come to face the third phase of the QUEST Internet inquiry process---Evaluating ideas and information, involving making decisions about whether information is truthful, credible, and useful. To determine the usefulness of online information, it is very important for teachers to teach students to evaluate search engine results and

<sup>13</sup> The QUEST Internet inquiry model is extracted from:  
[http://readingtheweb.net/docs/rtw\\_handout\\_p-11.pdf](http://readingtheweb.net/docs/rtw_handout_p-11.pdf)

information within a website. To determine the truthfulness of Internet information, whether text or visual, students should be taught to be detectives to evaluate websites with respect to authority, purpose, objectivity, and timeliness. Moreover, analyzing URLs or Web addresses is another recommended strategy for students to assess online information, which can provide students with a wealth of knowledge and clues about the type of information likely to be encountered with a click on the link and thus can prevent students from having to sift through mountains of information to find out research answers (Eagleton & Dobler, 2007, p.164~170). After the truthful and useful information is found from different website sources, students then come to the fourth phase---Synthesizing information from a variety of sources, including text, graphics, and multimedia. Teachers are advised to teach students to create a thread linking separate ideas from with a text or from multiple texts and then tie this thread to their personal prior experiences by creating a new interpretation, or a way to view this idea in a new light (Eagleton & Dobler, 2007, p.199). This way, students' final projects will not just be a simple recall of facts they have read on the Internet. Finally, students come to the last phase of the QUEST Internet inquiry---Transforming, involving synthesizing content from various resources (i.e. websites) and then creating something original (such as new webpages, posters, or essays) based on a personally meaningful research questions (Eagleton & Dobler, 2007, p.238). Information itself is not knowledge; however, knowledge requires readers to undergo the information transformation, which students fail to do. Therefore, it is advisable for teachers to teach students strategies for notetaking, organizing information, citing sources, designing a final product, and presenting it to others in diverse and creative ways.

Thirdly, the finding that the participants reveal that it is their laziness that drives them to choose to read with multimedia, short-length contents, and others' viewpoints on certain topics instead of long-length contents implies that students not only tend to

regard reading on the Internet as a shortcut and an efficient and effective way to help them glean information, solve problems, and deal with schoolwork in the shortest time, but also seem to blindly accept and retrieve all the information they read on the Net. This phenomenon not only reflects that efficiency is intelligent laziness for students but it also begs for teachers' attentions to students' critical thinking development in their online reading. Although it is generally agreed that Internet technology can help students do more in less time, students seem too reliant on the information on the Internet that they turn out to be a total information receiver instead of being productive with the information they receive on the Internet. To address this problem, the present study encourages teachers to pay attention to both students' process and product of reading on the Internet by requiring them to keep reading logs such as double-entry journals to reflect and respond to what they have read as well as to present the final projects. According to Joyce (2000), the double-entry journal is a type of reading log in which the page is divided into two columns. In the left column, students write any information from the text and in the right column they reflect on what they write on the left column. This reading log can be used for students to exercise their minds and for teachers to assess and foster students' critical thinking development. Table 5-2 is an example of the double-entry journal.

Table 5-2<sup>14</sup>An Example of the Double-entry Journal

The left hand column includes:	The right hand column includes:
<ul style="list-style-type: none"> <li>• Notes</li> <li>• Quotations</li> <li>• Summary paragraphs/Main ideas</li> <li>• Facts/Concepts/Evidence</li> <li>• Key terms</li> <li>• Illustrations (pictures, graphs, drawings, concept webs)</li> <li>• Questions</li> <li>• Responses to specific questions</li> <li>• Descriptions of events</li> </ul>	<ul style="list-style-type: none"> <li>• Reactions after learning new information about the topic</li> <li>• What more would you like to learn?</li> <li>• Agree? Disagree? Why?</li> <li>• What you understand/don't understand</li> <li>• Compare/Contrast</li> <li>• Connections to other sources/to what you already know</li> <li>• Your interpretation of what you experienced</li> <li>• Perspective/Bias</li> </ul>

<sup>14</sup> The table of the double-entry journal is from: <http://gsep.pepperdine.edu/~whughes/Journaling.html>.

### **Limitation of the Study**

Two limitations are found in the present study. First of all, since this study is a qualitative study mainly conducted by means of interviewing focus groups that are only composed of small number of the participants from English major department (i.e. twenty-five seniors and twenty-four freshmen), the results of this study cannot represent the views of larger population. In other words, it is not possible to generalize the findings of the current study to other contexts and other population groups. Regardless of this limitation, thanks to the nature of qualitative nature of the focus group methodology, the present study are able to provide an in-depth and comprehensive insight into the tertiary English majors' habits and perceptions of reading English on the Internet. As a consequence, the findings that this study contributes can unveil some potential viewpoints that the use of quantitative study can not come by.

Secondly, the findings of the present study are solely based on the forty-nine participants' self-reported responses in the focus group interview. There is no other source of data to triangulate the findings of the focus group interview questions. Even though there are only forty-nine participants to receive the focus group interview, the responses they provide are able to reach the data saturation, genuinely reflect general responses of other students, and provide insights to universities currently implementing the Internet technology to enhance teachers' instruction and students' learning.

### **Suggestions for Future Research**

Based on the limitations and the findings of the present study, four suggestions for future research are engendered and listed as follows. First, future studies can extend the scope of the current study by comparing tertiary students from various



departments, or comparing female and male tertiary students to examine how habits and perceptions of reading English on the Internet vary among different participants from different departments or different gender groups.

Second, future studies can be done with a combination of qualitative and quantitative research methods by implementing focus group interviews, administering questionnaires, and making observations on students' actual performances while reading English on the Internet. Furthermore, the questionnaires can be designed and modified based on the findings of each interview question presented in previous chapter. And then a large-scale questionnaire can be conducted. As a result, with the questionnaire administered and interview and observation conducted, findings of future research can be triangulated and therefore the generalizability can be increased and more solid conclusions can be made.

Third, future studies can be conducted to investigate and compare both teachers' and students' perceptions on the learning and the use of the Internet in EFL teaching settings. Such studies can find out differences of perceptions on the incorporation of the Internet into English language learning between teachers and students and may contribute to better suggestions to improve curriculum and instruction mediated by the Internet technology.

Finally, another significant direction for future research is to examine the relationship between teachers' instructions on Internet literacies, students' critical thinking, Internet reading habits, and English learning development. Since more and more tertiary students heavily depend on searching for information on the Internet to do papers or prepare presentations in English, they really need teachers' guidance to read English on the Internet as well as to get familiarized themselves with foreign websites. In this respect, it would be very helpful to understand about *how* and *to what*

*extent* teachers' instructions on Internet English reading can affect students' development of critical thinking and English learning during reading on the Internet.

### **Concluding Remarks**

With the increasing integration of the Internet technology into people's daily lives and educational settings as well as the availability and accessibility of the authentic materials for English learning on the Internet, how do Taiwanese undergraduates capitalize on this medium to improve their English proficiency? To answer this question, the present study investigated forty-nine English majors' habits and perceptions of reading English on the Internet. The results from eighteen focus group interview sessions reveal that, generally speaking, English major students more or less have the habit of reading English on the Internet mainly for the purpose of gleaning information pertinent to their schoolwork as well as catering for their own personal interests. In addition, with their accumulating experiences of using the Internet, they have gradually developed their own approaches to tackle their reading comprehension problems arising from their reading on the Internet. Even though there are some disadvantages and challenges they face while reading English on the Internet, they still hold positive attitudes toward reading English on the Internet due to the convenience of accessing information in diverse forms. However, no matter how convenient the Internet makes it to facilitate learning, the students still need teachers' instruction on such computer literacy as searching skills to know how to find out relevant and credible resources instead of misusing the information they read on the Internet. As Eagleton and Dobler (2007) advocate, in this digital information environment, students need to be taught with the Internet inquiry model, QUEST, which stands for questioning, understanding, evaluating, synthesizing, and transforming Internet resources. It is expected that the findings of this study can

provide educators with more understanding about how students utilize the Internet to facilitate their English learning and how their reading habits are influenced by the Internet. With these understanding, educators can collaboratively come up with some better instruction and solutions to help students to overcome difficulties and challenges of reading on the Internet. In doing so, students can be well-prepared for the coming digital literacy.



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## Appendixes

### Appendix A: Participation Consent Form (English Version)<sup>15</sup>

#### Consent Form

Hi, my name is Pei-ling Hung. I am a graduate student of TESOL (Teaching English as a Second Language) program at National Cheng-Chi University. At present, I am conducting a thesis study on Taiwanese EFL English majors', freshmen's and seniors') English Internet reading habits and perceptions.

You are invited to this study since you are seniors or freshmen of English major. This study will take about an hour to interview a group of three to four students at one time and finish a questionnaire. This interview will be a very casual discussion over some questions about your English Internet reading habits and perceptions. The results of this study will inform English educators how students read English information on the Internet to further improve their performances on Internet English reading and cultivate their English reading habits. If you are willing to participate in this study, you will be provided one hundred dollars as my appreciation.

This study is only confined to academic purpose. The interview details will be kept confidential. If you are not willing to participate in this study, please feel free to mark  unwilling-to-join check.

If you would like to join in this study, please mark  the willing-to-join check and write down your e-mail address or any way I can reach you and your available time. Then afterwards, I will assign the interview group for you and inform you when to start the interview. Would you like to join in?

Yes, I am willing to join.  Sorry. I am not willing to join.

Student Name: \_\_\_\_\_

Contact: (email or phone number) \_\_\_\_\_

Available time: \_\_\_\_\_

Here again, I deeply appreciate your help and participation!!  
 Graduate of TESOL Program at NCCU  
 Peiling, Hung

<sup>15</sup> The consent form was provided in Chinese and its Chinese version is in Appendix B.

## Appendix B: Participation Consent Form (Chinese Version)

## 自願參加同意書

您好，我是洪珮菱，是政治大學英文所英語教學組的研究生。目前我正在從事我的碩士論文研究。我的研究是有關台灣大一和**大四**英文系學生英文網路閱讀習慣和觀感的研究。

本研究的對象是英文系大一和**大四**的學生，在此誠摯的邀請您參加這項研究。這項研究的方式將會花一個小時的時間作 3~4 個人的小組面談以及一份問卷，在面談的過程中屬於是比較閒聊的方式討論一些有關您在英文網路閱讀習慣和觀感方面的問題。本研究結果將會幫助英文老師們了解學生們在網路上閱讀英文資訊的情形，進而幫助他們培養英文閱讀的習慣。如果您願意加入這項研究，您將會給予 100 元的現金酬勞，當作我對您的感謝。

本問卷僅供學術之用，您的訪談詳細內容將會受到嚴格的保密。假如你沒有意願參予這項研究，請放心的在下面「不克參加」一欄打勾 。

如果您願意加入這項研究，請在下面「願意參加」一欄打勾 。並且留下你的電子信箱或是任何可以跟您聯絡的方式，以及您最有空可以訪談的時間。之後我會再幫您分組並通知您何時開始進行訪談。

您願意參加此項研究嗎？

是的，我願意參加。  對不起，不克參加。

學生姓名： \_\_\_\_\_

聯絡方式： \_\_\_\_\_

方便的時間： \_\_\_\_\_

再次由衷的感謝您的協助與參予。

政大英語教學所研究生

洪珮菱 敬上

Appendix C: Focus Group Interview Questions (English Version)<sup>16</sup>

Note: Definition of Internet English Reading: Internet English reading refers to reading any forms of English reading materials on the Internet, such as multimedia, e-books, emails, news, and so on.

1. When and why would you like to read English materials on the Internet?
2. What types of Internet English reading materials do you read, such as English news? Why do you read them?
3. What topics of Internet English reading materials are you interested in reading, such as subject-related information? Why do you like these topics?
4. How often do you read English materials on the Internet on a weekly basis?
5. What influences your choices of Internet English reading materials? For example, the length and the presentation of the Internet content.
6. If you encounter some problems affecting your comprehension during the Internet reading, such as new vocabulary, what are some typical ways to solve these problems?
7. What do you think are the disadvantages and challenges of reading English on the Internet?
8. What do you think are the advantages of reading Internet English?
9. Do you prefer reading English materials on the Internet to printed ones? Why?
10. If your English teacher is going to integrate the Internet English reading into the course, what are some suggestions would you like to make? Why?

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<sup>16</sup> The interview was conducted in Chinese and the Chinese version of questions is in Appendix D.



## Appendix D: Focus Group Interview Questions (Chinese Version)

**焦點團體訪談問題**

附註：英文網路閱讀之定義：在本研究中，英文網路閱讀指的是閱讀網路上任何形式的英文資訊。例如：多媒體資訊、網路書、電子信件、網路新聞等。

1. 你在什麼情況之下會想要上網閱讀有關英文的資訊呢？為什麼呢？
2. 你通常都在網路上讀取哪種類型的英文閱讀資訊呢？例如：新聞。為什麼你會想要讀這些類型的資訊呢？
3. 你喜歡在網路上閱讀哪一種英文的主題的資訊呢？例如：跟學業上有關的資料。
4. 你經常在網路上閱讀英文資訊嗎？大約多久一次呢？
5. 現在網路上資訊那麼的多，那有什麼因素會影響你決定要選讀哪種英文資料嗎？例如：網路文章的長度。
6. 你在網路閱讀過程中遇到一些會影響你的理解能力的狀況時，你通常都是如何解決這些問題呢？
7. 你認為在網路上閱讀英文資料有哪些壞處和缺點呢？為什麼？
8. 你認為在網路上閱讀英文資料有哪些好處呢？為什麼呢？
9. 你比較喜歡在網路上閱讀英文資訊還是紙本上的呢？為什麼？
10. 假如你的老師將要結合網路英文閱讀在他的教學內容上，你會想要老師提供哪些建議有助於你在網路學習呢？為什麼呢？