

CHAPTER 2: REVIEW OF LITERATURE

2.1 Introduction

As seen in the previous chapter, this study covers a wide range of issues concerning ESL reading and writing skills. Some of the aspects which this study touches upon are: reading, writing, online reading, argumentative essay writing, information technology in teaching, active learning, Gen Y and numerous others. It is obvious that not all the potentially relevant literature can be covered and as such, the literature review in this section will be confined to the connection between reading and writing skills in ESL, lexical acquisition in ESL, the component of content in writing, the role of ICT in ESL teaching and online and print reading which are pertinent to this study.

2.2 Reading-Writing Connection

Reading is often seen as the foundation to good writing skills as it enables writers to recognize language styles and the use of language in various genres whilst providing authentic examples of language or grammar rules. Besides this, reading provides a variety of benefits for ESL language learning as can be used for different levels of proficiency; from beginners to advanced level learners every learner will be able to enhance their language skills in different aspects. In his study on integrating reading and writing skills and assessing students' writing skills in different writing tasks, Boran (2008) emphasizes the role of reading in the writing class. One of the benefits of reading listed is that written materials are good representatives of the culture and social life of the people who speak English as their native language and learners should know these to produce appropriate and accurate written discourses. In addition, reading can 'introduce the rhetoric, texture, various genres, and styles of the written discourse of English' (Boran 2008, p. 268). Thirdly, reading is important as a means 'used to activate students' background knowledge about the topic and if they lack necessary knowledge, reading text can also provide the necessary

background information (Boran, 2008, p.268). Therefore, it is evident that reading materials can serve very practical purposes in the writing classroom.

A similar belief is echoed by Krashen (1993), who emphasizes that readings provide models of what English texts look like, and even if not used for the purpose of imitation, i.e. where students are asked to produce an English text to match the style of the model text, ‘readings provide input which helps students develop awareness of English prose style’ (as cited in Boran, 2008, p.271). The importance of reading for writing has long been recognized, and as far back as 1993, Krashen suggested ‘free voluntary reading’ as key to improvement in reading skills, linguistic competence, vocabulary, spelling and *writing*. He further explains that

‘.....second language writing skills cannot be acquired successfully by practice in writing alone but also need to be supported with extensive reading’ (Hyland, 2003, p. 17).

This illustrates the significance of reading in whichever form for learners to help them create awareness towards the different writing styles adapted by native writers; this awareness then can be used in order to improve one’s own writing and to be able to emulate native writing styles.

Besides, Hyland (2003) points out that the favourable effects of reading on writing skills enhance language acquisition. He states that ‘extensive reading can furnish a great deal of tacit knowledge of conventional features of written texts, including, grammar, vocabulary, organizational patterns, interactional devices and so on’ (p. 17). Therefore, this indicates the importance of exposing language learners to reading texts as it is useful and of significant relevance to writing better.

Recent studies by Macalister (2008) and Brown (2009) focus on the importance of reading skills in higher education with the incorporation of extensive reading programs into course syllabuses in order to succeed in effective language acquisition. Macalister’s (2008)

action research project studies the implication of extensive reading in a variety of ELT settings and concludes that ‘the inclusion of extensive reading as a component of an English for Academic Purpose (EAP) program was positively received by learners and at least in some cases created positive attitudes towards reading’ (p. 254). Therefore, we can see that educators and researchers are experimenting with and discovering a variety of methods to improve students’ reading attitudes, skills and perceptions due to their broad benefits towards ESL teaching and learning.

Even though extensive reading also appears to be the focus of Brown’s (2009) study, which investigates the use of this reading method, it discovered considerable benefits for learners in terms of learning goals, writing, vocabulary and overall proficiency while increasing motivation (p. 238). Further in this study Brown elaborates on the importance of reading and writing and finds:

‘Students increased their reading ability in the target language, develop positive attitudes towards reading, had increased motivation to read, and made gains in various aspects of proficiency in the target language, including vocabulary and *writing*’ (p. 239).

Therefore, it seems evident that choosing the appropriate reading method can help not only enhance students’ language performance, but also increases their motivation.

So, there is convincing empirical evidence as to the strong bond between reading and writing, and the importance and benefits of reading to positively impact writing skills. Nevertheless, a local phenomenographical study by Noor (2006) identifies the learning approaches used by Malaysian students and indicates that reading skills are the main weakness that they experience during their transition from secondary schools to tertiary education. It acknowledges the importance of reading and its role in Malaysian and overseas higher education as it states,

‘without a doubt, in any academic or higher learning context, reading is perceived as the most prominent academic skill for university students. It is through *reading* that these learners will learn new information and are able to synthesize, evaluate and interpret to learn more about their subject matter (p. 66).

The findings of this qualitative study were that Malaysian students had weak reading skills and depended mainly on prior knowledge to understand subject matters. Further, it discovered that this group of students relied on a surface approach to learning, which focused on memorizing discrete items in isolation resulting in superficial understanding of the learning material. This is opposed to students who had a deep approach associated with intrinsic motivation and a focus on understanding the meaning of the learning material. Therefore, this study is significant as it provides insight into the reading problems faced by Malaysian students with regards to their reading process; also, ‘by learning about how students go about learning, we take control of improving our teaching which will help our learners become better readers’ (Noor, 2006, p. 75). Taking this into consideration, the current study is vital to enable students to enjoy and improve the reading process and eventually aid them in their writing skills.

2.3 Reading for content

In the past, English was taught using traditional behavioral teaching methods like grammar translation, rote learning and passive drill-and practice strategies; after all, these were believed to be the most effective means of teaching and learning at that time. However, over the last 30 years, these methods have come under scrutiny as they do not enable the learner to explore, and experiment with, the language on their own. As a result, educators have moved away from behaviorist strategies to more cognitive and constructivist approaches. In recent years, educators and researchers have understood the benefits of allowing L2 learners to be submerged into the language in order to enhance language

acquisition. In this way, the focus is not on the nitty-gritty grammar rules but on learning through authentic material and on comprehending sentences as unanalyzed chunks of meaningful language use. Furthermore, 'studies show that teaching formal grammar to students has 'a negligible or even harmful effect on improving students' writing' (Bromley, 2003, p.145). Therefore, reading can be an alternative method to improve learners' language skills in all aspects.

Reading material used for teaching in higher education is incorporated for the purposes stated above and mainly for students to gather content for their writing tasks, which is usually the end product. As reading and writing are interdependent, by reading texts, students are then able to generate ideas, 'argue opinions, and synthesize multiple perspectives', thus creating effective persuasive pieces. (McNamara et al., 2010, p. 57). In addition, by reading, students are involved in 'constructing meaning through the application of complex cognitive and linguistic abilities that draw on problem-solving skills and the activation of existing knowledge of both structure and content' (Hyland, 2003, p. 46)

In higher education, language learning is not focused on grammatical aspects since a majority of the students have had a minimum of at least six years of exposure to English. As such, the focus is more on developing ideas, thoughts and forming opinions on specific topics: most college language syllabuses are therefore thematically structured. It is clear that content-oriented methods tend to rely heavily on reading and exploit the close relationship between reading and writing in L2 literacy developments since 'reading provides input for both content and the appropriate means of its expression - a positive link that reflects the wider role of reading in developing composing skills' (Hyland, 2003, p. 17)

Hyland further defines 'content-based' as an approach that focuses on the requirements of particular subject areas. In other words, these types of courses 'focus on the language, composing skills and specific text conventions associated with a particular

domain and its content or subject matter' (p.17). By using this method, writing instructors can enhance student motivation as the reading materials are aimed specifically at contexts and content relevant for learners' language improvement and thus equip them for other related tasks, in this case, writing tasks.

Research has supported the use of integrated tasks to improve writing and various studies have shown that 'academic writing tasks are rarely done without using reference sources as a basis for writing' (Gebriel, 2009; Weigle, 2002, 2004; Cumming et al., 2000; Leki and Carson, 1997; Hamp-Lyons and Kroll, 1996 as cited in Gebriel, 2009, p. 508) When tasks are integrated, they provide a host of benefits to students: integration allows students to read texts, analyse them, reach a conclusion, and then synthesize this information to produce a piece of work Besides this, 'reading a source text before writing would provide them with a common platform' (Plankans, 2007).

Recently, Gerbil (2009) compared two types of writing tasks: 'read-to-write' tasks and 'independent' tasks. The methodology used in this study provided 115 students with a mixture of 4 writing tasks consisting of 2 'read-to-write tasks' and 2 'independent' writing tasks. The findings of this study revealed that 'read-to-write' tasks yielded higher scores compared to scores on tasks that simply set 'independent' topics to write about. These findings are in line with findings reported by Grabe (2001), who concludes that reading-based writing enhances higher-order thinking, and consequently, could result in better organization and development of ideas, whilst simultaneously improving the linguistic features of students' writing.

Realizing this strong correlation between reading and writing skills, the International English Language Testing Service (IELTS), which is used as a major English language proficiency test for university-bound students, incorporates thematically related reading and writing modules. In this way, the reading section contributes to input for the

writing tasks. Esmaeili (2002) closely examined the relation between the reading and writing tasks of the major International English language proficiency examinations and found the links in Figure 1 (below). This figure also shows the common rationale cited for tests that have thematically organized reading inputs for the writing tasks. There have been some arguments regarding the change in the test format. However, Charge and Taylor (1997) (as cited in Esmaeili, 2002) pointed out that the ‘link between the reading and writing tasks had never been completely removed in the new IELTS versions’ (p. 602) as shown in Figure 2.1 below.

Test	Link	Rationale(s)	Reference(s)
IELTS (International English Language Testing System)	Writing component is related to some input in the form of a diagram or table or both.	Recently the connection between reading passages and writing tasks has been dropped. It was feared that some examinees would copy too much.	Charge and Taylor (1997) Wallace (1997) Clapham (1996)
TEEP (Teacher Effectiveness Enhancement Program)	TEEP uses reading and writing modules.	High predictive validity, relevance to academic tasks, and authenticity.	Rea (1987) Alderson (1990)
OTESL	Reading, listening, and writing are related thematically.	Relevance to academic tasks, high face and predictive validity, and positive washback.	Wesche (1987)
LAAS (Language Ability Assessment System)	A thematic link between reading, listening, and writing components.	Relevance to academic tasks and high predictive validity.	Bachman et al. (1995)

UCLA Subject A Examination	A thematic link between a reading passage and a writing task.	Relevance to academic tasks.	University of California (1995)
COPE (Certificate of Proficiency in English)	A thematic link between listening, reading and writing components.	No rationale documented. Examinees are said to perform better than they do in a test with no thematic links.	University of Toronto (1996)

Figure 2.1 Summary of the use of thematic links in 6 popular academic English language tests

(Esmaeili, 2002, p. 601)

Therefore, all the above studies from Figure 1 and the other studies reviewed in this section have closely examined this entwined nature of these two skills and discussed the effectiveness of incorporating these skills with one another for L2 learners to enhance their language acquisition.

2.4 Barriers in argumentative essays

The previous chapter highlighted the importance of argumentative essay writing at college level, and of providing reading materials and tasks to aid students in this genre of writing. Educators ensure students spend almost all of in-class time reading, discussing, and writing in the hope of generating profound questions and answers. The main reason for this incorporation of reading tasks prior to writing argumentative essay pieces is for students to analyze and argue, agree or disagree with the ideas that they encounter, evaluate the ethics, display logic and clarity, support their arguments, synthesize, and evaluating different perspectives (Schmoker, 2007). Therefore, all these elements are practiced in the writing classroom mainly due to the fact that students have inadequate contents of their own for their essays.

Numerous studies through the decades have expressed this lack of content as the central reason why essay writing falls short of expectations. Studies by Gleason (1999), Baker (1999), Delphine and Caroline (2002), Schmoker (2007) and Wolfe et al. (2009) have all expressed the same and have taken different angles to overcome this issue of weak content in argumentative essays. All these studies above have pointed out that the main obstacle students face in this genre of writing is that the writer is not providing evidence, but is still trying to forge ahead and as a result, the writing becomes circular, often repeating the argument claim in different ways. Gleason (1999) lists the general inadequacies in students' argumentative essays:

1. Discourse has a narrative rather than argumentative purpose.
2. Claims or propositions are nonexistent or brief and unclear.
3. Generally, statements intended to support claims do not provide sufficient grounds.
4. Supportive statements, when made, are brief, lacking elaboration and details.
5. Support in the form of logical or factual evidence is rare.
6. The writer does not explicitly or implicitly acknowledge an opposing point of view. Frequently, grounds are established that agree with the opposing side, thereby creating no argument.
7. When an opposing view is acknowledged, no attempt is made to respond to the opposing side's point of view (p. 85).

It is evident that writing instructors can expect to face similar concerns and weaknesses in their students' argumentative essays. The main reason for this problem is weak content and ideas in their essays, which in turn could be due to weak cognitive skills.

The studies discussed above have each taken a different approach to overcome this barrier to students' argumentative essay writing. Baker (1999) concentrated on the specific case of argumentative interactions, and compares various interactive modes, namely:

dialectical, rhetorical, epistemological, conceptual and interactive modes. All of these modes can be used to identify the role of interaction in improving the content of argumentative essays. On the other hand, Delphine and Caroline (2002) use various experimental situations to promote different ways for students to retrieve ideas for argumentative essay writing: the authors stress that the critical process is the most crucial step in the production of this type of essays. Finally, Wolfe et al. (2009) describes a 'cognitive argumentation scheme for written argumentative and presents three empirical studies on the 'myside bias' – the tendency to ignore or exclude evidence against one's position' (p. 183). When applying the suggestions made in this study, students should be able to read texts with an open mind and develop ideas logically and support them rationally and unbiasedly.

All in all, it is evident that a majority of students face similar barriers to argumentative essay writing, which is weak content due to a lack of ideas. Therefore, educators need to implement more interesting reading pedagogies, incorporate motivational methods of teaching and introduce more challenging reading texts in the hope to enhance the content of students' argumentative essays.

2.5 L2 Lexical Acquisition

Besides reading, writing and content, this study also aims to investigate lexical knowledge and usage amongst college - level ESL users. The role of vocabulary as the foundation of any language is also aptly expressed by Krashen (as cited in Lewis, 1993) that 'when students travel, they don't carry grammar books, they carry dictionaries'. This shows the importance of vocabulary knowledge. In the definition of writing provided in Chapter 1, words play an important role in order to express ideas and thoughts, for without words, our thoughts and feelings cannot be externalized easily with sufficient clarity and accuracy. This section will elaborate on the importance of lexical knowledge for efficient

language acquisition, the reading and vocabulary connection, past and current methods of teaching vocabulary and the different methods used to measure learners' vocabulary.

2.5.1 Importance of Vocabulary

College students enter higher education with a minimum of six to twelve years of English language learning experience. In Malaysia, for instance, school children are exposed to English not only in the language classroom but English is also used as the medium of instruction for Mathematics and Science. These steps have been taken by the Malaysian government to ensure that students have good command of the language since English is critical for the success of the nation. However, even with this early start and foundation, once at higher education level, learners still encounter problems of little or limited vocabulary knowledge as they have not been exposed to the relevant academic vocabulary needed for college-level learning.

Ironically, students themselves realize the importance of vocabulary knowledge to enhance their writing skills. Hyland (2003) states in a study of L2 learners that they 'commonly identify language difficulties, particularly an inadequate grasp of vocabulary or grammar, as their main problem with writing and frequently express their frustrations at being unable to convey ideas in appropriate and correct English' (p. 34).

Studies by Deng and Hu (2007) have echoed vocabulary difficulties experienced by students in China. According to the 2004 version of the College English Curriculum Requirements, students are expected to acquire a total of 4,500 words and 700 phrases to be eligible to enter college. Yet, most students were found to be below par, and as Deng and Hu (2007) observe, the main explanation is that learners have difficulty remembering words. This poses a concern as the role of vocabulary is crucial for effective learning, as they state;

'Vocabulary is an important part of a language as well as the basis of linguistic abilities.

The size of vocabulary is an important standard to evaluate a learner's English level.

Without adequate vocabulary knowledge, a second language learner's conversational fluency and reading comprehension will meet difficulties' (p.55).

Linguistic authorities like Nation (2001) have suggested that an increase in L2 learners' academic vocabulary can contribute to higher ratings of their academic texts. At the same time Zhou (2009) states that 'lexical errors are found to be the most serious problem in professors' evaluations of non-native speaker students' writing' (p. 35). Zhou (2009) sums up our current state of knowledge by saying that 'an increase in the amount of academic vocabulary should contribute to writing improvements' (p.35). Therefore, it is imperative that educators should provide students with more opportunities to increase their academic vocabulary store as this will aid them in their foreign language learning as well as ability to write better academic texts.

2.5.2 Reading for vocabulary gains

Without having adequate vocabulary knowledge, learners in higher education level will not be able to read relevant course material and this will in turn hinder their academic performance. Zhou (2009) found that 'when little language support was available, some participants tended to use simple language forms and sentence structure to express complex thoughts' (p.43). Resorting to simple language forms to convey complex meanings could place L2 learners at a distinct disadvantage compared with their native speaker counterparts (Hinkel, 2003 as cited in Zhou, 2009). To further validate the importance of vocabulary at college level, Zhou (2009) emphasizes that learners at this level should 'be taught the kinds of grammar and *vocabulary* needed for higher levels of language production' (p. 44) since they need to be able to express complex thoughts independently, which requires advanced vocabulary. To overcome this disparity, educators often rely on reading materials (such as newspaper articles, textbooks, journal articles and many more resources) to help students expand their knowledge of the topic and to increase their content for various forms of

output. Another vital role of these reading materials is to expand their students understanding and use of vocabulary, too.

Weak vocabulary has been viewed as one of the stumbling blocks for L2 learners and has been widely studied. There is general agreement that reading positively enhances learners' vocabulary. Xu (2009) undertakes an empirical study to test the Involvement Load Hypothesis by examining the impact of different reading tasks on L2 vocabulary acquisition. Students were given different types of reading material and were subjected to pre-tests and post-tests in which they had to answer comprehension questions and fill in the blanks by using vocabulary from the reading input. The results of this study only partially supported the theory. However, Xu (2009) discovered that when students completed tasks that induced higher involvement load than others, there was 'a significantly higher acquisition in the overall immediate posttest' (p. 76). Therefore, this study is highly relevant as it empirically shows that students are able to improve and expand their vocabulary by either incidental learning or intentional learning from reading. From these findings, it is clear that students tend to reuse words from the text in their writing and this use of more advanced vocabulary will lead to better quality pieces of writing.

In addition, Wesche and Paribakht (1999) insist that 'much – if not most - lexical development in both L1 and L2 appears to occur as learners attempt to comprehend new words they hear or read in context' (p. 176). It is further deduced that the main attribute to L2 learners' lexical knowledge is L2 reading (Laufer, 1996, 1997; Nassaji, 2002, 2003; Nation, 2001; Qian, 2002; Read 1993, 1997, 2000, as cited in Nassaji, 2006). All these studies in L1 and L2 have indicated that vocabulary knowledge best demonstrates an individual's reading skills and to obtain new information from texts.

In Nassaji's (2006) study, a clear distinction is drawn between depth and breath of vocabulary. Here, depth of vocabulary knowledge 'refers to the quality of lexical

knowledge, or how well the learner knows a word’, whereas breadth of vocabulary knowledge ‘refers to the quantity or number of words learners know at a particular level of language proficiency’ (p.5). This study concluded with the findings that L2 learners’ vocabulary knowledge had significantly gained in breadth and that this was mainly due to reading. Similar findings were reported by Pulido (2003, cited in Nassaji, 2006) which reported that knowledge of sight vocabulary was correlated with measures of incidental vocabulary gains from reading. Therefore, it is evident that reading is a sure way to improve and expand learners’ vocabulary knowledge.

2.5.3 Effectiveness of specific target vocabulary

The Advanced Oxford Dictionary contains 1422 pages of words and meanings, and it would be impossible for educators to teach or students to learn all those words. One way to increase learners’ vocabulary would be by introducing the course content thematically and having a set target vocabulary list for each topic, as this would help the vocabulary learning be more focused and directed. Laufer (2003) conducted reading experiments to compare vocabulary learning through reading with vocabulary learning through productive activities. In the study, she assessed students’ vocabulary by providing 10 target unknown words and they were required to use these 10 target words in a variety of activities such as reading comprehension and sentence writing. Following this, in a second experiment she compared the reading group with the ‘composition group’; this latter group were required to compose a letter using the 10 target words. The final results indicated that the ‘composition group’ recalled significantly more words than the reading group. Therefore, it is clear that using target vocabulary helps improve the effectiveness of gaining vocabulary by reading, whilst it also appears to be an effective method to apply when conducting a research study on vocabulary.

A study by Hui-Tzu (2008) used a quasi-experimental research design to compare the effectiveness of reading plus vocabulary-enhancement activities (RV) and narrow reading (NR) on vocabulary acquisition and retention. The input in this study consisted of thematically related reading articles. The study acknowledged the fact that using specific target vocabulary increased students' knowledge and use of specific words from the text, and was now trying to assess if by using other vocabulary related activities would further improve their acquisition. The study assessed students' knowledge of 50 vocabulary items by providing selected reading texts and found that although the RV group demonstrated more knowledge about the target vocabulary, the NR group also showed some improvements. It is clear that by using specific target vocabulary, learners can gain vocabulary effectively regardless of the methods or activities used by educators.

Paribakht and Wesche (1997) also examined two reading approaches – the reading only and reading plus text-based vocabulary exercises - on ESL college students' vocabulary growth in an authentic comprehension-based program. In this study they employed the Vocabulary Knowledge Scale (Paribakht and Wesche, 1996) as it is seen to be a 'practical instrument for use in studies of the initial recognition and use of new words' (p. 29). This scale consists of five levels;

- I: I don't remember having seen this word before
- II: I have seen this word before but I don't know what it means
- III: I have seen this word before and I think it means _____ (synonym or translation)
- IV: I know this word. It means _____ (synonym or translation)
- V: I can use this word in a sentence e.g: _____

This progressive scale reflects the learners' ability of recognizing a word and then being able to use the word in a sentence. It is believed that once the learner achieves the highest stage of the vocabulary scale, i.e. learners can use the word in their writing, only then has

the learner truly gained the word and has expanded their vocabulary. Employing this scale to measure learners' vocabulary growth, this study found that both reading activities led to word gain. More particularly, incorporating the specific target vocabulary into reading materials can be shown to have a positive impact on learners' acquisition of vocabulary, even though at a slower pace.

As Hyland and Tse (2009) observed, 'targeting vocabulary as contributing an important element to an 'academic style' of writing and being 'more advanced' than the core 2,000 to 3,000 words that typically comprise around 80% of the words students are likely to encounter in reading English at university (p.118). Nation (2001) argues that vocabulary typically falls into three main groups:

1. High frequency words such as those included in West's (1953) General Service List of the most widely useful 2,000 word families in English, providing coverage of about 80% of most texts.
2. An academic vocabulary of words which are reasonably frequent in academic writing and comprise some 8% to 10% of running words of academic texts
3. A technical vocabulary which differs by subject area and covers up to 5% of texts

It follows that college and university students are less exposed to academic vocabulary and technical words when completing writing tasks. The reason is that incidental learning cannot take place if the exposure to the target vocabulary is limited and infrequent. As a consequence, it makes sense for teachers to develop vocabulary lists for direct teaching (Hyland and Tse, 2009).

Summing up, the studies reviewed above all show the benefits of using target vocabulary through reading to help learners gain words. These findings can be seen to be encouraging to ESL educators as they provide an avenue to resolving a gnawing problem:

how to effectively and efficiently increase learners' receptive vocabulary size to 3,000 – 5,000 word families (Hui-Tzu, 2008).

2.5.4 Assessing vocabulary acquisition

From the literature on vocabulary discussed in the previous subsections, it is evident that vocabulary plays an important role in acquiring language and in improving writing quality. However, assessing vocabulary knowledge and its use is an intricate issue. Hyland and Tse (2009), Tribble (2009) and others have suggested that the most precise method to evaluate vocabulary is to identify lexical items which are frequently used in writing as this would be a good indicator of knowledge and understanding of the word.

In view of this, empirical researchers in the area of lexical acquisition have generally categorized vocabulary into three main categories for straightforward evaluation. To simplify, the first level known as K1, consists of the first 1,000 most frequent word families, followed by K2, which is the next 2,000 word families and lastly, the Academic Word List (AWL) (Coxhead, 2000). The AWL contains 570 additional word families most commonly found in academic text irrespective of the field of study. Therefore, for the purpose of evaluation, if someone uses more words from these word families, it can be assumed that this reflects higher vocabulary knowledge and a more advanced level of language acquisition.

The main components for language acquisition (reading, vocabulary and writing) have been reviewed in the subsections above and all clearly indicate what and why these components are crucial for successful language acquisition. The following sections of this literature review will focus on how to teach these components successfully in line with the research topic.

2.6 Information Communication Technology (ICT) pedagogies

Computers have been used in language learning as far back as the 1960's with the development of Computer-Assisted Language Learning (CALL). This approach to language learning and teaching has been based on behaviorist, cognitive, constructivist and similar learning theories. Today, the development of technology has grown far beyond our imagination with the rapid transition from desktop computers to laptops, the 'anywhere anytime' availability of the Internet, Google, and Wikipedia and even to social networking sites like Facebook and Twitter and many more today. All these elements have not only changed the workplace and people's personal lives but more importantly, they have also redrawn the landscape of education. For these reasons, educators have no choice but to continue to further incorporate technology into their classroom teaching repertoire if they want their courses to be up-to-date, relevant and most importantly motivating to their learners.

The current generation of college students is commonly known as the 'Net Generation', Millennials, and also as those 'born with a chip' (Berk, 2009). This group of students are generally those born between 1982 and 2001 and have never known a world without MTV, PCs, video games, Skype, blogs, ipods or iphones. Therefore, they live in a world of media stimulation and many of them thrive on the latest and newest technological inventions. As a result, as Berk (2009) shows, 50% of college students are unmotivated, disinterested, and disengaged from traditional classroom instructions. To overcome this disconnection between instructors and learners, it is more vital today than ever before to include Information Communication Technology (ICT) into our teaching pedagogies. The following sections of this chapter will review studies in the area of ICT and its impact of writing skills.

2.6.1 Two sides of technology

Undoubtedly, the new media has become one of the major educators of young people and the most influential form of media this century is the Internet. However, like any other tool, it has its negative and positive aspects as elaborated in Leino (2006).

Networks offer new possibilities, yet worries about technical, social and cognitive features remain: Internet addiction (e.g. Suler, 1999); privacy concerns (e.g. George, 2002; Sheehan, 2002); and information overload (e.g. Koshi, 1999). Some other aspects of the internet - such as anonymity - can be seen in both positive and negative lights (Suler and Phillips, 1998) (p. 542).

In addition, this study explores the perception among adolescents of the advantages and disadvantages of the Internet, as it is imperative for educators to understand students' perceptions on such a confounding issue. Leino (2006) uses qualitative and quantitative data collected from 4,864 students (53% females and 47% males), and analyses their responses by means of a comparative method. It was discovered that although female students - more than male students - found the Internet useful for entertainment and maintaining social relations, the majority of both female and male students 'felt that the most valuable advantage the Internet has to offer is its vast amount of information' (p. 545) and that the 'necessary information can be found rapidly, easily and even in an entertaining way' (p. 545).

In the past, studies on ICT in education have focused on constructivist theories: ICT provides avenues for learners to construct their own knowledge and derive individual meaning from online resources; this method of teaching is also more humanistic. Even so, Ewing et al. (1998) insists that this reliance on electronic resources is 'rather more daunting as an aid to learning' (p. 5). Without a doubt, there is an array of barriers when using online resources on the World Wide Web (WWW): there is no single pathway to access specific

information, the amount of information available is too overwhelming, and the links on websites are unreliable. At the same time, educators face problems as they are unfamiliar with the resources as most are not as tech-savvy, feeling insecurity as they are not prepared for the content of the lesson using the WWW, unable to restructure resources to match learners' needs and so on. To quote, Ewing et al. (1998),

'In the WWW based learning scenario, the teacher is less in control and much less able to monitor individual progress through predetermined learning sequences. Indeed, the level of predetermination becomes much reduced as the learning environment moves from the traditional to WWW based. For some pupils this may create confusion and disorientation, which in turn makes it difficult for them to take appropriate decisions about the direction of their own learning' (p. 6).

Undeniably, the use of ICT in teaching in the past can be viewed as being difficult for both teachers and learners. Both parties had to become more familiar and comfortable when using it for teaching and learning purposes.

Over the past decade, due to the rapid development of technology, there has been an enormous number of studies on the role and implementation of technology in the language classroom but mostly they offer conflicting views and research findings. Many studies have identified the problems of using ICT in language teaching mainly from the stance that it alters the traditional balance between teacher and learner (Vanghn 1997; Barton 1997; Haydn, 1998, as cited in John, 2004). However, studies in ICT today, focus more on the learners' point of view as opposed to the barriers that teachers face. Ewing et al. (1998), for example, adopts a learners' perspective and states that ICT can be a daunting method of learning. Still, Selinger (2002) and John (2004) provide a list of benefits learners have when learning with the use of ICT, namely: new technologies can stimulate the development of intellectual skills, spur more spontaneous interest, increase motivation, improve

concentration and develop more autonomous learners. With a host of information, teaching resources and learning aids available online, from online dictionaries, large corpora, easily assessable reading material to virtual stimulation, educators need to acknowledge the fact that technology should be part of our Mathematics, Science, Geography and English language classrooms. Even so, ‘many L2 learners in less advantaged regions are still not benefiting from these tools, the numbers that are enjoying the riches of technology are considerable and deserving of attention’ (Stapleton and Radia, 2010, p. 176).

2.6.2 Impact of ICT on Writing

With the profound benefits of ICT in teaching and learning, researchers have embarked on comparative studies, comparing traditional ESL teaching pedagogies and ICT teaching pedagogies from a variety of perspectives to assess the advantages, disadvantages, effects and impact of these two different methods. Sullivan and Pratt (1996) compared second-year university students who were at intermediate ESL levels. The focus of this study was to compare students in two ESL writing environments, i.e. in a networked computer-assisted classroom and a traditional oral classroom. In this study, two groups of students who were taught by the same teacher were compared. One group conducted face-to-face oral discussions whereas the other group discussed online; both groups had to complete an argumentative composition on a given topic. Therefore, ‘the only difference between the two classes was the students’ use of networked computers in one class’ (p. 494). The qualitative and quantitative findings both indicated that although the writing environment had no effect on attitudes towards writing, there was a significant difference between the two groups in terms of writing quality, whereby the computer-assisted group produced better quality argumentative compositions.

A current study by Stapleton and Radia (2010) showed similar findings. Here, it is argued that ‘L2 writing pedagogies need to give more recognition to the impact emerging

from new technological tools and online resources' and that 'these software and online resources are leading to improvements in many areas of student writing, both at the levels of language and content' (p.175). Other studies such as Gaskell and Cobb (2004), Hafner and Candlin (2007), Guo and Zhang (2007) and Conroy (2008) all have found significant differences in students' writing when they are able to apply online software, use concordancers and other basic tools in computers like grammar and spell checkers, compared to students who were not allowed to rely of these applications in a traditional classroom setting.

Even at higher learning levels, students are not expected to be able to write error-free compositions; a small number of errors are acceptable, as long as it does not hinder the general ideas that the composition hopes to express. So, student writers are not usually penalized for grammar or spelling errors if they are small and unobtrusive in number. If students are allowed to fully utilize technology, this will not only increase their independence but teachers reviewing their essays can focus their attention on the areas of content (Stapleton and Radia, 2010 p. 180).

These and other studies all point to the many critical benefits of incorporating ICT into the ESL classroom. Thus, 'as teachers we must weave the expanding web of technology into our classroom practice' (Smith-Sutherland, 2002 p. 664) as it has significant positive impact on students writing levels in all areas.

2.7 Interactive Online Reading

Without a doubt, the Internet is synonymous with knowledge. The Internet appears to be the main source of information currently. In an experimental study, Lenatti (2009) surveyed 8,824 consumers from four countries on their source of information and segmented respondents into four age groups; millennials, Generation X, baby boomers and matures. Interestingly, he discovered that among other things, the growing divide between

younger and older readers in how both use online and print material for gaining information. It is evident that the younger generation is more inclined towards the Internet for a host of activities and more so as a primary source information.

As far as reading is concerned, there are a host of studies which report conflicting findings with regard to online reading versus print reading. Aragon (2004) and Steinhauer and Friederic (2001) find that students have difficulty changing their learning habits to accept reading electronic texts; on the other hand, it is believed that the online learning environment is popular due to its multiple visual representations and easy application to new learning environments (Hsieh and Dwyer, 2009). Studies by Sun (2003) and Rho and Gedeon (2000) have tackled the issue of interactive online reading from different angles, and conclude the popularity, evaluation and reading strategies used and students' perception all indicate that students see this type of reading method in a positive light. Thus, Net Generation students are not only more inclined to use ICT, the Internet, etc., they also display increased motivation in doing so. It is believed that using more interactive online reading activities in the ESL classroom will therefore yield beneficial results.

On the academic front, it has been clearly established that reading is an essential skill for learners of English and when students are strong in their reading skills, they tend to make greater progress in other areas of ESL language learning. In addition, there is no doubt about the role that technology plays in teaching and learning today. Leu (2002) points out that 'the internet has entered our classrooms faster than books, television, computers, the telephone, or any other technology for information and communication' (p. 311). Therefore, it is important that educators incorporate reading via the internet to enhance student learning, since reading skills are crucial and ICT is currently not an active participant in the language classroom. Merging of these two areas would arguably also lead to greater improvement in language acquisition.

Online learning has been increasingly the focus of research for the past decade. Bikowski and Kessler (2002), Dudeney (2000) and Sutherland-Smith (2000) have studied different aspects of online learning and its impact on language learning. Online reading strategies and online reading rates have been researched by Anderson (2003) and Kurniawan and Zaphiris (2001) respectively. Besides these, in the seventh annual International Reading Association proceedings, reading and technology were in the top of the list of 'hot topics' for research (Cassidy and Cassidy, 2003). Therefore, there is a growing interest in L2 reading research and how technology influences reading.

As this field of research is expanding rapidly, educators need to acknowledge and incorporate online reading into the teaching repertoire. Leu (2002), for example, brings to our attention the role of so-called new literacies and states that they 'include the skills, strategies, and insights necessary to successfully exploit the rapidly changing information and communication technologies that continuously emerge in our world' (p. 313). To quote Coiro (2003), 'today, the definition of literacy has expanded from traditional notions of reading and writing to include the ability to learn, comprehend, and interact with technology in a meaningful way' (p. 461).

Even though the use of ICT in language teaching has long been studied, John (2004) asks the following pertinent question: 'Are new pedagogies emerging alongside the new technologies or are old pedagogies being adapted?' (p. 5). This is pivotal in order to improve teaching and learning. Ultimately, the success of new innovations rests 'on the teacher's ability to recognize their learners' preferred style and this can be harnessed through a mediated, technology-rich environment' (John, 2004, p.13). In support, Walsh (2008) stresses the importance for teachers to incorporate multimodal texts (digital texts) environments to enhance student learning whilst fostering a richer student-centered

classroom. Given the altered meaning of ‘being literate’ in today’s world, it is important that students are exposed to online reading in the ESL classrooms.

2.8 Comparing Interactive Online Reading (IOR) and Traditional Print Reading (TPR) modes

Research tells us that children who have interests are engaged, and that engaged thinkers and readers are better students (Guthrie and Humenick, 2004). Likewise, if students are more interested in the medium used for reading, their enthusiasm for reading may improve. However, Donahue et al. (2005) record the results from a national survey which found that a majority of L2 learners were turning off reading due to low motivation levels as their reading materials were restricted to school-based reading texts and they did not have easy access to interesting print materials. In turn, low motivation can be overcome, however, by bringing online interactive reading texts into the ESL reading classroom and choosing interesting texts because ‘students are more likely to put forth the effort necessary to read and learn if the material and the learning activities interest them’ (Guthrie and Davis, 2003, as cited in Brozo and Flynt, 2008, p. 173).

Realizing the impact of ICT on students’ writing from the studies cited above, researchers have embarked on various comparative studies using different reading modes in order to further enhance areas of students’ writing. It is believed that if students are motivated, they can understand and comprehend the information from the reading text better, which in turn would improve the content in their writing. Using interactive and stimulating reading modes would thus help create a positive domino effect. To address the prevailing issue of poor content, researchers have looked for alternative reading modes to improve the quality of students’ writing. As online materials increasingly dominate printed media, this development has ignited a whole new corpus of studies on online interactive reading compared to traditional print reading material practices (Kress, 2006).

Back in 1995, a study on content by Adamson et al., (1995) compared the efficacy of two presentational modes (traditional versus multimedia) and measured their effect on reading comprehension among ESL students of two varying proficiency levels. The results demonstrated that the use of multimedia computer-based instructions resulted in better comprehension. Similarly, Stakhnevich (2002) compared the effect of modes of reading on students' comprehension. Students were exposed to different textual modes, for instance, Web reading and traditional print reading articles and the 'results of the study suggested that when teaching content through self-directed reading, web medium can evoke better reading comprehension than traditional print medium' (Stakhnevich, 2002). On the other hand, in contrast to these researches, Xiufeng et al. (1998) and Davis and Lyman-Hager (1997) claim that they are unable to prove that computer use results in overall higher achievement than traditional modes of instruction (as cited in Stakhnevich, 2002).

Sutherland-Smith (2002) explored Web literacy in light of the change from traditional print to on-screen reading. It lists the contrasting features between these two modes of reading. Reading Web-based text

- Permits nonlinear strategies of thinking
- Allows nonhierarchical strategies
- Offers non-sequential strategies
- Requires visual literacy skills to understand multimedia components
- Is interactive, with the reader able to add, change or move text and
- Enables a blurring of the relationship between reader and writer (p. 665)

With this change in reading mode, readers are no longer simple passive participants in the ESL classroom, but have to rely on a variety of strategies to understand and construct the reading text for themselves since presentation of information in digital contexts is non-linear or multi-linear. Walsh (2008) believes that there should be a paradigm shift in the

ESL classroom practices today, where print-based reading and writing texts should be replaced with multimodal literacy comprising digital texts. In her study, she includes multimodal or digital texts into a literacy program and compares the findings. Results from this study indicate that students were able to make ‘interconnections or transitions between traditional aspects of reading and writing within visual and digital mediums’ (p. 106). This new notion of literacy today is also discussed by Coiro (2003), whose study finds that, although students may need to depend on different learning skills, they are able to adapt sufficiently and by using the digital mode, they are encouraged to comprehend, participate and interact with technology in meaningful ways.

Tan and Liaw (2009) analyzed the reading strategies used by English for Science and Technology (EST) students in Malaysia. They compared strategies adapted by readers when completing online reading tasks and found that students tend to rely on the traditional reading strategies of scanning and skimming, using typographical clues and using visuals like tables and graphics to increase understanding of the text. It shows that students use the same reading methods to decipher the textual content, even when reading from different modes. This study also suggested that strategy awareness training should be incorporated into courses to allow learners to be more strategically equipped and develop autonomous learners.

Similarly, studies in this field by Hsieh and Dwyer (2009), Rowsell and Burka (2009) and Usó-Juan and Ruiz- Madrid (2009) have further compared these two modes of reading (traditional and online interactive reading), in terms of opposing strategies and behavior while reading. To start with the last one, Usó-Juan and Ruiz- Madrid (2009) conducted a two-fold study to examine ‘firstly whether the hyper-textual medium affects learners’ reading comprehension and, second, to analyze learners’ use of strategies in hard copy and online reading contexts’ (p. 59). The respondents were divided into two

experimental groups, whereby the first group read the text in print and the other group read the text via the computer screen. For assessment purposes, both groups were then required to complete two reading comprehension tasks: true/false and open-ended questions based on the text. However, it was found that that the hyper-textual medium did not affect learners overall reading comprehension, even though ‘researchers in the reading field (Burbules, 1996; Hanson-Smith, 2003; Kasper, 2003; Villanueva et al., 2008) have considered hyper-reading as a reading practice that is different to that of reading in print’ (Usó-Juan and Ruiz- Madrid, 2009, p. 61).

In addition, neither do students show any significant differences in their comprehension scores when the actions involved in both modes of reading are compared. Baker (2003) studied the action or movement involved when reading traditional print and reading interactively online. In this study, he assessed the ‘impact of scrolling vs. paging’ through a specific text; after reading, participants had to complete multiple-choice comprehension questions related to the given passage. As in the other comparative studies, there was no reported difference in their scores although they used different reading modes.

2.9 Summary

A wide range of studies have been reviewed in this section, all of which are pertinent to the topic. The entwining nature of reading and writing has been established, and it was found that the reading-writing relationship is independent of the modes used for their acquisition. The prevailing obstacle to good argumentative essay writing appears to be weak contents as observed by writing instructors around the globe. However, from the relevant literature, it is clear that reading is the main source of information and vital for generating superior contents. Furthermore, reading also appears to be the answer to lexical acquisition. Varying studies on lexical knowledge and lexical recall, the significance of sight and incidental vocabulary and the use of target vocabulary in lexical acquisition have

been reviewed for their relevance to this study. The common trend revealed in these studies clearly indicates the benefits of reading in acquisition of vocabulary.

The incorporation of ICT in the language classroom has been referred to because it is one of the main strands of this study. It is generally accepted that ICT, WWW and the Internet are beneficial not only for content and vocabulary growth, but also in that they provide authentic, interactive, stimulating and motivating avenues for L2 learners. In addition, the use of ICT has helped improve both writing and reading skills, more particularly in the field of interactive online reading, an emerging trend in ESL teaching today. Though there are numerous comparative studies on reading modes (interactive online reading (IOR) and traditional print reading (TPR) texts), most focus on reading strategies and reader behavior. In addition, they are mainly interested in comprehension skills, showing only minimal or insignificant differences in their outcomes. They fail to compare the reading modes based on output, i.e. the piece of writing that these strategies may lead to and the quality that may or may not result from the different input modes.

Moreover, a wide range of studies have been conducted comparing these two modes of reading but the Malaysian context has so far been overlooked. To date there has been no research in the area of Malaysian tertiary education. The current study is the first to address the connection between reading in traditional print and reading from online interactive sites in order to improve argumentative essays in terms of vocabulary usage and content – a problem area which has not been sufficiently addressed. It is hoped that the research findings will be helpful in future studies on Malaysian higher education and the teaching and learning of similar academic language skills in English.