

Beyond the traditional reading class: The application of an e-Book in EFL English classroom

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Abstract

The purposes of this study are to explore the effects of an e-book reading on the following aspects: 1) vocabulary increase over the experiment period, and 2) the changes of affective factors on learning English through an e-book. In this e-book based study, sixty two Korean elementary school students were given ten weeks of instruction and provided with e-book reading materials. In order to evaluate students' vocabulary ability, pre- and post-tests were conducted with 30 questions. Also, pre- and post-surveys, interview and class observation were administered in order to measure the changes of affective factors. The results showed that: (1) with an e-book reading, vocabulary knowledge has increased; (2) the affective factors such as motivation and interest on reading and English learning have been remarkably elevated. This study proves that an e-book reading or teaching English with an e-book can be of benefit to ESL/EFL learners.

Keywords: e-book; ESL/EFL; reading comprehension; vocabulary teaching; digital literacy

Beyond the traditional reading class: The application of an e-Book in EFL English classroom

1. Introduction

Recently, the use of an e-book has been rapidly growing with the development of ICT (information communication and technology). According to statistics published by Association of American Publishers (2011), e-book sales already account for 23.5% of all trade book sales in the U.S. Another interesting poll shows that 15% of Americans now use an e-reading device, and 11% of Americans had already bought or read e-books (Harris Poll, 2011). The number of people using e-book reading devices has doubled in the past year, from 8% to 15%. In fact, whereas 16% of Americans read only between 11 and 20 books per year and, among those who have an e-book reader, 32% answered they read average 11 to 20 e-books per year. Also, based on the research by Harris Poll (2011), 78% of respondents stated that they enjoyed online reading, and were likely to purchase more e-books. With the Internet users coming online at an astounding rate of over two million each month and the younger generation becoming proficient at using the computer at an ever-earlier age, it is not any wonder that most experts agree that e-books are the wave of the future education (Beadenkopf, 2009; King, 2010; Medley, 2010; Rowlands, et al., 2007; Warburton, 2007).

It is, therefore, naturally expected to have a bright future for e-books when on-screen reading becomes easier. In terms of the use of an e-book, it can be regarded as more efficient than paper-based books from the various perspectives such as storage, transfer, delivery, and accessibility. And it can be no longer such a big surprise today to see people reading e-books through hand-held mobile devices, or via mobile smart phones even in the running subway. And with diverse functions of multimedia and hypertext links, an e-book enables readers to view video clips, listen to sound and narrations, or jump to the Web simply by selecting a link. And against drawbacks that an e-book contains, readers are likely to get involved in reading, because simultaneously with reading, an e-book offers powerful electronic features such as note taking, key word searches, quick navigation, and links to related information. Therefore, it undoubtedly provides the user not only with a convenient system, but also with a much more pleasant reading experience.

2. Review of Literature

2.1 Significance of Reading

Our understanding of reading, both in terms of theory and practice, has changed considerably in the past four decades. In the mid- to late 1960s, reading was considered as little more than a reinforcement for oral language instruction (Grabe, 1991). Based on the importance of teaching reading with ALM (Audio-Lingual Method), most of the efforts to teach reading were focused on examining the rules of grammar and on increasing vocabulary power, or on practicing pronunciation (Silberstein, 1987). However, as psycholinguistic and schema/interactive models of reading were proposed, the old view of reading was challenged by them (Carrell, 1987; Carrell & Eisterhold, 1983; Goodman, 1971, 1973; Rumelhart, 1980).

Reading was not considered as a passive process, a skill more or less automatically acquired following oral language proficiency, any more. According to a “psycholinguistic model of reading” of Goodman (1967), reading is not primarily a process of picking up information from the page in a letter-by-letter, word-by word manner, but a selective process. It involves partial use of available minimal language cues selected from perceptual input on the basis of the reader's expectation. As this partial information is processed, tentative decisions are made to be confirmed, rejected, or refined as reading progresses. Concurring with Goodman's arguments, Loew (1984) further argued that reading is a psycholinguistic process in which a reader uses a variety

of skills to infer the writer's intended meaning and the reader's repertoire includes knowledge of phonics, linguistic skills, knowledge about the surrounding world, and, above all, problem-solving strategies.

Song (1999) defined reading comprehension as a complex cognitive process in which both text-based and reader-based factors interact simultaneously to help readers construct coherent meaning from contexts. On the other hand, Nuttall (1996) insisted that the view of reading should be concerned with meaning, specifically with the transfer of meaning from mind to mind: the transfer of messages from a writer to a reader. In addition, she emphasized that the reader's role is not passive because the fact that meaning is in the text is unfortunately no guarantee that the reader will get it out. Similar to Nuttall's argument, Carrell (1987) and Schulz (1983) also argued that constructing meaning from the text has been viewed as the goal of reading rather than decoding or translating each word with accuracy.

2.2 E-book instruction

As mentioned above, reading itself is shown as a very active, complex set of human cognitive and emotional processes which co-develops with physical interaction. Marshall (1998) succinctly stated that readers do not just read, but commune with their documents, wander, collect, organize, interpret, mark in, and mark on what they gather. Reading an e-book can be also applicable to this principle with a few functionalities; 1) to interact with readers with the content-bearing device, whatever form it may take, 2) to cover visual and audible interaction with the content 3) to possess, modify, and expand the content (Gibbons, et al., 2003). Due to much research, the effect of an e-book has been verified and one of them is a recent work reported in Yoon's study (2008). It examined the effect of an e-book reading compared to a traditional paper-based reading. The result shows that students not only improved in reading comprehension ability, but also in their attitude towards reading and the study of English. In accordance with the gained results, the success of an e-book reading and its functionalities, as stated above, can be predicted as well, in terms of the benefits and advantages that an e-book is holding.

2.3 Characteristics of an e-book

Simply put, an e-book is a special computer file which contains the text of a printed book. The file may be read on a personal computer (PC), a personal digital assistant (PDA), a laptop computer, or an electronic device designed specifically for reading e-books (i.e. NOOK Color™, NOOK Tablet™, Kindle Fire). Over typical hard copy books, there are some distinct benefits to an e-book and it is actually preferred for a number of reasons, although nobody is considering that e-books will substitute all the paper books in the near future. However, it is clear that replacing the existing form of the printed book with an electronic book is inevitable, and will occur very soon. Some of the obvious advantages of an e-book are recapitulated in the following:

2.3.1 Functionality

It is possible to change not only the size of what is viewed, but the size or even various styles of fonts for the sake of a reader's convenience, leaving the original content as it is. What is more, an e-book allows readers to interact with the functions of, for example, the highlighting of key sentences, searching for specific key words and dictionary look-ups thanks to the its electronic function. It is also expected to experience both an integrated and interactive learning process with multimedia application which is accompanied with sound and music.

2.3.2 Expediency

Assessing an e-book via the web facilitates the simultaneous use of other online resources. For example, it is possible to link to related documents or websites, and to provide search facilities, a user-friendly navigation system, and the use of complementary online reference resources, such as dictionaries or a thesaurus (Ashcroft & Watts, 2004). Before long, it is expected that an e-book will be read via television if, accompanied with an Internet service.

2.3.3 Price Validity

Purchasing an e-book, that is, to download from the provider implies is far more economical than traditional printed books for those who own a personal computer, mobile phone, or smartphone. Even today, the publication and distribution cost of e-books is getting lower than those for the equivalent traditional printed material and in fact, as to the price of an e-book recently researched, it shows only a 40 to 60% price compared with what printed book was valued. Amazon.com, one of the first major companies to sell goods over the Internet manages its subsidiary e-book store named 'Mobipocket' (<http://www.mobipocket.com>) with more than 40 thousand titles available.

2.3.4 Convenience & Portability

e-books are carefully prepared to maximize the reading experience. Because it is believed that the convenience and portability of an e-book should match or exceed that of the conventional paper medium, the electronic devices for an e-book continue to focus on the handheld computer or device as the best choice.

2.3.5 Rapidity

An e-book is delivered almost instantaneously. It can be purchased, downloaded and began to be read within minutes, without leaving a chair. In addition, readers don't have to go to a bookstore to buy books, nor wait for days, weeks and sometimes more for them to arrive in the mail.

2.3.6 Storage

e-books take up less space. Readers practically don't need any space to store them. It is possible to imagine that they don't need a library or a room for e-books. Readers can store hundreds and thousands of e-books on their computers or e-book reader devices according to their need and interest.

2.3.7 Interaction

e-books can be interactive and mostly contain audio, video, flash and animations, which can enhance the message that the author is trying to convey.

2.3.8 Printability

e-books can be printable, so that if readers wish to read an e-book in the traditional way, they can very inexpensively print it with home printer or at any printing shop.

3. Research Method

3.1 Research Questions

This study is a case study which was focused on Korean EFL elementary school students. In English reading class, students were allowed to use freely linked audio files to a text or a word, and they were able to select to listen to the particular part which they wanted to practice, narrated by an English native speaker. Compared with reading paper-based materials, an e-book reading has various advantages, thus the goal of this study is to discover EFL elementary school students' responses using an e-book. The research questions in this study are as follows:

1. In which ways reading an e-book reading contributes to increasing students' vocabulary knowledge?
2. How an e-book reading lead to a positive attitude and motivation toward reading books written in English and English learning?

3.2 Research Subjects

To answer these questions, a total of 62 participated in this study who were sixth grade ELL students. The research site was a public elementary school located near Northern Kangwon Province, South Korea. Participants were, at the time of the study in 2010, approximately 12 years old, and according to the personal information survey, they were of basic and intermediate level in English without any experiences living in an English speaking country. The reading class was carried out twice per week for ten weeks. To 62 participants, reading an e-book was proposed to be a possible solution in ELL learners who have difficulty and apathy to reading or a lack of interest in English written texts at elementary school level. Therefore, in that respect, what should have been considered first, was how to choose proper reading materials for them, as Nuttall (1996) proposed the 'SAVE' theory in doing that as following: 1) Short, 2) Appealing, 3) Varied, 4) Easy.

Because this study was designed for elementary school ELL students, SAVE theory was more highly valued in that almost all of the young learners tend to read short and easy materials for continuing reading, otherwise they are likely to lose interest and desire to read books. And as an application, a website for reading e-books (<http://storytimeforme.com>) was selected, and a book list was originally made on the basis of average vocabulary which was composed of 400-700 letters. Selected books were mainly fairy tales and fables which were helpful to students of basic English proficiency.



Figure 1. A screen shot of the website of story time for me

3.3 Research Instruments

In the present study, there are two distinguished figures: one is that what students are reading is not paper-based, but e-books which are designed to be online-based, and the other is that all the pre- and post- test and survey questionnaire were conducted online mainly using the Internet. During the experiment, students were encouraged to read e-books from <http://storytimeforme.com>, which appealed their level and interest. All of the students took the pre- and post- vocabulary tests and the survey questionnaires on the effect of an e-book and the change of affective factors.

3.4 Data Collection

To ascertain that an e-book reading contributes to increasing vocabulary knowledge and eventually leads to

comprehension of the given texts, students were given two vocabulary tests as a pre- and a post-test at the start and end of the course, which the researcher developed using Hot Potatoes (version 6)¹ as an online application test, not a paper-based one. The main purpose for this test was to see how much student's vocabulary had increased by the end of the course, because a vocabulary enhancement is to encourage reading a large amount of comprehensible text, and to build confidence, enjoyment and interest for further reading. Tests measuring vocabulary for reading comprehension were administered with 30 multiple questions in total.

And to see the extent an e-book reading can influence on affective factors, like motivation and attitude toward reading and English learning, survey was conducted two times as a pre- and post-survey, consisting of 5 contents (20 questions in total) with a Likert scale, ranging from 1 (Strongly disagree) to 5 (Strongly agree). The students were asked to respond to the items of the questionnaire sincerely, based on what they had done while reading. All the data were automatically collected on SurveyMonkey after students had finished the questionnaire and sent it. Figure 2, shows how easily the data was collected, and that there was no necessity for the researcher to pass and withdraw the printed questionnaire, thus wasting a lot of time.

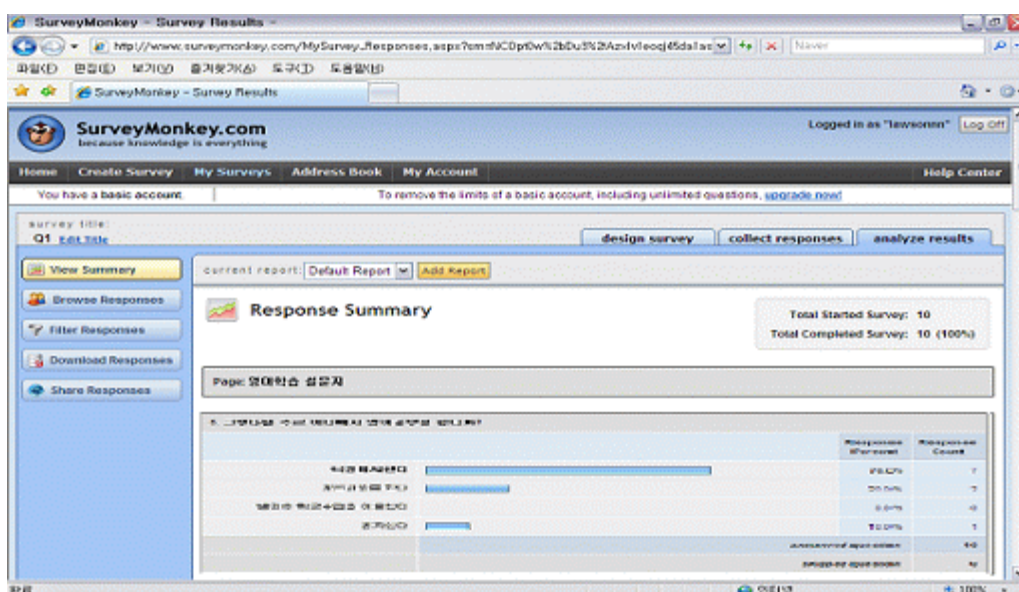


Figure 2. A screen shot of the online survey using Surveymoney.com

3.5 Data Analysis

Two vocabulary tests which were applied analyzed using a statistical analysis method (e.g. a repeated measure ANOVA and a paired-sample t-test). And two surveys on affective factors in English learning with an e-book were analyzed with Likert scale (1-5), and each scale was converted into one point, and then the score was compared.

4. Results and Discussion

4.1 Pre/post Vocabulary Test

During the research period, pre-and post-vocabulary tests were conducted to monitor the vocabulary improvement. In total, 30 words (half in the main texts and half in other source) were selected to take a test to measure how much the vocabulary had been enriched at the end of the study. Figure 3 shows the mean score of the two tests. As the result indicated in figure 3, there was evidence for the efficacy of an e-book reading

¹ Hot Potatoes is a suite of educational tools to create interactive web-based activities for self-assessment purposes. (<http://hotpot.uvic.ca>)

instruction. With the increase of the mean score, this result can be deducted that an e-book reading with a program-external glossary led to the increase in vocabulary. Moreover, an interesting vocabulary test using drag and drop and inserted pictures can be used as partial evidence for the vocabulary improvement, since it facilitates learning with rousing the students' interest and giving instant feedback and information.

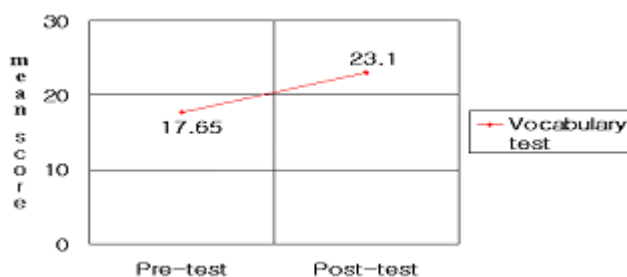


Figure 3. Changes of mean score with two vocabulary tests

4.2 Affective Factors with an e-book

In support of the research, a survey regarding affective factors was conducted at both the beginning and the end of the study. The aim of this survey was to gather students' awareness of an e-book reading and their perspectives, and to find out whether they do actually use them in learning English. The results revealed that nearly 80% of participants showed their interest in learning English with an e-book. It was notable that functionalities of an e-book, such as flash animation and sound effect could make it possible to become engaged in the reading process. In addition, their interest and concern consequently led to the increase of vocabulary and brought a positive effect to reading, communication, and English learning.

In the second part of the survey, 90% of the respondents stated that using an e-book is effective in reading comprehension and to promote reading while 72% of participants answered that the main reason to read an e-book was for practicality and functionality. For specific information, it could be read immediately without waiting for a printed book to be delivered, and an e-book was more easily updated and upgraded. Additionally, because it was more portable, it was possible to have quick and easy access to hundreds of books on desktop computers, notebooks or e-book readers. Regarding e-book's functions, students had an individual taste. The result revealed that 35% thought highly of interaction, which was a huge benefit that an e-book offered over traditional print. Another 28% mentioned that multimedia in an e-book could facilitate learning and arouse interest for reading. In fact, it is impossible to get more interactive and visual than the allowance of movie clips in an e-book, and sound can be used for several key pedagogical benefits. Students can play back the reading as they read a passage of text and practice pronunciation.

To sum up, the students' awareness of an e-book reading enhanced their reading ability and with increased vocabulary power, they were able to write online book reports in more detail. In addition, not only the ability of speaking was remarkably elevated, but confidence and also the interest in English learning was increased.

5. Conclusions and Implications

This study is designed to investigate elementary school students' response using an e-book with regards to vocabulary increase as well as the change of affective factors. In this study, sixty two Korea EFL elementary school students were given ten-week periods of instruction with online materials on the Internet. To assess students' vocabulary ability, pre- and post-tests were conducted with 30 questions. Pre- and post-surveys as well as classroom observations were administered to see the changes of affective factors.

5.1 Progress in Vocabulary Knowledge

It has been reported that expanding vocabulary helps reading comprehension, and students can benefit from

increased access to e-books, when exposed to numerous suitable reading materials. By reading e-books, students can build their vocabulary, choose online materials that fit their own level and pace, and read and discuss novels, short stories, and one page summary.

Moreover, students were encouraged to enhance word power, by doing post reading activities. This led to increased active vocabulary, and they learned to express ideas and thoughts freely in written English, gain confidence in writing and making themselves understood. An increased vocabulary not only improves overall academic aptitude, reading comprehension, critical thinking and problem solving skills, but also triggers their imagination and expose them to new experiences and concepts.

Students were also motivated while reading e-books that were relevant to their interests and issues. They also could follow highlighted text as it is read by a narrator in digitally recorded speech. Later, by developing vocabulary and background knowledge, they became willing to read for themselves, resting comfortably in the knowledge that they were able to hear every word with a simple mouse click.

5.2 Changes of Affective Factors

According to the pre- and post- survey on the change of affective factors, the results reveal that reading an e-book made it possible to have intention, to rouse interest and motivation, to gain confidence and enthusiasm for further reading and for studying English or English written books. It has also improved students' reading achievement and comprehension and attitude toward reading can be promoted when they are allowed to read an e-book which is suitable for their level and interest and are encouraged to get an e-book instruction.

It is therefore, probable that students, by reading an e-book, were able to advance their vocabulary power, background knowledge, interest and motivation, as well as the ability to accurately identify words. Due to these factors, they gradually had the preference for an e-book. But for the advantages of an e-book, it was impossible for young learners to support beginner reading skills, build fluency and vocabulary, and increase comprehension.

Consequently, a positive attempt and impact on the students who participated in the innovations using an e-book, could increase confidence and self-esteem, improve group-working and co-operative skills, enhance achievement, and eventually influence their further reading and English study.

5.3 Implications

Previously conducted surveys and research indicates that young students are likely to use digital format, compared to the sole use of paper-based materials. Therefore, for many educators concerned about reading achievement with young ELL learners, an e-book instruction is to become a part of the solution. Getting to know an e-book enables students to get involved in reading, to have motivation, interest and a desire for further study. Another significant reason why an e-book needs to be focused in foreign language class is that it helps to enhance four skills in learning a language in particular. An e-book provides a wealth of authentic written, audio and video material which might be of personal or professional interest to students. E-books can be exploited in the EFL classroom, not only to provide practice in the receptive skills but also to stimulate the productive use of language.

In reading and writing, for example, an e-book supports a dual language menu which provides texts, audio, video, and other materials in native language and another language. An e-book can subsequently take advantages of the bilingual skills of students and encourages bilingual students to use their bilingual reading and writing skills to contribute to the overall effort. It is also applied to young learners who are monolingual and start to learn a second language. All students, regardless of English proficiency will be encouraged to make contributions. Music clips and sound effects in an e-book are other good factors to exert a favorable influence on reading, since students are likely to get involved in reading and have less tediousness than printed material.

In listening and speaking, on the other hand, an e-book also contains a distinctive feature. Because an

e-book is designed solely on the basis of the Internet with diverse multimedia functions, it can be strongly utilized in interactive learning. An e-book provides a motivating learning atmosphere with students, and audio and video clips inside an e-book can be played as much as possible. Students can practice their pronunciation using audio and video clips, as the need arises. In addition, students can work at their own pace and have an opportunity to hear a wide variety of English forms. With the external links, it is easy to find a vast array of timely, authentic materials for further reading. It is possible for them to visit authentic sites to discover activities related to reading passages, or to make recordings and post them on a web page after reading in class.

Derived from the popular interactive Adobe Flash®, most e-books are easy-to-use and interactive, despite the scope for improvement. As an e-book combines communicative activities with skill-building exercises in listening, speaking, reading, writing, plus grammar to boost students, educators and instructors will be very much encouraged to use it in class.

For future study, more research needs to be undertaken on the educational value of an e-book, which can easily be pulled together by many users. At present, there are copious quantities of e-books freely available on the Internet, yet despite the rapid IT development, few teachers feel comfortable or believe they have the time to delve into the Internet to support their teaching and improve students' learning. It is thus expected for teachers to have a research and training course, in order to recognize the wealth of e-book resources available and how to apply and embed them successfully in their classroom teaching.

Specific times in the school curriculum should then be devoted to pleasure reading of an e-book or its related contents and time must be set aside to develop students' motivation and to turn them into independent learners. It is also required to consistently support the use of an e-book in class so as to aid students to learn. In the end, more research should therefore be done to determine whether the findings of this study are generalizable to other learning levels or environments, especially in an EFL situation such as Korea.

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