"E-book flood" for changing EFL learners' reading attitudes [*]

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Abstract: This paper was intended to investigate the effects of using e-books (or texts with multimedia support) in an ERP (extensive reading program) on EFL (English as a foreign language) learners' attitudes toward reading in English. In a junior high school in northern Taiwan, 109 students from 3 intact classes were recruited in the 10-week ERP of e-books. Each class was introduced to a list of 140 selected e-books for the reading program; each student was then encouraged to read e-books after school, with the target of reading 4 e-books every week. The degree of changes in reading attitudes was assessed by using the reading attitudes scale (Stokmans, 1999) before and after the e-book ERP. In addition, the teacher's class notes of the students' reading behaviors and reactions as well as their spontaneous oral or written feedback were analyzed to be triangulated with the quantitative data. The results showed that the e-books had positive effects on the students' attitudinal changes in all dimensions of reading attitudes, namely, utility, development, enjoyment and escape, as well as in all the cognitive, affective and conative components. The results also showed that the features of the e-books, especially oral reading, highlighting, animations and music/sound effects, were considered important to change their attitudes. The implementation of interaction and learner control in the e-books guaranteed positive attitudinal changes as well.

Key words: e-books; EFL reading; extensive reading program; reading attitudes

1. Introduction

In the Internet era, students' high computer literacy and keen interest in multimedia have inspired language teachers to consider the possibility of converting their traditional teaching setting into the e-setting which students are constantly exposed to (Chu, 1995). Teachers are further encouraged to use the computer technology as an intervention strategy to reverse students' negative attitudes toward reading in a foreign language (Adam & Wild, 1997), and the appearance of texts with multimedia support or e-books may account for the changes. The main reason that e-books changed the nature of reading (Matthew, 1996) lies in multimedia features, such as oral reading, highlighting, animations and music/sound effects, all of which are impossible with printed ones (Adam & Wild, 1997). The audio element particularly has been emphasized and advocated to be integrated with the reading input (Davis, 1995; Day & Bamford, 2002; Fry, 1991; Janssens, 1977; Labbo, 2000; Underwood, G. & Underwood, J., 1998; Williams, 1986), for the combination of audio-visual can not only offer students a welcome change from routine lectures in the classroom, but also arouse their interest in learning various types of knowledge. However, the effects of e-books in an extensive reading program are not yet confirmed in an EFL (English as a foreign language) context.

The motivation of this study is to find a way to utilize e-books effectively, with the aim of reinforcing

students' reading attitudes. To achieve this goal, a literature-based reading program (Chu, 1995) is employed to encourage students to read, to spend more time reading, to foster the love of reading (Gambrell, 1996), and to develop the habit of reading in the long run (Adam & Wild, 1997; Hafiz & Tudor, 1989). The positive effects of an ERP (extensive reading program) have been widely recognized. Researchers also intuitively claimed that e-books are good for outside reading (Anderson-Inman & Horney, 1999), and other forms of reading materials, for example, highly interactive audio or digitalized text, should be adopted to provide students with multiple input (Hafiz & Tudor, 1989). E-books, therefore, are potentially-suitable materials in an ERP. With e-books as a new medium in an ERP, the purpose of this study is to see if e-books can affect EFL learners' reading attitudes.

2. The e-book ERP

An ERP has been recognized as one of the most effective ways to enhance reading in reading comprehension and reading rate (Asraf & Ahmad, 2003; Davis, 1995; Elley & Mangubhai, 1983; Hafiz & Tudor, 1989; Hitosugi & Day, 2004; Mason & Krashen, 1997). E-books as well have proved particularly beneficial to young learners with reading difficulties (Chera & Wood, 2003) in supporting the developing literacy in children with reading difficulties (Labbo, 2000), helping them improve reading comprehension (Doty, Popplewell & Byers, 2001), enhancing their phonological awareness (Chera & Wood, 2003), and encouraging reluctant students to read (Adam & Wild, 1997). Nevertheless, not every study of ERPs or e-books has positive results. The main reason lies in the way ERPs are implemented and e-books are utilized. Looking into the characteristics of successful ERPs, Slatin's (1990) using-browsing distinction is, therefore, necessary. To sum up in Green's (2005) words, in this study, the way of implementing e-books as a new medium in an ERP is to follow the way of introducing "extensive reading within the purposeful interactive framework of the task-based language curriculum" (p. 311).

2.1 Characteristics of successful ERPs

The characteristics of successful ERPs are discussed from three aspects, including the central philosophy, suggested material and specific principles, based on the previous studies with positive results. ERPs with emphasis on extrinsic motivation, excessive reading or comprehension tests inevitably result in students' loss of pleasure in reading as well as desire for reading.

ERPs must be able to stimulate students to read, to keep them reading and to induce them to read in large quantity; therefore, the philosophy underlying ERPs lies in the word, "enjoy" (Bamford & Day, 2004, p. 5). Williams (1986) believed that, in ERPs, what students read does not matter much as long as they enjoy reading and the only way to learn to read is through reading. Asraf and Ahmad (2003) further pointed out that, only when students read more will reading become easier. By encouraging students to read more to make reading easier, the ultimate goal of ERPs to develop reading habits and to encourage a liking of reading (Yamashita, 2004) can be achieved.

In terms of the material in ERPs, students should be able to freely select from an ample supply of short, easy and interesting books. Ivey and Broaddus (2001) found that students were motivated by "finding good materials to read and having choice in the selection of these reading materials" (p. 361). Also, books used in ERPs must conform to students' "reading comfort zone" (Day & Bamford, 2002, p. 137). Books with more than 2% of unknown words may be too difficult for students to do ER (extensive reading) and enjoy reading (Chera & Wood, 2003), while the use of books ranging from "i-1" to "i+1" (Yamashita, 2004) can bestow the privilege of book-choosing on students with different proficiency levels. In addition to difficulty levels of books, students must also be provided with a wide range of books in terms of genres and contents.

Williams presented his pioneering top 10 principles to reading teachers in 1986, which later on inspired Fry (1991) to edit a book of various top 10 principles for teaching reading and also encouraged Day and Bamford (2002, 2004) to present their own versions of top 10 principles for the context of ER. Although their principles are slightly different, resulting from personal adjustments to time periods or teaching contexts, most of the basic rules are well-accepted. For example, the use of easy reading materials, providing a large variety of materials for students to choose from, considering reading as its own reward, and the spirit of pleasure reading are important principles in ER. All of the principles give a definite direction to those who want to implement ERPs; following these principles also guarantees success of ERPs. In addition, Day and Bamford (2002) proposed the use of tasks. During the process of reading, teachers can monitor and keep track of what and how much students read with activities rather than tests.

In this present study, almost all of the principles proposed by Day and Bamford (2002) were incorporated into this e-book ERP. The teacher provided the participants with easy e-books with different genres and topics to choose from, encouraged them to read extensively by emphasizing the philosophy of pleasure reading, individualized reading by using computers as the medium and guided them to read as the role model of a reader.

2.2 "Using" not "browsing" the Internet

Slatin's (1990) using-browsing distinction of reading online reminds teachers of the importance of assigning specific tasks to students, instead of allowing them to randomly browse. Reading online in the form of browsing lacks direction, which may result in students' fatigue and boredom in reading pretty soon, so by providing students with a reading task, they have a clear goal to achieve in their mind and then they are likely to be really using the resources on the Internet. This concept was adopted in the e-book ERP by encouraging participants to achieve the goal of finishing 40 e-books and to participate in class discussion.

3. Methodology

The research design of this study was a 10-week ERP of e-books; the teacher asked the students to spend one hour to finish 4 e-books a week from a collection of 140 online e-books. For active participants, they were encouraged to read more. In addition to reading e-books, the participants were invited to take part in a 10-minute oral discussion in class every Monday about what they read and what they liked in the previous week.

Three intact 9th-grade classes in Northern Taiwan were recruited. The total number was 109, with 52 boys (47.7%) and 57 girls (52.3%). They were at the ages of 14-15, and the size of their English vocabulary was around 750 words. Their English proficiency was in a bimodal distribution, and so was their attitude towards reading in English. Except for the textbooks, most rarely did any outside reading in English and were unwilling to do so.

In the study, 140 e-books were selected from 9 websites: AndersenFairyTales.com, Award winning children's storybooks, BBC, Clifford Interactive Storybooks, Grimm Fairy Tales.com, Kizclub, Peter Rabbit, Primary Games.com and Starfall. They are multimedia-supported, in a wide range of choices in terms of their levels, genres and features. They were categorized into 5 genres: stories, nonfiction, fairy tales and fables, poems and plays. Their multimedia features, including highlighting, oral reading, animations, music/sound effects and pictures, are presented on a list for participants to refer to when choosing an e-book to read.

The instruments used to collect data in this study are Stokmans' (1999) reading attitude scale as the quantitative data and the teacher's class notes of participants' reading behaviors and responses as well as their spontaneous feedbacks as the qualitative data.

4. Results and discussion

4.1 Results of the reading attitude scale

The reading attitude scale was used as the pre-test and the post-test to examine whether there was any significant attitudinal change of reading in English. A paired-sample t-test was performed (see Table 1), whose results show that the participants had significant positive changes in all aspects of reading attitude.

Table 1   Results of the reading attitude scale

Items	Pre-test		Post-test		t
	Mean	SD	Mean	SD	
Utility	17.17	2.805	19.01	2.339	7.455**
(1) In my opinion, English book reading is useless.	3.22	0.672	3.49	0.502	4.290**
(2) If I want to succeed in society, I have to read a lot of English books.	2.80	0.717	2.96	0.732	2.332*
(3) I do not read English books to improve my ability to converse about particular topics.	2.43	0.762	2.77	0.702	4.106**
(4) By reading a lot of English books I can improve my ability to comprehend difficult texts.	3.14	0.700	3.39	0.651	3.405**
(5) Reading English books increases my knowledge of the meaning of words.	3.15	0.718	3.50	0.571	4.606**
(6) Sometimes I read English books to improve my writing style.	2.44	0.751	2.90	0.666	5.334**
Development	16.90	3.040	18.23	2.391	4.992**
(7) I do not learn anything by reading English books.	3.51	0.603	3.61	0.489	1.734
(8) I read English books to find out more about matters that interest me.	2.71	0.724	2.91	0.688	2.626**
(9) English book reading is of importance in molding an individual's personality.	2.46	0.834	2.64	0.687	2.408*
(10) English book reading helps me to form an opinion about different issues.	2.79	0.746	3.08	0.611	3.903**
(11) English book reading improves my self-knowledge.	2.59	0.796	2.94	0.705	4.114**
(12) English book reading is a way to learn about other people's customs and practices.	2.84	0.772	3.04	0.607	2.635**
Enjoyment	14.72	2.937	16.60	2.925	6.900**
(13) Reading English books is generally boring.	2.87	0.862	3.43	0.583	6.837**
(14) Reading English books is an exciting pastime.	2.23	0.675	2.66	0.710	5.023**
(15) My imagination is barely if at all stimulated by reading English books.	1.94	0.650	2.39	0.782	5.058**
(16) When reading an English book, I enjoy identifying with a character in the book.	2.33	0.806	2.65	0.725	4.113**
(17) I enjoy daydreaming about the things I have read.	2.66	0.819	2.70	0.822	0.476
(18) I enjoy transporting myself mentally into another world I have read about.	2.69	0.813	2.76	0.732	0.985
Escape	11.64	3.167	14.85	3.234	9.814**
(19) When I am bored, I read an English book.	1.99	0.616	2.49	0.675	6.983**
(20) I often read English books to kill time.	1.83	0.586	2.32	0.637	6.532**
(21) I often read English books when I have nothing else to do.	1.86	0.600	2.37	0.619	7.236**
(22) Reading English books helps me to momentarily forget my worries.	2.07	0.778	2.70	0.752	7.233**
(23) By reading an English book, I can briefly escape from the drag of daily routine.	2.09	0.752	2.64	0.739	7.409**
(24) I often read an English book when there's nothing interesting on TV.	1.79	0.625	2.34	0.710	7.526**
Total	60.44	9.229	68.69	8.724	10.398**

Notes: (1) N=109; *p<0.05; **p<0.01; (2) Items 1, 3, 7 and 13 with negative description had been reversely scored.

The gain of the total mean score after the intervention is significant (t=-10.398, p<0.01) with the total mean score clearly increased by 8.25 while the SD (standard deviation) decreased at 0.505. Breaking down the grand mean into 4 dimensions, utility, development, enjoyment and escape, all showed significant difference in gains between the pre-test and the post-test at the increased value of 1.84, 1.33, 1.88 and 3.21 respectively. These figures further showed that the participants changed positively in every aspect of their reading attitude. Utility and development, related to personal beliefs about the usefulness and helpfulness of English books, received higher mean scores than enjoyment and escape. However, enjoyment and escape received low mean scores in the pre-test but increased enormously in the posttest, especially the dimension of escape. The results, in general, show that the participants not only think e-books are useful and helpful, but also begin to enjoy reading English books and further develop English reading habits.

When each item was carefully examined, most of them (79.16%) achieved the significant confidence level at 0.01, except for items 2, 7, 9, 17 and 18. This again confirms the participants' positive attitudinal change towards reading in English with the help of e-books. Moreover, in terms of 2 and 9, a substantial improvement was detected (p<0.05). As for items 7, 17 and 18, although not significantly different, they increased positively as well. The gain of item 7 was only 0.1, but it is noteworthy that its mean scores in both the pre-test and the post-test were the highest among all of the items. With regard to items 17 and 18, these 2 items seem to be strongly or directly connected with personal traits, which may not be easily or enormously changed within a short time.

4.2 Results of the class notes and spontaneous feedback

When the participants were reading e-books, the teacher observed their behaviors and reactions, and took notes. During the 10-minute discussion every Monday, she asked questions related to the e-books to stimulate them to read more and encourage them to share what they learned and what they thought of reading in English. The questions include their favorite e-books and features, the decisive reasons for choosing an e-book to read, their perceived progress of reading in English and their feelings about this reading program. The e-books they mentioned in the discussion of their favorite e-books were those with interesting and impressive content or those with well-designed features, such as interactive games, memorable songs and vivid animations. They also enjoyed the e-books with clear themes and target sentence patterns so that they could easily learn from reading in English. As for the features, they favored oral reading and animations most. When it comes to selecting an e-book, many of them would choose one with oral reading and animations. Some of them preferred stories, fairy tales or fables with moral, some of them would consider difficulty first, and the others would choose one with an attracting title. In terms of their opinions about reading in English, they thought their English had improved in all 4 skills, for the e-books trained their listening, speaking, reading and writing abilities simultaneously. Moreover, they felt happy and easy about participating in this reading program. They went to the computer classroom earlier than they were required, with smiling faces and apparent excitement. When they read, they got totally involved in the e-books by reciting the text, laughing at funny animations and sharing opinions with their peers from time to time.

As for the participants' spontaneous oral feedback, it happened in natural settings of casual chatting, not planned beforehand as a formal interview. It was usually initiated by the participants when the teacher had lunch with her students in the classroom. Most of the participants expressed their liking for English e-books and some of them told the teacher that they enjoyed reading e-books as a pastime at home. They said that this reading experience was brand-new, interesting and exciting, which changed their opinions and attitudes about reading in English. Many of them perceived that they became more confident and interested in English and those who used to be afraid of reading in English were no longer so. Lower-proficient participants were surprised to find that they

could also understand some part of the text, which was quite encouraging to them. Few of them mentioned that they felt uncomfortable without Chinese translation at the beginning of the reading activity, but later on, they felt easy in trying to guess the meaning of unknown words from the context or with the help of animations.

4.3 Discussion

As the results showed, the participants' attitudes were different and the changes were obvious. It is encouraging that all scores of the 4 dimensions, utility, development, enjoyment and escape, increased at a significant level. From another viewpoint about reading attitude (Yamashita, 2004), it can also be detected that the participants had a positive change in terms of all the 3 components, cognitive, affective and conative aspects. Cognitively, they believed that English e-books were beneficial for them and they had the desire and ambition to keep reading. Affectively, they regained their confidence as well as interest in English and they began to love reading in English as a pastime because of these English e-books. Conatively, they took actions by spending their free time reading these English e-books and started to develop a reading habit to do outside reading in English at home by themselves regularly with an increasing amount of reading. As Anderson-Inman and Horney (1999) suggested, e-books are particularly good for outside reading.

How the attitudinal changes happened was observed in 3 aspects. Cognitively, not many of the participants initially believed that English books were a must for them to be successful in society or to improve their self-knowledge; that is, they did not highly value English books in terms of the dimensions of utility and development. However, after the 5th week of the experiment, they found that they could learn not only English but also knowledge, common sense and moral, which gradually convinced them of the usefulness and helpfulness of English books. Affectively, novelty of e-books, in the beginning, did arouse their curiosity in e-books and enhance their interest in reading in English, but as time went by, passion for e-books gradually faded away, which was later on replaced by the sense of achievement whenever they learned something, comprehended the text, finished an e-book or achieved the weekly goal of reading 4 e-books. Finally, they could really appreciate the fun of English reading and enjoyed reading English e-books as their pastime at home. They were willing to squeeze out some time from their busy schedule to read English e-books for fun and for learning, which can be regarded as manifestation of the dimension, enjoyment. Conatively, some of them had the experience of reading English e-books at home voluntarily. They told the teacher that reading e-books helped them escape from the reality and forget unpleasant things in life, which was identical to the dimension of escape. They also strongly expressed their hope that this e-book ERP could be extended longer, and then it might be possible that most of them would develop habits of reading in English at the end. As Adam and Wild (1997) and Hafiz and Tudor (1989) believed, outside reading can help the development of automatic reading habits.

The main reason why the participants had positive attitudinal changes is because of the unique nature of e-books. First of all, e-books should be read on computers, and using computers already implied excitement and novelty to most participants. This anticipation and impression made them willing to get involved in the e-book ERP before it really began and when it was being conducted. This phenomenon was in line with what Janssens (1977) claimed, a change from routine lectures in the classroom was welcome to students and could therefore arouse their interest in learning. Second, e-books consist of different features, which were not only interesting but also helpful to the participants. Through reading these English e-books, they learned beyond English with the help of the features. They easily learned from reading enjoyably, so it is predictable that they had a positive attitudinal change. Third, e-books are relatively short, compared with authentic English novels or graded readers, so they could finish one e-book within 10 minutes. For most of them, this was a great achievement and encouragement,

especially for those with lower proficiency, who had never imagined that they could finish one English book within such a short time.

The top 10 principles for implementing ERPs also contributed to the success of this e-book ERP. It can be discussed in 4 areas: materials, the reading activity itself, readers and the teacher. First, the teacher provided a list with features. With this list, the participants could easily find the e-book they were interested in and linked to the web page. As for the reading activity itself, it was purposeful, task-based and interactive, its purpose was related to pleasure, information and general understanding, as Williams (1986), and Bamford and Day (2004) suggested. The primary activity was the participants' reading texts individually without other additional exercises or practices. Reading is its own reward, but in order to encourage them to read more in their tight schedule, the teacher adopted Hitosugi and Day's suggestion (2004) of giving extra credit to them. As readers, the participants were free to choose what they want to read, read as much and fast as possible and needed to use their ears and eyes at the same time. They liked the way of implementing the e-book ERP free from pressure, limitation, tests and post-reading activities. As a teacher, she learned to be quiet to be a role model of a reader in class, but oriented and guided them when they encountered problems or difficulties in reading.

In addition, the amount of reading also plays a role in the attitudinal change. According to Asraf and Ahmad (2003), the more one reads, the easier reading becomes. In this present study, the participants also had such an experience as the reading program moved on. They found that the more they read, the more they learned; the more they learned, the more confident they became. It was more likely that they would enjoy reading in English and develop lifelong reading habits (Adam & Wild, 1997; Gambrell, 1996; Hafiz & Tudor, 1989). The process of reading, thus, can be concluded with the following 4 dynamic stages: read increasingly, read easily, read happily, and finally, read regularly.

5. Conclusion

This study investigates the effects of e-books on EFL high school students' attitude towards reading in English and bears two central findings. One is that e-books can effectively reinforce EFL learners' attitude towards reading in English; the other is that the features of e-books, such as oral reading, highlighting, animations and music/sound effects, may reinforce their reading attitude. For those who are interested in further exploring this issue, suggestions are given as follows. First, it is strongly suggested that a longer span of experiment, at least one year, should be conducted to examine the long-term effects of e-books on students' attitude towards reading in English. Second, the role of proficiency in determining the effects of e-books on reading attitude may be a topic worth exploring. Finally, what features of e-books can facilitate learning of certain aspects of languages is an issue requiring further investigation.

References

Adam, N. & Wild, M. (1997). Applying CD-ROM interactive storybooks to learning to read. *Journal of Computer Assisted Learning*, *13*, 119-132.

Anderson-Inman, L. & Horney, M. A. (1999). *Electronic books: Reading and studying with supportive resources*. Retrieved March 14, 2008, from http://www.readingonline.org/electronic/elec_index.asp? HREF=/electronic/ebook/index.html.

Asraf, R. M. & Ahmad, I. S. (2003). Promoting English language development and the reading habit among students in rural schools through the guided extensive reading. *Reading in a Foreign Language*, *15*(2), 83-102.

Bamford, J. & Day, R. R. (Eds.). (2004). *Extensive reading activities for teaching language*. Cambridge, UK; New York: Cambridge University Press.

Chera, P. & Wood, C. (2003). Animated multimedia "talking books" can promote phonological awareness in children beginning to read. *Learning and Instruction*, *13*, 33-52.

Chu, M. L. (1995). Reader response to interactive computer books: Examining literary responses in a non-traditional reading setting. *Reading Research and Instruction, 34*(4), 352-366.

Davis, C. (1995). Extensive reading: An expensive extravagance? *ELT Journal*, *49*(4), 329-336.

Day, R. & Bamford, J. (2002). Top ten principles for teaching extensive reading. *Reading in a Foreign Language*, *14*(2), 136-141.

Doty, D. E., Popplewell, S. R. & Byers, G. O. (2001). Interactive CD-ROM storybooks and young readers' reading comprehension. *Journal of Research on Computing in Education*, *33*(4), 374-384.

Elley, W. & Mangubhai, F. (1983). The impact of reading on second language learning. *Reading Research Quarterly, 19*, 53-67.

Fry, E. (1991). *Ten best ideas for reading teachers*. Menlo Park, Calif.: Addison-Wesley.

Gambrell, L. B. (1996). Creating classroom cultures that foster reading motivation. *The Reading Teacher*, *50*(1), 14-25.

Green, C. (2005). Integrating extensive reading in the task-based curriculum. *English Language Teaching Journal, 59*(4), 306-311.

Hafiz, F. & Tudor, I. (1989). Extensive reading and the development of language skills. *English Language Teaching Journal, 43*, 4-13.

Hitosugi, C. I. & Day, R. R. (2004). Extensive reading in Japanese. *Reading in a Foreign Language*, *16*(1), 20-39.

Ivey, G. & Broaddus, K. (2001). "Just plain reading": A survey of what makes students want to read in middle school classrooms. *Reading Research Quarterly*, *36*(4), 350-377.

Janssens, R. (1977). Stimulating motivation through audio-visual aids based on "English by radiovision". *English Language Teaching Journal*, *32*(1), 43-49.

Labbo, L. D. (2000). 12 things young children can do with a talking book in a classroom computer center. *The Reading Teacher*, *53* (7), 542-546.

Mason, B. & Krashen, S. (1997). Extensive reading in English as a foreign language. *System, 25*(1), 91-102.

Matthew, K. I. (1996). The impact of CD-ROM storybooks on children's reading comprehension and reading attitude. *Journal of Educational Multimedia and Hypermedia*, *5*(3/4), 379-394.

Slatin, J. M. (1990). Reading hypertext: Order and coherence in a new medium. *College English, 52*(8), 870-883.

Stokmans, M. J. W. (1999). Reading attitude and it is effect on leisure time reading. *Poetics*, *26*, 245-261.

Underwood, G. & Underwood, J. D. M. (1998). Children's interactions and learning outcomes with interactive talking books. *Computers Education, 30*(1/2), 95-102.

Williams, R. (1986). Top ten principles for teaching reading. *English Language Teaching Journal, 40*, 42-45.

Yamashita, J. (2004). Reading attitudes in L1 and L2, and their influence on L2 extensive reading. *Reading in a Foreign Language, 16*(1), 1-19.

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