

Collaborative Mobile eBook Reading for Struggling EFL College Readers

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Abstract

Background: Mobile e-books together with Blackboard LMS and Elluminate were integrated and used as extensive reading activities, i.e., as a supplement to in-class reading instruction. The aim of the activity was to develop EFL struggling freshman student readers enhance their reading skills through short, simplified e-books.

Materials and Methods: Two groups of freshman students participated in the study. The experimental group used extensive collaborative e-book reading activities whereas the control group read paper books of their choice on their own out of class. Students in the experimental group were divided into small groups and were assigned a free e-book. The e-books selected matched the students' proficiency level and interests. Each group read a chapter (2-3 pages) and had to write an outline and a summary and post them on the Blackboard Discussion Forum. Each group generated questions about each other's chapters. The questions had to ask about the topic, details, meanings of difficult words, pronouns and their referents and so on. The rest of the students had to answer the questions online, give feedback and comments on each other's posts, summaries, and answers. Discussions were held via Elluminate webconferences. The control group was given questions on paper to answer and discussions with the instructor were held in class.

Results: Post-test results showed significant differences between the experimental and control groups in their reading skill level. Experimental students made higher gains in reading skills. A post-treatment survey showed several factors that led to reading improvement such as student-centered activities, active participation and practice, interaction among the students, a secure environment for making mistakes, and instructor and peer support.

Conclusion: Extensive collaborative e-book reading activities in used as a supplement to in-class reading instruction proved to be effective in improving EFL freshman students reading skills.

Keywords: e-book reading, extensive e-book reading, collaborative e-book reading, EFL freshman students, Blackboard LMS.

Date of Submission: 20-11-2021

Date of Acceptance: 05-12-2021

I. Introduction

The Google Play and Apple Stores are loaded with educational Apps that can be used for developing students' listening, speaking, reading, writing, grammar and vocabulary skills in the second/foreign language (Al-Jarf, 2020; Al-Jarf, 2012). They also contain a multitude of e-books that students of all ages and proficiency levels can use to enhance their reading skills in the first (L1) and second language (L2). Due to the importance of e-books, numerous studies in the literature highlighted the benefits of using e-books in the foreign language context. For example, Wu (2016) indicated that learning English by reading articles on multimedia e-book devices can assist students in improving their vocabulary and in understanding the associations among words, textual meaning, and the organizational structure of the text. They strengthen students' language ability and reading comprehension and increase the effectiveness of their language learning. Chen, Chang, Wang & Jian (2018) added that effective reading strategies, such as using graphic organizers, answering question, and analyzing story structures can help students improve their reading comprehension skills.

In addition, numerous studies in the literature have shown that e-books engage students in extensive reading in the English as a foreign language (EFL) classroom. In Taiwan, EFL junior high school students participated in a 10-week extensive reading program using e-books with multimedia support, in which they were introduced to a list of 140 e-books. Each student read e-books after school, with the target of reading 4 e-books a week. Reading e-books had positive effects on students' attitudes towards reading in general, and the cognitive, affective and aspects of reading. Oral reading, highlighting, animations and music/sound effects were considered important for changing students' attitudes. Interaction and learner control of e-books contributed to the positive changes in students' attitudes towards reading (Lin, 2010). In another study, Taiwanese EFL

freshman students, enrolled in a semester-long literature-based course, read e-books in order to respond to literature rather than intensive academic studying. The students appreciated the intangible nature of e-books. They experienced meaningful reading through e-books and demonstrated improved attitudes towards e-book reading. However, they still considered e-book reading to be unpleasant (Chou, 2016; Chou, 2015). In a third study in Taiwan by Chen, Chen, Chen & Wey (2013), tertiary level EFL students read materials freely from three e-book library collections classified according to their difficulty level. At the end of the 10 week-practice, the students exhibited significantly better reading attitudes, reading comprehension and vocabulary knowledge than the control group that did not engage in any extensive reading activity.

In the USA, Isaacson (2017) divided high-intermediate ESL students into an e-book group and a paper book group. The majority of the students preferred e-books for learning over paper books although they never used e-books before. The researcher suggested that instructors provide e-book strategy lessons to students so they can understand e-books better.

At the University of Leicester, UK, Nie, Armellini, Witthaus & Barklamb (2011) incorporated e-book readers into two distance-taught master's programmes in Occupational Psychology and Education (TESOL) course materials. The students' learning experiences improved as a result of four key benefits of e-books: new strategies for reading the course materials, enhanced flexibility in curriculum delivery, improved efficiency in the use of study time, and cost.

In South Africa, the majority of students read faster on the iPad, but there were no significant differences between comprehension scores between the e-books and paper book groups. The authors concluded that iPad and e-books are suitable tools for reading and learning, and can hence, be used for academic work. They added that e-books can be introduced without assuming that reading performance and reading comprehension will be obstructed or delayed (Sackstein, Spark & Jenkins, 2015).

At an English Department in Kuwait, utilization of extensive e-book reading through downloadable reading Apps to EFL freshman students' e-devices accelerated their reading speed, probably because the reading App features helped the students practice reading faster. However, the students reported lower comprehension levels when reading from e-books and less positive attitudes compared to paper book reading (Akbar, Taqi, Dashti & Sadeq, 2015).

Moreover, some studies in the literature combined e-book reading with other technologies, resources, or activities. For example, students who employed a new e-book interface that features thinking maps and a question answering mechanism on the same page, acquired more vocabulary and understood the story structure better than students who did not. The thinking maps and question answering mechanism stimulated the students to reflect on the reading content and helped them understand the reading content more effectively (Chen, Chang, Wang & Jian, 2018). In another study by Wu (2016), an English-reading e-book system was integrated with a guidance mechanism that analyses students' learning profile and matches the text difficulty and relevance with their linguistic level. The proposed reading guidance mechanism proved to be effective in improving students' reading comprehension and reducing their reliance on the system's translation functions.

Studies by Kaban (2021) in Turkey, and Chen & Su, (2019) in Taiwan integrated Microsoft Teams and Moodle in e-book reading to facilitate and record peer-to-peer interactions during screen reading. The experimental group was more motivated and more engaged in the personalized e-book reading program and the personalized feedback that students received triggered more interaction. In Chen & Su's study, students who used an e-book reading system and a digital material delivery system embedded in Moodle called BookRoll, showed significant improvements in self-regulated learning and self-efficacy. Their gain scores were significantly higher than those in the control group. Online e-book reading behaviors such as attaching bookmarks, adding, and deleting markers, attaching, removing and editing memos, and slide switching (next, previous, jumping page) positively and significantly correlated with the students' academic achievement.

Similar results were obtained with international students in Japan who used a system called SCROLL to collect and analyze learning logs, to find out whether the system is effective in connecting the words learned from the e-Book with those learned in real-life, and which social network centrality was the most effective in enhancing learning in the seamless learning environment. The system helped increase the students' learning opportunities and find central words that connect e-book and real-life learning (Mouri, Uosaki & Ogata (2018).

An eye-tracking technology was devised for exploring the e-book reading behavior of advanced EFL students who read an e-book containing six types of multimedia supports: three micro-level supports for vocabulary learning and three macro-level supports for reading comprehension. The students read the e-book under two conditions: a simultaneous mode and a sequential mode. Results showed that when the students read for vocabulary learning, they fixated on vocabulary and glosses, but when they read for comprehension, they fixated more intensely on illustrations. There was a significantly higher total fixation duration on vocabulary when the digital content was incrementally presented to the students. Reading under the sequential mode, in which the digital input and supports were presented at the same time, guided L2 learners' focal attention toward micro-level supports that focus on background knowledge. On the other hand, under the simultaneous

presentation mode, in which the digital content and supports were incrementally presented, L2 learners seemed to divide their focal attention among both micro-level support that focuses on vocabulary and macro-level support that focuses on background knowledge (Liu, Liu & Chen, 2019).

Although e-books are widely used these days by the general population and students, Isaacson (2017) pointed out that many ESL institutions have not yet incorporated e-books into their college curricula, and there is lack of research on the potential effect of e-books on ESL reading comprehension and strategy use during reading. In Saudi Arabia, almost every student has a mobile device whether a smart phone, iPad and/or tablet, yet many students do not know how to take advantage of mobile apps in language learning, in general, and reading skill development, in particular. Many freshman students majoring in languages, translation, linguistics, or literature find reading and comprehension skills in English challenging to acquire due to their inability to comprehend and interpret ideas and information that are explicitly or implicitly stated in the text, and which may lead to demotivation and loss of interest in reading (Al-Jarf, 2019). In addition, there is insufficient research in Saudi Arabia that investigates the integration of e-books in EFL freshman reading instruction whether as an intensive or extensive activity. For these reasons, this study aims to explore the effects of using extensive collaborative e-books reading as a supplement to in-class reading instruction with discussions via Blackboard and Elluminate on EFL freshman students' reading skill development compared to students in a control group who have used supplementary paper books and class discussions. It also aims to find out freshman students' views on the benefits and shortcomings of e-books of as opposed to paper books in reading skill development and their attitudes towards using e-books.

Findings of the current study are beneficial to EFL college reading instructors in Saudi Arabia as e-books provide students, instructors in language, translation, linguistics and literature departments with an extra tool for reading instruction that can encourage and enhance students' reading skill in English. The study will show them how to locate e-books, how e-books can be integrated in EFL reading instruction for freshman students, examples of reading activities used with selected e-books, and will introduce them to an instructional strategy with e-books, in addition to the instructor's role in the Blackboard and Elluminate learning environments.

II. Subjects

Subjects of the present study consisted of 72 female freshman students majoring in translation at the College of Languages and Translation (COLT), King Saud University, Riyadh, Saudi Arabia. The students were enrolled in two sections (intact groups) of a Reading I course (4 hours per week) taught by the author. The students were concurrently taking Listening (3 hours per week), Speaking (3 hours), Writing (4 hours), Grammar (2 hours) and Vocabulary Building (3 hours) courses in EFL. The subjects were all Saudi and were all native speakers of Arabic. Their age ranged between 17-19 years, with a median of 18 years.

One section was assigned to the experimental group (35 students) that was exposed to an extensive collaborative reading activity using some e-books as an out of class activity, in addition to in-class instruction using the reading textbook assigned by the department. Students in the experimental group had no prior experience in reading mobile e-books in English.

The second section (37 students) was assigned to the control group which was exposed to the same in-class instruction using the same reading textbook assigned by the department and the same teaching hours. In addition, the control group read paper books of their choice at home on their own and answered some comprehension questions given by the instructor on paper, wrote a summary and/or an outline of the text they have read individually on paper with discussions held between the students and their instructor in class.

At the beginning of the semester, students in both sections were given the same pretest that consisted of a reading text followed by questions covering the reading skills to be studied in the assigned textbook. Results of the independent T-test showed no significant differences between the experimental and control groups in their reading scores before reading instruction began ($T = .37$; $Df = 77$; $P < .67$), i.e., no significant differences were found in the students' reading skill level.

Analysis of the students' responses to the pretest questions showed that students in both groups had many reading weaknesses in English. In general, they read slowly, had difficulty understanding the multi-paragraph text given, identifying the main ideas, topics, and important details, inferring the meaning of difficult words from context, understanding the organizational structure of the text, connecting pronouns with their referents, identifying the part of speech of some words in context, writing a summary and making an outline of the content of the text or parts of it.

III. In-Class Instruction

Students enrolled in the two sections of the Reading I course at COLT studied the same reading textbook titled *Interactions I: Reading* (Kirn and Hartman, 2013) for a whole semester (14 weeks). The

textbook is a process-skill book for elementary-level students. It consists of 10 chapters. Each chapter consists of four parts as follows:

1. **Part I:** Before You Read; Read; After You Read (Recognizing Reading Structure, Understanding the Main Idea; Answering Paragraph Questions with Details; Discussing the Reading).
2. **Part II:** Before You Read; Skimming, Underlining the Main Ideas; Matching Paragraphs with Given Topics; Learning to Summarize; Discussing the Reading; Talk It Over.
3. **Part III:** Vocabulary and Language Learning Skills: Finding Definitions of Vocabulary Items; Recognizing Words with The Same or Similar Meaning; Real-Life Reading; More Real-Life Reading.
4. **Part IV:** Personal Stories and Humor; Read Stories Quickly; Summarizing Main Ideas; Telling Their Opinions; Tell or Write Your Own Story; Reading Funny Cartoon, Telling the Point of Each Carton and Why It Is Funny.

As for reading assessment during the Reading I course, students in both sections were given two in-term tests and a final exam. The following skills were covered by the in-term tests: *Writing the topic of several paragraphs in the reading text; locating specific details in the reading text; inferring the meaning of some words in context; finding the referents of pronouns; writing a summary of the reading text or parts of it; filling out an outline of the whole text or part of it; classifying some vocabulary items in categories, identifying the part of speech of some words as used in the text etc.* Both tests were graded by the author and returned to the students with comments on strengths and weaknesses. Words of encouragement were written for each student on her answer sheet. Answers to the reading test were always discussed in class.

IV. Treatment

Students in the experimental group were divided into small groups. Every week or two, the students were assigned a free e-book to download from Google Play, and/or iPhone App Stores. e-books with a moderate difficulty level were selected by the instructor. The selected e-books matched the students' proficiency level and interests. Most e-books selected were self-help books to help raise students' self-esteem, positive thinking and life-skills not only reading skills. The students were allowed to suggest and select e-books of interest to them. Each group read a chapter (2-3 pages, not the whole e-book) out of class and had to make an outline and summarize the chapter in 10 points and post their answers on the Blackboard Discussion Forum as a small group. Each group was required to post questions about other groups' chapters. The questions had to ask about the topic, details, guessing meanings of difficult words from context, connecting pronouns with their referents, meanings of difficult words in Arabic and so on. They also had to answer comprehension questions. The rest of the students answered the questions online, read each other's summaries and outlines, gave feedback, and commented on each other's posts, summaries, and answers. The instructor and the students met weekly online using the Elluminate videoconferencing tool of Blackboard so that the student talk about what she read orally for 5-10 minutes. Oral discussions were held via Elluminate from home (See Images 2, 3, 4, 5 in the Appendix).

Students in the control group were asked to select paper books of their choice and read them individually, at home, on their own. The instructors gave them comprehension questions printed on paper which they answered at home individually. They had to write a summary of what they read and make an outline individually. The instructor and students answered the questions and held discussions together in class. No technology was involved. The students did not have a chance to read or comment on each other's books, answers, summaries, or outlines.

Throughout the semester, the EFL reading instructor served as a facilitator. To locate appropriate e-books, she searched e-book libraries such as *Aldikp Book Reader*, *Kindle*, *100,000 Free Books Wattpad*, *Kobo eBooks*, *50000 Free Ebooks*, *Goodreads*, *FBReader*, *Bilo eBooks for T-Mobile*, *e-book/Magna reader ebiReader*, *EbookStore4Me* (See Inage 1). She also searched the Google Play Store for e-books on the following themes: *Self-Mastery Books*, *Motivational and Self-Help Books Collection*, *Self Help Books*, *Self-Improvement for Success*, *What Every Leader Needs to Know*, *Change Your Thinking*, *Change Your Life*, *positive thinking strategies*, *The Power of Positive Thinking* and so on. Before assigning an e-book, the instructor read a number of e-books to assess their difficulty level and usefulness to the students. The instructor helped the students in searching and download the assigned e-book that met their needs, interests and matched their proficiency level. Students who did not possess a smart phone with an App store were allowed to download a version of the same e-book on their laptop from Google. In addition, the instructor randomized the members of the small groups for each e-book. She followed the students up to make sure they are making the best use of the e-books. She encouraged the students and gave extra credit for participating in the activities. She provided help with the Internet, Blackboard and Elluminate technical and connectivity problems.

V. Procedures

Before instruction, freshman students in the experimental and control groups were pretested. At the end of the semester, students in the experimental and control groups took a reading posttest (the final exam) that

consisted of a reading text and questions that covered all of the reading skills and subskills covered in the textbook: (1) *What is the whole text about?* (2) *Write the topic of the each of the following paragraphs;* (3) *Questions about details in the texts;* (4) *Write a summary of the whole text;* (5) *Complete the outline;* (6) *Give the meaning of the following words as used in the text;* (7) *What does each word refer to?* (8) *Give examples that illustrate each of the following category;* (9) *Find 2 words with a negative prefix, 4 compounds, 2 words with an adjective suffix, 2 words with a noun suffix;* (10) *Write the part of speech of each word as used in the reading text;* (11) *break each of the following words into its component parts (prefix, suffix, and/or root).* Most of the questions on the reading test required production.

The reading pre and posttests were blindly graded by the author. The students wrote their ID numbers instead of their real names. An answer key was used for scoring the test items. Questions were graded one at a time for all the students in the experimental and control groups. Marks were deducted for spelling errors.

At the end of the course, all of the students in the experimental group answered a survey with open-ended questions: (1) *Did you like reading the e-books or not? Why?* (2) *What did you like about the collaborative e-book activities?* (3) *Did your reading skills improve as a result of using the collaborative e-book reading activities? In what ways?* (5) *What problems or difficulties did you face in using the e-books, the Blackboard LMS and Elluminate? How were those problems solved?* (5) *Would you join a similar extensive collaborative e-book reading activity in the future? Why?*

VI. Data Analysis

The reading pre and posttest raw scores for the experimental and control groups were converted into percentages. The mean median, standard deviation, standard error, and range were calculated for the test scores of both groups. To find out whether students in the experimental and control groups have made higher gains as a result of the extensive reading activities that each group received as a supplement to in-class instruction, a within group paired T-test was calculated using the reading pre and posttest scores for each group, i.e., the pre and posttest scored were compares for each group separately. To find out which group made higher gains in reading skill development as a result of the e-book and paper book reading activities, an independent T-test was calculated using the reading posttest scores for the experimental and control groups, i.e., the reading posttest scores for both groups were compare.

VII. Test Validity and Reliability

The reading posttest is believed to have content validity as it aimed at assessing freshman students' reading skill in English. The reading tasks performed in the reading posttest were comparable to those covered in the assigned reading textbook and practiced in class and in the extensive reading activities using e-books and paper books. In addition, the reading test instructions were formulated clearly, and the students' task was defined. Concurrent validity of the reading posttest was calculated the correlation between the students' scores on the reading posttest and the students' reading course grade. The validity coefficient was .57. Concurrent validity was also calculated by correlating the students' scores on the reading posttest and their scores on the second in-term reading test. The validity coefficient for the reading test was .73.

Since the author was the instructor of the reading course and the scorer of the reading pre and posttests, estimates of inter-rater reliability were necessary. A 30% random sample of the reading pre and posttest papers was selected from experimental and control groups answer sheets and were double scored. A colleague with a Ph.D. degree and experience teaching reading at COLT scored the reading pre and posttest samples. The scoring procedures were explained to her, before using the same scoring procedures. She also used the same answer key that the author used. The scores given by the rater and author were correlated. The inter-rater correlation coefficient was .97 for the reading posttest. Moreover, examinee reliability was computed using the Kuder-Richardson formula 21'. The examinee reliability coefficient for the reading posttest was .67.

Responses to the survey by students in the experimental group were categorized according to the questions and are reported qualitatively.

Table (1): Distribution of Pre and Posttest Scores in Percentages

Groups	Tests	N	Mean	Median	Standard Deviation	Standard Error	Range
Experimental Group	Pretest	35	26.14%	25%	04.37	0.87	08-42%
	Posttest	35	79.44 %	79 %	09.63	1.68	37-92%
Control Group	Pretest	37	18.76%	18%	03.29	0.66	04-54%
	Posttest	37	67.62%	67%	08.17	1.61	20-83%

VIII. Results

Effects of the extensive collaborative e-book reading on reading skill enhancement: Table (1) shows that the typical EFL female freshman student in the experimental and control groups scored higher on the reading posttest than the pretest (medians = 79% and 67% respectively) with lower variations among student scores on the pretest than posttest (SD =9.63 and 08.17 respectively). This means that students in the experimental and control groups made higher gains as a result of the extensive collaborative e-Book reading and paper book reading activities respectively. However, the median and mean scores do not show whether gain in the reading scores was significant or not. Therefore, the pre and posttest reading scores for each group were compared using a paired T-test. Results of the paired T-test showed a significant difference between the reading pre and posttest mean scores of the experimental group at the .01 level, suggesting that experimental group students' reading skills significantly improved as a result of using a combination of extensive collaborative e-book reading and the assigned textbook (T =15.34, Df = 34). Similarly, a significant difference between the reading pretest and posttest mean scores of the control group was found at the .01 level, suggesting that the reading skill in the control group significantly improved as a result of using a combination of the supplementary paper books that the students read on their own and the reading textbook and (T = 13.29, Df = 36).

Comparisons of the posttest reading posttest for the two groups using the independent T-test showed significant difference between the experimental and control groups in reading skill development (T = 24.76; df = 70). This means that the experimental group made higher gains in reading skill development than the control group as a result of using extensive collaborative e-book reading. Experimental students' higher gains in their reading skills are attributed to student-centered activities, active participation and practice, interaction among the students, a secure environment for making mistakes, and instructor and peer support as revealed by students' responses to the survey.

Students' Views on the Effects of the extensive collaborative e-book reading: Experimental groups students' comments and responses to the post-treatment surveys revealed positive attitudes towards the extensive collaborative e-book reading and the Reading I course in general. All the students found the extensive collaborative e-book reading useful and fun and considered it a new way of doing reading activities on Blackboard and Elluminate and a new way of improving their reading ability in English. They preferred it to conventional paper books. The e-books encouraged them to read more without feeling that reading is a chore as it is the case with paper books. The e-books heightened their motivation and raised their self-confidence. The Blackboard Discussion Forums and Elluminate webconferences created a warm climate between the students and instructor and among the students themselves. They found the reading activities posted in on the Blackboard Discussion Forums useful, as they provided extra practice, gave instant feedback, and provided an opportunity for improving their ability to identify main ideas, supporting details, paragraph topics, text structure and inferring meanings of difficult words from context, making an outline, and summarizing the text by having to generate questions themselves. They could read their e-book chapter any time and as many times as they needed. They e-books helped them read faster. They acquired new vocabulary items. They also had a chance to read each other's outlines, summaries and responses and comment on them. The Blackboard and Elluminate class environment was secure for making mistakes, and was characterized by instructor and peer support and encouragement from their instructor and classmates. They indicated that they benefited from the self-improvement tips that helped them acquire new life skills such as stress management, success, positive thinking and others. All the students mentioned that they would join a similar e-book reading activity in the future. Some students wrote:

Maha: *the e-books helped me to read faster. I did not have to flip the pages, as in paper books, to see how many pages are left.*

Noura: *The reading activities made the reading skills studied in class easier to apply because the students had to generate questions and produce answers.*

Sara: *I did not only read my chapter but read all the chapters in the assigned e-book because the books were interesting and beneficial for me.*

Rana: *I had a chance to read my classmates' responses and had a chance to compare my own with them and learn from those who are better than me.*

Nada: *the collaborative activities helped my brainstorm with students in my groups and elaborate ideas and answers with them.*

Dalal: *joining different students in a new group when a new e-book is assigned helped me interact many classmates. I learnt from and exchange ideas with many rather than a limited number.*

However, students in the experimental groups pointed out some of negative aspects of extensive collaborative e-book reading in the present study such as some students did not have a smart phone to access the assigned e-book or did not know how to find and access the assigned e-book in the Apple App Store. But the instructor helped those students individually in searching for and downloading the e-book and helped those without a smart phone to download a version of the e-book from Google. They also pointed out that at first, they

were not familiar with the Blackboard and Elluminate tools but with practice things got easier. The students wished they had a highlighting tool and hyperlinks in the e-books to key ideas and to access a dictionary to check the meanings of difficult vocabulary in the text.

At first some students did not post any responses if not prompted by the instructor and if the instructor did not post instructions or a sample response. Some wrote “Thank you” notes and compliments rather than real responses. Others just browsed and read rather than posting messages.

At the beginning few students did not take the e-book reading seriously as it was not used by other instructors and students at COLT. The author could not make the extensive collaborative e-book reading activities mandatory and could not allocate a proportion of the course grade to them for administrative reasons in her college. Many Saudi college students do extra work only when the activities or assignments are part of the course grade. If extensive collaborative e-book reading activities are not part of tests and course grades, some students will not participate and take the activities seriously. However, they were encouraged by extra credit added to their course marks.

IX. Discussion

Significant differences were found between students in the experimental and control groups in their reading skills as measured by the posttest at the end of the semester (after 14 weeks) suggesting that reading skills in the experimental group improved as a result of exposure to extensive collaborative e-book reading. The extensive collaborative e-book reading raised the good and average student’s reading performance and the performance of the lowest-performing students as well. Moreover, the present study revealed positive effects of the extensive collaborative e-book reading on students’ attitudes towards reading in general, and e-book reading, in particular. The students enjoyed e-book reading and felt it helped them to read faster, learn more vocabulary, understand the content of the material read better. At the end of the semester the students’ ability to identify the main ideas, supporting details, understand the organizational structure, infer meanings of difficult words from context has greatly improved as they had to generate questions about them themselves. They could write a summary of the material read, make an outline of it, and reflect on the material read in their own words. Unlike paper book reading, e-book reading was more fun as they could access their e-books anywhere and anytime and the assigned part was short and manageable (not more than 3 pages).

Findings of the current study are consistent with findings of some prior studies in the literature such as Chen, Chen, Chen & Wey (2013) who found that tertiary level EFL students in Taiwan, who read materials from three e-book library collections, exhibited significantly better reading attitude, reading comprehension and vocabulary learning than the control group that did not engage in any extensive reading activity. Similarly, students enrolled in two distance-taught master’s programmes at the University of Leicester improved as a result of reading e-books (Nie, Armellini, Witthaus & Barklamb, 2011). The experimental group in a Turkish study was more motivated and more engaged in the personalized e-book reading program (Kaban, 2021). In South Africa, the majority of students read faster on the iPad than paper books (Sackstein, Spark & Jenkins, 2015). Most students in Isaacson’s (2017) study preferred e-books to paper books for learning although they never used e-books before. Taiwanese students, who used an e-book reading system and a digital material delivery system embedded in Moodle, showed significant improvements in self-regulated learning and self-efficacy. Their gain scores were significantly higher than those in the control group (Chen & Su, 2019). Thinking maps and question answering mechanism stimulated the students to reflect on the reading content and helped them understand the reading content more effectively (Chen, Chang, Wang & Jian, 2018). Moreover, 62% of a student sample from 36 Turkish universities indicated that they are e-book readers (Cumaoglu, Sacici & Torun, 2013). Students and faculty at a community college-like institution in Quebec, Canada generally had neutral and positive impressions of e-books. They perceived e-books to be more convenient than printed books (Chen, Carliner, Martinez & Davidson, 2019),

It seems that the positive effects of e-book reading on reading skill enhancement is attributed to reading App features that helped a sample of EFL Kuwaiti students practice faster reading rates (Akbar, Taqi, Dashti & Sadeq, 2015). Turkish students mentioned factors affecting e-book use such as: accessibility of e-books (68%), reading e-books for research (81%), preference for the e-book pdf format (73%), the computer as the most commonly used e-book medium (60%), social environment and students’ reading habits (Cumaoglu, Sacici & Torun, 2013). In addition, e-book readers have few more benefits: new strategies for reading the course materials, enhanced flexibility in curriculum delivery, improved efficiency in the use of study time, cost, and the interaction triggered by personalized feedback (Nie, Armellini, Witthaus & Barklamb, 2011; Kaban, 2021). Preference for e-books is also affected by previous experience, reading preferences and tasks, reading habits, convenience, costs, and ownership issues. The students added that e-books become attractive when their price is 50% of the price of printed books (Chen, Carliner, Martinez & Davidson, 2019).

Unlike findings of the present study which showed that the participants preferred e-books to paper books, Chou (2015) declared that students preferred using e-books less than hardcopy books when they engage

in academic reading which is considered intensive reading. Likewise, Woody, Daniel & Baker's (2010) students did not prefer e-books over textbooks regardless of their gender, computer use or comfort with computers. No significant correlations were found between the number of e-books previously read and the overall preference for e-books. Students who had previously used e-books still preferred print texts for learning. Although it is easy to access supplementary content in e-books through hyperlinks and other features, the students preferred using special features in print books than e-books. Taiwanese EFL freshman students, enrolled in a semester-long literature-based course considered e-book reading to be unpleasant (Chou, 2016; Chou, 2015). Likewise, EFL freshman students in Kuwait reported lower comprehension levels when reading from e-books and less positive attitudes towards e-books in comparison with paper books (Akbar, Taqi, Dashti & Sadeq, 2015). Sackstein, Spark & Jenkins (2015) found no significant differences in reading comprehension scores between e-books and paper books. For students and faculty at a community college-like institution in Quebec, printed materials had more credibility than digital ones. Many students read online but could not take notes (Chen, Carliner, Martinez & Davidson, 2019)

X. Recommendations And Conclusion

To make the best use of e-book reading by EFL students, the present study recommends the following:

1. EFL college students should never use an e-book passively. They should always have some tasks to work on while reading or after they finish reading an e-book. EFL instructors may provide e-book strategy lessons with specific tasks to perform.
2. analyzing a student's learning profile and matching the reading text difficulty and relevance with the student's proficiency level; introducing a list of e-books and having each student read some after school, with the target of reading 4 e-books a week. Several e-books might be assigned at a time to accommodate the students' different proficiency levels, reading speeds, and interests (Isaacson, 2017; Wu, 2016; Lin, 2010).
3. EFL instructors may combine reading and listening, reading, and speaking, or reading and writing activities using e-books. They can also integrate simplified literature, multicultural children's literature and short stories in extensive reading practice with e-books (Al-Jarf, 2021; Al-Jarf, 2016; Al-Jarf, 2015; Al-Jarf, 2013; Al-Jarf, 2010; Chou, 2016; Chou, 2015).
4. the integration of multimedia, hyperlinks, highlighting, animations, and music/sound effects, a reading guidance mechanism such as attaching bookmarks, adding, and deleting markers, attaching, removing, and editing memos, and slide switching (next, previous, jumping page), adding thinking maps and a question answering mechanism on the same page (Wang & Jian (2018; Chen & Su, 2019; Chen, Chang, Wang & Jian, 2018; Lin, 2010).
5. extensive collaborative e-book reading can be extended to the Reading II, Reading III, and Reading IV at COLT. Students enrolled in the Reading I, II, III and IV courses at COLT can share extensive collaborative e-book reading together with their instructors. To encourage the students to participate, instructors can prompt and motivate them. Rules for using extensive collaborative e-book reading should be made clear. The minimum number of e-books read may be specified. Administrative support is also required to make extensive collaborative e-book reading a mandatory part of reading instruction in EFL, in order for the students to take it seriously.

These e-book reading strategies would be very helpful for EFL students' comprehension of English written texts and would help students engage in and benefit from e-book reading.

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Appendix

Image 1: Examples of e-book Libraries and Collections

Android Apps At least 1000 results









	Aldiko Book Reader ALDIKO LIMITED / BOOKS & REFERENCE ★★★★★ (49,305) INSTALL	Read and download thousands of eBooks right on your Android phone or tablet. Download one of the best Android eBook Readers now! ★The leading eBook application for th...
	Kindle AMZN MOBILE LLC / BOOKS & REFERENCE ★★★★★ (88,439) EDITORS' CHOICE INSTALL	Read books on your phone, including thousands of free Kindle books. The Kindle app puts over a million books at your fingertips. It's the app for every reader, whethe...
	100,000 Free Books Wattpad WATTPAD.COM / BOOKS & REFERENCE ★★★★★ (21,966) INSTALLED	Unlimited Stories Wattpad is the world's largest community of readers and writers. Every day millions of people visit Wattpad to discover fun new stories. Our social ...
	Kobo eBooks KOBO INC. / BOOKS & REFERENCE ★★★★★ (17,523) INSTALL	With Kobo, reading on your Android Smartphone or Tablet couldn't be easier. Download our FREE eBooks app and start browsing millions of free and affordable books from ...
	e-book/Manga reader ebiReader EBOOK INITIATIVE JAPAN CO.,LTD. / COMICS ★★★★★ (1,151) INSTALL	How about reading MANGA on your Android device? Your favorite is surely found. It can be downloaded the e-books in "eBookJapan" to the Android device on your hand. It...
	Blio eBooks for T-Mobile KNFB READING TECHNOLOGY / BOOKS & REFERENCE ★★★★★ (94) INSTALL	Don't just read books. Experience them. Books come to life, in Blio. This version is for T-Mobile users only. Don't just read books. Experience them. Blio doesn'tj...
	FBReader GEOMETER PLUS / BOOKS & REFERENCE ★★★★★ (30,908) INSTALL	FBReader (FBReaderJ) is an e-book reader. Supports epub, rtf, fb2(zip), mobi, and plain text file formats. FBReader is fast, highly customizable. Can use external Tr...
	Moon+ Reader MOON+ / BOOKS & REFERENCE ★★★★★ (40,610) INSTALL	Your finger ebook reader with rich features. Book reader with powerful controls & full functions. *Read thousands of ebooks for free, supports online ebook libraries....

Image 2: An Example of an Assigned e-book titled “Let the sun In: Stop Worrying in Its Tracks”

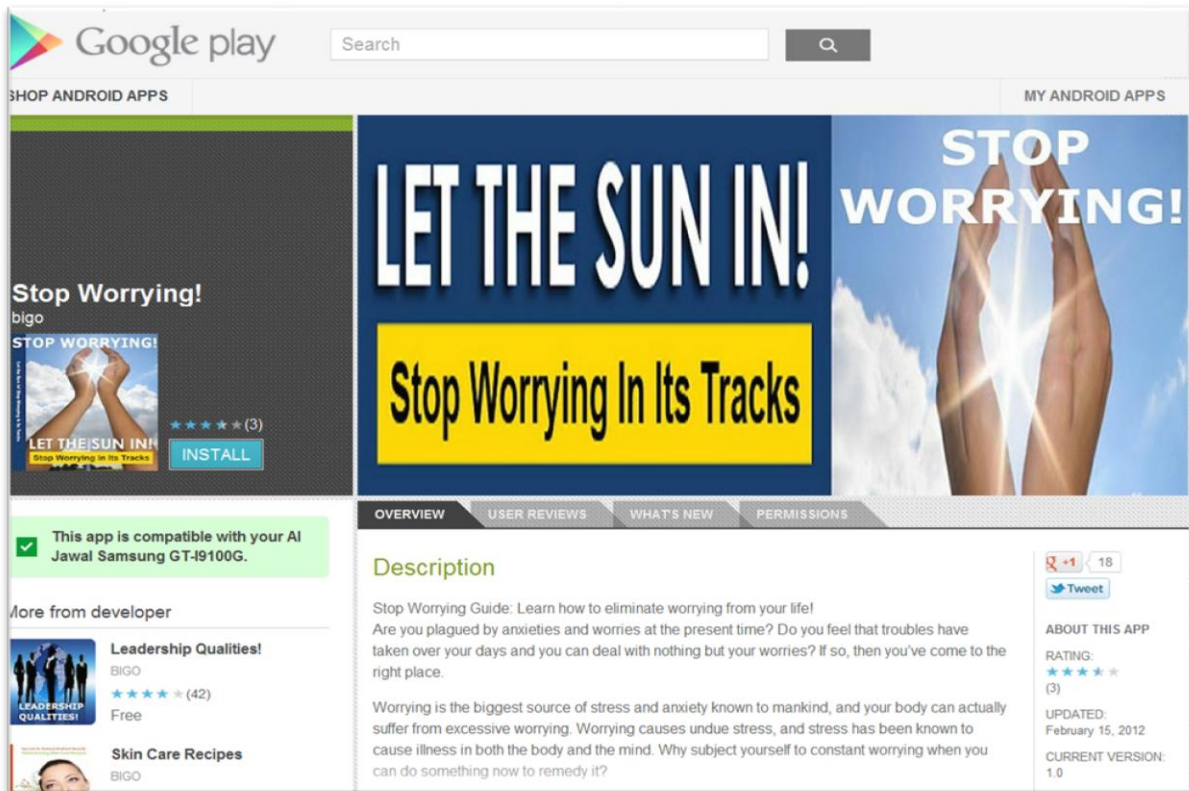


Image 3: Sample Instructions and Assignment Questions on the Assigned E-Book

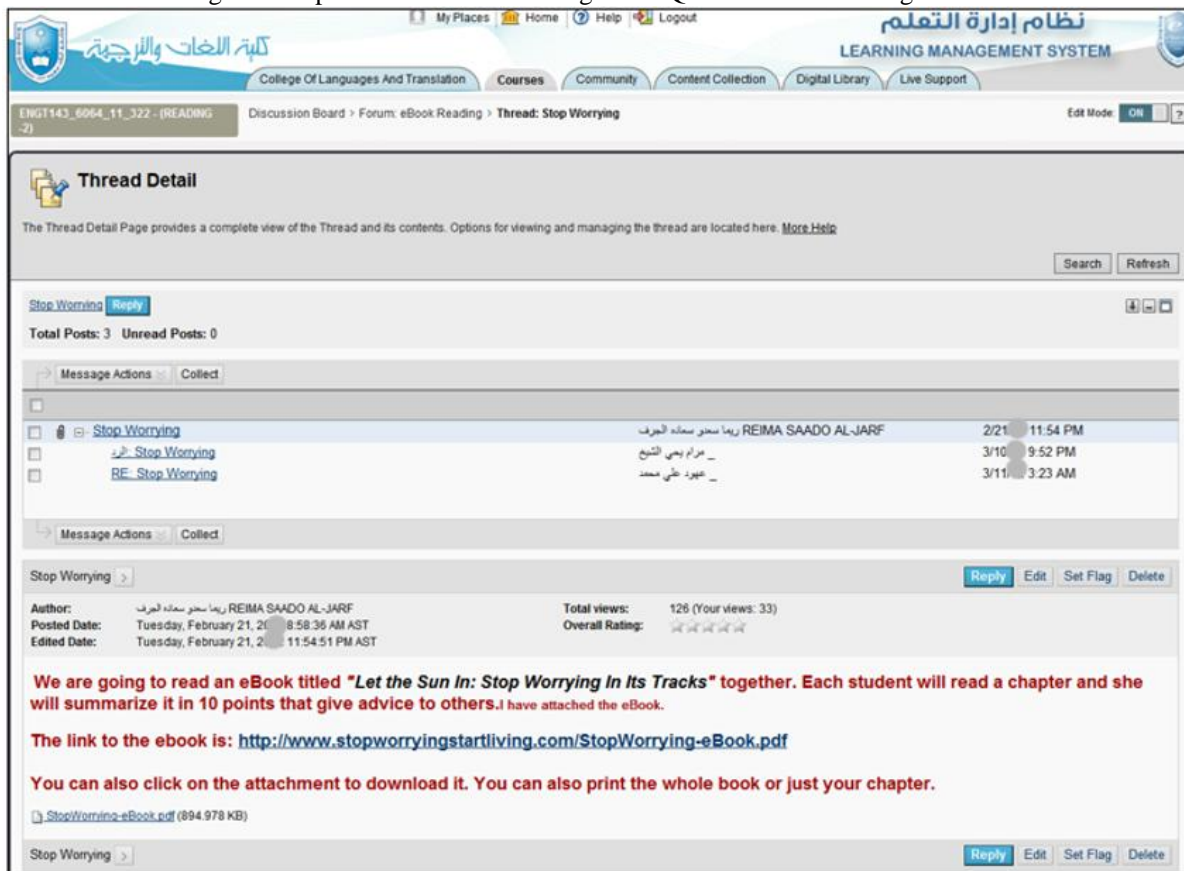


Image 4: A Sample Student's Summary Posted in Blackboard's Discussion Forum

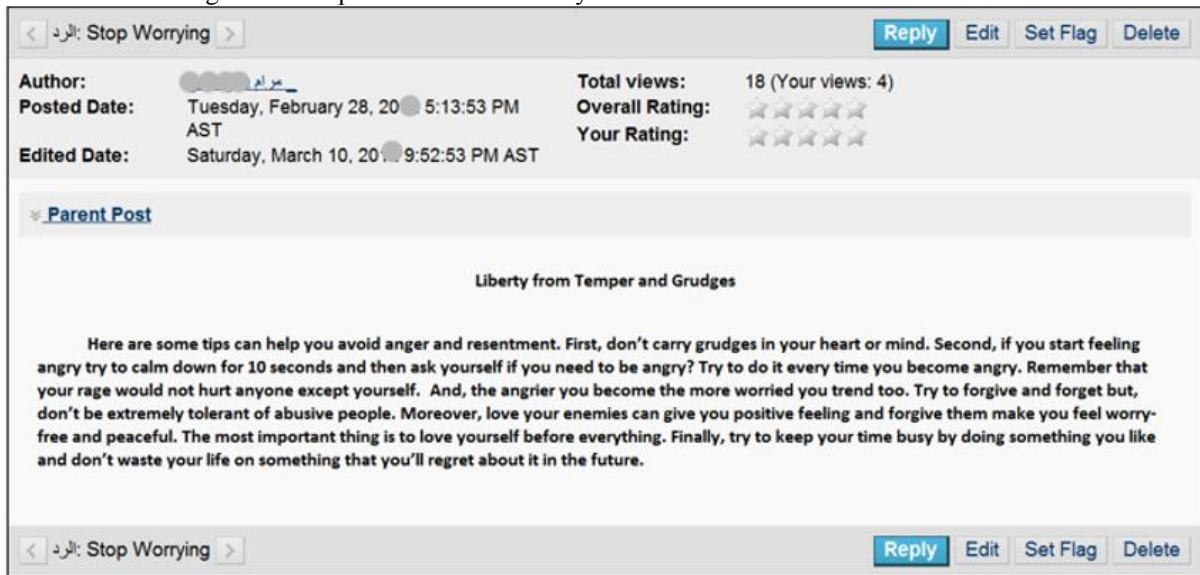
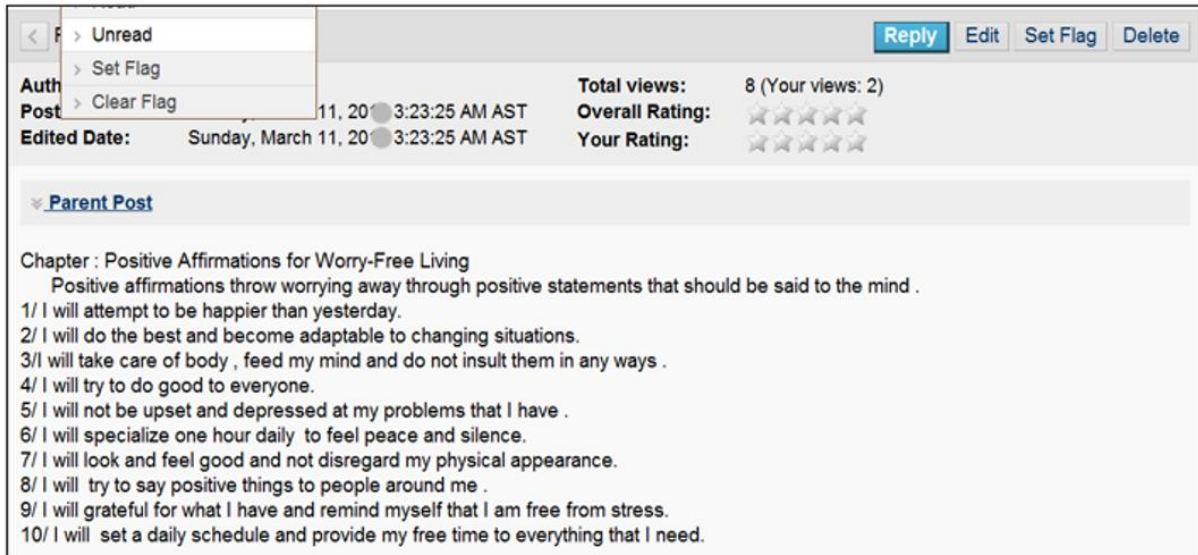


Image 5: A Sample Student's Summary in 10 Points Posted in Blackboard's Discussion Forum



Reima Al-Jarf. " Collaborative Mobile eBook Reading for Struggling EFL College Readers." *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 11(06), (2021): pp. 32-42.