

# Revealing University Students' Attitudes toward Online Extensive Reading in Thailand

**MINTRA PURIPUNYAVANICH**

*Chulalongkorn University, Bangkok, Thailand*

Author email: [mintra.p@chula.ac.th](mailto:mintra.p@chula.ac.th)

Article information	Abstract
<b>Article history:</b> Received: 21 Jun 2021 Accepted: 18 Aug 2021 Available online: 23 Aug 2021	<p><i>This study explores undergraduates' attitudes toward extensive reading (ER) and reading graded readers online via Xreading.com in a large-scale ER program (ERP) involving over 5,000 students. Data were obtained from 356 students via an online questionnaire and 13 students in three focus groups. The quantitative findings showed that the students had positive attitudes toward ER. The top three reasons included (1) reading graded readers made them enjoy reading in English more than before, (2) they were more motivated to read graded readers because the stories were simple, and (3) they preferred to read shorter texts because they were simpler. Additionally, the qualitative findings revealed that all 13 students enjoyed freedom of choice in which they could choose their own graded readers that matched their interests and proficiency. Also, students had positive attitudes toward online ER through Xreading due to a variety of graded readers, an opportunity for students to practice their English and reading skills, enjoyment from reading, convenience and ease of use, and self-monitoring features. However, two difficulties were reported, including not knowing which graded readers to choose and eyestrain when reading online. Finally, pedagogical implications are discussed to guide ERP coordinators and teachers.</i></p>
<b>Keywords:</b> Extensive reading (ER) Online extensive reading (online ER) Attitudes	

## INTRODUCTION

Among the four main English skills—reading, writing, listening, and speaking—reading is fundamental and plays a crucial role in developing learners' language literacy. Reading is key to learning English as a foreign language because the ability to read in English helps learners develop their English knowledge and competency (Grabe, 2009). Strong reading skills facilitate a greater progress in learning English and other academic contents (Anderson, 1999). Nuttall (1996, p.128) accentuates the importance of reading on foreign language development through this statement, "The best way to improve one's knowledge of a foreign language is to go and live among its speakers. The next best way is to read extensively in it." If reading extensively can help second language learners develop their foreign language ability, extensive reading certainly deserves more attention. Some renowned scholars advocate extensive reading as an approach to increase learners' reading interest and motivation (Day & Bamford, 1998; Nuttall, 1996).

A history of extensive reading dates back to the 1920s and Harold Palmer's work, but it was in the late 1960s and early 1970s that extensive reading came into the spotlight both in research and instruction (Grabe, 2009). In Thailand, extensive reading started to gain attention in research in 1990s. Previous studies have shown evidence that ER programs have been implemented at primary schools (Maipoka & Soontornwipast, 2021), secondary schools (Charumanee, 2014; Uraiman, 2011; Satitporn, 1995), primary and secondary schools (Maneeekhao & Tepsuriwong, 2016), and universities (Chanthap & Wasanasomsithi, 2019; Kirin, 2010; Patanasorn, 2013; Paungmaliwan, 2005; Porkaew & Fongpaiboon, 2018; Pratontep, 2007; Tamrackitkun, 2010; Wisaijorn, 2017).

## LITERATURE REVIEW

### Extensive reading (ER)

Extensive reading describes reading in which readers extensively read very easy and enjoyable reading materials to build their reading speed and fluency (Extensive Reading Foundation, 2011). The main aim of ER is "to get students reading in the second language and liking it" (Day & Bamford, 1998, p.6). In ER, students read large amounts of interesting materials that match their language proficiency levels. Because the materials are easy and appropriate for their language ability, they can read quickly and understand the content (Renandya & Jacobs, 2016).

Day and Bamford (2002) identify 10 guiding principles of ER that contribute to successful ER programs (ERPs), which can be used as guidelines, "not as rules that must be strictly followed" for implementing ER (Renandya et al., 2020, p. 18).

Day (2015) discovered that Principles 1, 2, 3, 4, and 8 were frequently employed in the 44 ERPs in a variety of countries (e.g., Japan, China, Taiwan, Korea, Malaysia, the U.S., etc.) he investigated between 1998 and 2015. They are displayed in the following order in Table 1.

**Table 1**  
**The most frequently adopted ER principles in 44 ERPs (adapted from Day, 2015)**

Principles (P)	Times Used
1. (P3) Learners choose what they want to read.	38
2. (P4) Learners read as much as possible.	36
3. (P2) A variety of reading material on a wide range of topics is available.	35
4. (P1) The reading material is easy.	34
5. (P8) Reading is individual and silent.	31

Noticeably, *Principle 3: Learners choose what they want to read* ranks first. This reflects the underlying principle of ER in that students are at the center of their own reading, taking an active role in selecting the materials they want to read and are likely to choose what interests them over the easiness of the materials.

Macalister (2015) and Waring and McLean (2015) argue that the 10 principles are somewhat idealistic and might not be practical for practitioners experiencing curricular and contextual limitations. For instance, *Principle 6: Reading is its own reward* might not be the case in many ERPs where assessment is a curricular requirement, which means students might not take ER seriously if there is no assessment. Kirchhoff (2013) also argues that assessment required by institutions to assess reading achievements usually outweigh the principle of reading for enjoyment. Ng et al. (2019) propose that reading be monitored and assessed. This proposition is supported by empirical studies in Thailand which reveals that giving scores to ER activities encourage students to read more (Tamrackitkun, 2010) and in the U.S. which supports the use of quizzes to assess reading comprehension (Zhou & Day, 2021).

### **Extensive reading programs (ERPs)**

Davis (1995) describes an extensive reading program as a class library scheme integrated into an English course. It gives students time, encouragement, and many books to independently and silently read for pleasure at their level without focusing on testing. The emphasis is typically on the quantity and variety of books, so students can choose what they find interesting and relevant to their lives. This description, however, might not reflect the reality of an ERP implemented as part of the existing curriculum where scores are allocated for ER activities as an instrument to motivate students to read. If students' reading effort is not assessed in some way, it is likely that only the most motivated students will read (Nation & Waring, 2020). Nonetheless, this does not imply that tests and quizzes are necessary, as assessment could also be measured indirectly by amounts read, performance on follow-up activities, and so forth.

ERPs can be broadly divided into stand-alone and integrated programs. Stand-alone ERPs have no connection with the curriculum and are independent of other classes. Typically, they follow the traditional ER approach where reading is done for pleasure without assessment. Integrated ERPs are part of the curriculum with assessment of reading. They can be implemented as a separate course, part of other skill courses, an addition to an existing course, an extra-curricular activity, during the homeroom period, self-study, and with a supervisor or any combination of the above (Renandya & Day, 2020).

Although there is no fixed criterion for how much reading needs to be done to be considered as extensive (Yamashita, 2008), reading at least one graded reader per week is recommended for students to benefit from extensive reading and develop a reading habit (Day & Bamford, 2002), and to acquire vocabulary (Nation & Wang, 1999). However, reading at least three books at each level and more books at the higher levels is required to get a good number of vocabulary repetitions (Nation & Wang, 1999).

### **Online extensive reading**

The integration of technology into ERPs has become more apparent in the past 10 years. Positive effects of linking technology with ER as evident in several studies makes adopting online platforms instead of setting up a physical library more promising (Bui & Macalister, 2021; Cote & Milliner, 2015; Milliner & Cote, 2015; Robb & Kano, 2013; Zhou & Day, 2021).

Robb and Kano (2013) proposed an additive mode to the ERP implementation whereby reading could be done outside of class time and online quizzes could be taken through the online platform, MoodleReader (M-Reader)<sup>1</sup>. They argued that such a mode could be implemented widely if effective instruments were used to assess students' reading, but did not increase teachers' workload or interfere with class time. Their study reported highly significant gains in reading scores among 2,783 university students in Japan who read outside of class as a result of the ERP implementation.

Milliner and Cote (2015) conducted a one-year pilot study with 30 university students in Japan. They discovered that despite students' positive attitudes toward Xreading<sup>2</sup> and reading e-books, the actual reading engagement was low. Despite this, the results also revealed that after using Xreading, 93% of students found reading in English more enjoyable and 83% thought it was easier to read in English. Furthermore, the convenience of Xreading and a variety of books contributed to the students' positive reading experience.

Cote and Milliner (2015) reported Japanese university students' English language performance and perceptions on online ER through the Xreading implementation. It was revealed that students' unfavorable perception of ER changed after they had engaged in reading graded readers on Xreading. Also, 89% ( $N = 80$ ) of students preferred to read graded readers online to paperbacks in the post-pilot questionnaire. Students enjoyed reading graded readers on Xreading because they could read anywhere, anytime, and the website was easy to use. Only technical issues, including system errors, login time, slow loading, difficult to use, eyestrain, waste of battery life, and small library were listed as Xreading's features they disliked, with no negative reports about the book content or their reading experience.

Zhou and Day (2021) investigated the perceptions of 57 international university students in the U.S., who took EAP courses that implemented an ERP with Xreading. The study reported that through online ER with Xreading, students' attitudes became significantly positive after reading graded readers online, and they felt that their reading rates, comprehension, vocabulary, grammar, writing, and speaking improved. The top three language abilities improved through online ER ranked by frequency were reading rate (35%), vocabulary (25%), and grammar (22.5%). It was also found that easy access of Xreading and the books in the Xreading library were the two things that made students enjoy reading on the website. Additionally, through taking quizzes, students were able to check their comprehension and receive immediate feedback.

Bui and Macalister (2021) discovered positive effects of an online ERP on developing 17 Vietnamese freshmen's reading speed and promoting their positive attitudes toward ER. This ERP did not use M-Reader or Xreading, but the website, <https://exreading.wordpress.com/>, which was developed as a small online library of free graded readers and simplified

---

<sup>1</sup> MoodleReader is a plug-in module that allows students to take post-reading quizzes with randomized questions on their graded readers and teachers to assess students' reading. The platform has only quizzes but not reading materials.

<sup>2</sup> Xreading is an online subscription-based library for graded readers and a learner management system.

texts. It had a stopwatch to keep track of students' reading time and a graph to track their reading progress. The reading materials were collected and adapted from resources such as er-central.com, Paul Nation's website, and so on. It was found that after 10 weeks of the study, the reading speed of all the students increased. Twelve students thought the program helped increase their reading fluency with higher reading rates and 11 students felt it helped them acquire new vocabulary. Also, the majority of students (71%) agreed that the program enhanced their reading motivation. Factors that contributed to enhanced reading motivation included the reading materials that were within students' language proficiency, the apparent improvements in reading fluency and vocabulary, the books' content, and convenience (books can be easily accessible via the Internet). Eyestrain, the lack of various genres, and the website's unattractive design were reported as obstacles that demotivated students from reading online.

### **Benefits and challenges when reading online**

Nowadays, people can easily access and read information online on their electronic devices. According to Chen et al.'s (2013) study, reading e-books enhances tertiary-level EFL learners' motivation and increases their reading comprehension and vocabulary learning. Mesureur's (2013) study revealed that over three-quarters of Japanese university students would like to read extensively if they could read e-books or had an access to an online library. There are two key advantages that reading on electronic devices has over paperback books: first, such devices can store numerous e-books of different genres, and second, students can read anytime they want as long as they have a stable Internet connection (Cote & Milliner, 2015). The fact that Xreading allows students to read anywhere and anytime, and that it is easy to use contributed to positive experiences of Japanese university students in using Xreading (Cote & Milliner, 2015). Some sophisticated online reading systems enable students to track their reading progress and teachers to identify students' reading performance and who need additional support (Brown, 2012). In addition, post-reading quizzes help teachers confirm students' actual reading and comprehension of books they have read (Cote & Milliner, 2015; Zhou & Day, 2021). In summary, previous studies have suggested that learners seem to enjoy the convenience, accessibility, diversity, portability, and flexibility that online reading offers.

Regarding challenges in online reading, some studies argue that reading on electronic devices for a long time can cause eyestrain, may be slower than reading on paper, and might be more distracting. Eyestrain has been reported as a difficulty when reading online on mobile phones and computers for a long time (Bui & Macalister, 2021; Cote & Milliner, 2015; Huang, 2013; Huang & Lin, 2011). Some other issues caused by reading online have also been reported, including a decrease in reading speed and distraction from reading due to email banners and push notifications (Mesureur, 2013). In addition, technical problems such as system errors, login time, and slow loading encountered by students when using Xreading were identified (Cote & Milliner, 2015).

## Effects of ER

The pedagogy of ER has significantly contributed to two areas, improvements of language skills and students' attitudes toward ER (Lin, 2014; Ng et al., 2019).

### 1. Language improvements

Regarding the improvements of language skills, ER was reported to improve students' reading rate (Belgar & Hunt, 2014; He, 2014; Huffman, 2014; Jeon & Day, 2016; McLean & Rouault, 2017; Nakanishi, 2015; Suk, 2016; Tamrackitkun, 2010; Tran, 2018). Belgar and Hunt's (2014) study suggested that easy texts were appropriate for developing reading fluency. ER also contributes to students' gains in reading comprehension (Jeon & Day, 2016; Nakanishi, 2015; Suk, 2016; Tamrackitkun, 2010; Tran, 2018; Yang et al., 2021). When doing ER, vocabulary acquisition usually occurs as students read words repeatedly and infer word meanings in context. By reading a lot of graded readers, students are exposed to a large number of words, which promotes incidental vocabulary learning (Ng et al., 2019). Previous studies have found positive effects of ER on vocabulary acquisition (Jeon & Day, 2016; Nakanishi, 2015; Suk, 2016). Suk's (2016) study showed that participants in the ER group had the highest improvement in vocabulary acquisition.

Both meta-analyzes of Nakanishi (2015) and Jeon and Day (2016) emphasized the positive effects of ER on reading rate, comprehension, and vocabulary. Their studies examined two types of empirical studies, those including group contrasts (comparison of control and experimental groups), and pre-post contrasts. Nakanishi (2015) examined 34 studies with 3,942 participants, while Jeon and Day (2016) investigated 49 studies with 5,919 participants. A large effect was found for reading rates ( $d=0.98$  and  $0.83$ ), a medium effect for reading comprehension ( $d=0.63$  and  $0.54$ ), and a small effect for vocabulary ( $d=0.18$  and  $0.47$ ). In addition, there seems to be no consensus on the most appropriate length of ER instruction as the two studies present different, yet interesting results. According to Nakanishi (2015), one year of instruction for group contrasts produced a medium effect size ( $d=0.52$ ) and pre-post contrasts a medium to large effect ( $d=0.74$ ), while Jeon and Day's (2016) study found no statistical difference among the program lengths.

As for the effects of ER on the grammatical knowledge, two studies conducted in South Korea and Iran have confirmed that ER improved students' general grammatical knowledge including usage of articles and prepositions (Lee et al., 2015) and simple past tense, objective pronouns, adverbs of frequencies, and determiners (Khansir & Dehghani, 2015).

### 2. Attitudes

Students' attitudes toward ER have received a lot of attention from scholars. This could be because the students' affective state, what they think and feel, plays an important role in developing their reading skills (Ng et al., 2019). Tamrackitkun's (2010) study reported positive attitudes toward ER and score allocation to ER activities motivated students to read more. Tien (2015) conducted a large-scale study on ERP at a private university in Taiwan, analyzing



perceptions of the program by 5,711 non-English major students enrolling in General English courses and 36 teachers. The results indicated that students' attitudes toward ER were positive. Students strongly agreed that ER was a good way to learn English.

Wisaijorn (2017) examined the effects of ER on the proficiency in English and attitudes toward reading in English of 51 fourth year undergraduates in Thailand who engaged in an ERP for 15 weeks. Findings of the pre- and post-tests of reading ability in English showed an insignificant decrease (2.91%) in performance of the higher proficiency group and a significant increase (10.69%) for the lower proficiency group. Responses in the post-questionnaire ( $N = 58$ ) revealed that ER positively affected their attitudes toward reading in English as the students felt it was easy for them to read in English (46 students), they had confidence in their ability to read in English (41 students), and they would like to read more in English (54 students). Furthermore, most of the students' comments on ER were positive. Improved vocabulary received the highest mentions of 21, interesting (11), improved reading skills (8), improved English skills (7).

In conclusion, a great number of studies have explored different aspects of ER and shown evidence that the effects of ER on students' attitudes and English skills development have been positive. In Thailand where ERPs have been implemented at primary and secondary schools and universities, the university in this study, however, is one of the two universities that officially adopt Xreading in their ERPs. Additionally, to the best of the researcher's knowledge, there has not been an investigation of attitudes toward ER with over 300 university students from various faculties in science, technology, social science, humanities, and business in Thailand or on Thai university students' perceptions of reading graded readers online via Xreading. Considering the importance of ER in helping L2 learners develop their positive attitudes toward reading in English and their English skills in tandem with the gap in the research in doing online ER via Xreading in Thailand, the present study aims to broaden the knowledge by addressing the two research questions in the following section.

### Research questions

1. What are the students' attitudes toward extensive reading in general?
2. What are the students' attitudes toward doing online extensive reading through Xreading?

To prevent any confusion or ambiguity, *attitude* and *online* in this study are defined as follows:

1. *Attitude* in RQ 1 refers to the students' opinions or feelings about reading graded readers, reading preferences, and improvements of their English abilities. However, RQ 2 focuses specifically on their perceptions of doing online ER on Xreading, including their preferences for reading modes, assignments, book selection, advantages of and difficulties when using Xreading.
2. *Online* refers to Xreading.com, a virtual library that has a learner management system. More information about the website is provided in the Xreading section.

## METHODOLOGY

### Context of the study

The university where the current study took place is a large public university in Bangkok, Thailand with nearly 38,000 students. All freshmen from 18 faculties, except the Faculty of Arts, are required to complete two foundation English courses: Experiential English (ExpEng) I and II, which concentrate on reading, writing, listening, and speaking skills. In the 2020 academic year, 5,395 and 4,916 students enrolled on the two courses respectively. Eighteen faculties include Allied Health Science, Architecture, Dentistry, Engineering, Medicine, Pharmaceutical Sciences, School of Agricultural Resources, Science, Sports Science, Veterinary Science, Communication Arts, Education, Fine and Applied Arts, Law, Political Science, Psychology, Commerce and Accountancy, and Economics.

### Implementation of the ERP

The spread of the COVID-19 pandemic led to a shift in a teaching mode from on-site to online at most universities in Thailand. In the 2020 academic year, as part of redesigning the ExpEng I and II courses, external reading assignments were integrated in tandem with teaching the four skills and assigned as self-study activities and part of the ERP implementation, using Xreading. The ERP was implemented to enable students to take an active role in developing their English, particularly reading skills, outside the classroom at their own convenience.

Taking the key concept of ER, which encourages students to read a lot of graded readers for pleasure, and the reality that many students might not enjoy reading in English, the ERP coordinators aimed to start small by setting a total reading goal of over 21,000 words for two assignments in the ExpEng I course in the first semester. To ensure that students would take ER more seriously, taking book quizzes and writing a book review were added to assess students' reading. Table 2 presents the information about the external reading assignments in both courses.

**Table 2**  
**External reading assignments in the ExpEng I and II courses**

<b>ExpEng I (Semester 1)</b>	<b>ExpEng II (Semester 2)</b>
1. Read & Review (RR): 4% <ul style="list-style-type: none"> <li>• Reading one book of over 3,000 words</li> <li>• Writing a short review of over 25 words</li> <li>• Four weeks to complete</li> </ul>	1. Reading Marathon: 10% <ul style="list-style-type: none"> <li>• Reading one or several books of over 20,000 words</li> <li>• 12 weeks to complete</li> </ul>
2. Reading Marathon (RM): 6% <ul style="list-style-type: none"> <li>• Reading one or several books of over 18,000 words</li> <li>• Eight weeks to complete</li> </ul>	

\*Remark: Students were required to take book quizzes for all the books they had read with a 60% passing score.



To summarize, in this study, a large-scale ERP was implemented in the two English foundation courses that involved approximately 5,000 freshmen. Students were assigned to complete external reading assignments as self-study activities on the Xreading platform.

### **Xreading**

The Xreading website ([xreading.com](http://xreading.com)) is an online library and a learner management system (LMS) launched in 2014 and designed to be a web-based platform that facilitates ER. It provides students unlimited access to over 1,400 graded readers, which are categorized based on their readability, from leading ELT publishers and eases the management and assessment of ERPs for teachers. Also, audio narrations, book ratings, and post-reading quizzes can be accessed anywhere and anytime via electronic devices. Its easy-to-use LMS allows teachers to track their students' reading progress and assess their reading. The information related to the students' reading, including their reading speeds, books read, words read, and quiz scores, is stored in the system and is available to both the teacher and students. When an ERP is implemented with a large number of students like at the university in this study, the integration of Xreading helps reduce the university's cost in setting up an ER library and buying a lot of graded readers to make them sufficient for every student in the program. Thus, subscribing to Xreading that offers a lot of graded readers of all levels and a learner management system is "the easiest way to set up an extensive reading program" (Nation & Waring, 2020, p.56), especially during the pandemic which has shifted in-person teaching to an online mode. A screenshot of the Xreading library is presented in Appendix 1.

### **Ethical approval**

Prior to conducting the study, the researcher obtained ethical approval from the university's Research Ethics Review Committee for Research Involving Human Subjects and followed their research protocol.

### **Participants**

Participation in the questionnaire and focus groups was voluntary. Participants consisted of 356 students from 18 faculties who completed the questionnaire. Of those 356 students, 13 students volunteered to join the focus groups. Seven students in the high proficiency group came from all faculties, except Fine and Applied Arts, and five students in the intermediate proficiency group, except Engineering, Law, and Economics. However, there was only one subject from Education who wanted to join the interview in the low proficiency group. The name list and faculties are in Appendix 2.

### **Sampling methods**

Convenience sampling was employed to select the participants for the questionnaire, and purposive sampling was used to select the participants for the focus group interviews. The study aimed to collect data from freshmen from the 18 faculties who enrolled in the ExpEng I and II courses in the 2020 academic year and completed external reading assignments on

Xreading in both semesters. Additionally, three focus groups would be conducted with 24 questionnaire respondents (eight students from eight faculties per group) who were willing to provide information regarding the ERP. Three groups would be divided based on their ExpEng I course grades—the high (Grade A: 85-100), intermediate (Grade B: 75-79), and low proficiency students (Grades C-D: 65-55). Participants would be selected from eight faculties that had students with all grades, including Engineering, Allied Health Sciences, Science, Law, Education, Fine and Applied Arts, Commerce and Accountancy, and Economics.

## **Instruments**

Two instruments—an online questionnaire and three focus groups—were approved by three experts in the field of reading and ER, using the Item Objective Congruence (IOC), and employed to collect data. All online questionnaire items and interview questions were in Thai with an English translation. These instruments were used to collect data in the end of the 2020 academic year between May and June 2021 after the students completed the ExpEng II course.

### **1. Questionnaire on attitudes and experiences**

The questionnaire consisted of 58 items, some of which were adapted from the studies of Tamrakitkun, (2010), Patanasorn (2013), Cote and Milliner (2015), Wisaijorn (2017), and Yamashita (2013). The questionnaire had five sections: students' attitudes toward (1) reading in English and (2) extensive reading, (3) students' experiences in reading graded readers online with Xreading, (4) reading assignments and score proportion, and (5) final comment: one thing they like or dislike about external reading assignments or Xreading.

The questionnaire was created on Google Forms and piloted with three sections of the ExpEng II course (Faculties of Science, Political Science, and Commerce and Accountancy), and was used to collect quantitative data. Participants were required to respond to all items in Sections 1-5.

### **2. Semi-structured focus groups**

Three semi-structured focus groups were conducted in Thai on Zoom with 13 students from three different divisions to allow participants to elaborate on their attitudes toward extensive reading and reading English graded readers online. The size of a focus group ranged between 6-12 (Dörnyei, 2007; Grey, 2014), and eight seemed to be appropriate for this study. There were 17 interview questions divided into five sections like those in the questionnaire.

## **Data analysis**

### **1. Questionnaire**

All 356 questionnaire responses were included in the quantitative data analysis. 5-point Likert rating scale items ranging from strongly disagree to strongly agree in the questionnaire were analyzed by using descriptive statistics to calculate percentage, means, and standard deviation via SPSS Version 22. Table 3 presents the 5-point Likert scale used in this study.

**Table 3**  
**5-point Likert scale**

Strongly disagree	1.00-1.80
Disagree	1.81-2.60
Neutral	2.61-3.40
Agree	3.41-4.20
Strongly agree	4.21-5.00

## 2. Focus groups

Short answers in the questionnaire and interview transcriptions were analyzed using the content analysis method.

## RESULTS

Overall, the Xreading's data usage report showed a significant increase in students' reading goal achievement in the second semester as 93.55% ( $N = 4,599$ ) of the students read more than the required 20,000 words with the highest being 192,420 words, whereas in the first semester there were only 46.32% ( $N = 2499$ ) of the students who read more than the required minimum of 21,000 words, with the highest words read of 144,592. The average reading time was 3.31 hours in the first semester, which decreased to 2.54 hours in the second semester which might be due to a rise in the reading speed limit from 300 to 400 words per minute. Although students spent less time on reading, a much higher number of the students exceeded the reading goal which could be because the students became more familiar with the system and the assignment. Additionally, 55.43% ( $N = 2,725$ ) of the students read more than 21,000 words, which was still more than in the first semester.

### RQ 1: What are the students' attitudes toward extensive reading?

This section presents the students' perceptions of ER and the effects of ER on their language abilities improvement.

#### 1. The students' perception of ER

**Table 4**  
**Students' attitudes toward extensive reading**

Statement	M	SD
1. Reading graded readers makes me enjoy reading in English more than before.	3.80	0.89
2. I am more motivated to read graded readers because the stories are simple.	3.77	0.97
3. I prefer to read shorter texts because they are simpler.	3.63	1.00
4. I like reading graded readers in English.	3.57	0.90
5. I am too busy with other coursework or activities to read graded readers out of class.	3.41	1.09
6. I prefer to read longer texts because they are more interesting.	3.21	1.01
<b>Total mean</b>	<b>3.57</b>	<b>0.54</b>

The total mean score ( $M = 3.57$ ) in Table 4 shows that students generally had positive attitudes toward ER. The top three reasons show that reading graded readers made them enjoy reading in English more than before ( $M = 3.80$ ), they were more motivated to read graded readers because the stories were simple ( $M = 3.77$ ), and they preferred to read shorter texts because they were simpler ( $M = 3.63$ ).

Additionally, all students in the focus groups enjoyed reading graded readers in English because they could choose the books that were appropriate for their proficiency levels and interesting for them, which helped them understand the stories better and enjoy reading even more.

*Mallika: Reading graded readers in English is even more fun for me when I can choose my own books at my level and that I'm interested in reading. I can understand the stories better and become more motivated to complete the books.*

*Hansa: I enjoy reading English graded readers more because I can choose the books that are both appropriate for my proficiency and interesting for me.*

Twelve students felt they enjoyed reading in English more after reading graded readers because they had freedom to choose what they wanted to read by themselves.

*Saichon: Extensive reading allows me to select books based on my preferences, interests, and proficiency level, and these elements make reading graded readers very easy and fun for me.*

The data also showed reading graded readers reduced high and intermediate proficiency students' anxiety in reading books in English for the following reasons:

*Praewa: Being able to understand what I read really reduces my anxiety because it makes me realize that my reading skill isn't that bad.*

*Natcha: Before I started reading graded readers, I was very anxious about reading books in English because I thought I would not be able to understand anything. After I've read graded readers, I realized I could actually understand what I was reading and that reading in English wasn't as scary as I thought.*

Moreover, when students are allowed to read graded readers at their own convenience, reading becomes even more fun for them as shared by one low proficiency student.

*Siraya: Reading graded readers outside of class is very fun because I can read the books at my convenience. The external reading assignments were assigned with a duration to complete and I could be in control of my own reading time.*

Only one high proficiency student, Jirayu, did not feel that reading graded readers made him enjoy reading in English more than before because he has always enjoyed reading in English since he was young.

## 2. The effects of ER on the students' language abilities improvement

In the questionnaire, students were asked to self-evaluate their improvement of their English abilities as a result of doing ER. The scale ranges from strongly disagree to strongly agree.

**Table 5**  
**Students' self-evaluation on the improvement of their English abilities**

Ability	M	SD
1. Vocabulary	4.17	0.78
2. General English ability	4.15	0.66
3. Reading comprehension	4.11	0.68
4. Reading speed	4.06	0.77
5. Grammatical knowledge	3.61	0.93
<b>Total mean</b>	<b>4.02</b>	<b>0.56</b>

Table 5 indicates that students generally perceived that ER helped them improve their English abilities. The top three abilities include vocabulary ( $M = 4.17$ ), general English ability ( $M = 4.15$ ), and reading comprehension ( $M = 4.11$ ).

The qualitative data analysis presented similar findings. Eight students in all three focus groups agreed that ER helped them improve their vocabulary.

*Saichon: My vocabulary knowledge has been expanded. Although I read books that were at my level, sometimes I saw words that I didn't understand, and I'd look them up.*

*Kemika: Reading graded readers trains me to guess word meanings from the context when I came across words that I didn't know the meaning of. After having seen those words many times, I felt I could understand them better.*

ER helped improve reading speed and fluency of four high and one intermediate proficiency students.

*Ingfa: After reading graded readers for a while, I feel that my reading speed and fluency have improved greatly.*

*Natcha: I feel I can read more quickly and fluently.*

Besides language abilities, two high proficiency students thought that reading extensively helped them form a reading habit because it made them enjoy reading more and get used to reading.

*Praewa: Extensive reading makes me enjoy reading more, which promotes a reading habit.*

*Mallika: I feel that reading extensively instills a reading habit as it makes me get used to reading more.*

## **RQ 2: What are the students' attitudes toward doing online extensive reading through Xreading?**

This section focuses on students' opinions about reading graded readers on Xreading. Three aspects are presented: (1) students' reading preferences regarding modes, assignments, and factors for book selection, (2) advantages of Xreading, and (3) difficulties when using Xreading.

### **1. Students' preferences**

#### **Modes**

The majority of respondents (72.5%,  $N = 258$ ) preferred reading graded readers on their electronic devices to reading physical graded readers at the library (27.5%,  $N = 98$ ). All 13 students in the focus groups reported that they preferred reading on Xreading as it allowed them to read anytime and anywhere.

*Siraya: The library has opening hours. I usually enjoy reading at night before going to sleep. With Xreading, I can just log in whenever I feel like reading, search for a book, and then start reading right away.*

#### **Assignments**

The majority of respondents (77.2%,  $N = 275$ ) preferred the Reading Marathon (RM) to Read & Review (RR) (22.8%,  $N = 81$ ). The qualitative analysis showed that seven students liked both assignments as they could see the benefits of both.

*Maylada: I think RR allows us to reflect on what we think about the book we've read, whereas RM encourages us to read a lot of words or many books.*

*Bandit: RR and RM are excellent at helping us improve our reading skills. RR allows us to reflect on what we've learned from the book. RM allows us to develop our reading fluency because we have to read a lot.*

Five students preferred RM for different reasons. Three students liked RM more because they did not like writing a review.

*Saichon: I preferred RM because I didn't like writing a review. I just wanted to continue reading the next book.*

*Natcha: I preferred RM because I didn't enjoy thinking about what to write for a review.*

*Siraya: I enjoyed RM so much more because I didn't have to spend so much time on thinking about what to write for a review.*

The other two students liked it because of different reasons as shown below.

*Ingfa: RM was more flexible as it gave me some freedom to choose how I wanted to complete the assignment between reading a few long books or many short books.*

*Hansa: RM was the activity that let me be with myself and with the book I was reading. It gave me an opportunity to develop my reading skills besides studying in class.*

Only one student enjoyed RR.

*Mallika: I preferred RR because it allowed me to practice reading and reflect what I thought and liked about the book.*

Furthermore, 50% ( $N = 178$ ) of respondents would not continue reading on Xreading if the assignments were not required in the courses. Twenty respondents mentioned that the scores motivated them to do the assignments even more. Five focus group participants (one high and four intermediate proficiency) also mentioned this point.

*Saichon: I really loved these reading assignments because they were fun and provided score.*

*Jupita: I liked the reading assignments because they were easy to get full points.*

### **Factors for book selection**

The questionnaire asked students to select all the factors that applied to them when choosing which graded readers to read. Table 6 illustrates the top five factors. The total word count was the most popular factor which received the highest frequency of 276 times. Other factors that had above 200 times include the genre (252), the book title (251), and the difficulty level (223).

**Table 6**  
**Top five factors for graded reader selection**

Factor	<i>n</i>	Percent of cases
1. The word count	276	77.5%
2. The genre	252	70.8%
3. The book title	251	70.5%
4. The difficulty level	223	62.6%
5. The summary	181	50.8%

Unlike the quantitative results, findings from the focus groups showed that seven students (five high and two intermediate proficiency) looked at the genre first, and two students (one high and one low proficiency) considered the number of words because they wanted to read only one or a few books that would help them complete the reading assignment. Determination to complete the assignment which had a minimum requirement of words could explain why the word count was the most frequently picked in the questionnaire as shown in the excerpt below.



*Siraya: I wanted to read fewer books with a lot of words to complete the reading assignment.*

It was also revealed that the majority of respondents (94.1%,  $N = 335$ ) mainly preferred to read graded readers about a variety of topics to their fields of study (5.9%,  $N = 21$ ). No questionnaire respondents requested more books related to their fields, and no focus group participants mentioned they preferred reading about their fields of study.

## 2. Advantages of Xreading

**Table 7**  
**Advantages of Xreading**

<b>Advantage of Xreading</b>	<b>M</b>	<b>SD</b>
1. I can check my reading data (e.g., number of books I've read, my reading speed, quiz scores, etc.)	4.48	0.70
2. I can read anywhere, anytime.	4.47	0.74
3. I can see book ratings and reviews.	4.28	0.71
4. There are many kinds of graded readers on Xreading that I can choose from.	4.24	0.89
5. The Xreading website is easy to use.	4.05	0.96
6. It's easy to search for books.	3.94	0.97
7. I often listen to the audio narration while reading.	2.86	1.37
<b>Total mean</b>	<b>4.04</b>	<b>0.61</b>

The total mean score ( $M = 4.04$ ) of the advantages in Table 7 shows that students generally enjoyed the benefits of Xreading, and especially liked the self-monitoring features ( $M = 4.48$ ) and convenience ( $M = 4.47$ ) that Xreading offers.

In the final questionnaire section where students were asked to mention one thing that they liked about Xreading, they mentioned statements 2, 4, 5, and 7 in Table 7. Their own mentions seemed to confirm the aspects about Xreading that they really liked. In addition, they mentioned three things they really liked about Xreading. First, doing reading assignments via Xreading enabled them to practice their English and reading skills (30 mentions). Second, reading on Xreading was fun (25 mentions). Finally, they could choose the graded readers they were interested in reading by themselves (15 mentions). The quantitative analysis also revealed that 84% ( $N = 299$ ) of the students preferred to choose the graded readers on Xreading by themselves.

The qualitative data provide insightful feedback on reading graded readers online via Xreading. Twelve students had positive experiences with reading books on Xreading and only one high proficiency student felt neutral. Seven students (three high and four intermediate proficiency) mentioned convenience as the main reason contributing to their favorable experiences. The students liked Xreading's filter feature which made their book searches very easy and the website enabled them to read anytime and anywhere without having to go to the library.

*Kemika: It's really convenient for me to read anywhere and anytime, and there are so many choices to choose from.*

*Bandit: The website makes it very convenient for me to read graded readers because I don't have to go to the library. Also, I can easily search for books using the filter, which makes it very easy for me to find the books that I'm interested in and match my proficiency level.*

Three students (one high and two intermediate proficiency) enjoyed reading on Xreading because they found it very relaxing.

*Monthira: Reading on Xreading allows me to choose to read where I want to read. I can read in bed or on a sofa and relax.*

*Hansa: I really like reading on Xreading because I can take a break from reading the texts in the course book and read what I want.*

Two high proficiency students felt that reading books on Xreading was a great way to help them develop their English reading skills regarding speed and comprehension.

*Ingfa: Reading graded readers on Xreading helps me improve my English reading skills a lot. I can read more quickly and understand what I read better.*

*Praewa: When I keep reading at my level on Xreading, I feel that my speed has increased because I can understand what I read immediately.*

Additionally, two intermediate proficiency students loved the post-reading quizzes on Xreading because they allowed them to check their reading comprehension of the books.

*Siraya: Post-reading quizzes were really useful for helping me check how much I understood the books.*

In summary, the ten advantages of Xreading were identified in four categories based on the information in Table 7 and students' additional comments in the questionnaire. First, convenience and ease of use include (1) students' being able to read anywhere, anytime, (2) the website's ease of use (features' being easy to use), and (3) ease of book search. Second, the useful functionalities consist of the students' being able to (4) check their reading data, (5) see book ratings and reviews, and (6) listen to the audio narration while reading. Third, the ER principles involve (7) the availability of a variety of graded readers, (8) fun reading experience on Xreading, and (9) students' being able to choose their own graded readers that match their interests. Finally, the linguistic value includes (10) an opportunity to practice English and reading skills for students when doing reading assignments via Xreading.

### 3. Difficulties when using Xreading

**Table 8**  
**Difficulties when using Xreading**

Difficulty	M	SD
1. I am not sure what graded readers to choose.	3.52	0.94
2. I have eyestrain when reading on Xreading.	3.41	1.10
3. There is not enough variety of graded readers that I'm interested in to choose from.	3.12	1.09
4. The speed of the audio narration is often too slow or too fast.	2.90	0.91
5. I often experience system errors.	2.79	1.21
6. Xreading functionalities (e.g., adding books, taking quizzes, changing the audio speed, etc.) are difficult to use.	2.79	1.04
7. I have problems with the Internet connection.	2.68	1.25
8. Reading graded readers on Xreading uses too much of my cellular data.	2.46	1.05
9. Most of the graded readers on Xreading are too difficult for me.	2.37	1.00
10. The book quizzes are too difficult.	2.31	1.05
<b>Total mean</b>	<b>2.84</b>	<b>0.71</b>

The total mean score ( $M = 2.84$ ) of difficulties in Table 8 expresses a neutral degree, suggesting that students generally did not experience a lot of problems. Despite frequent comments on system errors (e.g., slow loading and page freezing) and some comments on a lack of a variety of graded readers in the final section of the questionnaire, Table 8 shows that students generally felt neutral about these two issues with the mean scores of 2.79 and 3.12 respectively. The top two difficulties include a lack of ideas on which graded readers to read ( $M = 3.52$ ) and eyestrain when reading on Xreading ( $M = 3.41$ ). Three difficulties that students disagreed in items 7-9 indicate that they did not find reading on Xreading used too much cellular data and most graded readers and book quizzes were not considered to be too difficult.

Students' mentions of difficulties 2, 3, and 5 in the final part of the questionnaire confirm that such issues bothered them. Thirteen respondents also mentioned that the system automatically closed the book when they spent a long time reading on one page,<sup>3</sup> and the other thirteen respondents mentioned that they were distracted by a pop-up notification displaying when they were reading too quickly or too slowly.

Noticeably, there is a divide in the students' opinions on the variety of graded readers on Xreading; while some students thought the website has a wide range of graded readers, others thought the opposite. From the questionnaire responses, eighteen students reported that genres were limited, two thought books at the high difficulty level were too few, and two wished Xreading had contemporary bestsellers like *Harry Potter*.

<sup>3</sup> The automatic book closing is set when inactivity is detected for tracking the reading record. The system automatically closes the book when the user is inactive (i.e., no page scrolling) for more than two minutes. The user might open the book, but not read it and do something else.

In the focus groups, four students did not experience any technical problems, but all the problems mentioned were technical. Six students were distracted by a pop-up notification of inactivity. Two students sometimes experienced slow loading and page freezing, and such problems occurred even when their Internet connection was stable. Additionally, one student reported a technical issue when using Xreading on his tablet.

*Bandit: I did not encounter any problems when reading on my computer, but I had some technical issues when reading on my tablet. For instance, the system kept going back to the main page when I continued to read a book.*

However, it should be noted that only one student reported this problem when using the website on a tablet; thus, it could be anecdotal.

In a nutshell, nine difficulties were listed in five categories based on the information in Table 8 and students' additional comments in the questionnaire. First, technical issues involve (1) system errors (slow loading and page freezing), (2) the Internet connection, (3) the automatic closing of the book when students spend a long time reading on one page, and (4) distraction of pop-up notifications, but these tended to be anecdotal in nature, not systematic and repeated. Second, the issues with functionalities consist of (5) Xreading's functionalities being difficult to use and (6) the audio narration speed's being too slow or too fast. This speed problem reflects that some students were not aware that they could adjust the speed on the book page. Third, a preference includes (7) a lack of a variety of graded readers. Fourth, (8) book selection refers to students' not knowing which graded readers to choose. Finally, a health issue which is (9) eyestrain when reading on Xreading. It should be noted that three difficulties (items 8-10) in Table 8 were not included because students did not perceive them as difficulties.

## DISCUSSION AND CONCLUSION

The present study explored attitudes of over 300 freshmen from 18 faculties in an online ERP with the integration of the Xreading virtual library at a large public university in Bangkok, Thailand. The findings confirm the positive effects of online ER as revealed through the students' positive attitudes toward ER and reading graded readers online (Bui & Macalister, 2021; Cote & Milliner, 2015; Milliner & Cote, 2015; Zhou & Day, 2021).

It was revealed that students had positive attitudes toward ER because (1) reading graded readers made them enjoy reading in English more than before (Milliner & Cote, 2015), (2) they were more motivated to read graded readers because the stories were simple, and (3) they preferred to read shorter texts because they were simpler. Insightful findings from the three focus groups indicate that all 13 students enjoyed freedom of choice in which they could choose their own graded readers that matched their interests and proficiency. This enhanced their pleasure and reduced their anxiety in reading English books. The focus groups thought reading simple stories increased their comprehension, reading speed, and fluency. Since the ERP integrated the Xreading library which includes over 1,400 graded readers, students seemed to enjoy a variety of graded readers on different topics, and 93.55% ( $N = 4,599$ ) of the students read more than the requirement of 20,000 words in the second semester. Also, the students

were assigned to complete their reading assignments outside of class, reading was done individually and silently at their convenience. These findings confirm that all five frequently adopted principles (Day, 2015) in Table 1 were also present in the university's ERP. *Principles 1: The reading material is easy, 2: A variety of reading material on a wide range of topics is available, and 3: Learners choose what they want to read* were frequently mentioned in both the questionnaire and focus groups (Day & Bamford, 2002).

Regarding the effects of ER on English abilities improvement, students agreed that ER helped them improve their language abilities, especially vocabulary. Similarly, Wisaijorn's (2017) study reports vocabulary improvement was most frequently mentioned by the students as a result of ER. Although the current study did not measure vocabulary gains, the students' reflections on their vocabulary development as a result of doing ER seems to confirm that incidental vocabulary learning occurs when they read extensively (Ng et al., 2019), and ER has positive effects on vocabulary acquisition (Chen et al., 2013; Jeon & Day, 2016; Nakanishi, 2015; Suk, 2016). Besides vocabulary, the students could feel their reading comprehension and speed also improved. When students read texts that are appropriate for their levels and in large amounts, their reading comprehension and speed increase (Belgar & Hunt, 2014; Huffman, 2014; Suk, 2016; Tamrackitkun, 2010). This study was also in agreement with Zhou and Day's (2021) findings, which reported improved language abilities in reading rate, vocabulary, grammar, and comprehension. Additionally, two high proficiency students thought that reading extensively helped them form a reading habit (Bin & Macalister, 2021; Day & Bamford, 2002). This finding sheds some light on implementing ER to cultivate a reading habit among students, especially in countries where reading is not their culture.

As for the students' attitudes toward online ER via Xreading, 72.5% ( $N = 258$ ) of the students preferred reading on their electronic devices to reading physical graded readers at the library. A similar preference is evident in Cote and Milliner's (2015) study. The findings further support that students were more motivated to read if the reading assignments were required as part of the courses with the allocation of scores (Tamrackitkun, 2010). Also, the students had positive perceptions due to a variety of graded readers, enjoyment from reading, convenience (Bin & Macalister, 2021; Mesureur, 2013; Milliner & Cote, 2015; Zhou & Day, 2021) and ease of use, self-monitoring features (Brown, 2012; Zhou & Day, 2021), and an opportunity for students to practice their English (Tien, 2015) and reading skills. All of these advantages, except for the last one, align with Cote and Milliner's (2015) findings in which convenience and ease of use received high frequencies. Regarding difficulties that students encountered, the total mean score of all difficulties is in a neutral degree, indicating that students generally did not experience a lot of problems. Despite frequent comments on system errors and some comments on a lack of a variety of graded readers, students generally felt neutral about these two issues. The top two difficulties included a lack of idea on which graded readers to read and eyestrain when reading on Xreading. This study's findings reflect similar difficulties, including system errors, eyestrain, and small library that Japanese university students also experienced (Cote & Milliner, 2015). A report on eyestrain in this study is also in consistent with studies by Huang and Lin (2011), Huang (2013), and Bin and Macalister (2021). Similarly, technical issues and a lack of variety of books identified in this study were also mentioned in Zhou and Day's (2021) study.

## PEDAGOGICAL IMPLICATIONS

First, freedom of choice is crucial to motivate students to read more and should always be part of an ERP. This study's findings show that being able to choose reading materials that interested them made students enjoy reading even more. To make it possible for students to choose books themselves, the library must include a variety of genres, titles, and difficulty levels to match the students' needs. Although students enjoy the freedom of choice, making a book recommendation list available can also be helpful, especially for students who are new to reading books in English as the list can be their starting point. However, providing a book recommendation list should not be confused with assigning the whole class to read the same books at the same difficulty level. In the very early stages of reading, having the whole class read the same book at the same time with the teacher guiding students through it can be done to prepare students for independent self-selected reading (Nation & Waring, 2020).

Second, when an ERP with the integration of Xreading is implemented for the first time, a demonstration video that briefly explains what ER is and its benefits to students, the assignments, and what Xreading is and how to use it to complete the assignments should be offered to both students and teachers to facilitate their understanding and prevent confusion. The demonstration should also provide suggestions on what to do to prevent technical issues and emphasize that the current Xreading's library includes only graded readers, not authentic materials written for native speakers of English, so students will not expect to find contemporary bestsellers like *Harry Potter* on Xreading. An orientation before the online ERP implementation is recommended to inform the teachers of the definition and benefits of ER and the kinds of materials to be read (Zhou & Day, 2021).

## LIMITATIONS

Some limitations in this study should be noted. First, the generalizability of the study's findings is limited to participants with the same characteristics as those represented in the sample due to the research context and participants. The data were collected from one leading university in Thailand where most students have access to facilities needed for the success of the online ERP. The participants were freshmen who came from different academic disciplines. Thus, the results may not apply to all contexts. Second, since the data collection was entirely on a voluntary basis, an equal distribution of research samples' grades was not possible. The majority of questionnaire respondents were high and upper-intermediate proficiency students (93.26%,  $N = 332$ : A = 62.36%,  $N = 222$ ; B+ = 20.79%,  $N = 74$ ; and B = 10.11%,  $N = 36$ ), while the lower-intermediate and low proficiency students constituted only 6.74% ( $N = 24$ : C+ = 2.81%,  $N = 10$ ; C = 2.25%,  $N = 8$ ; D+ = 0.84%,  $N = 3$ ; and D = 0.84%,  $N = 3$ ). Although the proportion of all seven grades of the students represents that of the freshmen population, in that the majority obtained A and the minority obtained D in the ExpEng I course, the results of the high and upper-intermediate students clearly dominated in this study. Thus, future study should attempt to collect data from students with an equal distribution of their grades to obtain more balanced views. Finally, although students of all proficiency levels participated in this study, their quantitative data were not analyzed based on their proficiency levels; therefore, it would be

useful for future studies to investigate whether students' proficiency affects their attitudes and experiences in online ER.

## THE AUTHOR

**Mintra Puripunyavanich**, Ph.D., is a lecturer in the Division of English for Business at Chulalongkorn University Language Institute. She serves as Chair of Thailand Extensive Reading Association. Her research interests are extensive reading, materials development, and ESP.

[mintra.p@chula.ac.th](mailto:mintra.p@chula.ac.th)

## REFERENCES

- Anderson, N. J. (1999). *Exploring second language reading: Issues and strategies*. Heinle & Heinle.
- Beglar, D., & Hunt, A. (2014). Pleasure reading and reading rate gains. *Reading in a Foreign Language*, 26(1), 29-48.
- Brown, D. (2012). Online support systems for extensive reading: Managing the tension between autonomy and institutional education. *The Language Teacher*, 36(2), 11-16.
- Bui, T. N., & Macalister, J. (2021). Online extensive reading in an EFL context: Investigating reading fluency and perceptions. *Reading in a Foreign Language*, 33(1), 1-29.
- Charumanee, N. (2014). Idea sharing: The use of read-share-act to promote extensive reading. *PASAA: Journal of Language Teaching and Learning in Thailand*, 47, 183-198.
- Chanthap, N., & Wasanasomsithi, P. (2019). The effect of integration of a blended learning and extensive reading instruction model on Thai EFL undergraduate students' learner autonomy. *LEARN Journal: Language Education and Acquisition Research Network Journal*, 12(2), 76-96.
- Chen, C. N., Chen, S. C., Chen, S. H. E., & Wey, S. C. (2013). The effect of extensive reading via e-books on tertiary level EFL students' perceptions of reading aptitude, reading comprehension and vocabulary. *Turkish Online Journal of Educational Technology*, 12(2), 303-312.
- Cote, T., & Milliner, B. (2015). Implementing and managing online extensive reading: Student performance and perceptions. *IALLT Journal of Language Learning Technology*, 45(1), 70-90. <https://doi.org/10.17161/iallt.v45i1.8550>
- Davis, C. (1995). Extensive reading: An expensive extravagance? *ELT Journal*, 49(4), 329-336.
- Day, R. R. (2015). Extending extensive reading. *Reading in a Foreign Language*, 27(2), 294-301.
- Day, R. R., & Bamford, J. (1998). *Extensive reading in the second language classroom*. Cambridge University Press.
- Day, R. R., & Bamford, J. (2002). Top ten principles for teaching extensive reading. *Reading in a Foreign Language*, 14(2), 136-141.
- Dörnyei, Z. (2007). *Researching methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press.
- Extensive Reading Foundation. (2011). *The Extensive Reading Foundation's guide to extensive reading*. ER Foundation. <https://erfoundation.org/wordpress/guides/>
- Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. Cambridge University Press.
- Gray, D. E. (2014). *Doing research in the real world*. (3rd ed.). SAGE Publications Ltd.
- He, M. (2014). Does extensive reading promote reading speed? *The Reading Matrix*, 14, 16-25.
- Huang, H. (2013). E-reading and e-discussion: EFL learners' perceptions of an e-book reading program. *Computer Assisted Language Learning*, 26(3), 258-281.
- Huang, L., & Lin, C. (2011). EFL learners' reading on mobile phones. *The JALT CALL Journal*, 7(1), 61-78.

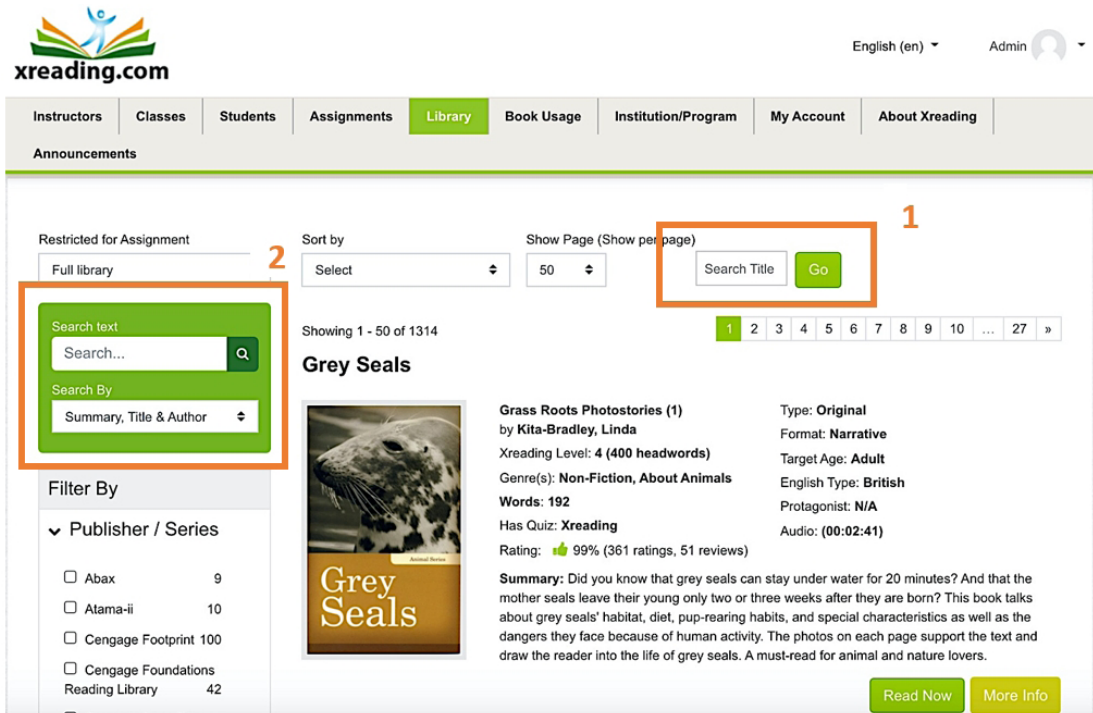


- Huffman, J. (2014). Reading rate gains during a one-semester extensive reading course. *Reading in a Foreign Language*, 26(2), 17-33.
- Jeon, E. Y., & Day, R. R. (2016). The effective of ER on reading proficiency: A meta-analysis. *Reading in a Foreign Language*, 28(2), 246-265.
- Khansir, A., & Dehghani, N. (2015). The impact of extensive reading on grammatical mastery of Iranian EFL learners. *Theory and Practice in Language Studies*, 5(7), 1501-1507.
- Kirchhoff, C. (2013). L2 extensive reading and flow: Clarifying the relationship. *Reading in a Foreign Language*, 25(2), 192-212.
- Kirin, W. (2010). Effects of extensive reading on students' writing ability in an EFL class. *The Journal of Asia TEFL*, 7(1), 285-308.
- Lee, J., Schallert, D., & Kim, E. (2015). Effects of extensive reading and translation activities on grammar knowledge and attitudes for EFL adolescents. *System*, 52, 38-50.
- Lin, C. (2014). Learning English reading in a mobile-assisted extensive reading program. *Computers & Education*, 78(2014), 48-59.
- Macalister, J. (2015). Guidelines or commandments? Reconsidering core principles in extensive reading. *Reading in a Foreign Language*, 27(1), 122-128.
- Maipoka, S., & Soontornwipast, K. (2021). Effects of intensive and extensive reading instruction on Thai Primary Students' English Reading Ability. *LEARN Journal: Language Education and Acquisition Research Network*, 14(1), 146-175.
- Maneechao, K., & Tepsuriwong, S. (2016). A study of Thai students' opinions on books for extensive reading. *Songklanakarin Journal of Social Science and Humanities*, 22(2), 181-211.
- Mesureur, G. (2013). An evaluation of ESL reading efficiency and motivation using e-book vs. printed book. In S. Miles & M. Brierley (Eds.), *Extensive Reading World Congress Proceedings* (pp.280-290). Extensive Reading Foundation.
- Milliner, B., & Cote, T. (2015). One year of extensive reading on mobile devices: engagement and impressions. In F. Helm, L. Bradley, M. Guarda, & S. Thouèsny (Eds.), *Critical CALL – Proceedings of the 2015 EUROCALL Conference, Padova, Italy* (pp. 404-409). Dublin: Research-publishing.net. <http://dx.doi.org/10.14705/rpnet.2015.000366>
- Nakanishi, T. (2015). A meta-analysis of extensive reading research. *TESOL Quarterly*, 49(1), 6-37.
- Nation, P., & Wang, K. M. (1999). Extensive reading and vocabulary. *Reading in a Foreign Language*, 12(2), 355-380.
- Nation, P., & Waring, R. (2020). *Teaching extensive reading in another language*. Routledge.
- Nuttall, C. (1996). *Teaching reading skills in a foreign language* (2nd ed.). Heinemann.
- Ng, Q. R., Renandya, W. A., & Chong, M. Y. C. (2019). Extensive reading: Theory, research and implementation. *TEFLIN Journal*, 30(2), 171-186. <http://dx.doi.org/10.15639/teflinjournal.v30i2/171-186>
- Patanasorn, C. (2013). Integrating extensive reading into a regular curriculum in an EFL context. Thailand Science Research and Innovation. [http://digital.library.tu.ac.th/tu\\_dc/frontend/Info/item/dc:64684](http://digital.library.tu.ac.th/tu_dc/frontend/Info/item/dc:64684)
- Paungmaliwan, P. (2005). Enhancing reading comprehension, vocabulary recognition and attitude towards extensive reading: A case study of the first-year English majors in the academic year 2004 at Nakhon Ratchasima Rajabhat University. [Unpublished master's thesis]. Suranaree University of Technology..
- Porkaew, K., & Fongpaiboon, A. (2018). Effects of extensive reading on Thai tertiary students' reading attitudes. *Arab World Englishes Journal (AWEJ)*, 9(1), 207-219. <https://dx.doi.org/10.24093/awej/vol9no1.15>
- Pratontep, C. (2007). *The effects of extensive reading and levels of reading proficiency on Thai university students' English reading comprehension using a self-regulated learning framework*. [Unpublished doctoral dissertation]. Department of English as an International Language, Chulalongkorn University.
- Renandya, W. A., & Day, R. (2020). The primacy of extensive reading and listening: Putting theory into practice. Willy Renandya. <https://willyrenandya.com/the-primacy-of-extensive-reading-and-listening/>

- Renandya, W. A., Hidayati, M., & Ivone, F. M. (2020). Top ten implementation issues. Willy Renandya. <https://willyrenandya.com/extensive-reading-top-ten-implementation-issues/>
- Renandya, W. A., & Jacobs, G. M. (2016). Extensive reading and listening in the L2 classroom. In W. A. Renandya & H. P. Widodo (Eds.), *English Language Teaching Today, English Language Education Vol. 5* (pp.97-110). Springer International Publishing. [https://doi.org/10.1007/978-3-319-38834-2\\_8](https://doi.org/10.1007/978-3-319-38834-2_8)
- Robb, T., & Kano, M. (2013). Effective extensive reading outside the classroom: A large-scale experiment. *Reading in a Foreign Language*, 25(2), 234-247.
- Satitporn, N. (1995). *An experimental study of the role of extensive reading on the ability to acquire vocabulary and motivation of M5 students at Thawangphapittayakom School in Nan Province*. [Unpublished master's thesis]. Mahidol University.
- Suk, N. (2016). The effects of extensive reading on reading comprehension, reading rate, and vocabulary acquisition. *Reading Research Quarterly*, 52(1), 73-89.
- Tamrackitkun, K. (2010). Extensive reading: An empirical study of its effects on EFL Thai students' reading comprehension, reading fluency and attitudes [Doctoral Dissertation, University of Salford]. University of Salford Institutional Repository. <http://usir.salford.ac.uk/id/eprint/11924/1/Thesis.pdf>
- Tien, C. (2015). A large-scale study on extensive reading program for non- English majors: Factors and attitudes. *International Journal of Applied Linguistics and English Literature*, 4(4), 46-54.
- Tran, Y. (2018). The benefits of extensive reading for EFL Vietnamese learners. *Journal of Extensive Reading*, 64-72.
- Uraiman, Y. (2011). *Developing secondary school students' reading ability and motivation using an extensive reading program*. [Master's project, Srinakharinwirot University]. Srinakharinwirot University Repository. [http://thesis.swu.ac.th/swuthesis/Eng\(M.A.\)/Yutha na\\_U.pdf](http://thesis.swu.ac.th/swuthesis/Eng(M.A.)/Yutha na_U.pdf)
- Waring, R., & McLean, S. (2015). Exploration of the core and variable dimensions of extensive reading research and pedagogy. *Reading in a Foreign Language*, 27(1), 160-167.
- Wisaijorn, P. (2017). Effects of extensive reading on Thai university students. *PASAA PARITAT Journal*, 32, 29-62.
- Yamashita, J. (2008). Extensive reading and development of different aspects of L2 proficiency. *System*, 36(4), 661-672. <https://doi.org/10.1016/j.system.2008.04.003>
- Yamashita, J. (2013). Effects of extensive reading on reading attitudes in a foreign language. *Reading in a Foreign Language*, 25(2), 248-263.
- Yang, Y. H., Chu, H. C., & Tseng, W. T. (2021). Text difficulty in extensive reading: Reading comprehension and reading motivation. *Reading in a Foreign Language*, 25(1), 78-102.
- Zhou, J., & Day, R. R. (2021). Online extensive reading in EAP courses. *Reading in a Foreign Language*, 33(1), 103-125.

## Appendix 1

### The screenshot of the Xreading library



The screenshot displays the Xreading library interface. At the top, the navigation bar includes links for Instructors, Classes, Students, Assignments, **Library**, Book Usage, Institution/Program, My Account, and About Xreading. Below the navigation bar, the 'Restricted for Assignment' dropdown is set to 'Full library'. The search section features a green search box on the left (labeled '2') and a search box on the right (labeled '1'). The main content area shows a list of books, with 'Grey Seals' highlighted. The book details include a cover image, title, author, Xreading Level, Genre(s), Words, Has Quiz, Rating, Type, Format, Target Age, English Type, Protagonist, and Audio. Buttons for 'Read Now' and 'More Info' are located at the bottom right of the book details.

The screenshot presents the library page which displays graded readers with a brief summary and information about each book. Users can also search for the books in (1) the “Search Title” box on the right or (2) the green search box on the left and use different filters under the search box to help them their narrow down their searches.



## **Appendix 2**

### **Focus group lists**

#### **1. High proficiency group**

1. Ingfa, Engineering
2. Praewa, Allied Health Science
3. Monthira, Science
4. Mallika, Law
5. Saichon, Education
6. Jirayu, Commerce and Accountancy
7. Maylada, Economics

#### **2. Intermediate proficiency group**

1. Hansa, Allied Health Science
2. Kemika, Science
3. Bandit, Education
4. Jupita, Fine and Applied Arts
5. Natcha, Commerce and Accountancy

#### **3. Low proficiency group**

1. Siraya, Education