

The Implementation of Digital Extensive Reading to Enhance Reading Ability for Chinese EFL Learners

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Abstract

Digital Extensive Reading (DER) was designed to investigate Chinese EFL learners' English reading ability. Employing a mixed-methods, one-group pretest–posttest design, this study sought to offer a comprehensive understanding of the development of learners' reading comprehension and reading fluency. It was implemented with fifteen high school learners in twelve sessions. Results from the Digital Reading Comprehension Test and Digital Reading Logs revealed significant improvement for reading comprehension and reading rate using the Wilcoxon signed-rank test. Digital Reflective Journals and Digital Reading Logs through thematic analysis displayed reading fluency, in particular reading speed, accurate comprehension, and personal engagement. Implications highlighted the implementation of extensive reading to support gradual and multidimensional development in both comprehension and fluency in digital learning contexts.

Keywords: digital extensive reading, reading ability, reading comprehension, reading fluency, Chinese EFL learners

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Introduction

In China, English is a compulsory subject introduced in primary education, typically from Grade 3 and earlier in some regions. It remains a core requirement in secondary schools, serving as a major component of entrance examinations for both high school and university admission. Junior high school learners are at a critical point in English language development, progressing from basic vocabulary and structures toward understanding more complex texts and developing individual learning strategies. Their cognitive growth enables deeper and more critical language processing. As the final phase of China's nine-year compulsory education, junior high school serves as a crucial link between primary and senior high levels.

However, Chinese junior high school learners often struggle with English learning. Firstly, they experience difficulties in reading comprehension, particularly at the semantic and pragmatic levels. This is often related to the intensive reading instruction, which is a language-focused learning activity and improves learners' reading comprehension mostly at lexical and syntactic level (Fu, 2022; Nation, 2008; Wang & He, 2006). Additionally, the exam-oriented context often leads learners to perceive reading as unimportant or time-consuming, a situation compounded by the growing prevalence of short-form online videos (Loh, 2024). Spending too much time on short-form videos can weaken learners' ability to maintain attention while reading, limit the time they have for effective learning, and lower their motivation to study (Guo & Chai, 2024). Moreover, China's 2022 new English curriculum mandates 40,000–150,000 words of extracurricular reading at the junior high level.

To address these challenges, extensive reading (ER) has become a promising approach to complement traditional classroom instruction. ER encourages learners to read large amounts of engaging, easy, self-selected materials, encompassing a wide range of topics and genres for enjoyment, information, and general understanding (Carrell & Carson, 1997; Day & Bamford, 1998; Jeon & Day, 2016; Nation, 2022; Renandya & Jacobs, 2016). By providing frequent exposure to meaningful language, ER offers sustained engagement with texts that support deeper comprehension. It also makes reading more appealing for learners under exam pressure or distracted by short-form videos, helping rebuild motivation and sustained attention (Fu, 2022; Zhou, 2024).

With the widespread use of digital devices, adolescents increasingly engage with easily accessible online materials, highlighting the growing role of digital reading (DR) (Day, 2015; Loh, 2024; Prasetyanto et al., 2024). Previous studies have noted that the Internet facilitates ER by enabling teachers to monitor learners' progress easily and providing learners with convenient

access to diverse reading resources. Furthermore, Grabe and Yamashita (2022) underscore the importance of investigating effective strategies for DR practices, given the complexity of online reading environments and changing reading habits. However, traditional ER principles were largely developed before the widespread adoption of digital reading environments. Although some scholars have suggested the use of digital libraries, learners do not always restrict themselves to these platforms, and they need support in the more complex online reading space. Moreover, most existing ER research has focused on adult or university learners (Wang & Kim, 2021), leaving junior high school learners largely underexamined.

In response to these gaps, this study develops a Digital Extensive Reading (DER) framework that integrates digital reading with extensive reading. By retaining ER's foundational principles - learner autonomy, reading volume, enjoyment, and general understanding - the framework adapts tasks, reading materials, and assessment practices to digital environments to better support younger EFL learners' reading development.

This study aimed to examine the outcomes of implementing DER on the reading ability of Chinese EFL learners. DER was integrated into the second language curriculum as an extracurricular activity in which the learners participated in nine 120-minute lessons. The participants were 15 junior high school learners selected by convenient sampling. Data were collected from Digital Reading Comprehension Pretest and Posttest, Digital Reflective Journals and Digital Reading Logs. The independent variable was DER, and the dependent variable was learners' English reading ability.

This study aimed to address the following research questions:

RQ1: To what extent does the implementation of digital extensive reading enhance reading ability of Chinese EFL learners?

RQ1.1: To what extent does the implementation of digital extensive reading enhance reading comprehension of Chinese EFL learners?

RQ1.2: To what extent does the implementation of digital extensive reading enhance reading fluency of Chinese EFL learners?

Literature Review

Extensive Reading

ER is commonly defined as a meaning-oriented approach in which learners read large quantities of self-selected and accessible texts from diverse topics and genres for enjoyment, information, and general comprehension (Carrell & Carson, 1997; Day & Bamford, 1998; Jeon & Day, 2016; Nation, 2022; Renandya & Jacobs, 2016).

Translating this conceptual definition into classroom practice, Day and Bamford (2002) proposed ten principles that operationalize ER through the use of easy and varied materials, extensive and largely individual reading, a focus on fluent and meaning-focused processing, and active teacher guidance and modeling. However, these principles were established over two decades ago, variations in teaching contexts and resources have led scholars to propose different perspectives. Macalister (2015) argued that reading should prepare learners for taking part in other learning activities or tasks, rather than being pursued solely for its intrinsic value. Moreover, he further revised the principle to emphasize that learners should read as much as possible in a regularly scheduled, time-limited period, encouraging reading to become a habitual part of their daily routines. Also, Ng et al. (2019) argued that ER may not be effective unless accountability measures are implemented, suggesting that one principle should be reframed as “Reading should be monitored and assessed.”

Meanwhile, the results of Day’s (2015) study revealed that the ten principles were not uniformly applied; many programs adopted only some of them, and, surprisingly, one program did not reference any of the ten principles at all. Macalister (2015) also concluded that the ten principles should be best considered as guidelines, not as commandments. Renandya et al. (2025) further suggested that the implementation of ER has consistently involved balancing idealistic principles with practical constraints.

Moreover, drawing from previous studies, several key research trends in the field of ER can also be identified: 1) Numerous studies have provided strong evidence for the positive effects of ER on specific aspects of language ability (e.g., reading fluency, reading comprehension, vocabulary, grammar, writing, and speaking) and learner-related factors (e.g., reading attitudes, motivation, habits, and flow experience). For example, Zhou (2024) found that ER facilitated reading fluency by providing learners with repeated exposure to common vocabulary, enabling these words to become part of their sight vocabulary. Supporting this view, Bui and Macalister (2021), Iwata (2022), and McLean and Rouault (2017) reported that learners engaged in ER showed significantly greater gains in reading speed than those in control

groups. Moreover, Nakanishi (2015) reported a strong relationship between reading speed and comprehension, suggesting that learners who enjoy reading tend to read faster, read more, and ultimately understand better. 2) The focus of research has gradually shifted from examinations of whether ER is more effective than other forms of reading instruction to investigations of how to implement it effectively. 3) Researchers have increasingly acknowledged that ER is not without limitations and have explored strategies to mitigate these challenges (e.g., Renandya et al., 2021, 2025).

Building on established definitions of ER, pedagogical guidance on the ten ER principles, and evidence of ER effectiveness, this study selectively adopted and adapted relevant principles to suit the instructional context and its learner-focused design. In addition, responding to calls to broaden the age range of ER research to improve generalizability (Jeon & Day, 2016; Sangers et al., 2025), the study focuses on younger EFL learners.

Digital Reading

Digital reading has become a major medium for information distribution worldwide and represents a form of literacy that deserves focused attention in all educational contexts (Grabe & Yamashita, 2022). To help learners effectively engage in DR, Grabe and Yamashita (2022, p. 399) outlined several essential strategies for challenging online reading assignments. Nevertheless, many struggling learners find it difficult to master these strategic processes, and it may be unrealistic to expect all secondary and postsecondary learners to become proficient in increasingly complex online reading tasks. Thus, learners will require a lot of practice and guidance from the teacher (Grabe & Yamashita, 2022, pp. 399-400).

While these strategies can enhance reading efficiency and accessibility, the shift to digital formats also introduces both benefits and challenges. From one perspective, digital reading offers numerous advantages across multiple dimensions, as evidenced by recent studies (Alexander, 2020; Cheetham et al., 2022; Janah et al., 2022; Kuhn et al., 2022; Milliner & Cote, 2015; Muravev, 2023; Prasetyanto et al., 2024). First, DR uses technology to integrate multimedia elements, interactive tools, and digital features that create diverse and engaging learning experiences. Second, it provides flexible, portable, and inclusive access to learning resources, supporting learners' needs and enabling study anytime, anywhere. Third, it improves resource availability and affordability while promoting environmental sustainability. Fourth, DR benefits from Learning Management System integration and technology-driven strategies to track progress, enhance engagement, and personalize learning pathways. Finally,

it enhances learning efficiency through better time management, faster information access, and improved comprehension and retention. From another perspective, the downsides of digital reading should not be overlooked, as several studies have noted (Alexander, 2020; Cheetham et al., 2022; Clinton, 2019; Janah et al., 2022; Kuhn et al., 2022; Milliner & Cote, 2015; Muravev, 2023; Singer & Alexander, 2017; Prasetianto et al., 2024). First, DR depends heavily on stable technology and connectivity, making it vulnerable to disruptions from technical failures, limited infrastructure, or unreliable Internet access. Second, it may cause physical discomfort and reduce sensory engagement due to the lack of physical interaction. Third, DR may lead learners to process information superficially, feel overconfident about their understanding, and struggle with deep thinking or focused analysis. Fourth, it increases exposure to external interruptions and divided attention, undermining focus and productivity. Fifth, it raises the risk of encountering unreliable content and complicates the efficient navigation of dense or complex information. Finally, DR can exacerbate inequalities in access to resources and reduce engagement for learners with limited technological familiarity or access.

Comparing with traditional ER, DER offers the potential to increase learners' engagement and better reflect the realities of their digitally mediated environment. The participants in this study are Generation Z learners, who have grown up with constant exposure to technology and are naturally familiar with electronic devices. The development of these devices has, in many ways, influenced their reading habits and preferences. Many learners may be “tech users”, who regularly use technology for everyday tasks such as chatting, browsing, or gaming, but they may not know how to use it for deeper purposes such as learning or problem-solving. Therefore, it is important to guide these digital natives to become “tech learners”, who go beyond casual use - they actively build digital skills, explore new tools, and use technology to think, create, and learn more effectively (Chardonens, 2025).

Reading Ability

Reading ability has been widely debated in L2 research, with scholars offering definitions reflecting cognitive, linguistic, and interactive aspects of text processing. In this study, reading ability focused on two aspects - reading comprehension and reading fluency - which closely align with the nature of DER. First, access to a wide range of level-appropriate digital texts supports the development of both comprehension and fluency. Second, the accessibility and convenience of digital reading platforms encourage sustained reading practice,

a key condition for fluency development. Finally, these two components are widely used outcome measures in ER and DER research, ensuring comparability across studies and methodological rigor. Reading comprehension was further divided into three levels: literal comprehension (e.g., understanding what is explicitly stated in the text, such as identifying details, main ideas or sequences of events), inferential comprehension (e.g., understanding what is not directly stated in the text, such as making predictions or determining the author's purpose) and critical comprehension (e.g., engaging with the text on a metacognitive level, such as evaluating the author's arguments or comparing the text with real-world knowledge or personal experience to make judgments) (Alderson, 2000). Reading fluency refers to the ability to read quickly, accurately, and effortlessly while understanding the text, including appropriate word stress and phrasing in prosody (Grabe & Yamashita, 2022, p. 404). As participants in this study read silently in class, prosodic features were not considered.

In the assessment of reading ability in DER, teachers are encouraged to implement follow-up activities for multiple purposes: to evaluate what learners have gained from the reading, to track the quantity and type of reading, to monitor attitudes toward reading, to foster shared reading experiences, and to integrate reading with other curriculum components. These activities aim to maintain the integrity of learners' reading experiences while extending them in engaging and practical ways. Day and Bamford (1998) also provided examples of follow-up activities that support ER and discussed how ER classrooms can function as communities of readers. Additional reading activities and detailed explanations can be found in Bamford and Day (2004) and Leather and Uden (2021).

Guided by the study's definition of reading ability and established recommendations for evaluating DER, this study employed both formal and informal assessments to collect quantitative and qualitative data, enabling a more comprehensive examination of DER's influence on learners' reading ability.

Methodology

Research Design

This study adopted a one-group pretest-posttest design within a mixed-methods research framework, which was well suited to exploratory instructional research, as it was feasible in authentic classroom contexts, ensured instructional equity, and allowed for direct assessment of learning gains through pre-post comparisons.

Participants

The participants were 15 Chinese junior high school learners who studied English as a compulsory subject with local English teachers. Their proficiency level corresponded to A2 (pre-intermediate) according to CEFR. All of them needed to take the senior high school entrance examination as part of their academic progression.

Research Instruments

Digital Reading Comprehension Test

A Digital Reading Comprehension Test was developed to examine the impact of DER on Chinese EFL learners' reading comprehension (see Appendix A). The same test was used as both the pretest and posttest. Based on Alderson's (2000) framework, the test assessed three levels of comprehension: literal, inferential, and critical. Five passages (three non-fiction and two fiction) were adapted from previous Senior High School Entrance Examination reading comprehension tests, matching learners' typical reading length and level of difficulty. Each passage contained six multiple-choice items, with two items targeting each reading comprehension level, resulting in 10 items per level across the test. All items were equally weighted (1 point each), yielding a maximum score of 30. The test was created in Wenjuanxing, an online survey platform, validated by three language education experts and piloted with eight comparable learners, with revisions made to ensure reliability and validity.

Digital Reflective Journal

A Digital Reflective Journal was designed to explore how DER facilitated Chinese EFL learners' reading comprehension and fluency (see Appendix B). As a supplementary instrument to the standardized test, it captured learners' evolving meaning-making processes and interpretive responses to texts. Reflective journals can promote deeper textual engagement and support the development of comprehension and metacognitive awareness in EFL contexts (Gonzalez-Torres & Vargas-Saritama, 2025). Informed by Alderson's (2000) three levels of comprehension and Bamford and Day's (2004) reading activities, the journal included two parts: basic bibliographic details (title, author, source, and genre) and reflections addressing literal, inferential, and critical comprehension. After receiving explicit instruction on journal writing and the use of Jinshan Docs, learners completed the journals in class using Jinshan Docs, an online collaborative platform. The instrument was reviewed by three language education experts and piloted, leading to minor revisions.

Digital Reading Log

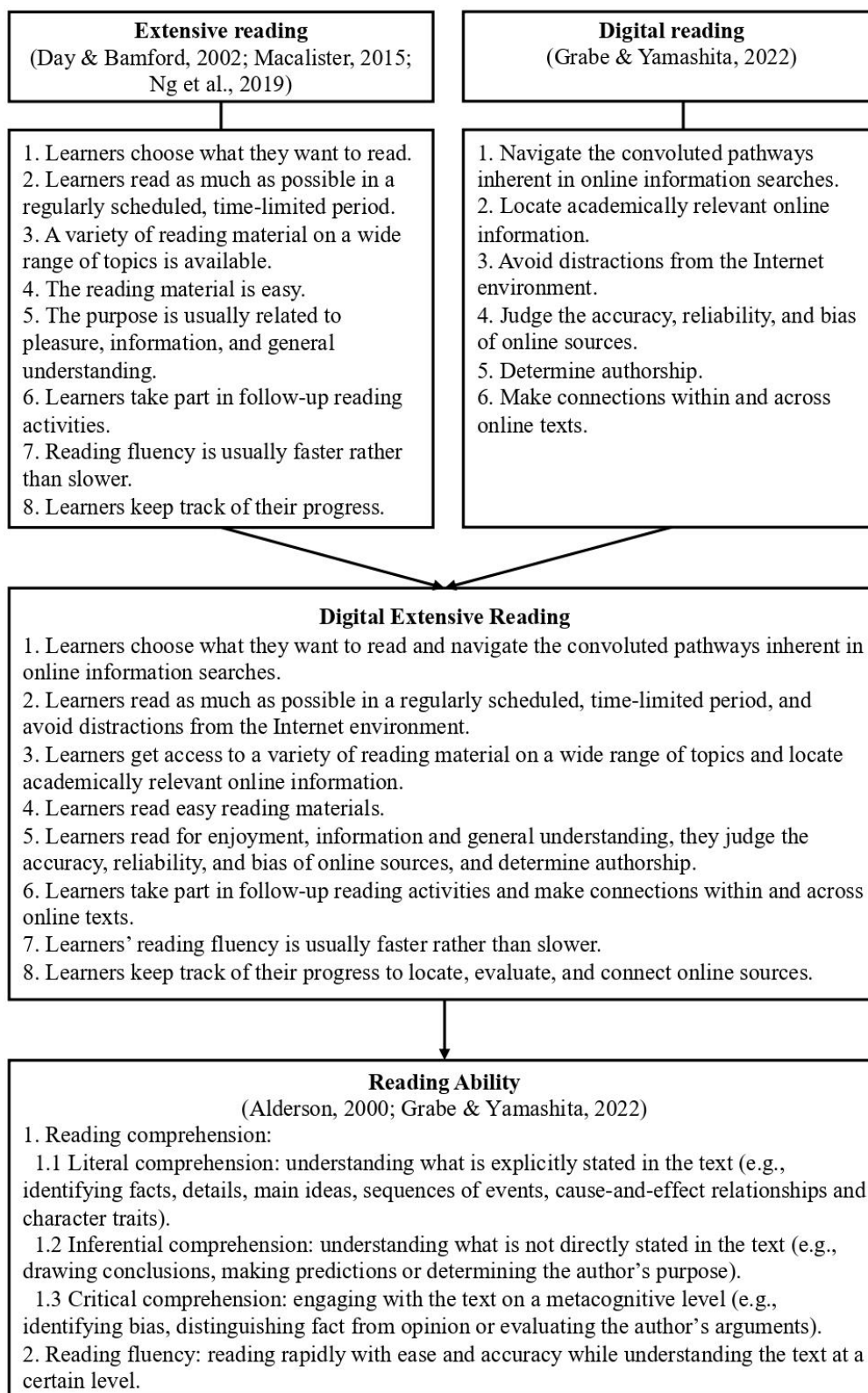
A Digital Reading Log was developed to examine how DER supported the development of reading fluency among Chinese EFL learners (see Appendix C). Reading logs have been widely used as a practical and reliable tool for documenting readers' ongoing practice and habits in recent ER studies, and they have been shown to support the development of reading-related skills and engagement in authentic classroom settings (Zur et al., 2025). Drawing on Grabe and Yamashita's (2022) definition of reading fluency and adapted from Bamford and Day's (2004) activities, the log recorded reading date, book title, reading level, reading time, word count, words per minute (WPM), familiar words, perceived difficulty, and indicators of ease or struggle. A brief content item was included to ensure basic comprehension during rapid reading. Prior to log completion, learners received explicit instruction on how to record their reading logs. Learners then filled out the logs using Jinshan Docs in class. The instrument was validated by three language education experts and piloted, leading to minor revisions.

Digital Extensive Reading

The theories and related concepts to Extensive Reading, Digital Reading and Reading Ability were used to construct the theoretical framework of DER in this study, as presented in Figure 1.

Figure 1

The Summary of Related Theories and Theoretical Framework

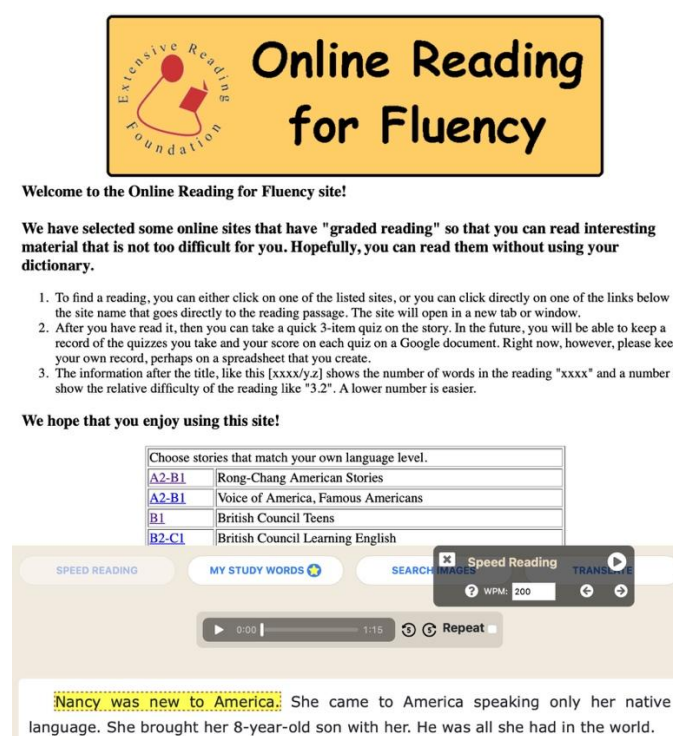


Guided by the framework, unit plans for three instructional units were developed. An orientation session was conducted to familiarize learners with DER and the use of digital devices. The topics of each unit were: Get Started, Explore Fiction and Explore Non-fiction. The description of each principle and its instructional activities were as follows:

DER Principle 1: Learners choose what they want to read and navigate the convoluted pathways inherent in online information searches. Four open-access digital libraries, each with distinct features, were introduced progressively to accommodate diverse preferences and to simulate real-world online reading environments. For instance, in Unit 1, learners were introduced to the digital library Online Reading for Fluency, as shown in Figure 2 (<https://or4f.org>). The library provided a wide range of graded texts organized by CEFR levels and topics. A key feature, “speed reading,” allowed learners to set a target words-per-minute rate, with the text automatically highlighted to guide reading pace and support the achievement of their fluency goals.

Figure 2

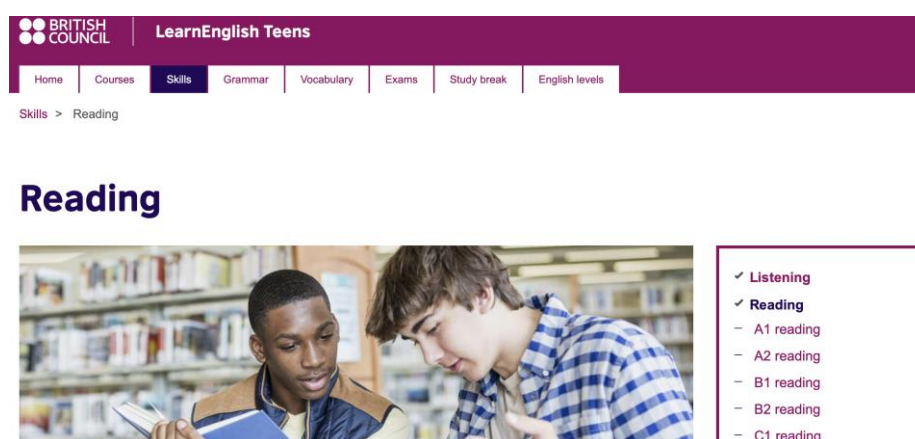
The First Digital Library: Online Reading for Fluency and its “Speed Reading” Function



Also in Unit 1, learners accessed the digital library British Council LearnEnglish Teens, as can be seen from Figure 3 (<https://learnenglishteens.britishcouncil.org/skills/reading>), which provided short texts tailored for teen learners across CEFR levels. Each passage was accompanied by interactive comprehension exercises and vocabulary tasks to support reading development.

Figure 3

The Second Digital Library: British Council LearnEnglish Teens



In Unit 2, learners used the digital library English e-Reader, as displayed in Figure 4 (<https://english-e-reader.net>). The texts, both fiction and non-fiction, were organized by CEFR levels and varied in length. Each book included information on unique words, total word count, difficult words, and audio support to facilitate reading comprehension and fluency.

Figure 4

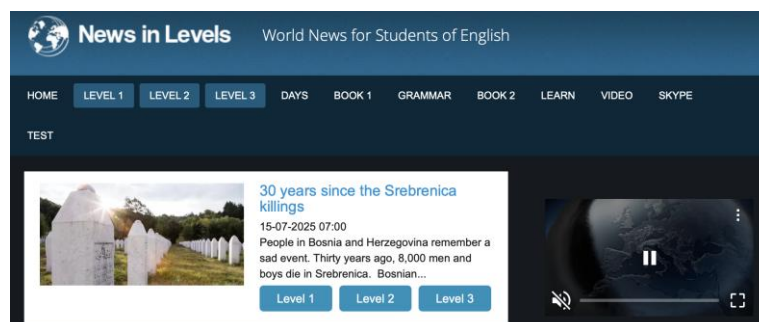
The Third Digital Library: English E-Reader



In Unit 3, learners accessed the digital library News in Levels, as illustrated in Figure 5 (<https://www.newsinlevels.com>), which provided current news rewritten at three levels. Each article included audio and video support, allowing learners to engage with authentic content and progressively advance to higher levels as their reading skills developed.

Figure 5

The Fourth Digital Library: News in Levels



DER Principle 2: Learners read as much as possible in a regularly scheduled, time-limited period, and avoid distractions from the Internet environment. For example, in Unit 1, Lesson 2, during Activity 3: Digital Extensive Reading Time, as presented in Figure 6, learners first identify potential distractions and discuss strategies to manage them. They then read the book while applying these strategies.

Figure 6

Activity 3. Digital Extensive Reading Time

- What factors may distract you during digital reading?

- How to overcome them?



- Open the link you send in WeChat group chat in L1.

- Read the book for 15 minutes.

- Record the time and underline unknown words



1. Total words

2. Unknown words

3. Percentage of known words

Interesting? Easy?



DER Principle 3: Learners are given access to a variety of reading materials on a wide range of topics and locate academically relevant online information. For instance, in Unit 1, Lesson 1, during Activity 2: Learn Genres, as shown in Figure 7, learners first receive instruction on text genres. The teacher then demonstrates how to find subject-related texts in Digital Library 1, after which learners work in groups to locate and share texts connected to school subjects.

Figure 7

Activity 2. Learn Genres

A. Genres
Here are some fiction and non-fiction genres.

Adventure 冒险	Western 西部
Disaster 灾难	Romance 爱情
Thriller 惊悚	Science fiction 科幻
Suspense 悬疑	Fantasy 奇幻
Spy 间谍	Horror 恐怖
Mystery 神秘	Ghost story 鬼故事
Detective 侦探	Human interest 人文
Crime 犯罪	Humor 幽默
Travel 旅行	History 历史
Biography 传记	Self-help 自助
Science & Technology 科技	Current events/issues 时事/议题
Culture 文化	Children's literature 儿童文学

- Form five groups of four.

- Find one text that have connections to school subjects.



DER Principle 4: Learners read easy reading materials. For instance, in Unit 1, Lesson 1, during Activity 4: Find Your Reading Level, as can be seen from Figure 8, learners first receive an introduction to the CEFR framework. They then read three texts from Digital Library 2, identify unknown words, and calculate difficulty percentages to evaluate the texts' levels.

Figure 8

Activity 4. Find Your Reading Level

C. Reading Level
Read the passages and count how many unknown words you have.

Passage 1

FLORIDA HOTEL SWIMMING POOL

OPENING HOURS:
Monday - Saturday 08:00 - 22:00
Sunday 09:00 - 17:00

No diving.

No running.

No eating or drinking in the pool.

Use the steps to go into the pool.

Children should be with an adult at all times.

Respect the lifeguard at all times.

Unknown words: _____ X 100 = _____ %
Total word count: 43

Too easy (100 > x ≥ 99%)
Perfect (99 > x ≥ 98%)
A little difficult (98 > x ≥ 96%)
Too difficult (< 96%)

Passage 2

Seven tips for a tidy desk

1. Only keep things you really need on and near your desk.
2. Don't keep any drinks on your desk.
3. Reduce the amount of paper that you use.
4. Scan your notes.
5. Use your smartphone to take photos of things you need to remember.
6. Get a noticeboard.
7. Clean your desk at the end of every day.

If you have a lot of paper (magazine articles, notes, worksheets, etc.), make digital versions of them.

If you really do need to keep small bits of paper, use a noticeboard on the wall. Check it every day and throw old notes in the bin.

Choose a time to tidy your desk and do it! If you do it every day, it will only take five minutes and you can start each new day with a clean and tidy space.

Unknown words: _____ X 100 = _____ %
Total word count: 250

Too easy (100 > x ≥ 99%)
Perfect (99 > x ≥ 98%)
A little difficult (98 > x ≥ 96%)
Too difficult (< 96%)

Passage 3

An Olympic blog
What an Olympics!
Posted by Helen Nolan on 10 September, 2012 at 21:25

It's all over! I've been writing my blog from London every day during the Olympics and the Paralympics and this is my final post to look back on a wonderful couple of months. Here are some of the things that were the most memorable for me:

The Opening Ceremony
This set the scene for the Games with an amazing show featuring music, dancing, historical figures, fireworks and British humor. A huge number of volunteers practiced for months to make everything perfect. The best moment was when the old lady in Buckingham Palace turned round and showed that she was neither a lookalike nor an actor but Her Majesty the Queen. The next best bit was when she jumped out of a helicopter with James Bond (although I think that actually was an actor!).

Team GB
I was very proud of our team as we kept on winning medals and finished in third position in the medal table, which is truly a great result for Great Britain. There were so many incredible sportsmen and women. The ones that stand out for me are Mo Farah, the Somali-born Londoner who won the 10,000 and 5,000 meters with the whole stadium going crazy. Jessica Ennis, the popular super-athlete from Sheffield who won the heptathlon, and Nicola Adams who won the first female boxing medal in Olympic history for Britain.

The Olympic Stadium crowd
Although the crowd cheered on the British, there was lots of support for athletes of other nationalities too like the wonderful Usain Bolt, from Jamaica, who won the 100 and 200 meters sprint to become the fastest man alive. There was also Oscar Pistorius of South Africa who was the first disabled person to compete in the Olympics. He went on to win two gold medals and a silver in the Paralympics.

New sports
I have really enjoyed being able to watch sports which are not normally shown on television. Before the Olympics I didn't expect to love watching judo or find myself screaming at the television during a game of wheelchair tennis, but I really got into them. I didn't know anything about goalball before the Paralympics but it became one of my favorite sports.

The organization and the atmosphere
It took seven years of planning and 70,000 volunteers to make everything go well. Many people have said that the organization was not as perfect as that of the Beijing Games, but there was a much better atmosphere which spread out through the whole city. The volunteers were always friendly and helpful and Londoners even began talking to each other and visitors on the underground trains!

Unknown words: _____ X 100 = _____ %
Total word count: 453

Too easy (100 > x ≥ 99%)
Perfect (99 > x ≥ 98%)
A little difficult (98 > x ≥ 96%)
Too difficult (< 96%)

DER Principle 5: Learners read for enjoyment, information and general understanding; they judge the accuracy, reliability, and bias of online sources, and determine authorship. For example, in Unit 1, Lesson 2, during Activity 2: Check Digital Libraries and during Activity 4: Top Reading Pick, as displayed in Figure 9, learners first record library information. They then create an online information checklist, share it with peers, and review their selected books, documenting title, genre, difficulty, rationale for selection, and summary.

Figure 9

Activity 2. Check Digital Libraries and Activity 4. Top Reading Pick

B. Check Digital Library
Explore Digital Library 1 or 2 in groups and complete the table.

Name	
URL	
Sponsor	
Date	
Purpose	

C. Top Reading Pick
Review the books you have read and complete the table.

Book Title			
Genre			
Difficulty (tick ✓)	Too easy (≥ 99%)	Perfect (≥ 98%)	
	A little difficult (≥ 96%)	Too difficult (< 96%)	
Why I choose this book (tick ✓)	I read it for enjoyment.	I read it for information.	
What this book is about			

Design an online information checklist.

DER Principle 6: Learners take part in follow-up reading activities and make connections within and across online texts. For example, in Unit 1, Lesson 2, during Activity 4: Top Reading Pick, as illustrated in Figure 10, learners are first provided with sentence structures to support explanation. They then share their reading selections verbally and vote for a peer’s preferred book along with a brief justification.

Figure 10

Activity 4. Top Reading Pick

C. Top Reading Pick
Review the books you have read and complete the table.

Book Title			
Genre			
Difficulty (tick ✓)	Too easy (≥ 99%)	Perfect (≥ 98%)	
	A little difficult (≥ 96%)	Too difficult (< 96%)	
Why I choose this book (tick ✓)	I read it for enjoyment.	I read it for information.	
What this book is about			

Sentence structures

- **The title and genre of the book**
- 1. The book I choose is **(Book Title)**.
- 2. It’s a **(genre)** book.
- **Difficulty and Purpose**
- 3. This book is **(too easy/perfect/a little difficult/too difficult)** for me.
- 4. I read it for **(enjoyment/information)**.
- **What this book is about**
- 5. The story is about.../ The book talks about.../ It takes place in ...

DER Principle 7: Learners’ reading fluency is usually faster rather than slower. For example, in Unit 1, Lesson 3, during Activity 2: Speed Reading, as presented in Figure 11, learners first read a simple text for one minute to determine their current reading speed. They then set successive speed goals and use the “Speed Reading” function in Digital Library 1 to practice reaching these targets.

Figure 11

Activity 2. Speed Reading

The screenshot displays the Speed Reading app interface. On the left, a text passage titled "[1-A2-259/3.4] 20. A VISIT TO ASIA" is shown. The passage describes Liz's excitement about traveling to Asia with her mom. On the right, the app's speed reading interface is visible, featuring a timer set to 1:21, a WPM (Words Per Minute) goal of 100, and a 'Repeat' button. The text 'Liz was excited' is highlighted in yellow. Below the text, a WeChat logo is present, and the URL 'https://www.rong-chang.com/esiread/ss/s020.htm' is displayed.

DER Principle 8: Learners keep track of their progress to locate, evaluate, and connect online sources. For example, in Unit 1, Lesson 3, during Activity 3: Digital Reflective Journals and Activity 4: Digital Reading Logs (see Appendix B and C), learners first receive instruction on the purpose and use of the instruments, then reflect on their reading and complete the journals and logs.

Research Procedures

The research procedures were divided into two phases:

Phase 1: Preparation of Digital Extensive Reading

In Stage 1.1, a comprehensive review of theories and relevant literature was conducted to develop the theoretical framework of DER. In Stage 1.2, the development and validation of the research instruments were carried out. Guided by the DER theoretical framework, three research instruments were designed, validated by experts, and piloted to ensure reliability and validity. In Stage 1.3, the formulation of the DER instructional plan was carried out. In Stage 1.4, the DER instructional plans were validated prior to implementation. Three language education experts qualitatively reviewed the plans, and they were piloted with eight learners that had similar characteristics to the participants. Revisions were made as needed to ensure validity and reliability.

Phase 2: Implementation of Digital Extensive Reading

In stage 2.1, prior to the instructional intervention, participants completed the Digital Reading Comprehension Pretest in Session 1. In Stage 2.2, learners were first oriented to DER and introduced to the four digital libraries in Session 2. They then participated in three DER

units designed according to the DER framework from Sessions 3 to 11. After engaging with DER for a few sessions, learners became familiar with the process, so Digital Reflective Journals and Digital Reading Logs were assigned as follow-up classroom activities from Session 5 to 11 to monitor reading engagement and fluency. In Stage 2.3, following the conclusion of all instructional interventions, participants were administered a posttest in Session 12, and it was the same as the pretest.

Data Collection and Analysis

Data were collected and analyzed using a mixed-methods approach. Before the treatment, participants completed the Digital Reading Comprehension Pretest. During the treatment, learners completed journals and logs after each session, while those from Sessions 5, 8, and 11 were selected for analysis, as these sessions fell at the end of each instructional week. After the treatment, the Digital Reading Comprehension Posttest was administered. Quantitative data from the pretest, posttest, and reading logs were summarized using descriptive statistics (means and SDs) and compared using Wilcoxon signed-rank tests. Qualitative data from journals and logs were analyzed thematically following Braun and Clarke's (2006), using a deductive, theory-driven approach. Initial themes were informed by relevant literature and theoretical constructs, and the data were systematically coded to identify examples corresponding to these predefined themes, with ongoing refinement throughout the analysis process.

Findings

RQ1: To what extent does the implementation of digital extensive reading enhance the reading ability of Chinese EFL learners?

In general, the implementation of DER effectively enhanced the overall reading ability of Chinese EFL learners, promoting integrated development in both comprehension and fluency. Learners became more capable of understanding, processing, and engaging with texts, reading with greater ease, speed, and accuracy, while also demonstrating deeper interpretive and critical skills. These results suggest that DER supports holistic reading growth rather than isolated improvements. To elaborate on these overall effects, the following subsections detail the specific outcomes regarding reading comprehension and fluency.

RQ1.1: To what extent does the implementation of digital extensive reading enhance the reading comprehension of Chinese EFL learners?

Table 1

Comparison of Participants' Overall Digital Reading Comprehension Pretest and Posttest Scores

Digital Reading Comprehension Test (total score=30)	Mean	SD	z	p	Effect size (r)
Pretest	15.93	8.46	1.822	.068	.492
Posttest	17.80	8.99			

Note. *p< .05, **p<.01, N=15

Table 1 compares participants' digital reading comprehension pretest and posttest scores. The mean increased from 15.93 (SD = 8.46) to 17.80 (SD = 8.99), but the change was not statistically significant ($z = 1.822$, $p = .068$). This suggests only modest gains in reading comprehension, with no strong evidence of significant improvement. Subsequent analysis of test subcomponents provided a more detailed view of learners' comprehension development.

Table 2

Comparison of Participants' Performance on Literal Comprehension

Literal Comprehension (total score=10)	Mean	SD	z	p	Effect size (r)
Pretest	6.07	2.99	0.604	.546	.166
Posttest	6.27	3.13			

Note. *p< .05, **p<.01, N=15

Table 2 compares participants' performance on the literal comprehension subscale. Mean scores showed a slight increase from 6.07 (SD = 2.99) in the pretest to 6.27 (SD = 3.13) in the posttest, indicating that learners' ability to extract explicitly stated information remained largely stable. Among the three subscales, literal comprehension consistently had the highest

mean, suggesting it was the least challenging aspect of reading comprehension. The z-test confirmed no significant change ($z = 0.604$, $p = .546$).

Qualitative data from 45 digital reflective journal entries corroborated these findings. Learners consistently identified details, main ideas and sequences of events from texts across sessions. No clear decline or improvement was observed over time, indicating that literal comprehension was a well-established skill prior to the intervention. Table 3 presents the theme, codes, and representative excerpts related to participants' literal comprehension identified through the thematic analysis.

Table 3

Theme, Codes, and Sample Responses Related to Participants' Literal Comprehension

Theme	Codes	Sample Responses
Literal Comprehension	Identifying details	L14 (S5): <i>"A man who was good at riding motorcycles was hit by a car one day."</i> L14 (S8): <i>"Fewer tourists travel from Canada to the United States."</i> L14 (S11): <i>"This app offers a community where people can share their drawings."</i>
	Identifying main ideas	L3 (S5): <i>"This text is about Asla and her family wanting to go on a boat."</i> L3 (S8): <i>"This text is mainly about the Little Mermaid who wants to see the outside world."</i> L3 (S11): <i>"This text is mainly about Canadians not buying American products."</i>
	Identifying sequences of events	L7 (S5): <i>"A little girl went to the forest to play and met a little boy. The next day, she saw a man at the police station looking for the boy."</i> L7 (S8): <i>"Jack and his partners left France and sailed south. On the way, they met a young killer whale that was hurt."</i> L7 (S11): <i>"This article explains how matcha is made. Then it introduces the places where</i>

matcha is produced. Finally, it mentions the raw materials of matcha.”

Note. L=Learner, S=Session

Table 4

Comparison of Participants’ Performance on Inferential Comprehension

Inferential Comprehension (total score=10)	Mean	SD	z	p	Effect size (r)
Pretest	5.40	2.97	0.738	.461	.157
Posttest	5.73	3.04			

Note. * $p < .05$, ** $p < .01$, $N=15$

Table 4 compares participants’ performance on the inferential comprehension subscale. Mean scores increased slightly from 5.40 (SD = 2.97) in the pretest to 5.73 (SD = 3.04) in the posttest, indicating modest development. However, the z-test showed no significant change ($z = 0.738$, $p = .461$), suggesting limited measurable improvement.

Qualitative analysis revealed that inferential responses appeared in all journal entries, though their depth varied. Learners often made predictions about plot developments, sometimes loosely linked to textual evidence, and regularly interpreted authorial purpose. Beyond identifying basic intentions (e.g., entertaining or informing), learners recognized deeper themes, such as moral lessons, values like diligence or kindness, environmental awareness, and reflection on human behavior. These findings suggest that repeated engagement with diverse digital texts may foster gradual cognitive growth in inferential comprehension, even if standardized measures show only modest gains. Table 5 displays the theme, codes, and representative excerpts related to participants’ inferential comprehension identified through the thematic analysis.

Table 5

Theme, Codes, and Sample Responses Related to Participants' Inferential Comprehension

Theme	Codes	Sample Responses
Inferential Comprehension	Making predictions	L7 (S5): <i>"The little boy will wait for the police and his father to come and find him."</i> L7 (S8): <i>"The killer whale will think that they hurt the baby whale and take revenge."</i> L7 (S11): <i>"People will plant more tea plants in the future."</i>
	Determining the author's purpose	L12 (S5): <i>"The writer's main purpose is to tell us how to wash dishes."</i> L12 (S8): <i>"The writer wants to tell us that we should be hardworking."</i> L12 (S11): <i>"The writer wants to tell us that the world is getting warmer. He hopes people can protect the environment and look for renewable energy."</i>

Note. L=Learner, S=Session

Table 6

Comparison of Participants' Performance on Critical Comprehension

Critical Comprehension (total score=10)	Mean	SD	z	p	Effect size (r)
Pretest	4.47	3.09	2.595	.009**	.725
Posttest	5.80	3.17			

Note. * $p < .05$, ** $p < .01$, $N = 15$

Table 6 compares participants' performance on the critical comprehension subscale. Mean scores increased from 4.47 (SD = 3.09) in the pretest to 5.80 (SD = 3.17) in the posttest, indicating improved ability. The z-test with a large effect size ($r = .725$) showed a statistically

significant improvement ($z = 2.595$, $p = .009^{**}$), suggesting that DER contributed meaningfully to this gain.

Qualitative analysis revealed a consistent developmental pattern: learners gradually shifted from personal, experience-based responses to more analytical and socially aware interpretations. Early responses focused on emotions or personal memories with minimal critique, whereas later responses evaluated authors' perspectives, articulated reasoned positions, and linked textual ideas to broader social or real-world contexts. This progression reflects growing critical engagement. Table 7 outlines the theme, codes, and representative excerpts associated with participants' critical comprehension identified through the thematic analysis.

Table 7

Theme, Codes, and Sample Responses Related to Participants' Critical Comprehension

Theme	Codes	Sample Responses
Critical Comprehension	Comparing the text with real-world knowledge or personal experience	L5 (S5): <i>"This text reminded me of my trip to Shanghai in 2013. I also felt happy when I went to Shanghai. Because I tasted many delicious foods in Shanghai."</i> L14 (S5): <i>"This reminds me of a time when I fell off my bike on a gravel road. After that, I was a little afraid to ride."</i> L15 (S5): <i>"I always think that my brother is too hard to take care so I would like to search some useful information to solve this problem."</i>
	Evaluating the author's arguments	L5 (S11): <i>"I agree with the author's ideas because money is important in our life. If we use money properly, we can become wealthier."</i> L14 (S8): <i>"I agree with the author's view because the policy of America is unfriendly to most people. It is reasonable for Canadians to fight back against this policy. Only when the policies of the two countries are mutually beneficial can they have long-term development."</i>

L15 (S11): “*I agree with him because this problem is true. Fire is dangerous and cause serious aftereffects. We should take action to solve this problem.*”

Note. L=Learner, S=Session

In sum, the integrated analysis showed modest gains across all three reading comprehension dimensions, with DER affecting each differently. Literal comprehension remained stable, inferential comprehension showed moderate improvement, and critical comprehension demonstrated significant growth ($p = .009^{**}$). Future DER instruction and assessment should more effectively foster and measure this emerging competence.

RQ1.2: To what extent does the implementation of digital extensive reading enhance the reading fluency of Chinese EFL learners?

Table 8

Comparison of Participants’ Overall Reading Rate across Sessions 5 and 11

Reading Rate (WPM)	Mean	SD	z	p	Effect size (r)
Session 5	83.52	64.89	2.215	.027*	.413
Session 11	108.99	70.01			

Note. * $p < .05$, ** $p < .01$, $N = 15$

As shown in Table 8, participants’ overall reading rate increased from Session 5 ($M = 83.52$, $SD = 64.89$) to Session 11 ($M = 108.99$, $SD = 70.01$). The improvement was statistically significant ($z = 2.215$, $p = .027^*$) with a moderate effect size ($r = .413$). Since fluency involves more than reading rate, development was examined across three components: reading rate, familiar word recognition, and comprehension accuracy. Comprehension accuracy was measured via four open-ended questions after each session, recorded in the journals and logs, with each correct response scoring 1 point. Table 9 presents mean scores for these components across three sessions.

Table 9

Comparison of Participants' Reading Rate, Familiar Word Recognition, and Comprehension Accuracy across Three Sessions

Reading Fluency	Reading Rate (WPM)	Familiar Words (%)	Correct Comprehension Responses (max=4)
Session 5	83.52	96.93%	3.80
Session 8	87.57	97.78%	3.93
Session 11	108.99	97.63%	3.93

Note. Values represent Mean, N=15

As reported in Table 9, participants' reading fluency improved steadily across three sessions. Mean reading rate increased from 83.52 to 108.99 WPM, reflecting notable gains in speed. The proportion of familiar words remained high, rising slightly from 96.93% to 97.63%, though still below Nation's (2022) recommended 98% threshold for comfortable reading. Comprehension accuracy remained consistently strong, with mean scores between 3.80 and 3.93 out of 4, indicating that learners maintained understanding while reading faster and with greater ease.

Qualitative analysis of open-ended responses further illuminated reading processes. Learners demonstrated comprehension through coherent and detailed retellings. Moreover, personal relevance appeared to facilitate engagement; learners linked reading experiences to prior knowledge, interests, and life experiences, which likely reduced cognitive load and sustained attention. Table 10 below shows the theme, codes, and sample responses that emerged from the analysis of participants' comprehension accuracy.

Table 10

Theme, Codes, and Sample Responses Related to Participants' Comprehension Accuracy

Theme	Codes	Sample Responses
Comprehension Accuracy	Coherent and detailed retelling	L9 (S11): <i>"This news is about the 80th anniversary of the atomic bombing of Hiroshima and Nagasaki. It focuses on the story of a person who has experienced it. It warned that people today should cherish peace."</i>

	L14 (S11): <i>“I like this book. I think it is warmhearted. Because it is about two people after the second war and a student helped them to meet each other.”</i>
Personal relevance	L3 (S8): <i>“I like this book. Because this book is one of my favorite books when I was a child. Because of this book, I want to be a mermaid.”</i>
	L5 (S11): <i>“I like this book because I think pandas are cute. Pandas were also important in China. I want to see pandas in the zoo.”</i>

Note. L=Learner, S=Session

Overall, these findings indicate balanced development across the three components of reading fluency: rate, ease, and accuracy. The statistically significant increase in reading rate ($z = 2.215$, $p = .027^*$) suggests that speed gains were meaningful rather than incidental. Qualitative data further revealed that fluency in DER was not merely mechanical speed but an integration of comprehension, personal resonance, and cognitive ease. Learners maintained fluency when they understood texts well enough and the content resonated with their personal experiences.

However, the small sample size and the short intervention period limit the generalizability of these findings; therefore, the results should be interpreted as exploratory and context-specific rather than conclusive.

Discussion

In general, the study found that DER led to modest but meaningful gains in reading ability (i.e., reading comprehension and fluency), consistent with prior research indicating that ER produces gradual, cumulative effects rather than immediate improvements (Nakanishi, 2015; Renandya & Jacobs, 2016; Renandya et al., 2021). The following discussion focuses on the two components of reading ability: reading comprehension and reading fluency.

Reading Comprehension

Literal comprehension remained stable, reflecting learners' baseline ability to extract surface-level information. Inferential comprehension showed slight improvement, while the largest gains occurred in critical comprehension. Peer discussions and reflective post-reading

activities likely facilitated this development by exposing learners to diverse viewpoints and prompting reflection. Furthermore, the significance of teachers scaffolding should also be highlighted (Milliner & Cote, 2015; Robb & Ewert, 2024). Before the post-reading sharing activity, instructors introduce useful sentence structures, suggest possible aspects for sharing and give a demonstration, all of which provide learners with additional support and guidance. After the sharing session, providing feedback helps learners deepen their understanding of the text and supports them in producing more coherent and insightful entries in their reflective journals and reading logs. Despite the growth, critical comprehension remained the lowest-scoring dimension, consistent with Alderson's (2000) claim that it develops after a foundation in literal and inferential skills and often requires explicit scaffolding.

Notably, both quantitative and qualitative evidence indicate that standardized assessments - especially those measuring literal comprehension - may underestimate learners' emerging higher-order reading skills. In addition, literal comprehension items, often framed as simple fact-recall or information-matching tasks, can produce a ceiling effect when learners already score near the maximum on the pretest, making any post-intervention gains difficult to detect.

Reading Fluency

Reading fluency improved steadily, with learners maintaining high comprehension and vocabulary familiarity. Specifically, qualitative data indicated that fluency encompassed not only speed but also coherent comprehension and personal engagement, supporting Grabe and Yamashita's (2022) view of fluency as reading with ease and understanding. This progress reflects the core principles of ER, which advocate learner autonomy, reading volume, enjoyment, and overall comprehension (Day & Bamford, 2002). Moreover, in the process of using different digital platforms, learners engage not only with longer, book-like texts but also with authentic and multimodal materials commonly found online. This type of exposure reflects real-world reading demands, where literacy involves working with many kinds of texts beyond literary or academic materials, and therefore provides a more authentic reading environment while promoting fluency.

In addition, prior studies suggest that reading fluency can be influenced by factors such as text genre, task demands, vocabulary, and learner characteristics including motivation and strategies (Bui & Macalister, 2021; Brysbaert, 2019). These factors often do not operate in isolation to influence reading fluency but rather interact collectively. Most importantly, digital

environments enhanced accessibility and motivation but could also distract learners (Janah et al., 2022; Milliner & Cote, 2015; Muravev, 2023), highlighting the need to carefully balance these advantages and drawbacks.

Limitations and Recommendations

Although this study sheds light on DER's impact on Chinese EFL learners' reading, several limitations warrant note. First, the intervention was relatively short; as Renandya et al. (2021) observe, DER typically requires longer exposure - such as a full semester - to yield substantial gains. Second, all instruments were digital, assuming baseline digital literacy that was neither assessed nor supported. Future research should include a digital literacy diagnostic and provide targeted training to prevent technical barriers from hindering language learning.

Pedagogical Implications

The findings of this study offer practical implications for teachers and curriculum designers. Teachers are advised to use interactive post-reading activities, such as peer sharing and reflective journals, to deepen comprehension, enhance engagement, and gradually cultivate autonomous reading habits. From a curriculum perspective, providing diverse, level-appropriate digital materials and combining structured with flexible activities can promote personalized learning and sustained motivation. Additionally, integrating digital reading strategies fosters learners' critical digital literacy, while careful selection and management of digital resources, including online libraries and reliable access, ensures effective and equitable learning experiences.

Conclusion

In summary, this study found that DER did not produce statistically significant gains in overall reading comprehension among Chinese EFL learners but contributed to consistent, modest improvements across sub-skills. Notably, critical comprehension showed a significant increase and the largest numerical gain. Furthermore, high text familiarity and personal engagement also appeared to enhance reading fluency, as reflected in a significant increase in reading rate without compromising comprehension accuracy. These findings suggest that DER can foster higher-order thinking and genuine fluency when combined with structured reflection and peer interaction.

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AI Declaration Statement

During the preparation of this work the authors used ChatGPT and Qwen in order to enhance readability and improve language. After using the tools, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

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Appendices

Appendix A: Digital Reading Comprehension Test

Reading passage 1 Genre: non-fiction Number of words: 243

William grew up in a poor family in Africa. His family lived in a village with no electricity. At night, they used oil lamps for light. However, oil was too expensive for his parents to afford.

William wanted to improve life there, but he had no idea how to realize it. One day, he read a book on how to turn wind into electricity with a windmill.

"That is amazing!" Though he didn't know what a windmill was, he decided to give it a try.

First he had to collect all the materials. He dug through the rubbish with his cousin in the villages nearby and stuck to his goal until he got what he wanted.

Then he started to make the windmill. The moment his farm work finished in the fields, he threw himself on studying the materials, staying awake till midnight. Finally, he made it after many failures. He fixed the windmill on the top of a wood tower to catch wind. The villagers came to look. A long wire was used to connect to a bulb to the windmill. The wind blew and the windmill turned. To their amazement, the bulb lit up. The villagers cheered. William threw his hands in the air and jumped excitedly. To produce more energy, he built another windmill for his village.

Born into poverty, William didn't give up in the face of difficulties. He kept reading, taught himself and lit up the whole village.

1. What problem did William's family face at night?

- A. They could not afford oil for lamps.
- B. They were afraid of the dark.
- C. They had to go to bed early.
- D. They could not read books.

2. What inspired William to build a windmill?

- A. He saw one in his village.
- B. He watched a movie about electricity.
- C. He read a book on science.
- D. He talked to an engineer.

3. Why did William collect materials from rubbish?

- A. He didn't have enough money to buy them.
- B. He wanted to protect the environment.
- C. He enjoyed searching through trash.
- D. His parents asked him to do it.

4. Which statement shows that William did not give up easily?

- A. He went to school every day.
- B. He talked to many villagers about his idea.
- C. He asked his parents for help.
- D. He stayed up late to study the materials.

5. How did the villagers feel when the light bulb lit up?

- A. They felt confused and worried.
- B. They felt surprised and happy.
- C. They felt tired and bored.
- D. They felt angry and disappointed.

6. The author describes William as someone who "didn't give up in the face of difficulties" and says he "lit up the whole village." What is the main purpose of using such positive language?

- A. To show that building a windmill is easy for anyone.
- B. To praise William and encourage readers to admire his determination.
- C. To provide a scientific explanation of how windmills work.
- D. To argue that all villages in Africa should use wind power.

Reading passage 2 Genre: non-fiction Number of words: 246

When he was a teenager, Hunter Adams was very unhappy and he spent many years in a special hospital for people with mental (精神的) health problems.

When he left the hospital, Adams decided to become a doctor, so he went to a medical school in Virginia, the USA. But when he was there, he did things in a different way. For example, he didn't like the doctors' white coats, so he wore shirts with flowers on them when he visited his patients and he tried to make them laugh. The doctors at the medical school didn't like Adams because he was too different.

But Adams believed that people in hospital need more than medicine. He saw unhappy and lonely people, and he tried to help them. He spent a lot of time with children in hospital and often dressed up like a clown to make the children laugh. When he finished medical school and became a doctor, Adams opened his own hospital, called "The Gesundheit Institute", together with some other doctors. They wanted it to be a place with a different way of working with sick people.

Hunter Adams became famous during the 1980s, and in 1998, Universal Pictures made a film about his life. It was very successful. In the film (called Patch Adams), Robin Williams played Adams. Williams said, "Adams is a really warm person, who believes that patients need a doctor who is a friend. I enjoyed playing him."

7. When did Adams have mental health problems?

- A. After he left medical school.
- B. During the 1980s.
- C. When he was a teenage boy.
- D. After the film came out.

8. Why did the doctors at the medical school dislike Adams?

- A. Because he was a warm person.
- B. Because he had mental health problems.
- C. Because he was a clown.
- D. Because he wasn't the same as others.

9. Why did Hunter dress as a clown?

- A. To make patients feel better.
- B. To avoid being recognized.
- C. To look more professional.
- D. To save money on doctor clothes.

10. The passage mainly tells us about _____.

- A. how to cheer up patients
- B. people with mental health problems
- C. a film about Adams
- D. a doctor named Hunter Adams

11. What message does this story try to teach readers?

- A. Doctors should always wear white coats.
- B. Being kind and friendly helps healing.
- C. Medicine is the only way to treat illness.
- D. Making films is better than being a doctor.

12. The author writes that "patients need a doctor who is a friend." Which of the following best describes the purpose of this statement?

- A. To express the author's opinion about how to improve patient care.
- B. To suggest that all doctors should dress like clowns.
- C. To prove that medicine is not important in healing.
- D. To present a fact about how hospitals operate.

Reading passage 3 Genre: non-fiction Number of words: 256

After a 10-year project to count tuna and other large fish in the world's oceans, scientists have made a very surprising discovery: these fish are almost gone. Because of too much fishing, almost 90 percent of the worldwide population of large fish—the ones we usually eat—has disappeared. If we don't act, these animals will totally disappear. That will influence every animal in the ocean.

The demand for fish is growing. Almost a billion people around the world get their protein (蛋白质) mostly from fish. Doctors praise seafood for being low in fat. But what seems like a healthy choice for humans is causing a disaster to our oceans. "People are consuming (消费) too much," says Lance Morgan, a scientist at the Marine Conservation Biology Institute.

A dish of tuna in restaurants costs more than just one animal's life. When fish like tuna disappear from the ecosystem (生态系统), the ocean's food chain (链) breaks down. Animals such as sharks, which normally eat tuna, may die because they find no food.

The news may be scary, but taking action from now on can prevent harm that hasn't happened yet. World organizations are ordering countries to stop fishing too much. The Monterey Bay Aquarium gives seafood choices to anyone hoping to keep healthy without destroying the environment.

"If you care about wildlife, first spend time and think about your own values and beliefs," says Morgan. Then decide what you're going to eat."

13. What caused the fish population to drop?

- A. Pollution destroyed their homes.
- B. People caught too many fish.
- C. Climate change made the water cold.
- D. Too many people swim in the ocean.

14. The author says, "What seems like a healthy choice for humans is causing a disaster to our oceans." What is the author's main point in this sentence?

- A. The author is criticizing the overconsumption of fish.
- B. The author believes scientists are exaggerating the problem.
- C. People should stop eating all kinds of seafood.
- D. Eating fish is always unhealthy.

15. From Paragraph 3, we know that _____.

- A. if sharks die out, tuna will die out soon
- B. tuna will be more popular in restaurants
- C. tuna plays an important role in the ecosystem
- D. tuna disappeared because they found no food

16. Which animal may suffer if tuna disappear?

- A. Birds B. Lions C. Sharks D. Snakes

17. Why does the Monterey Bay Aquarium help people choose seafood?

- A. To stop people from eating fish.
- B. They want to sell more fish in restaurants.
- C. Because they want everyone to eat more fish.
- D. To make sure people eat healthy and don't hurt the ocean.

18. Which of the following statements from the text is an opinion rather than a fact?

- A. "Almost 90 percent of the worldwide population of large fish—the ones we usually eat—has disappeared."
- B. "If we don't act, these animals will totally disappear."
- C. "When fish like tuna disappear from the ecosystem, the ocean's food chain breaks down."
- D. "Doctors praise seafood for being low in fat."

Reading passage 4 Genre: fiction Number of words: 277

Once there were four children whose names were Peter, Susan, Edmund and Lucy. This story is about something that happened to them when they left London during the war.

The four children were sent to an old man's house in the countryside, ten miles from the nearest railway station and two miles from the nearest post office. The old man had untidy white hair which grew over most of his face. On the first evening, he went out to meet the children. He looked so strange that little Lucy was a bit afraid, but Edmund wanted to laugh and tried to hide it by blowing his nose.

After saying goodnight to the old man, they went upstairs. The house was so large with all those steps and rows of doors leading into empty rooms. The boys went into the girls' room and they argued about the house and the old man. While they were talking, there came a strange noise. The noise and the thought of the large house made Lucy feel even more frightened.

"It's an owl," said Peter. "This is a wonderful place for birds. Let's go and explore tomorrow. You might find anything in a place like this. Did you see those mountains and woods as we came along?"

But the next morning, it was raining, so thick that you could see neither the mountains nor the woods. After breakfast, they were upstairs in the room. Edmund started complaining about the weather. Susan suggested reading books in the room. "Not for me," said Peter, "I'm going to explore in the house." Everyone agreed to this and that was how the adventures began.

19. Where did the story take place?

- A. In the post office. B. In the old man's house.
C. In the railway station. D. In the city of London.

20. The author writes that the house was "so large with all those steps and rows of doors leading into empty rooms." What is the main purpose of this description?

- A. To prove that the children were in danger.
B. To explain why the children got lost easily.
C. To show that the house was expensive and well-built.
D. To create a sense of mystery and excitement for the reader.

21. Why did Lucy feel even more frightened in paragraph 3?

- A. Because she saw an owl in the large house.
B. Because someone unknown was walking on the steps.
C. Because the old man took all of them to the empty rooms.
D. Because she heard a terrible sound and thought of the house.

22. What can you infer about Peter's personality from this passage?

- A. He is curious and enjoys adventures.
B. He is shy and prefers to stay alone.
C. He is easily frightened by strange noises.
D. He dislikes being in the countryside.

23. What would probably happen next in the story?

- A. The four children would go back to London secretly.
B. The four children would explore the mountains together.
C. The children would experience something unusual in the house.
D. The old man would hunt for the owl and other birds in the woods.

24. Which statement from the passage is an opinion rather than a fact?

- A. "The house was ten miles from the nearest railway station."
B. "This is a wonderful place for birds."
C. "The old man had untidy white hair which grew over most of his face."
D. "It was raining, so thick that you could see neither the mountains nor the woods."

Reading passage 5 Genre: fiction Number of words: 348

"The hunting dog!" cried Holmes. "Come, Watson! Come!"

We ran quickly over the moor (荒野). We heard one last cry then a dull, heavy sound. We stopped and listened. but no other sounds broke the silence. Holmes put his hands to his forehead and hit his feet on the ground.

"We are too late, Watson."

"No, no, surely not! Can you see anything?"

"Nothing."

"But, listen, what is that?"

Suddenly we heard a low sound of pain. A man was lying on the ground. As we came near, we saw the dead body of Sir Henry Baskerville! He was wearing his brown tweed (粗花呢) suit.

"Oh, no!" said Holmes and his face was white with shock in the darkness. Holmes moved closer over the body. Suddenly he began laughing, "A beard(胡须)!" He said, "This man has a beard!"

"A beard?" "It is not Sir Henry--why, it is the prisoner who got away, Selden!"

It was indeed the face of Selden, the bad man.

Then, suddenly, it was all clear to me. I remembered that Sir Henry had given his old suit to Barrymore, and Barrymore had probably given it to Selden.

"Then Selden is dead because of this suit, said Holmes, "Think, Watson! Someone gave the dog some of Sir Henry's clothes-probably the boot from the hotel in London. The dog picked up Sir Henry's smell and ran after this poor man."

Suddenly we saw someone walking towards us. It was Stapleton. Holmes spoke very quietly, "Sssshhhh! Don't say a word to show your doubt!"

"Hello, Dr Watson. What are you doing on the moor?" asked Stapleton. Then he saw the dead body and added, "Oh no! What's this? Is our dear friend Sir Henry dead?"

Then he looked at the dead man. "Who ... who is this?" he asked.

"It's Selden, the prisoner. He's dead."

Stapleton looked at the body. "That's terrible," he said, "There was a strange noise. I was worried about Sir Henry. I wanted to check he was alright."

"Really?" asked Holmes.

25. What attracted Holmes and Watson to run over the moor?

- A. A sharp scream.
- B. The hunting dog.
- C. A heavy sound.
- D. Henry Baskerville.

26. How did Holmes tell the body was Selden?

- A. The man wore a beard.
- B. The man stole an old suit.
- C. The man was a prisoner.
- D. The man had a bad smell.

27. Holmes says, "A beard! It is not Sir Henry — why, it is the prisoner who got away, Selden!" What does this reaction suggest about how Holmes forms his conclusions?

- A. He pays attention to small details to solve the mystery.
- B. He always expects the worst-case scenario.
- C. He makes guesses without any evidence.
- D. He trusts people until proven otherwise.

28. Holmes concludes: “Someone gave the dog some of Sir Henry's clothes—probably the boot from the hotel in London. The dog picked up Sir Henry's smell and ran after this poor man.”

Which part of Holmes’ statement is a fact, and which is an inference?

- A. Both statements are facts—the dog was given clothes and followed Sir Henry’s scent.
- B. The first part is a fact (the dog was given clothes), but the second is an inference (it probably was the boot).
- C. Both statements are opinions—Holmes has no proof yet.
- D. The first part is an opinion, but the second is a fact.

29. Why did Holmes mean by saying “Really?” in the end?

- A. The case was a secret.
- B. Stapleton made the noise.
- C. Sir Henry was alright.
- D. Holmes didn’t trust him.

30. What is the best title of this passage?

- A. The Poor Dead Man
- B. Holmes and Watson
- C. Death on the Moor
- D. The Strange Sound

Answer key:

Reading passage 1: 1-6 ACADBB

Reading passage 2: 7-12 CDADBA

Reading passage 3: 13-18 BACCDB

Reading passage 4: 19-24 BDDACB

Reading passage 5: 25-30 BAABDC

Appendix B: Digital Reflective Journals

	A	B
1	Journal No.1	
2	Book Title :	
3	Author/Source :	
4	Link :	
5	Genre :	
6	[Literal comprehension] 1. What are the main ideas or important facts mentioned in the text? (e.g., main events, characters, facts, sequence, causes and effects...)	
7		
8	[Inferred comprehension] Pick one of the two questions to answer. ☐ 2.1 Predict what might happen next based on the plot/clues in the text. ☐ 2.2 What do you think is the author ' s main purpose in writing this text? (e.g., to inform, persuade, entertain?) Please explain.	
9		
10	[Critical evaluation] Pick one of the two questions to answer. ☐ 3.1 Do you agree with the author ' s ideas in the text? Why or why not? ☐ 3.2 How does this text relate to your own experiences? Please explain.	
11		

Appendix C: Digital Reading Logs

	A	B	...	C	D
1	Reading Date (Mon/Day)				
2	Book Title				
3	Reading Level				
4	Reading time (min)				
5	Word Count				
6	Words Per Minute (WPM)				
7	Familiar Words	_____ %		_____ %	_____ %
8	Difficulty	perfect (99> x ≥98%)		perfect (99> x ≥98%) ▲	
9	Enjoyment	a lot		too easy (100> x ≥99%)	
10	How did you like this book? Why? (e.g., I like/don't like it because...)	not at all		perfect (99> x ≥98%)	
11		a little		a little difficult (98> x ≥96%)	
12		so-so		too difficult (<96%)	
13		quite a lot			
14		a lot	✓		