ECDE 7013 Assessment Component 2

Digital Literacy in College English Reading Course in the Chinese University Context

Table of Contents

Chapter 1 Introduction 3

1.1 Research Purpose, Questions, Aims and Objectives 4

1.2 Purpose of the Research 4

1.3 Research Questions 4

1.4 Research Aims 5

1.5 Research Objectives 5

Chapter 2 Literature Review 6

2.1 Introduction 6

2.2 What is Digital Literacy? And What is College English Reading Course in the Chinese University Context? 6

2.3 The Chinese Digital Literacy Development 7

2.4 Literature Review Theme 8

2.4.1 Pedagogical Integration 8

2.4.2 Challenges in Digital Literacy Integration 9

2.4.3 Impact on Language Competence 10

2.4.4 Dilemmas of Teachers and Students 11

2.5 Conclusion 11

Chapter 3 Research Design 12

3.1 Research Design 12

3.2 Epistemology and Ontology 12

3.3 Researcher Positionality and Reflexivity 13

3.4 Theoretical Framework 15

Chapter 4 Methodology and Research Tools 17

4.1 Sampling 17

4.2 Data Collection Methods 18

4.3 Semi-Structured Interviews 18

4.4 Thematic Analysi 19

4.5 Ethical Considerations 20

Chapter 5: Findings and Themes 21

5.1 Current Integration of Digital Literacy in English Reading Courses 21

5.2 Impact on Critical Thinking and Reading Comprehension 23

5.3 Benefits and Challenges of Digital Tools 24

5.4 Future Improvements and Recommendations 26

Chapter 6: Analysis and Discussion 27

6.1 Current Integration of Digital Literacy 27

6.2 Impact on Critical Thinking and Reading Comprehension 28

6.3 Benefits and Challenges of Digital Tools 29

6.4 Future Improvements and Recommendations 30

6.5 Reflection on Research Process and Methodology 31

Chapter 7 Conclusion 33

Chapter 8 Recommendations 34

References 36

Appendices 51

Chapter 1 Introduction

China's educational system is going through a digital revolution. The introduction of national policies aimed at positioning China as a digital learning system has prompted such significant changes, including the Education Informatization 2.0 Action Plan (Ministry of Education of the People's Republic of China, 2018). These policies provide a supportive backdrop for studies focused on implementing digital tools in educational settings, highlighting the government's role in promoting technological integration in learning environments (Adhikari, Mathrani & Scogings, 2017; Li, Jiang & Nuttapong Jotikasthira, 2024; Wang & Si, 2024).

The Education Informatization 2.0 Action Plan aims to improve the information level of education in China in a comprehensive way, to enhance the modernization and intelligence of education, and to cultivate innovative talents to adapt to future development. It consists of eight interwoven components, one of which being 'Information Literacy Promotion in An All-round Way'. Information literacy promotion in an all-round way allow teachers to proactively adjust to emerging technological advancements, including informatisation and artificial intelligence, and actively and effectively carry out education and teaching, aiming to enhance students' digital literacy (Ministry of Education of the People's Republic of China, 2018). The characteristics exhibited by teachers in traditional non-digitalized teaching settings often reflect a focus on foundational teaching principles and conventional instructional

methods (Magen-Nagar & Shamir-Inbal, 2014). While the modern educational technology should complement traditional teaching methods, highlighting the importance of integrating digital tools alongside established pedagogical approaches (Tan & Feng, 2023), particularly within the English reading course.

As noted by Pertiwi and Musthafa (2021), the integration of digital literacy within the English reading course is crucial for learners to enhances academic achievement but also improves their literacy skills. Alternatively, the study by Haeroni (2023) highlights the significant influence of digital literacy on students' interest in reading. This emphasises the need for implementing digital literacy skills into English reading course to effectively engage learners. Yet, there has been limited research on the strategies employed by English language learners to access web text, move through the Internet, and analyse and comprehend digital content using their digital literacy skills (Chottsawhas, 2020). Alakrash and Razak (2021) succinctly stressed the vitality of digital literacies in teaching and learning English as a foreign language. They revealed that digital literacies can help us perceive linguistic discourses, language structure, phonology and grammatical patterns. Dahmash (2020) explains that digital literacies are non-linear since reading and writing activities consumed online are non-sequential, present multimedia, hypertext and interactive elements. Other than that, it is worth noting that there is a great opportunity to loosen up and be more creative in incorporating digital literacy in English Reading to improve students' reading experience and achievements.

Since digital literacy in English reading courses has very limited research and application in Chinese universities, this study is valuable and close to the current situation of digital literacy reform in China. This initiative seeks to yield empirical data regarding the efficacy of particular digital literacy methodologies in China, aiming to enhance teaching methods and assess the implications of these methods on student performance.

Research Purpose, Questions, Aims and Objectives

Purpose of the Research

The primary objective of the study is to identify effective pedagogical approaches for developing learners' digital literacy competencies to fulfil the requirements of college English reading courses. Expected outcomes include contributions to academic discourse on digital education, both within China and beyond.

Research Questions

This research aimed to examine the incorporation of digital literacy into college English reading classes in China, assess the efficacy of digital technologies, and devise methods to improve digital literacy abilities among teachers and learners. At such, a wild selection of issues was considered for purpose of making proper conclusions. Based on themes that emerged from pertinent literature, national documentation, and policies. The research question: '*What pedagogical approaches can be adopted for developing students' digital literacy skills to meet the demands of the college English reading course in China?*' emerged as a result of the 'Information Literacy Promotion in An All-round Way' in the Education Informatization 2.0 Action Plan (Ministry of Education of the People's Republic of China, 2018). It was projected that the conclusions of this research question would render the researcher to delve deeper into effective pedagogical methods for combining digital tools and overcoming the obstacles in digital literacy to effectively utilise its possibilities in increasing college students' English proficiency in the future.

Research Aims

The purposes of the study are to:

- Explore pedagogical ways to enhance students' educational experiences by identifying and integrating digital tools that substantially improve reading comprehension and critical thinking skills
- Formulate effective strategies for integrating digital literacy into English comprehension course, and assess the influence of these approaches on student outcomes
- Gather deep insights into the contextual and practical impacts of digital tools in educational settings

Research Objectives

The research objectives are:

- Addresses a notable gap in the research and application of digital literacy within Chinese university English reading courses
- Conduct qualitative research to examine the incorporation of digital literacy into college English education in China.
- Assess the efficacy of digital tools and formulate methods to improve digital literacy competencies among instructors and learners
- Analyse the data collected via thematic analysis (Braun & Clarke, 2006) to Identify typical patterns and narratives from interviews

- Provide an exploratory analysis of how digital literacy affects the college English reading courses in China, but with the voices and experiences of students in the classroom

The literature review critically analysed evidence of empirical studies and descriptions on the current theoretical discourse of digital literacy and its pedagogy in English reading classes. The focus of the study was the status quo: challenges and influence of digital literacy on language competence.

Chapter 2 Literature Review

Introduction

Nowadays, education reform of digital literacy (Chen 2021, Kingsley 2013, Tancock 2013, Wen 2021) in the whole world has been a rising theme. Plus, compared to 20 years ago, countries overseas have begun to reform their curriculums or are preparing to introduce education policies in accordance with international trends (Drenoyianni & Bekos, 2023). As such, it could be argued that it is vital for students to cultivate digital literacy during the process of acquiring English reading skills in college in China. The purpose of this literature review is to examine the present state of English reading and digital literacy, to elucidate the patterns and gaps, to provide the root causes, and to discuss and analyse the teaching practice of digital literacy in light of the present academic discourse: on the one hand, to explore the present academic discourse of teaching digital literacy; on the other hand, to discuss the challenges in teaching digital literacy as a whole and to find the way to integrate the digital literacy into the practice of college English teaching in the Chinese context. The review will relate to the research questions on the effective pedagogical approach to the enhancement of digital literacy and how to integrate digital tools into practice to get deep insights into the contextual and practical impact of digital tools in the educational context.

What is Digital Literacy? And What is College English Reading Course in the Chinese University Context?

Digital literacy is now viewed as part of everyday literacy, with similarities to and differences from traditional literacy (Sá *et al.*, 2021). However, the topic of digital literacy has gained increasing attention since the late 1990s (White, 2015). It encompasses the ability to use digital technology effectively and to transform information into knowledge (Pangrazio, Godhe & Ledesma, 2020). As stated by Leahy and Dolan (2010), this competence is considered vital for all citizens and has evolved over time, with changing definitions and requirements. However, the importance of

understanding digital literacy within specific contexts and disciplines (Montgomery *et al*., 2020). Also, as stated by Bosuwon and Woodrow (2009), English reading classes offer convenient means of acquiring knowledge in various subjects and are a crucial requirement for lifelong learning in life. For this reason, it is crucial to understand what the term college English reading courses means when integrating with digital literacy, especially in the Chinese context.

In 2020, the Newly Revised University English Teaching Guide (National College Foreign Language Teaching Advisory Board, 2020) in China stated, college English reading courses aimed at developing students' ability to synthesize, contrast, analyze, objectively review, assess the material's content, comprehend its profound significance, and derive your own conclusions or interpretations. According to Lianzhen He (2020, p.16), the Newly Revised University English Teaching Guide (National College Foreign Language Teaching Advisory Board, 2020) emphasizes that learners must be able to 'process, judge, and make a rational judgment of speech material on different occasions' and 'to have an in-depth understanding of the topics related to the specialty studied and the social hot spots associated with the speciality studied'. In this context, the enhancement of college English reading instruction and curriculum development is an essential trend for the high-quality advancement of foreign language education at universities.

The Chinese Digital Literacy Development

In recent years, China has focused on developing digital literacy to enhance societal digital literacy levels and promote digital transformation and innovation (Research on the Construction of Digital Literacy Framework for Citizens--Comparative Analysis Based on Five International Digital Literacy Frameworks, 2023). The term 'digital literacy' was introduced in China in 2006 and has since gained prominence among scholars, aligning with the country's digital development goals (Bai, 2023). In education, digital media literacy has become increasingly crucial, especially among vocational college students in China, reflecting the evolving intersection of education and technology (Zhao, 2024).

As asserted by Machin, McNally and Wyness (2013), national policies significantly influence educational pedagogy and student outcomes within a country. Despite advancements, the digital literacy training system in China is still evolving. Currently, China's digital progress lacks a cohesive, organised, and inclusive digital framework, and the digital literacy training system remains incomplete (Liu & Chen, 2024). Based on the Module (ECDE7016), the researcher (Zhenyu Chen, 2024) has conducted a

literature study that undertook a thorough analysis of 16 studies, complemented by an additional 24 articles (2015–2024) from the Web of Science for comprehensive bibliometric analysis, and found that there was a notable gap in the research and application of digital literacy within Chinese university English reading courses. Therefore, the current research aims to bridge research gaps and elucidate the intricate relationship between digital literacy and its influence on university-level English reading comprehension in China. The anticipated results encompass making valuable contributions to scholarly discussions on digital education and offering practical approaches for educators and policymakers. Ultimately, these efforts will enhance students' capacity to excel in a globally interconnected and information-rich world.

Literature Review Theme

Many Chinese universities now recognize that to help students do well in an increasingly technology-based world, it is important to teach digital skills as well as English reading. The below preliminary literature study will shed light on digital literacy in educational institutes, paying close attention to the application of it in classroom, the problems it brings, the relationship between digital literacy and language ability, and problems between teachers and students in this field. In this part, I will discuss three problems. Next, the pedagogical integration of digital literacy will be discussed when integrating with English reading courses.

Pedagogical Integration

The literature review is a dynamic exploration of digital literacy and English reading courses while focussing on digital technology and methods to improve literacy and language learning (Oakley, 2024). In brief, Lu (2016) says that digital tools have a revolutionary effect on the standard way of teaching by creating more fun and interactive ways to learn. He mentions that modern technology like the Internet, MOOC courses, micro lectures and flipped classes have a high potential in the future of education and create a more efficient and pleasant learning environment. What is more, Kvasnii (2024) points out that it is a great literature review about digitalization and its influence on educational processes, and clearly describes how digitalization changes the paradigms of teaching and learning, significantly increases the access to education, and accelerates the pace of innovative pedagogy. Besides, technology tools and resources equip students to participate in interactive and collaborative learning (Zimu, 2024). Parallel to all above views, utilising digital tools in educational practices assists interactive learning on the one hand, personalised learning, and collaboration and flexibility on the other (Thapa, 2023). In that respect, educators can make use of digital

tools, such as enabling videos, interactive activities and simulations, that contribute to active participation in learning and improvements in student conception (Carmona *et al.*, 2023). However, other research suggests that not all digital integration is equally beneficial. Goodwin *et al*. (2019) further support this finding, which shows that paper-based reading produced better comprehension outcomes than reading on a computer screen, implying that not all forms of digital integration are equally advantageous to reading comprehension. Parish-Morris *et al.* (2013) elaborate on this by examining how the presence of electronic features in e-books might reduce the interactive and educational benefits of shared reading experiences, which emphasises the importance of careful design considerations in educational e-books. Hermena *et al.* (2017) also looked at reading speed and comprehension when texts were given on a tablet versus on paper. However, Ho *et al.* (2023) say that using different types of digital devices (tablet vs. laptop vs. paper) can make a huge difference in how well students understand what they are reading. This means that using various kinds of digital tools may have various impacts on how effectively students comprehend what they read.As a result, many past studies have found that using different kinds of digital devices in the classroom can have a big effect on how well students learn. If there is a pedagogical desire to optimize reading comprehension outcomes, future research is needed to consider the specific characteristics of digital devices in educational settings, factors like medium of presentation, interactivity, and design features of digital materials.

Challenges in Digital Literacy Integration

The widespread adoption of digital tools and resources has fundamentally transformed traditional teaching methods in English reading courses, offering the potential to enhance the educational environment for teachers and learners alike (Astri, Noni & Halim, 2024; Ye, 2024). Nevertheless, despite the recognised advantages, there are notable obstacles that educators face when attempting to incorporate these technologies into their teaching methods (Shrestha, 2015). Some recent studies have shown that the lack of resources is one of the main problems that can make it hard for digital tools to be used effectively in English reading classes. This is further described by Saud (2023); he says that students have run into big problems like not getting enough training and technical help, which makes it hard for them to use digital technologies effectively in school. There are also problems with lack of appropriate system help and teachers' unwillingness to use new technologies in their English classes, according to the research (Che Had & Ab Rashid, 2019). These problems highlight the significant support need of teachers to facilitate the successful adoption of digital technologies in English reading courses.in order to promote the effective

implementation of digital technology in English reading courses. Therefore, there is a call for a more comprehensive research agenda to encompass various pedagogical goals and approaches in teaching reading fluency with digital technologies (Oakley, 2024). However, the existing literature have offered many insightful findings, this means insufficient training support, technical assistance, and system support for educators could remarkably hinder the effective integration of digital technologies in English reading courses. In response to resource constraints, when conducting future research, it is demanding to tackle these barriers through targeted support and training programs to enhance the integration of digital literacy in educational settings.

Impact on Language Competence

The literature presents various perspectives on the impact of digital literacy in English reading courses, highlighting its impact on language competence and benefits (Astri, 2024; Irwandi & Hidayati, 2023; Vice *et al.*, 2023; Yoon, 2013), as echoed by Reiber-Kuijpers, Kral, and Meijer (2021), who noted that digital literacy can lead to improved accessibility and interactivity in reading courses, which in turn could enhance student engagement and comprehension. For instance, the research conducted by Vychan and Hon (2024) discusses the enhancement of EFL reading, suggesting that the multimodal nature of digital storytelling in improving language skills and digital literacy. This is further supported by Vorobel *et al*. (2021), indicating that digital reading strategies with direct instruction could enhance language learners' reading efficiency. Meanwhile, the learners' enthusiasm and engagement (Vice *et al.*, 2023) towards English acquisition could be fostered, and meet their demand of digital literacy by these pedagogical innovations (Irwandi, 2023). In contrast, Vorobel, Voorhees, and Gokcora (2021) found that the difficulties encountered by language learners in digital literacy practices may result in deficiencies in their comprehension and expertise on many subjects, potentially leading to future repercussions if left unaddressed. Some researchers have put forward the points that the contributing factors may lie in the limited technological familiarity or difficulties in navigating digital interfaces (Qiao *et al*., 2023) and mited access to technology (Adeleye, Eden & Idowu, 2024). Also, the investigation by Wang *et al*. (2022) suggested that digital distractions may lead the learners far away from their language learning goal due to a loss of concentrations. As echoed by Ningsih (2023), e-textbooks might adversely impact students' focus. Likewise, if the learners use digital facilities, it is possible to indulge into entertaining practice instead of educational one (Chandran, 2023). Moreover, Nugroho and Triana (2021) asserted that, without effective management, if the learners failed to independently choose proper digital practices to improve their language study, the distracting result may not be avoided. Considering the fact, even though the digital practices may largely bring some

benefits to improving English learners' language competence, yet there are still some digital problems encountered that need to be solved in future study, like technology unfamiliarity, technological access inequalities, distraction interventions, lack of proper digital guidance, and so on.

Dilemmas of Teachers and Students

There are many studies describing the role of teachers when conducting digital literacy practices in English reading. Traditionally, it has been argued that educators play a vital role in engaging students into critical dialogue to deepen their insights into digital experience (Nash, 2024; Sadaf, 2019; Sápiras & Bayer, 2022). Additionally, Stanley (2018) advocated that teachers necessarily customized their pedagogical ways to meet the diverse demands of learners in digital age, while teachers may fall into dilemmas due to inadequate digital proficiency (Ferri, Grifoni & Guzzo, 2020). Correspondingly, when implementing digital practices, teachers inevitably encountered diverse challenges. This is further supported by Vice, Pittman and Warnick (2023), the conflicts may arise when balancing the structured classroom settings with the relatively creative and free digital practices. Also, there is a notable challenge for senior teachers to adopt new technology into pedagogical practices (Dewanto, Hidayat & Syarifudin, 2023; Suwarto, Setiawan & Machmiyah, 2022). In conclusion, teachers struggling to adapt their methods for the digital literacy era must address gaps in their understanding of digital and traditional literacies, embrace culturally responsive instruction, and enhance their digital skills to meet the evolving needs of today's students. Meanwhile, students pose potential risks to encompass various challenges when studying in digitally educational settings, such as lack of sufficient digital skills (Ferri, Grifoni & Guzzo, 2020), the distraction caused by the digital nature of e-devices (Murray, Giralt & Benini, 2020), access inequalities (Solehudin, 2024) and so forth. In conclusion, existing studies have revealed that both teachers and students face different types of problems when conducting digital practice in educational settings. Therefore, future studies are required to seek effective strategies to mitigate these problems, aiming to create effective digital environments and improve learners' engagement and experience.

Conclusion

The present national policies and studies on digital literacy have inspired me to consider the potential disparity between actual practices in schools and national policies. There is very little research on the application of digital literacy in college English reading courses, particularly within the Chinese context. The rise of digital

literacy is due to better use of technology in educational settings and a natural trend towards social success and human growth. As a researcher, my goal is to investigate a new way to teach digital literacy in Chinese college reading classes. This will add to the academic talks going on around the world about digital education.

In conclusion, the literature review has explored main themes of digital literacy in English reading, including its pedagogical integration, the challenges it poses, the impact it has on language competence and its dilemmas of teachers and students. The main ideas of this study are a few interpretations extracted from given meaning about what is meant by digital literacy, and interpretivist theories are also considered in these ideas as particular significant issues. They also have realised that each one of the participants in the study has their own perspective and considered it a very valuable issue. This research aims at designing an innovative pedagogical model for implementing digital literacy into Chinese college English reading courses, evaluating the effect of introducing digital tools, and exploring the countermeasures to improve digital literacy of teachers and students. Future research could analyse strategies to implement digital tools and ways to overcome barriers to digital literacy to further enhance English language competence for students studying abroad and not only in the context of local.

Chapter 3 Research Design

Research Design

In educational settings, the research is important because it uses strict study methods to look at how policies, programs, and practices affect students (Penuel *et al*., 2016). Research design is considered a means to combine advanced educational knowledge with innovative practices (Leeman & Wardekker, 2011), emphasizing the integration of design knowledge and skills into research initiatives (Herrington, McKenney, & Reeves, 2013). Consequently, it is vital to illustrate the research design and methodology of this investigation, attempting to seek effective pedagogical strategies regarding digital literacy in the Chinese college English reading course.

Epistemology and Ontology

It is acknowledged that a researcher's research philosophy intricately associates with their theoretical framework and guide their actions in the research progress (Tuli, 2010). This philosophical perspective influences the researcher's research design and outcome (McLachlan & Garcia, 2015). As a researcher, my epistemological and ontological views are intricately linked with my research assumptions and serve as a

foundation of understanding various phenomena. In relation to the multiple essence of the reality, my research is grounded in the philosophical assumptions of ontological relativism, emphasizing the varying perceptions of what is real for different people or groups (Glock, 2007). My view on knowledge is similar to the philosophical belief in interpretivism, which says that reality is socially constructed, complicated, and always changing (Glesne, 2016; McLachlan & Garcia, 2015). This means that knowledge comes from the work of both participants and researchers (Lai *et al.*, 2020). For this way of interpreting knowledge, it is subjective and determined by each person's experiences. It stresses that people construct reality through their interactions with others (Judy van Biljon & Samwel Mwapwele, 2023). In qualitative research paradigms, these philosophical beliefs help researchers understand how reality and knowledge are complicated.

Researcher Positionality and Reflexivity

It is known that the researchers' positions have a big effect on their research outcome (Adeagbo, 2020; Nyashanu, 2021; Ridgway & Lowe, 2022; Nyashanu, 2021; Savvides *et al.*, 2014; Shaw *et al.*, 2019). What I know and how I understand things shape my positionality as a college English teacher in a southern Chinese college. It is these experiences—an active interaction between my background and growth in making sense of things—that have changed the way I think. There is no doubt that my research field and my role in producing information are connected. The main reason why I intend to investigate digital literacy in Chinese college English reading courses is because I have seen how few resources are offered in these kinds of schools. The clear differences in educational possibilities between the Chinese and international systems led me to learn more about this subject in the context of China.

When I undertook my study, I was an insider researcher with a fairly strong school background, this means the researcher could share commonalities with the participants, and benefit from improved accessibility, rapport, and comprehension of the research context (Brannick and Coghlan, 2007; Hayfield & Huxley, 2015), which can boost the data collection and analysis, and build rapport with participant (Leigh, 2013). On the other hand, this means that my position of power may affect how people see and respond to me, which might impact how the data is collected. It is vital for recognizing the position between researcher and participants and the operation of power dynamics (Tarleton & Heslop, 2019). As asserted by Kim (2022), within specific sociocultural contexts, it is crucial to understanding the complexities of power dynamics via analyzing power relationships in research interviews. In order to balance the power dynamics, participants empowerment is not without a useful method

(Zimmerman, 1990). As an insider researcher, for instance, I might include the consent form prior to data collection (as opposed to afterwards), as Diener and Crandall (1978) stated: Informed consent is one of the more important ethical rules... it both respects people's independence and ability to choose and... it serves as a mechanism to make participants fully aware of their roles in research. Through this process, the researcher may be able to foster more equitable relationships and, simultaneously, increase the validity of the results … These attempts to make the research process more democratic represent a model that has the potential to enhance the voices of insider members of groups by making them feel heard and respected.

Also, it is vital to address the concerns pointed out by Giddens (2003, p647): 'A researcher could begin to identify so closely with the group that she or he becomes too much of an 'insider' and loses the perspective of an outside observer', indicating that as an insider researcher may face some challenges of the possibility of losing outsider's viewpoints (Adriansen & Madsen, 2009). Whereas insider position offers crucial insights and access, retaining neutrality and considering external perspectives is crucial for rigorous research (Mercer, 2007). As a researcher, I can adopt what Savvides *et al*. (2014) suggested 'reflexivity', which is an approach of ongoing, conscious self-awareness in which investigators consider how their personal identities and stance impact their studies (Finlay, 2002). During the research process, I will undertake the approach call 'positionality statement' noted by Holmes (2020), suggesting that enables investigators to explicitly identify their standpoint and its possible implications for their study, resulting in better openness and reflective thinking. Positionality statement would help me minimize personal biases and the risk of lacking an outsider perspective when an insider researcher being (Delgado-Romero, Singh & De Los Santos, 2018). This makes the study more rigorous and valid, which makes sure the results can be trusted and are morally sound.

Throughout the study process, I have consistently used the basic techniques of reflective practices to think about my positionality. Finlay (2002) says that reflectivity is the ongoing process of thinking deeply about oneself to understand how one's place as a researcher impacts the study. According to Darawsheh (2014), reflexivity is seen to come up with strict criteria, test subjectivity, and come to reliable findings. As part of my study, I'm using reflective approaches like keeping a reflective journal and asking the same questions over and over.On the one hand, Pieper *et al*. (2020) stress that keeping a reflective journal can help improve reflective knowledge, review work experiences, and spark further study. A reflective book also helps me keep track of how their understanding of my positionality changes over time while I'm doing research, which in turn changes the study (Vuong & Le, 2021). For a qualitative study, it can also

represent a good way of gathering information (A. A. Farrah, 2019). More evidence for this can be found in Ortlipp (2008), whose opinion is that reflexive writing and 'deliberate and self-lead self-criticism' help both the process of investigation and its results to be more accurate and transparent. Overall, reflexivity represents one of the main pillars of the whole process of research, contributing to achieving the goals of objectivity, truth, and, at the same time, ethics, since, through the ability to reflect carefully on one's own values, feelings, and power dynamics, it makes a researcher a more reliable, informed, and ethical person. This contributes to the general reliability and integrity of the study.

Besides, iterative questioning would continuously include throughout my research process, which enable the researcher to get involved in an evolving method of reflection, guaranteeing their interpretation keeps reliable and credible (Mats Alvesson & Kaj Sköldberg, 2017). In my research process, iterative questions play an essential part in the modifications of my research questions, as noted by Harris *et al.* (2018), iterative questioning in qualitative research is essential for clarifying research questions, improving data analysis, and assuring an in-depth comprehension. As an insider researcher, such iterative method enables investigator to design research enquiries for analyzing and interpreting the continuously changing data, assuring robust data evaluation and interpretation (Finfgeld-Connett, 2014). Thus, employing iterative process is an essential part in my qualitative research regarding ongoing data analysis, the refinement of the research process, and the enhancement in understanding the research phenomenon.

In conclusion, reflective practices such as a reflective journal and iterative questioning have helped mitigate the gap between logic and intuition, discern how my own experiences and biases creep into my work, and navigate a power balance with subjects (Rodríguez-Dorans, 2018). As I implement my research, this practice of reflection helps me to stay on high alert so as not to slip into biased reasoning.

Theoretical Framework

The theoretical framework becomes a foundation for the theoretical driving the study, to develop conceptual guidelines for understanding the issue addressed in the present study (Nguyen *et al.*, 2021). The theoretical foundation of this study is social constructivism. Social Constructivism is a theoretical framework that sets an agenda for critical understanding of the research process. In fact, social Constructivism views learning as a dynamic process and interactive, as ideas connect and are negotiated between different cultures. This theoretical context was chosen because it is an

excellent theoretical framework for stimulating inter cooperation, negotiations and exchanges (Jie, Puteh & Sazalli, 2020). The philosophical framework of social constructivism asserted that students played an active role in the process of knowledge production (Yeravdekar, 2022). Indeed, Shanmugam *et al*. (2023) report that digital resources can help the field of language acquisition employ virtual simulations, language apps 'gamified' with audio prompts, and online learning platforms to encourage students' engagement, provide immediate feedback, and monitor progress.

Social constructivism is a concept of what knowing is all about. The concept views that knowledge cannot be achieved through objective information but instead through subjective interaction and conversation (Letourneau, 2016). This concept is relevant to this issue because transforming students and their teachers into masters of digital literacy has the purpose of helping them find their way around enormous amounts of information, to work cooperatively, to share what they know, to think logically and carefully, to be creative, etc. (Ima Hariyanti Ningsih, Retno Winarni, & Roemintoyo Roemintoyo, 2019). English reading classes that want to equip students with better reading skills and reading habits should use diverse new and futuristic digital literacy tools. The social constructionist learning theory is useful on this issue because it conforms with the explorative nature of digital literacy as well as with the trends in English reading class interventions. It emphasizes the subjective application and communication of various new technologies. Proficiency in using digital technology is an essential element in English reading classes, especially in the context of social learning.Incorporating digital literacy into reading programs is crucial for improving learners' English reading behaviors and skills (Ikaningrum & Sarwanti, 2021; Thoermer & Williams, 2012). Ikaningrum and Sarwanti (2021) noted Digital literacy refers to the social behaviours and notions related to digital materials. It emphasises the significance of comprehending and using digital technologies while learning. Also, the incorporation of interactive digital resources and material in language acquisition programs has offered students supplementary chances in practical practice, auditory support, and self-directed learning outside the confines of conventional educational settings (Rusbel Zambrano Salcedo & Mercedes, 2024).

Although digital literacy in English reading courses is connected to the social constructivist framework, there is little research exploring this relationship in the Chinese context, particularly in Chinese college English reading courses. Consequently, the research questions, targets, and aims for this study were considered as mentioned earlier. These issues facilitate an interpretive way to this research.As opposed to being constrictive and limited, they are deliberately left open-ended to allow me to investigate the individual perspectives of learners. The primary objective of this paper

is to investigate students' perspectives through questions that impact research methods, maintain an interpretivist framework, and shape theoretical viewpoints. Consequently, this research can be considered a qualitative study (Conneeley, 2002).

Chapter 4 Methodology and Research Tools

The research questions justify using a qualitative methodology, since the main data collection are qualitative, whose procedures aim to represent and analyze the participants' perceptions in specific scenarios (Meston & Ng, 2012). Qualitative research aims to identify contextual factors in individuals' lives and provide new perspectives on behaviors in social settings (Benjumea, 2015). Examining qualitative data might be complex and time-consuming, demanding proficiency in qualitative analytic techniques to extract significant observations (Wang, 2013). Nonetheless, interpretive approach allows investigators to deeply understand complex issues by actively listening to and examining participants' personal experiences and viewpoints, thereby uncovering valuable insights (Boadu, 2021). To comprehend the attendees' perspectives, it is essential to use a qualitative research methodology that aligns with their natural thinking. Therefore, this study employs thematic analysis.

Sampling

Researchers could use convenience sampling to find people who are easier to get in touch with and more willing to take part in the study, which would make the process go more smoothly (Borges *et al.*, 2022). Participants were chosen from the researcher's college, which is related to this research project and the researcher's theoretical areas of interest. This convenience sampling helped the researcher understand directly from the participants their experiences and perceptions of using digital literacy in college English reading courses in Chinese contexts. Convenience sampling is also a good option for researchers who require to get data quickly because it gets quick responses compared to random sampling (Rastogi & Karatepe, 2021). With examples selected solely for their convenience, those examples may be significantly unrepresentative of the larger group to which the results are generalising, making the written outcome less balanced or bias-free and difficult to apply to the larger group (Maisiri Mazinyo & Dyk, 2019). In contrast, despite its abundance, convenience sampling is a weaker sampling method compared with other methods since the chosen attendees are selected by their real and most likely closest attendance determinants, namely their available time, their residential locality, and their interests in participating (Iortyom, 2019). According to Iortyom, Mazinyo, and Werner (2014), this criterion-based decision-making approach might make the availability of data easier to attain and the investigation more

meaningful. Also, selecting six participants at random is a good idea because it makes it easy to collect data from people who are easily accessible, which speeds up the recruitment process and increases the chances of hitting data saturation (Sundjaja *et al.*, 2022). This approach offers an overall view of the challenges and successes of digital learning. It supports a targeted study of how digital literacies impact upon English reading courses through case-study research that acknowledges the practical constraints on time, money, and expertise (Jones et al., 2001), but that brings important student perspectives to light.

Data Collection Methods

The choice of data collection methods was based on the belief that they would accurately reflect the individuals' points of view (Baumbusch, 2010). Six people were invited to take part in semi-structured interviews about a range of issues to get their natural and complete responses (Mills, 2008). Vezne (2020) also said that the semi-structured method helps people change how questions are asked, how issues are ordered, and how questions are worded as needed for the study.

Semi-Structured Interviews

Semi-structured interviews with six college students from a university in southern China would be invited to get the main data for this project. Fabiani, Frondizi, and Rossi (2023) say that this method helps researchers talk to participants to get information about their thoughts, feelings, and experiences.There is a chance that the interviewer's interpretations and questions could change the direction of the conversation (Nomnian, 2009), and the fact that semi-structured interviews are open-ended can make them hard to collect data because of the variability and complexity that can come up (Kallio *et al*., 2016). However, new ideas could still come up because of how often these interviews are done (Oerther, 2021). Thus, this method provides a deeper study of themes, which results in more complete data collection (McLachlan & Garcia, 2015). Everyone who took part in this investigation did so voluntarily. Figure 1 displays the basic demographic information about each respondent. The researcher uses 'P1, P2,... P10' as a symbol for each subject when citing their comments to protect their privacy. This is backed up by (Giordano *et al*., 2007; Surmiak, 2019).

Figure 1. Participant Profile

Participant ID	Age Range	Gender	Studying English Reading Course Experience	Digital Study Experience
P1 (Participant 1)	22	Female	2	YES
P2 (Participant 2)	20	Female	2	YES
P3 (Participant 3)	22	Female	3	YES
P4 (Participant 4)	21	Female	3	YES
P5 (Participant 5)	20	Male	2	YES
P6 (Participant 6)	21	Male	3	YES

Thematic Analysis

Thematic analysis (Braun & Clarke, 2006) has been employed as a theoretical framework in this study to look at transcribed data. Also, it gives a methodical way to code, create themes, and interpret the data (Levac, Colquhoun & O'Brien, 2010). Olumuyiwa Akin Olaniyi *et al*. (2023) say that data analysis techniques are important for predicting future trends and making smart choices. They stress how important these techniques are for putting together and showing study results. Additionally, Braun and Clarke (2006) state that thematic analysis can be broken down into six steps, which can be seen in Table 1 (2006, p. 87). This is a flexible and common way to look at textual data in qualitative research (Sanchez, Molintas & Caricativo, 2017). The following steps were carried out in the study process.

Table 1 Phases of thematic analysis

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Thematic analysis is a method for finding, analysing, and summarising themes, which are repeating patterns in a set of data (Morse *et al*., 2020; Lin & Boamah, 2019). Anderson *et al*. (2022) also say that thematic analysis could identify two kinds of themes: explicit themes, which are clear from the differences in the numbers, and

implicit themes, which are higher-order trends of what people were thinking behind the data. This idea fits with the rules of qualitative research, which focus on understanding respondents' points of view and how important they think their own experiences are, emphasising subjective meanings and personal views (Wisdom *et al*., 2011). On the other hand, careful data analysis underpins the empirical assumption that quantitative research starts with (Abood & Zbar Alalwany, 2021). It is understood that subjective meanings and personal views enables the exploration of diverse perceptions and valuable discoveries, but it also brings the potential for prejudice and the impact of the investigator in the analysing phase. In such, reflexivity and transparency are essential in qualitative research to minimise the influence of investigator viewpoints on quantitative results (Gąsior, 2015).

Ethical Considerations

This thematic analysis research conducted a rigorous procedure to obtain the ethical approval from the Ethics Panel of the University of Wales, Trinity Saint David. After modifying revisions, ethical permission was formally approved in June 19, 2024 (see to Appendix 1).

The Ethical Guidelines for Educational Research, outlined by the British Educational Research Association (BERA) in 2019, were adhered to guarantee equitable, respectful, and unbiased treatment of all participants. Considering the investigation task regarding 'Digital Literacy in English Reading Course in the Chinese University Context', performing the research within China requires meticulous attention to indigenous ethical standards, authorisations, and particular cultural and legitimate concerns related to the local setting. Also, adherence with the Standardisation Administration of China [SAC] (2020) was obligatory, as stated in the 'Information Security Technology - Personal Information Security Specification'. The implementation of a Data Management Plan guaranteed the secure utilisation, storage, and retention of data. (see Appendix 1& 3). Permission to conduct the research was granted by interviewees (see Appendix G), and the consent forms were granted from all participants about their permissions to attend this research (see Appendix 3).

I demonstrated ethical behaviour and ensured the protection of the attendees and myself by engaging with transparency and maintaining anonymity. I recognise that every investigation endeavour carries inherent risks, but as defined by J. Ellis and Levy (2008), the academic research is a meticulous process of gathering examined data and interpreting it to gain insights.

Chapter 5: Findings and Themes

This study seeks to investigate the perceptions and implementation of digital literacy among college students in university English reading classes. Additionally, it attempts to propose strategies for its effective integration into the practice of college English teaching in the Chinese context. The examination of the data collected from the interview, observation, and document review uncovered four primary themes including: 1) perceptions about current integration of digital tools in education; 2) Impact on critical thinking and reading comprehension; 3) benefits and challenges of digital tools; 4) future improvements and recommendations.

Current Integration of Digital Literacy in English Reading Courses

Based on interview data, the primary topic identified is the students' perception of digital literacy in English reading courses within the Chinese university context. Analysis of the interview data reveal sub-themes, highlighting a growing recognition of the importance of digital literacy in enhancing learning and influencing the learning process. The following students' interviews offer further ample supports about the participants' understanding of digital literacy in English reading courses within the Chinese university context.

Several respondents define digital literacy as a broad set of skills necessary for the digital age, including using digital tools to acquire, process, and create information, as well as to communicate and solve problems with the recognition of its importance. This is revealed from the responses of participants 2, 4, 5 and 6.

Participant 2 (P2)
P2 primarily regards digital literacy as a tool to enhance learning efficiency, stating, "I think digital literacy is using technology to better assist our learning and make our studies more efficient." P2 further emphasizes its efficiency, "Without it my learning progress would be much slower."

Participant 4 (P4)
P4 defines digital literacy as encompassing the capacity to proficiently utilise digital technology, communication tools, and network resources, saying, "Digital literacy refers to the ability of an individual to effectively use digital technology communication tools and network resources in a digital environment." Also, P4 highlights the role of digital literacy in accessing new English reading materials and broadening the scope of reading, quoting, "It helps students to access some new English reading materials ...".

Participant 5 (P5)
P5 understand digital literacy primarily as the usage of modern digital tools to assist in daily English learning, believing, “My understanding of digital literacy is using modern digital technology tools to help with our daily English learning.”

Participant 6 (P6)
P6 claims, “For me digital literacy refers to a series of abilities that individuals possess in the digital age. It includes but is not limited to using digital tools to acquire information, process information, create content, communicate, and solve problems.” This defines digital literacy as the ability to use digital tools to acquire, process, create content, communicate, and solve problems.

Another responses (P1 & P3) initially have a limited understanding of digital literacy, associating it with integrating digital methods into education, particularly in English reading courses within the Chinese university context. As P1 initially expresses uncertainty about the concept of digital literacy, indicating only a rough grasp of the idea, “Not very clearly but I can roughly grasp that it involves... assessing students’ ability to capture and integrate data.” Whereas P3 questions instead, “Does digital literacy mean integrating digital methods into education?” This reflects P3 has an unclear ideas about digital application in learning period. As the interview progresses, their understanding evolves through the discussion, reflecting a developing comprehension of the term. From the feedback provided by the participants, digital literacy is viewed primarily as the use of modern digital technology tools to assist in daily English learning. This reflects a practical and utilitarian view of digital literacy to enhance educational outcomes, particularly in English reading courses, indicating that all have an increasingly comprehensive and evolving understanding of integrating digital literacy in English reading study.

Considering the attendees’ explanations, it is obvious that the increasing recognition among students in Chinese university English reading courses of the significance of digital literacy in enhancing their learning experiences. Initially, several participants had a poor concept of digital literacy, equating it largely with the incorporation of digital technologies into schooling. But as they used these tools more, they learnt more about them and started to see digital literacy as a useful skill for everyday English study. Overall, based on the comments, students concluded that learning to use technology efficiently is an important element of doing well in school, and specifically in English reading classes. This growing insight implies that, as students develop more experience using digital tools, they will also likely gain deeper understanding of how

digital literacy contributes to learning.

Impact on Critical Thinking and Reading Comprehension

From this interview, it is evident to know how digital technologies have shaped participants' ability to think and understand many issues from their different perspectives.

Participant 1 (P1)
P1 says digital tools, like Learning Pass and multimedia courseware, are helpful for learning English. For further example, many students use these tools during and after class. This indicates clearly how much they depend on them. However, P1 also recognizes the limitations of some digital tools, such as MOOCs, which may hinder critical thinking due to their one-way, non-interactive nature: "MOOCs, for example, are a one-way output process and lack interactive elements... which limits mutual learning."

Participant 2 (P2)
Although digital tools help with both speed and depth of understanding, especially by offering a wide range of resources and platforms, P2 stresses that they do not replace critical thinking, which is still an individual task: "No, they are just aids for better reading, but personal judgement and critical thinking are still my own."

Participant 3 (P3)
P3 states that digital tools have changed the way people learn, since, for them, learning is no longer a subjective experience but a more objective one, based on facts. This change has affected text analysis, helping people understand words in a wider range of situations and encouraging a more scientific way of learning.

Participant 4 (P4)
Digital tools make certain forms of learning more efficient by making it easier to acquire knowledge and linguistic proficiency. But P4 points out that digital tools change how English texts are analysed, which could make students rely on them to understand what they're reading. As a result, this might stop people from being more critically engaged. P4 says, "Having these tools makes me a little dependent on them to understand."

Participant 5 (P5)
Although digital technologies improve learning efficiency, since they make education

more convenient and accessible, P5 thinks that, if learners rely too much on digital tools, they may sometimes impede the development of independent critical thinking abilities.

Participant 6 (P6)
P6 notices that digital tools, like online dictionaries and notes, help students understand what they are reading by giving them extra resources and functions. Though, P6 also knows that too much use of these tools can sometimes make it harder to learn deeper reading skills.

Based on the in-depth interview data, digital tools make it much easier for learners to understand and learn in many areas. Participants consistently recognise the value of these tools in expanding knowledge, improving understanding, and enabling quicker access to information. However, the interview also highlights a recurring concern: although digital tools support learning, they do not replace the need for critical thinking, which remains an individual responsibility. Several participants noted that excessive reliance on these tools might limit deeper critical engagement and foster dependency, especially in understanding and analysing complex texts. Overall, the findings suggest that while digital tools offer numerous benefits, their effectiveness is greatest when combined with independent critical thinking skills.

Benefits and Challenges of Digital Tools

The subsequent emerging theme is also advanced with the research progression, i.e. benefits and challenges of digital tools. As for the advantageous side, all participants hold a positive attitude toward the functions of digital tools to enhance their college English reading comprehensions. Furthermore, three sub-themes are identified from the in-depth interview data, including: tools as learning aids, supporting different aspects of language learning, and role in group assignments and class discussions. The interview findings contain reactions provided by the student respondents as following:

Drawing on the interview data, all participants provide examples of various digital tools to demonstrate their effectiveness as learning aids. These tools include digital media like PPT (P1 & P5), a multi-functional digital study system called Learning Pass (P1, P2, P5, & P6), e-dictionaries such as Youdao, DeepL, and NetEase (P1, P3, & P5), and e-books (P3). It is evident that, for learners, these tools facilitate easier access to learning resources and enhance the integration of digital literacy into university English reading courses, indicating that their roles in expanding the learning space and enhancing

comprehension.

All interviewees respond that digital tools, particularly those with interactive features, are more engaging than traditional methods. They do acknowledge that these tools greatly enhance their interest and motivation in English reading activities, rendering the learning process less burdensome and more interactive. In addition to better comprehension, P3 says that using dubbing software for her English reading tasks has made a big difference in her oral English. Plus, P1 states that digital tools, like Learning Pass, can keep track of their learning record, and give them a data-driven review during and after class. Similarly, since digital tools may provide a variety of resources and interactive features, P6 believes that these tools encourage self-directed learning and critical thoughts. Another emerging sub-theme involves the role of digital tools in group assignments and class discussions. P2, P4, P5, and P6 mention that digital tools, like Learning Pass, are not only used for individual learning but also significantly facilitate group assignments, presentations, and peer reviews. The reasons for those comments are as below. For them, these tools help learners with quick sharing and uploading of study materials. Those digital tools also offer a convenient use of the scoring system for peer evaluations. Meanwhile, they can provide prompt communication between teachers and students. All participants suggest that digital tools offer a portable, interactive platform and a personalised learning path, making the learning process more engaging and enjoyable.

Despite the importance of various digital tools in their English reading learning, there still exist some challenges for college students. There is ample evidence to show that their learning experience are hindered during the reading courses. Some mentioned challenges about technical limitations and barriers, like unstable internet connection (P1 & P6), lack of training and practice (P2 & P3 & P4 & P5), the complexities and difficulties of mastering certain digital tools (P2 & P4 & P5 & P6), and the high cost of some paid features (P5). Besides, despite the benefits of the improvement of engagements claimed by all the participants, some (P1 & P4 & P5 & P6) also recognizes that reliance on digital tools may limit independently critical thinking by overwhelming dependency. They recognizes that digital tools, to some degree, impact the way English texts are analyzed, making students somewhat reliant on these tools for comprehension too much, which could potentially limit deeper critical engagement as opposed to P2, who clarifies that digital tools do not replace critical thinking, which remains a personal responsibility: “No, they are just aids for better reading but personal judgment and critical thinking are still my own.” Also, the interviewee (P1) further points out the inherent drawbacks of digital tools, such as eye strain from digital reading and the distractive nature of digital content.

The interview data reveals that while digital tools substantially enhance English reading comprehension and overall learning, they also present challenges that must be addressed to prevent over-dependence and ensure critical thinking remains central to the learning process.

Future Improvements and Recommendations

Considering the future of digital literacy in college English reading courses, all generally express optimism that digital literacy is well-integrated into the current English reading courses, but there is still room for improvement, particularly in training and incorporating more digital literacy skills into the curriculum. A commonly further suggestion is that there is a need for structured training programs to help students and teachers effectively use digital tools, improving digital literacy skills across the board. The following interview data demonstrates the future envision of participants about digital literacy in the present college English reading curriculum.

Participant 1 (P1)
P1 shows an optimal attitude about the future of digital literacy in college English reading courses but acknowledges the need for better integration and interactive features. Nevertheless, it can be acknowledged that educational institutions should focus on better integrating digital tools within the curriculum to avoid a fragmented experience. While digital tools offer numerous benefits, traditional methods like paper-based reading should not be completely abandoned due to their unique advantages in engagement and comprehension.

Participant 2 (P2)
P2 believes although digital tools are integrated into the curriculum to some extent, there is room for growth, particularly in creating specialized resources and tracking student progress. Considering the future, the advancement of dedicated websites for each book or course to synchronize resources and improve learning efficiency.

Participant 3 (P3)
P3 perceives the current integration of digital literacy into university courses as inconsistent, with a need for a more standardized approach to ensure all teachers effectively use digital tools, and ensure all students receive a cohesive learning experience. When envisioning the future, integrating AI and other emerging technologies into the curriculum could offer more tailored and dynamic educational experiences, improving student involvement and understanding.

Participant 4 (P4)
P4 acknowledges that digital literacy is quite integrated into the current university English reading courses but suggests that there might need some adjustments to be more comprehensive. Also, P4 believes that digital literacy skills are important for future career prospects, as they enhance: “Yes they are important as they enhance my abilities in various aspects.”

Participant 5 (P5)
P5 believes that digital literacy is well-integrated into the current English reading courses, but there is still room for improvement, particularly in training and incorporating more digital literacy skills into the curriculum. P5 regards the future potential of digital tools could replace physical textbooks entirely, making learning even more convenient and integrated.

Participant 6 (P6)
P6 suggests that systematic digital literacy training and better integration of digital tools into course design are essential for enhancing their effectiveness in university English reading courses. P6 also emphasizes the crucial role of teachers in guiding students’ use of digital tools and adapting teaching strategies based on student feedback.

The observation results show that most people are optimistic about the future of incorporating digital literacy in college reading classes. The interviewees emphasize that, digital literacy is an important part of these classes but requires to be improved and developed all the time to realise its full potential for enhancing learning results.

Chapter 6: Analysis and Discussion

The main themes and results of this study show the significance of digital literacy in college English reading classes, especially at Chinese universities. The study focuses on four main topics: the current integration of digital literacy, its impact on critical thinking and reading comprehension, the benefits and challenges of digital tools, and future improvements and recommendations. Both the literature study and interview data show that adding digital literacy to English reading classes shows various perspectives of the pros and cons of using technology in the classroom.

Current Integration of Digital Literacy

The study's outcomes reveal perspectives about learners' definitions of digital literacy, and its integration into the English reading process. Participants acknowledge the increasing importance of digital literacy in improving English reading comprehension.

Several participants (P2, P4, P5, P6) define digital literacy as a broad set of essential skills for the digital age. This includes the applications of digital tools to acquire, process, create information, and solve problems. This finding reflects the interviewees recognize digital literacy as a key component in improving learning efficiency and effectiveness. In support, Hermena *et al*. (2017) and Ho *et al*. (2023) claim, different digital devices can have varying effects on reading comprehension. Thus, further research will necessarily explore the specific characteristics of digital devices, which aims to enhance learners' reading comprehension.

While digital tools are increasingly integrated into the curriculum, their effective use varies. For instance, some students (P2, P4, P5, & P6) have a broad understanding of digital literacy in English reading comprehension. By contrast, others (P1 & P3) initially struggle at first because they think it has to do with using technology in the classroom. Because of this, digital literacy needs to be taught in schools in a more uniform and standardised way. Similarly, Kvasnii (2024) and Zimu (2024) find the bigger effects of digitalisation on education, and they note that it has revolutionised teaching and learning for its wider access and improved pedagogical innovation. Consequently, learners' understanding evolves through digital pedagogical innovation, and this reflects the importance of digital literacy in daily English reading.

According to the research findings, interviewees focus more on how digital tools can help them learn English every day, which stresses how digital literacy can effectively improve reading. Evidence can also be found in Thapa (2023) and Carmona *et al*. (2023) on how digital platforms can make readers' learning more personalised. In support, Oakley (2024) agrees with this and says that digital tools and methods should be used to help people learn to read and write.

Impact on Critical Thinking and Reading Comprehension

Participants' learning efficiency and comprehension can be significantly enhance by digital tools. Besides, they can quickly access to information and diverse resources. However, a recurring concern is that over-reliance on these tools may impede the development of independent critical thinking skills. For participants, even though digital

tools are valuable aids, personal judgment and critical thinking should remain central to the learning process.

In the interview data, P2 and P4 acknowledge that digital tools promote critical thinking, since they can encourage readers to active explore and engage with knowledge. This associates with the research outcomes by Vychan and Hon (2024) and Reiber-Kuijpers *et al.* (2021). They discuss the potential of digital literacy to enhance critical thinking, particularly through the interactive and multimodal nature of digital tools. However, there is also a consistent theme regarding the limitations of these tools in fostering deeper critical thinking. This is in line with P4 and P6' s concerns. They claim that the overreliance on digital aids might potentially hinder independent critical thinking and reading skills. Meanwhile, the study results (Vorobel, Voorhees, & Gokcora, 2021) show that, if language learners encounter some troubles during their digital reading process, those issue ought to be solved at once, otherwise this may result in deficiencies in their comprehension.

Benefits and Challenges of Digital Tools

The study identifies various benefits of digital tools, such as improved engagement, enhanced comprehension, and support for collaborative learning. However, challenges also emerge. This includes technical issues, the complexity of mastering certain tools, and potential dependency on these tools. From the Participants' view of point, better training and practice ought to be required for both teachers and students. In this way the learning barriers might be overcome, so that maximize the effectiveness of digital tools in English reading.

With the help of digitally analysed English texts, students can better understand and use the language more efficiently. Vice *et al*. (2023) and Astri (2024) provide additional support for this. They consider that the use of digital tools makes access to certain things easier, the learning process more entertaining, and thus allows people to understand what they are learning and what they read better. In the interview data, P1 and P6 agree with this point. According to their statements, using digital tools improved their comprehension of reading texts, particularly when it came to challenging linguistic elements like idioms and cultural variances. According to their statements, using digital tools improved their comprehension of reading texts, particularly when it came to challenging linguistic elements like idioms and cultural variances (Vychan & Hon, 2024; Reiber-Kuijpers *et al*., 2021).

However, P1 expressed concerns about the inherent drawbacks of digital tools, and P1 pointed out the eye strain from digital reading and the distractive nature of digital content, because this may potentially limit deeper critical engagement. Correspondingly, Wang *et al*. (2022) and Ningsih (2023) concern the potential drawbacks about digital distractions and the challenges of navigating digital interfaces. This relates to Chandran's (2023) research, which examines how digital tools may divert attention from learning objectives. Thus, if learners do not select appropriate digital practices to enhance their language study, the distracting outcome may not be prevented in the absence of effective management (Nugroho & Triana, 2021).

Although digital tools offer substantial benefits in enhancing English reading comprehension and overall learning, there are still some challenges that need to be addressed. Future studies could explore effective pedagogy to avoid distracted interruptions, so that the critical thinking capability of learners can be enhanced.

Future Improvements and Recommendations

Although many pieces of evidence in the interview indicate that participants are optimistic about the future of digital literacy in English reading courses, they all believe that more needs to be done in this area. The recommendations for making more personalised and interactive learning experiences include: 1) more structured training programmes for students and teachers; 2) better integration of digital tools into the curriculum; and 3) more utilisation of new technologies such as AI. Saudi (2023) and Shrestha (2015) both mentioned several challenges in integrating digital literacy into English reading courses, such as resource limitation, lack of training and system support. As these challenges are also highlighted in the interview data, I will have more discussions with the interview participants below. For instance, P2 and P3 found that if our training programs were more structured, it would be beneficial for both the students and the teachers with the necessary digital skills. Besides, the findings showed several challenges, including little internet accessibility sometimes, an overabundance of unstructured digital tools, and the high cost associated.

To make learning more balanced, there is another call for a mix of digital tools and more 'old-fashioned' methods. For instance, P5 said that to avoid these problems, one needs to 'adopt a balanced approach between using the new digital way and the old-fashioned ways.' Similarly, this is a concern that both Oakley (2024) and Lu (2016) identify. They talk about how digital tools can change the way teachers do their jobs and can make the classroom a more interesting and engaging environment. Overall, the interview findings show that digital literacy in college reading courses appears to

be a rising component. In order to fulfil its potential, the interviewees emphasised that further improvement should be done to enhance pedagogical outcomes.

In conclusion, digital literacy is an increasingly important part in college English reading courses. However, the interview findings show that there are still huge spaces for its integration. Therefore, effective pedagogical strategies would be made to tackle challenges and build on the existing benefits. By doing this, digital literacy can be used more successfully to help students learn more and think more critically.

Reflection on Research Process and Methodology

According to Rooney (2013), reflection plays a critical role in qualitative research, for which the study's rigor and ethical integrity will be ensured. Meanwhile, several main insights would appear during the reflecting process, especially in the semi-structured interviews.

In this study, six college students would be invited to join these semi-structured interviews. Also, their own experiences and perspectives would be recorded to get qualitative perspectives into the hurdles and chances relevant to the incorporation of digital literacy into English reading courses in China. As noted by Barriball and While (1994), a natural conversation could occur in the semi-structured interviews, and interviewers also adjust their questions based on the participants' responses, for which rich and detail data can be achieved. Besides, semi-structured interviews are an effective way to explore participants' nuanced perceptions regarding digital literacy in English reading courses (Frondizi & Rossi, 2023). Furthermore, when being questioning, respondents can flexibly express their thoughts and experiences in details (Arif *et al.*, 2017). Apparently, the discovery of new perspectives results from the open nature of semi-structured interviews (McLachlan & Garcia, 2015).

Additionally, both broad and specific insights could emerge from the semi-structured interviews, since their design highlights the importance of crafting questions (Baldin *et al.*, 2022). The interview data reflects this point. It is obvious that most participants recognised that digital literacy truly brought benefits for their reading comprehensions; some significant challenges also appeared in the interview. For instance, the inadequate digital training and overdependence on digital tools may adversely affect their critical thinking and reading comprehension. Considering this fact, if this research employs a more structured or rigid interview format, it may be impossible to clearly emerge such a balanced view.

However, the potential biases in participants' responses should be underscored in the design of the interviews (Nomnian, 2009). For instance, due to the widespread and application of digital tools in modern education, some participants may tend to focus on their positive sides. Instead, in the semi-structured interview, the follow-question format could encourage respondents to reflect on the potential downsides (Roulston, 2010), which may reduce attendees' biases to some degree.

In the data analysis process, thematic analysis is a very flexible and useful tool for researchers since it can provide a basic level of organisation and a detailed description of each data set (Braun & Clarke, 2006). Also, the inductively identified themes help capture important patterns (Damianidou *et al.*, 2019). In the thematic analysis of the interview data, it is clearly shown about how students perceive digital literacy within the framework of English reading classes. Along with attempting to identify consistencies and discrepancies, the analysis process underscored the importance of triangulating findings with the existing literature. Thus, the overall interpretation of data could be enriched. Additionally, thematic analysis focuses on the dynamic nature of social interactions, behaviours, and experiences (Wisdom *et al.*, 2011). For instance, the dual-edged nature of digital tools was recognised from the data analysis. Although digital tools have shown substantial benefits in the research findings, they also present challenges that need careful consideration. For developing effective pedagogical strategies, therefore, it is vital to maximise the benefits of digital tools and mitigate their drawbacks accordingly. Plus, this is in line with social-constructivist theory, which acknowledges multiple social realities and the co-creation of knowledge between researchers and participants (Allen & Davey, 2017). In conclusion, the flexible nature of thematic analysis allows the researcher to employ it within social-constructivist frameworks. Also, it can serve as a powerful and adaptable methodology to investigate unique themes and patterns in qualitative results.

In conclusion, the integration of digital literacy into English reading courses presents a complex picture with significant benefits and potential challenges. In the interview data, the findings fit with the identified themes in the literature review. Both discuss that digital tools help the enhancement of language competence and critical thinking, and it is necessary to avoid over-dependence on digital devices. Also, the semi-structured interviews have provided valuable insights into capturing participants' perceptions about the research area.

Chapter 7 Conclusion

In the Chinese context of college English reading courses, this research comprehensively explores the students' perceptions and experiences with digital literacy. Besides, it aims to effectively integrate it into the implementation of college English instruction in the Chinese setting. This research has successfully addressed the research questions in the Chinese context. In the literature review, the main themes of digital literacy in English reading have been shown, which involve its pedagogical integration, the challenges it poses, the impact on language competence, and the dilemmas of teachers and students. Also, through the interview data analysis, the thematic analysis has identified the following key themes, namely, key pedagogical approaches, benefits, challenges, and future directions for enhancing digital literacy in educational settings.

In the interview data, the findings and themes closely align with the insights from the literature review. The interview data not only corroborates the existing academic discourse but also shows the digital literacy integration in English reading courses in a Chinese university. Although most participants consider that digital tools are increasingly enhancing reading comprehension and critical thinking, there is a need for careful integration to effectively complement traditional learning methods but also avoid over-reliance with digital devices. Besides, the research results highlight that it is vital to provide structured training for both students and educators so that this can fully leverage the potential of digital literacy. Thus, it is a complex process in this research area since the benefits of digital tools always accompany challenges.

From the results obtained so far, it seems that, despite the national policy support, there are still huge spaces to further develop a digital learning environment, including advanced technology and financial support, and broadly sufficient training supplement between teachers and students. This means the role of national policies and school cannot be overlooked, simply because the logic behind those requirement demands more broadly national support for a sustainable digital teaching environment, but not merely in school settings' support. Therefore, the role of national policies and schools cannot be ignored, as this demand not only depends on the school environment, but also requires broader national support to build a sustainable digital teaching environment.

On the other hand, there are limitations regarding this research study. 1) The outcome of this study might not be generalised since this study had only a small sample size with six participants, but more than two samples, and it was based on qualitative data.

2) The result of this research might not be applied to other contexts because the research was conducted in a unique cultural and educational context. Then in the future study, more sample size and diversity of cultural might be helpful to studies. Further, it can be augmented by applying quantitative methods in digital literacy courses about English reading skills.

This research is believed to have provided valuable insights for the reform of the digital literacy policy in China and will be helpful in future studies that promise better application of digital tools in English reading courses. On one hand, the educational community needs to address the challenges for better strengthening college students' digital literacy to meet the challenges brought by the digital world. On the other hand, it is possible to build on the students' strengths to develop their digital reading competence.

Chapter 8 Recommendations

In my thesis proposal, while addressing the pedagogical integration of digital literacy in English reading courses, I aim to build on the strengths of existing research and advance the impact of my research in China and elsewhere.

My research is grounded in the extensive literature on digital literacy in English reading courses. Previous studies have established a robust theoretical framework, which undoubtedly would provide a solid foundation for my research. Specifically, the semi-structured interviews are well documented and offer clear guidance for my data collection. Also, Braun and Clarke's (2006) thematic analysis have provided empirical evidence supporting for this interview data analysis. Based on this fact, my project will leverage these established theories to explore the pedagogical integration of digital literacy in English reading courses in the Chinese context, which remains underexplored.

There are significant gaps in the literature that my research seeks to address. For instance, previous studies have explored key themes of digital literacy in English reading, such as pedagogical integration, challenges, its impact on language competence, and the dilemmas faced by teachers and students. There is limited pedagogical research regarding digital literacy in English reading courses, especially in the Chinese context. This presents an opportunity for further exploration. Additionally, most existing research relies heavily on quantitative methods, potentially overlooking the nuanced insights offered by qualitative approaches. This study currently uses a qualitative approach via semi-structured interviews, which enables me to capture rich,

in-depth data that previous research may have overlooked, addressing methodological gaps. In the future, I propose a mixed-methods design that combines qualitative and quantitative methodologies to gain a more comprehensive grasp of the subject. This approach provides a comprehensive, flexible, and robust way to address complex research questions by utilizing the strengths of both qualitative and quantitative methods. It allows for deeper interpretation and strengthens validity through triangulation.

To build on these strengths, I will expand the application of the thematic analysis of the interview data to explore the nuanced insights into the practical and contextual challenges and opportunities that digital literacy tools present in the educational sector. By doing so, I aim to not only confirm the applicability of existing models but also identify potential limitations or modifications that could enhance digital literacy integration effectively. Additionally, by focusing on the under-researched variable practices and potential areas for policy and curriculum development to enhance digital literacy integration effectively, I will contribute new insights into academic discourse on digital education and provide actionable strategies for educators and policymakers, ultimately enhancing students' abilities to thrive in a global, information-dense environment.

By combining the strengths of existing literature with an innovative approach to addressing its current limitations, my research will make a significant contribution to both theory and practice. This approach will provide a more holistic understanding of digital literacy in English reading courses, especially in the Chinese context, and expand the current knowledge base by filling crucial gaps in the literature.

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