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**Fostering Reading Comprehension through Informal Digital Learning of
English: The Case of Third-Year Students at 8 May 1945 University, Guelma**

**A Dissertation Submitted to the Department of Letters and English Language in
Partial Fulfillment of the Requirements for the Degree of Master in Language and
Culture**

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Dedication

In the name of Allah, the most gracious and merciful, the most compassionate, I

Dedicate this work

To my greatest treasure, my mother, who has been a constant source of hope, guidance, and
inspiration no words can describe how grateful I am to have you

To my dear Father

To the piece of my heart; my beloved sister Sofia

YASMINE

Dedication

In the name of Allah, the most gracious and merciful, the most compassionate
I would like to dedicate this dissertation to my lovely parents whose efforts, sacrifice, and
support made it possible for me to do this work. May Allah bless them.

To my dearest sister Majda and my brave brother Zaki

To the soul of my brother Idris (may his soul rest in peace)

To everyone who encouraged me

ABIR

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Abstract

Understanding written texts is very crucial in foreign language teaching classrooms. Therefore, students have to improve their reading comprehension through informal learning by using technology beyond the classroom. Within this scope, this research aims to investigate the role of Informal Digital Learning of English in enhancing students' reading comprehension. It is hypothesized that informal digital learning may lead to high reading comprehension. To test the hypothesis, the quantitative descriptive method was adopted through administering a structured questionnaire to third-year students of English at 8 May 1945 University-Guelma. The findings indicated that using informal digital learning tools in EFL classrooms can foster students' reading comprehension. Hence, informal digital learning allows learners to practice reading in various formats which can improve their ability to comprehend.

Keywords: Reading comprehension; Informal learning; Technology; Informal digital learning

List of Acronyms and Abbreviations

CALL: Computer Assisted Language learning

EC: Extramural Context

ECAs: Extracurricular Activities

EE: Extramural English

EFL: English as a Foreign Language

IDLE: Informal Digital Learning

LBC: Learning Beyond Classroom

L2: second language

MMORPGs: Massively Multiplayer Online Role-Playing Games

OCL: Out of Class Learning

PIA: Productive IDLE Activities

SLA: Second Language Acquisition

SQ3R: Survey Question Read Recite Review

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Arabic Summary: ملخص

General Introduction

In recent years, the area of language teaching and learning has changed due to globalization. Within the field of education, reading is a crucial skill that every student should possess for better academic performance. Developing reading comprehension in EFL classrooms is important; it helps students understand written texts and grammar structure. It also enhances critical thinking ability, as students analyze and interpret information. Thus A good way to enhance students' reading comprehension is informal digital learning; it plays a crucial role in developing reading comprehension. It offers several benefits for students they can access different resources, anytime and anywhere. Also, learners can be exposed to diverse topics to deepen their knowledge beyond formal classroom settings. However, students need to direct themselves alone without the support of the teacher. By looking for supportive materials, using platforms and applications, managing their time effectively, and setting their own goals for good learning outcomes to make reading exciting, for better understanding and interpretation of meaning. This self-direction approach helps students to suit their individual preferences, eventually enhancing their motivation and autonomy. Thus, informal digital learning is like an opportunity for students to be self-directed, autonomous learners, independent from the traditional ways of learning or formal learning.

1. Statement of the problem

Reading comprehension is determined to be important. It allows students to make sense of what they read; it involves the understanding of meaning through the context. Reading comprehension plays a crucial role in the academic success of EFL learners. Therefore, students need to develop their reading comprehension to acquire critical thinking

skills and process information efficiently. It is noticed that the majority of third-year students of English at 8 May 1945 University-Guelma, have a poor reading comprehension; they cannot understand written passages and statements. The main cause behind that may be that they do not learn outside the classroom using informal digital tools and platforms. Besides, they are not autonomous to learn alone, they just rely on the teacher's guidance. As a result, they suffer from low reading comprehension. Students should be conscious of the importance of informal learning in order to improve their reading comprehension skills. Our research targets the following questions:

- Does informal digital learning of English have a positive impact on students' reading comprehension?
- Are students aware of the efficacy of informal digital learning?

2. Aims of the Study

This research aims to explore the importance of using informal digital learning and its influence on developing students' reading comprehension. Thus, this study targets the use of informal digital learning to enhance students' comprehension and understanding of written texts to gain analytical point of view and interpretation as they become independent from the use of traditional or formal ways of learning that break their comprehension. Informal digital learning will help students to be self-directed, and autonomous individuals. So the purpose of this research is two-fold:

- 1- To foster learners' reading comprehension through Informal Learning of English.
- 2- To raise learners' consciousness about the importance of Informal Digital Learning in enhancing reading comprehension.

3. Research Hypothesis

Informal digital learning plays a vital role in fostering and enhancing students' reading comprehension. Through using informal resources and tools, students can be autonomous and self-directed persons because they will use them outside the classroom and without the

support and the help of teachers. This could develop their motivation to read and analyze written texts at the same time. Thus, the more students employ informal digital learning, the more their reading comprehension will be developed. Accordingly, we hypothesize that:

H₁: If learners learn English via informal digital learning contexts, their reading comprehension will improve.

H₀: If learners learn English via informal digital learning contexts, their reading comprehension will not improve.

4. Research Methodology and Design

4.1. Population of the Study

The targeted population is third-year students at the Department of English, University of 8 May 1945, Guelma. The reason behind choosing this sample is that third-year students are going to graduate and most of them still face reading comprehension issues. The promotion is composed of one hundred sixty-five (165) students. According to Krejcie and Morgan (1970), one hundred fifteen (115) students should answer the questionnaire.

4.2. Research Method and Tools

This research examines the importance of informal digital learning in fostering students' reading comprehension. To fulfill this aim, the quantitative descriptive method is used by administering a structured questionnaire to test the hypothesis. The structured questionnaire was chosen because it is a reliable and quick method to collect quantitative data from multiple respondents in an efficient and timely manner.

5. Structure of the Dissertation

The current dissertation is divided into a general introduction, three chapters, and a conclusion. The first chapter is entitled 'Reading Comprehension', it includes the definition of reading and reading comprehension and the levels of reading. Moreover, it deals with its types, techniques, and stages. In addition to its models, cycles, and processes also, the role of context. Finally, the chapter

ends with compensatory strategies while reading. The second chapter is entitled “Informal Digital Learning”. Deals with definitions of informal digital learning, and its related terminology, origin, context, and dimensions. Additionally, the chapter highlights the significant role of informal learning. Furthermore, it includes a diverse range of tools and platforms that support informal learning. The chapter ends with the importance of informal digital learning in fostering reading comprehension. The third chapter ‘field Investigation’ is committed to the practical investigation. It includes the aims and description of the students' questionnaire and it tackles data analysis and interpretation. Finally, the research ends with pedagogical implications and recommendations as well as limitations of the study.

Chapter One: Reading Comprehension

Introduction

Reading comprehension is a fundamental skill for EFL learners and anyone who wants to read for pleasure or information. Thus, it is essential for any academic success. In fact, reading comprehension plays an important role in developing language proficiency and overall communication skills. The more we expose ourselves to different written materials, the more we widen our reading perception as understanding the meaning of texts requires a variety of language skills, including phonological awareness, reading aloud, grammar, vocabulary, and semantics. Therefore, the present chapter will discuss various definitions of reading comprehension provided by different scholars. Then, it will spotlight on different reading levels. Also, this chapter will include some types and techniques of reading comprehension as well as the reading stages, models, and cycles of reading. Furthermore, the chapter emphasizes some reading processes in developing learners' critical thinking and problem-solving. It also highlights the role of context in fostering reading comprehension. Ultimately, the chapter concludes with compensatory strategies during the reading process.

1.1. Definition of Reading Comprehension

Reading is a crucial skill that is considered as one of the four language skills, used by EFL learners. Over the years, various academics and writers defined reading. Bancroft (1874) defined reading as “the translation of written into spoken language and it comprehends two general divisions or theory and expression” (p. 15). Goodman (1967) declared that it “is a precise process. It involves exact detailed, sequential perception and identification of letters, words, spelling patterns, and large language units” (p. 126). Furthermore, Harmer (1991) defined reading as “an exercise dominated by the eyes and the brain” (p. 90). Besides, Brassell et al. argued that “it refers to the ability to comprehend or

make meaning from written text” (2008, p.15). Moreover, Mikulecky (2011, p. 5) mentioned that “reading is a complex conscious and unconscious mental process in which the reader uses a variety of strategies to reconstruct the meaning”. Similarly, Arcos proclaimed that “reading is the process of looking at a series of written symbols and getting meaning from them”(2013, p. 3). In his turn, Nurdianingsih (2021) claimed that “reading is the process of how information is processed from the text into meanings, starting with the information from the text, and ending with the reader gains” (p. 286).

From the definitions above, we conclude that reading involves the correct pronunciation of expressions, and words, and the transfer of meaning and emotion. When we read we use our eyes to receive written letters, and we use the brain to transform them into words. Thus, reading is not an easy task. It is a precise activity that involves combining related pieces of information and understanding components of language to raise the mind’s ability to comprehend.

The term ‘comprehension’ is “a complex process that has been understood and explained in several ways” (Pardo, 2004, p. 272). It is defined by Merriam–Webster’s dictionary as “the capacity for understanding fully knowledge gained by comprehending” (n.d.). Kennedy (1991) argued that “comprehension is facilitated by reading appropriate materials, intellectual curiosity, and desire to learn” (p. 12). The definition of comprehension can be stated as follows: “the ability of the pupil to find, interpret, and use ideas” (1991, as cited in Jafar,2012, p.9). Furthermore, Kintsch (1999) stated that “comprehension involves the relating of two or more pieces of information” (as cited in Kirby, 2007, p. 3). Moreover, Snow (2002) viewed comprehension as “the simultaneous ability used by readers to construct and extract meaning through interaction and involvement with written materials” (p. 11). Brassel et al. declared that it “is the ability to know or grasp an idea with the mind” (2008, p. 16).

According to Seyed et al. (2010) the word comprehension refers to “the ability to go beyond the words, to understand the ideas conveyed in the entire text” (p. 376).

To sum up, all the above definitions shed light on the fact that comprehension is the capability to apprehend knowledge that has been acquired through the process of understanding. It is about the reader’s ability to engage actively with the text to understand it. Furthermore, Flores and Moren (2004) pointed out that “reading comprehension is the mind’s ability to understand the ideas in a text, the message, and the purpose of the author” (p. 3). Besides, Woolley (2011, p. 15) claimed that “Reading comprehension is the process of extracting meaning from the text”. In a more sophisticated way, Paris and Hamilton (2014) argued that “reading comprehension is only a subset of an ill-defined larger set of knowledge that reflects the communicative interactions among the intentions of the author/speaker” (p. 32). Moreover, it is viewed as “the ability to extract, interpret, and use information from a print or digital text” (Grabe & Stoller, 2018, p. 12). Butterfuss et al. (2020) went further emphasizing reading comprehension. They argued that “it requires the construction of a coherent mental representation of the information in a text” (p. 1)

In other words, reading comprehension refers to the comprehensive method by which individuals derive understanding from reading, influenced by their pre-existing knowledge. Based on all the previous definitions, we may understand that reading comprehension is a cognitive process that requires mental abilities to grasp the meaning through interaction and involvement within the text.

1.2. Levels of Reading Comprehension

Reading comprehension has four levels as follows: literal, inferential, evaluative, and applied. They are discussed in the following subtitles.

1.2.1. Literal Reading Comprehension

Nurjanah and Putri (2022a) stated that literal reading is considered the “lowest level” of comprehension. Nurjah and Putri (2022b) asserted that learners who had proficiency in literal reading comprehension also possessed proficiency in inferential, evaluative, and applied reading comprehension (p. 24). That is to say, learners with strong literal reading comprehension can understand the explicit meaning, without delving into deeper analysis and interpretation. With solid grasp of literal meaning, they can draw conclusion beyond surface meaning.

According to Burns et al, (1999), literal comprehension is the capacity to comprehend concepts that are mentioned in the text, which enables learners to follow instructions, identify details, and comprehend reason-result relationships (as cited in Budi & Zuhro, 2023, p. 24). It is simply what the text says. Literal comprehension is thought to support more advanced cognitive skills (Nation, 2005, p. 248). So, by grasping the literal meaning of the text, it becomes easier to build knowledge to support the development of complex comprehension. Besides, there are question words that are usually used for literal comprehension such as what, who, where, and when (“NSW Department of Education”, 2024, p. 5). Thus, ‘What’ is used to ask about the characteristics of something, and ‘who’ is used to ask about a person or group of people. ‘Where’ is used to ask about location or place, and ‘when’ to ask about the period of a time or action. These word questions require direct factual responses that can be found within the text. This implies that literal reading comprehension is considered the lowest level because it focuses just on the surface level it doesn’t involve deeper analysis or interpretation of the text.

In other words, literal reading is the basic and first level of reading comprehension. It is about the direct and explicit understanding of stated facts in the text. It is important to

know this skill to comprehend other skills. At this level, students can get information directly by identifying ideas and vocabulary descriptions to have a better understanding.

1.2.2. Inferential Reading Comprehension

As claimed by Pennell (2002), readers who use inferential comprehension must combine the actual content of selection with previous knowledge, intuition to form hypotheses (p. 1). Simply said, teaching students to read inferentially enhances their strategic reading skills by enabling them to combine what the text explicitly said, with what they already know to draw conclusions to gain a richer understanding. Furthermore, Hirsch stated that “prior knowledge about the topic speeds up basic comprehension and leaves working memory free to make connections between the new material and previously learned information, to draw inferences, and to ponder implications” (2003, p. 13). Thus, when we already have background information, it is easier to understand new ideas or concepts.

On the whole, inferential reading comprehension is about involving reading to the end to gather all the information provided, and then using that information to draw conclusions, or make predictions. Drawing conclusions or ‘reading between the lines’ are common terms used to characterize inference-making (Zweirs, 2005). When readers can integrate information from what they read with what they have experienced, they can conclude. As a result, people infer a conclusion or provide new meaning to the reading that isn't clearly stated in the reading (as cited in Jumiati, 2014, p. 222). In a brief statement, readers can combine their background ideas and information with what they already read to create new meaning. Inferential reading comprehension also helps readers develop critical thinking skills and gain a deeper understanding of the author’s message it’s like mixing oxygen with hydrogen to form a new substance.

1.2.3. Evaluative Reading Comprehension

Turner (1989) noted that evaluative reading is critical reading that requires the capacity to contrast aspects of the new material, such as content, style, language, facts, ideas, and opinions, with features from prior experiences. Moreover, it entails judging appropriateness, agreement, or acceptance, as well as separating fact from opinion and separating illusion from reality. Evaluative comprehension is an expansion of literal and inferential comprehension. It requires readers to comprehend the text, understand what the author mean, and examine information as well as using background information or experiences to form opinions to enhance their comprehension skills (Rupley & Blair, 1983, as cited in Basaraba et al., 2012, p. 356). To put it briefly, evaluative reading comprehension involves assessing both surface-level and deeper messages in the text. It is like evaluating how well the author communicates the explicit information, and whether he provides enough clues to make an inference.

Dallmann et al. (1982) stated that making judgments about what is read is one of the important comprehension abilities. (p. 163). That is to say, evaluative reading involves making evaluations and judgments about what we read. It is about critically analyzing the text, considering the author's arguments, and evidence, forming personal opinions about quality and effectiveness, and assessing the weaknesses and strengths of the text. According to Herber (1970), for the readers to rate, judge, or value the text they must compare what they already know, from past experiences with what was received, to produce a new meaning that goes beyond the literal meaning (p. 233). So, by connecting what learners already know with what they read, they can make judgments about the quality and reliability of the text. They have to create connections and associations that facilitate learning, and memory of knowledge, and also to build a cohesive mental framework to integrate new concepts and expand understanding.

1.2.4. Applied Reading Comprehension

This is the final level that occurs when readers have a deeper understanding of the text. Applied reading comprehension is about reading beyond the lines to uncover hidden messages that the author wants to convey. The reader at this level uses information from the text to construct knowledge to express opinion and form new ideas based on information in the text (Veca & Veca, 2009, pp. 25-27). Thus, the applied level guides students, to synthesize information and develop a deeper understanding of the text, think critically, analyze information, and apply it to other information. Also, it requires readers to use all previous levels, to apply information from the text to a broader context.

In conclusion, what distinguishes a proficient, strong reader is literal, inferential, evaluative, and applied comprehensive reading. These levels must be learned and developed because they allow learners to understand and appreciate what they read, it helps to make connections, analyze complex ideas, and think critically about the text. When learners comprehend what they read, they can engage with the material on a deeper level.

1.3. Types of Reading

Reading is classified according to its types as follows:

1.3.1. Intensive vs. Extensive Reading

As Harmer (2007) stated, reading may be divided into two categories: intensive and extensive reading. Intensive reading involves reading a document closely and paying close attention to details. It is combined with study exercises like vocabulary and grammatical checks. Conversely, students often undertake extensive reading for general information and enjoyment. As extensive reading is crucial, instructors must have a plan. This comprises resources and instructions. Zhenyu (1997) argued that intensive reading calls students to read text attentively and in-depth (p.40). In a nutshell, students must read the material without hurrying. According to Brown (1988), intensive reading highlights linguistics forms,

indicators of discourses, and surface structure elements in order to comprehend exact meaning (pp. 400-450). Thus, this kind of reading makes students pay more attention to the grammar standards, and how sentences are structured, these aspects help readers to decode the text effectively.

Moreover, Williams (1994) viewed intensive reading as the opposite of extensive reading. The main focus is on the comprehension of text in detail by analyzing the author's style, strategies, grammar, and vocabulary for deeper comprehension. Muchtar (2019, p. 3) claimed that intensive reading refers to the reading that is strictly limited to a brief piece of content, and it is done in order to understand the entire material. Taembo (2023) stated that the primary goal of intensive reading is for the reader to develop and enhance reading quality (p. 177). Which means that the reader can become fluent and understand ambiguous ideas by developing vocabulary and grammar through reading for specific information. It is reading for detailed understanding and analysis.

Bamford et al (2004) defined extensive reading as a language education technique where readers are intended to read enormous amounts of materials or lengthy texts for broader understanding, with the primary purpose of gaining enjoyment from the text (pp. 1- 4). Similarly, extensive reading is reading a longer text in large quantities, to enjoy reading (Muchtar, 2019, p. 3). That is to say, extensive reading is a way to simply enjoy. It involves reading for pleasure without taking into consideration reading techniques or focusing on details. It is about choosing articles and magazines that interest readers. The following table explains the difference between the two types:

Table 1.1*Extensive vs. Intensive Reading*

Types of Reading	Intensive	Extensive
Class goal (general purpose).	Read accurately.	Read fluently (reading as smoothly as possible).
Reading aim.	Translate and answer questions.	Get or obtain information. Enjoy.
Focus (attention)	Word by word.	Meaning.
Material	Often difficult lectures. Choices determined by lecturers.	Easy student choices (chosen by each student).
Amount (quantity)	Not much	A lot
Speed	Slow	Faster (above normal speed)
Method (way)	Use a dictionary (use of dictionary as often as possible).	Minimum use of dictionary (dictionary occasionally used).

Note, Adapted from: Mushtar, 2019, p. 3

1.3.2. Digital vs. Print Reading

Both digital and printed texts play important roles in EFL classrooms. The word ‘digital’ means non-printed or electronic texts. Nordquist (2017) stated that reading electronically is a way of getting knowledge from a text that is on an electronic device like computers, tablets, smartphones and e-books (as cited Lim & Toh, 2020, p. 1). Thus, online reading involves gathering information from a text on digital devices instead of reading from a printed document. In this respect, Sandberg (2011) declared that reading text on a computer

coexists with seeing pictures, and videos. Students can use buttons to jump to specific sections. Electronic reading is a similar way of “hypertext” reading that allows readers to click on it, to go to another webpage to attain nonlinearity, after which they can quickly navigate and read through “hyperlinks” (as cited in EL- Ibrahim, 2020, p. 15).

Furthermore, Liu (2012) stated that the digital environment has changed how people read. Electronic resources are becoming more and more famous in libraries and bookstores. (p. 85), because digital reading offers benefits and allows users to search and retrieve information quickly. With the rise of digital devices, reading has become accessible. People can read different genres of e-books on their smartphones anytime and anywhere. Forsberg (2014) maintained that when online documents are not available or overpriced, readers choose to read printed ones instead of online books (as cited in Alieto, 2020, p. 4). Moreover, Ryong and Deoksoon (2011) indicated that there are online reading strategies including: “using hypermedia, using computer applications and accessories, dialoguing, setting up reading purposes and planning, connecting prior knowledge and experiences with texts and tasks, previewing and determining what to read and inferring” (as cited in El-Ibrahim, 2020, p. 5). Thus, using links allows readers to navigate easily to access additional sources such as; articles, pictures, and videos. In addition to using online note-taking applications like “Google Keep”, and organization tools to share points of view. The benefits of digital reading were summarized by Maden (2018, p.1) who explained that e-reading affords “essential savings in terms of time, space and energy”. So, online books offer time and reduce physical effort to the readers, they can download them in a second, without the need to travel and go to stores and libraries.

Pardede (2019) claimed that “a printed text is a tangible object with a beginning and an end. It is also hierarchical, intended for private reading, and provides a very linear and static reading experience to the reader” (p. 80). That is to say, a printed book is set up in a way

called the 'book's layout': the front cover, back cover, content pages, and spacing. All these visual elements give the text, smooth, flow and coherence to attract readers to be more engaged with reading. Similarly, a printed book is a physical and tangible book made of paper and often printed with words and protected by a cover (Kosch et al., 2022, p. 19). Simply said, with printed books, readers can touch the papers, and flip the pages, it's a traditional mode of reading, preferred by the elderly because it's easy to obtain. Printed reading is designed to be read sequentially, and its characteristics are not flexible (Coiro, 2003, p. 4). Thus, when the readers read a text, they must follow the text order. It is like reading from the beginning to the end, without changing the order of the text. Dillon (1994), for instance, found that "reading performance on the computer screen was about 20% to 30% slower than a paper" (as cited in Pardede, 2019, p. 82). This implies that reading from paper or printed text might be easier and more effective for readers, because of the physical appearance of the book. Turning pages allows them, to focus more for better understanding. However, some people find it easier to read from printed text while others prefer to read from a computer screen.

Digital reading is advantageous. Visual aids like pictures and charts enhance comprehension by adding additional information. However, printed reading is more successful, when adults read printed texts with a child as they can guide them and give them feedback (Furness et al., 2021, as cited in Sidabutar et al., 2022a, p. 1). Sidabutar et al. argued that printed text is essential for EFL learners because it provides them with a coherent structure, this structure allows them to develop their reading skills and comprehension, unlike digital online text as it may be flexible (2022b, p. 1). So, digital reading with graphics and tables offers readers the opportunity to retain and memorize information easily. Children also can use printed books alone because they are safer than digital ones.

1.3.3. Critical Reading

Critical reading is a complicated thinking process that entails analyzing the author's purpose, assessing it to established criteria, and combining it into preexisting ideas (Zadina, 2014, p. 8). So, critical reading is active reading that requires high mental abilities, it is deeper and more complex. It is the process of analyzing, interpreting, and sometimes evaluating and synthesizing the text.

Furthermore, critical reading allows readers to analyze the arguments in a text, beyond just knowing them, critical reading technique encourages readers to think about arguments from various points of view rather than simply agreeing with or disagreeing with them, trying to find its strengths and limitations (Tasnimi, 2017, p. 5). In short, when we read critically, we use our critical thinking skills to question the text's purpose and to get a deeper understanding. Critical reading is linked with critical thinking; learners must be active in interacting with text by asking questions, highlighting important points, and taking notes.

1.3.4. Speed Reading

Sutz (2009) claimed that speed reading involves the “mouth, ears, eyes, and brain”, and speed reading stimulates these senses even more than regular reading does. Readers use their senses and their mental capacity more effectively when reading quickly (p. 10). In brief, when readers read quickly, their eyes scan the text, the brain process the information, and the mouth pronounces the words. All senses work together to understand the text. Nation (2005) explained that a lot of individuals who are not native English speakers, as well as some who are native, read slower than 300 words per minute. Roughly, 25% of a balanced language program should focus on developing fluency, aiming to enhance learners' abilities to effectively utilize their existing language skills. Fluency improvement requires practice in listening, speaking, reading, and writing, with a focus on both input and output. (pp. 23-24).

In other words, those who could detect and recognize words more quickly were considered rapid readers. This technique can make life easier, and save time and effort. Therefore, teachers have to train learners to become fast readers.

1.3.5. Active Reading

Reading is not passive, it is an active process in which readers, take control of their reading, set goals and employ reading strategies to understand text effectively (Murray, 2003, p. 840). Thus, an Active reading is the process in which the reader actively engages with the material, to be efficient reader. According to Starros (2012), to be an active reader you should follow these strategies:

- Always have a pen or pencil handy as you read.
- Make notes
- Pay attention to what you are reading
- Contrast the authors' concepts with your knowledge.
- Ask the author questions.
- Highlight key concepts and answer them with your thoughts.
- Immediately look up unfamiliar terms. (p. 4)

So, active readers always compare their previous knowledge with the new knowledge and try to understand complicated words.

1.4. Reading Techniques/Strategies

Reading techniques are instruments used to help students understand what they are reading to foster their reading comprehension of different kinds of texts. Reading comprehension is done effectively through the use of the three techniques of reading which are skimming, scanning, and SQ3R.

1.4.4. Skimming

One of the most important techniques of reading comprehension is skimming. According to Brown (2001), skimming is the practice of reading quickly to get the main ideas of a piece. It has the benefit of allowing readers to anticipate the paragraph's goal, its central concept or message, and even some of the ideas that are developing or supporting it (p. 308). In the same vein, Shen (2009) defined skimming as quick reading ability that does not involve reading term by term, but it needs an excessive amount of focus (p. 16), meaning that skimming is about a high level of concentration to rapidly find the key information, and it is used to get an overview of the text.

According to Abdelrahman and Bsharah (2014), the procedures of the skimming technique are divided into three steps:

- Reading only the opening sentence of the paragraph to gain the main idea of the text to decide to continue reading or to move.
- Then read the closing sentence for more details about the author, the year, and keywords.
- Read the important keywords in between. (As cited in Fatmawan et al., 2023, p. 3)

1.4.5. Scanning

Nutell (1996) suggested that scanning is “the process of rapid glancing through the text either to search for a specific piece of information, name, a date...etc. or to get an initial impression of whether the text is suitable for a given purpose” (p. 49). In other words, scanning is a technique for rapid reading, to find particular information in a text, or to find words in a dictionary. By rapidly scanning the text, readers can recognize whether the text tackles their aims or not. Moreover, Shan (2009) defined scanning as a useful strategy, especially for students who seek for a solution to a specific topic, it involves going through the material looking for specific information (p. 18), that is to say, scanning is helpful strategy

used to rapidly search information without detailed reading. It is like a targeted search mission.

1.4.6. SQ3R

SQ3R is a reading technique introduced by Robinson that stands for Survey, Question, Read, Recite, and Review (3Rs) to gain comprehension of the content. He stated that SQ3R this reading technique seeks to boost students' retention, memory, and productivity (1970, as cited in Anjuni & Cahyadi, 2019a, p. 2). Thus, this strategy gets learners actively involved in the reading process to understand and remember the information.

According to Davis and Davey (2014), SQ3R is a reading comprehension strategy that helps students develop a framework for understanding a material. This strategy might benefit them by establishing a conceptual foundation for reading (as cited in Anjuni & Cahyadi, 2019b, p. 2). Simply said, by surveying questioning, reading, reciting, and reviewing, readers engage with materials and create connections in their minds to organize content logically.

SQ3R is composed of five phases. The first phase is 'Survey' it is the first step in the reading process. The reader receives a basic understanding or an overview of the reading material and content. Surveying gives readers a 'bird's eye' perspective of reading, enabling them to identify key themes. When surveying a text it is common to rapidly check the title, heading, images review question, introduction, and conclusion (Robinson, 1970). The second phase is 'Question' where students formulate some questions that are related to the headline, or title to determine the objective of reading to help them get the details (Adila & Weganofa, 2018a, p. 49). So, turning the headings of each section into questions helps readers to think about the content to stay more focus, also by converting headings into questions, readers generate a purpose for reading and become curious about the content.

The third step is 'Read'. Students here learn more and search for answers, to find a solution to the question they posed earlier, students must read the whole text for more information (Adila & Weganofa, 2018b, p. 49). That is to say, detailed reading to answer the questions that they created. The fourth stage is 'Recite', in which students attempt to respond to the previous question they posed and repeat the text without consulting the original source (Adila & Weganofa, 2018c, p. 49). the fifth and last step is 'Review'; learners should make a summary in their own words. The learners can identify the passages from the text that they can and cannot remember. This place will direct their review (Adila & Weganofa, 2018d, p. 49). Moreover, readers use this strategy to ensure that information is memorized.

In addition, The SQ3R reading strategy, have some advantages, those advantages were explained by Anjuni & Cahyadi (2019, p. 2):

1. Provide extensive review of crucial information.
2. Concentrate on smaller chunks of content.
3. Integrating comprehension assessment system.

1.5. Stages of Reading

There are three stages of reading: pre-reading, during-reading, and post-reading stages. They are explained in the following subtitles:

1.5.4. Pre-reading

Pre-reading exercises get learners read by previewing text and predicting what the text might be about. It might pique their attention, interest, confidence, and motivation to read the material. D'arcangelo (2002) argued that the teacher draws on the prior knowledge of the learners, and makes connections between what they already know and what they are learning in class. The instructor assists learners in identifying the text's idea organization and structure (as cited in El-Ibrahim, 2020a, p. 3). Thus, this approach is used to activate students' existing knowledge and build a foundation for a better grasp of materials. Understanding how text is

organized is important for comprehension, teachers may guide students to extract key points and supporting details.

1.5.5. While-reading

Roit (2015) explained that students find new knowledge in the activities, and explained how it relates to what they already know, with the new information received in the book. Asking themselves questions concerning ambiguous points, and going over the text again to find the information (as cited in El-Ibrahim, 2020b, p. 3). In simple words, while reading, learners understand, and make sense of the text, by comprehending the message, idea, and purpose. It is all about actively interacting with the text to enhance reading comprehension, learners should practice and apply comprehension strategies such as creating connections, checking knowledge, pausing to summarize, and asking questions, to create mental images of text to make the reading experience more vivid.

1.5.6. Post-reading

In the post-reading stage, the learner actively engages with a text to analyze and criticize content. Paptga and Ersoy (2016) declared that after reading the material, students evaluate and summarize it. The summary includes the text's topic and key points (as cited in El-Ibrahim, 2020c, p. 3). So, in the post-reading stage learners analyze the text with their thoughts to, acquire critical thinking and, consolidate their understanding, and remember the important ideas. Furthermore, there are some tasks used in this stage, these tasks are mostly focused on summarizing the text's content, looking into the author's viewpoint, and determining which sentence in each paragraph is the most crucial, comparing it with the appropriate paragraph, writing a version of the narrative using the reader's creativity, and Describing thoughts on the narrative (Kozak, 2011, pp. 7-8). In other words, in this final stage, the readers go back to their notes to summarize the main ideas in their own words, asking the question if the text

meets their understanding or not. Grabe and Stoller (2011) described the major goals of each stage of reading as follows:

Table 1.2

Stages of Reading

Pre-reading stage	While-reading stage	Post-reading stage
-Establish reading purpose	-Guide reading to facilitate	-Check comprehension
-Tap prior knowledge	Comprehension	-Explore how text
-Provide information needed for comprehension (e.g. vocabulary, background)	-Help students construct meaning and monitor comprehension	organisation supports comprehension
-Set up expectations	- Give students opportunities	-Provide opportunities for
-Stimulate interest	to connect what is read with	students to summarise,
-Build confidence and motivation	what is known; to evaluate what is being read	synthesize, evaluate, elaborate, integrate, extend,
-Explain or support text organization	-Provide opportunities for fluency development	and apply text information
	- Support ongoing summarisation	-Give students the chance to critique the author and aspects of the text (e.g. writing, content)
		-Establish and recognize comprehension successes

Note, Adapted from: Grabe and Stoller, 2011, as cited in Andini, 2016, pp. 15-16)

1.6. Models of Reading

Three models of reading were followed by teachers and learners to facilitate learners' understanding of written texts. Each model is explained as follows:

1.6.1. Bottom-up Model

Browne (1998) stated that in this model, learning to read begins with the learner's understanding of letters, sounds, and words, as well as how sentences are constructed out of words. Because it moves from partial to entire information, that is this concept is known as the "part to the whole model" (p. 9). Meaning is constructed by decoding minor parts like letters or words at "the bottom", and great units like phrases, sentences, and in-between links at 'the top' (Carrell & Eistenhold, 1983, as cited in Suraprajit, 2019, p. 454).

Moreover, this strategy works incredibly well with young children, especially when it comes to learning because the letters are the main focus. But when applied to higher levels, the aim is to promote remembering and ignore context (Baha, 2017, p. 45). That is to say, the bottom-up model allows children to develop their reading abilities because it focuses on phonics' letter recognition, to move to higher levels of comprehension and interpretation. However, it may not be sufficient with adults because it tends to prioritize remembering just meaning, rather than analyzing the deeper meaning of the text. Also, Nadea et al. (2021) explained that the bottom-up model emphasizes the growth of fundamental abilities, such as associating sounds with letters, syllables, and written words (p. 31). Thus, at this level, before starting to learn how to read words, learners must be able to recognize letters and their corresponding sounds, starting from smaller units of words and sounds to larger units of phrases and sentences.

Bano and Abdulaziz argued that sound representations of words in the text allow readers to access specific words or letters in their mental lexicon, using a bottom-up methodology. The procedure of vocabulary comprehension makes readers connect the words

in the text, with what they have in their mind by making a mental effort to comprehend the author's message. This process of interpreting a text by drawing on mental vocabulary is said to be “psychologically divine” (2022, p. 766). This means that when we read we recognize sounds, or phonemes in words, which allows us to access our stored knowledge of those words in our mind.

1.6.2. Top-down Model

It is opposite to the bottom-up model. This approach holds that learners’ comprehension starts with an understanding of ideas then morphemes, and phonemes. Goodman (1971) argued that the top-down model of reading is “a psycholinguistic guessing game “demonstrating that readers’ interpretation of texts is based on the prior information that they already know (as cited in Suraprajit, 2019, p. 455). So, readers will ignore visual information when they have an idea about the subject and content. The main focus is on interpretation and deduction. Similarly, Browne (1998) clarified that “this model suggests that readers begin to read by drawing on what they know about the structure and the meaningfulness of language, the structure of stories and other genres, and their knowledge of the world to predict the general meaning and specific words in context”. (p.9). In simple words, when using a top-down reading model, the reader’s knowledge, experiences, comprehension, and linguistic abilities are important for decoding the text’s meaning.

Furthermore, Baha (2017) suggested that this model “which is also called inside-out model and whole to the part model, involves the reader's experience and what they bring to the reading material” (p.45). Shortly, in this model readers use their background knowledge to guess the meaning of the text before focusing on smaller parts.

1.6.3. Interactive Model

Rumelhart (1977) defined this approach as a “combination of top-down and bottom- up processing and proposed it as a way in which the processes of both data-driven sensory

information and non-sensory information happen simultaneously”(p.732). Alyousef (2005) claimed that “reading is an interactive process between a reader and a text and emphasizes automaticity or reading fluency” (p. 143). So, according to this model, the reader engages with the text to deepen its meaning and makes use of many kinds of knowledge, including schematic knowledge (“processed top-down”), and linguistic or universal knowledge (“processed bottom-up”).

Furthermore, Bilokuoglu (2012) suggested that in the interactive model, it is anticipated that readers would analyze information both top-down and bottom-up before deciding on an interpretation of a text topic. Thus, the interactive model does not ignore the textual content or the reader's prior knowledge; instead, it highlights what has already been written or printed and what the reader may contribute by using the two previously described techniques.

To sum up, in an interactive model, students can read and analyze material, they are urged to make use of their unique abilities to learn new things and acquire comprehension. This implies that the interactive model is integrative; it integrates both prior knowledge and linguistic knowledge.

1.7. Reading Cycles

The reading process is “cyclical rather than serial or linear” (Samuels & Kamil, 1988, p. 27). It is a series of cycles that start with visual and move through perceptual and lexico-grammatical to semantic.

1.7.1. The Visual Cycle

The eye functions as an “optical device”. The reader’s eyes capture light from the page sending it to the brain to process it, but the brain only receives meaningful visual information when the eye fixates, or pauses and concentrates. Eye movement studies have revealed that, depending on font size, only a tiny portion of the print the “fovea”, which is an

area of roughly six letters sharply focused during a fixation. There is a “parafovea” surrounding that region, where vision is ambiguous, the movement is the only thing visible (Israel & Duffy, 2014a, p. 95). Thus, the visual cycle of reading starts with the process begins with the eye receiving information through the quick movement of the eye to scan the text. The role of the brain is to recognize words and convert them into meaning.

1.7.2. The Perceptual Cycle

By selecting information based on what it expects to see, the brain plays a big role in shaping what we see and what we comprehend. The brain doesn't just passively receive visual information; it actively constructs meaning based on expectation. According to eye movement studies, “readers only focus on content words like nouns, verbs, adjectives, and adverbs and also prepositions, determiners, and conjunctions this selective focus helps the brain to construct meaning. When reading aloud, the mouth relies to the brain the text that it has created (Israel & Duffy, 2014b, p.95). That is to say, the cycle begins with the eye scanning the text and sending signals to the brain to decode words. This process is highly complex, the mind interprets and connects ideas to comprehend text.

1.7.3. The Lexico-grammatical Cycle

The reader creates a logical text, by using grammatical patterns and specific language, these patterns indicate whether the reader is anticipating a question, statement, command, etc. Through the reader's voice, we can understand their interpretation. In this cycle, word choice and word form are equally evident. Word form is determined by factors such as syntax, person, number, and tense (Israel & Duffy, 2014c, p. 95). In simple words, the grammatical cycle is a method by which a person decodes, and comprehends material, entails lexical word recognition, and grammatical sentence structure knowledge to grasp the meaning, it is a dynamic cycle in which readers interact with the text by decoding, comprehending, and applying meaning.

1.7.4. The Semantic Cycle

Reading involves several stages, including visual, perceptual, lexical, and meaning. As the reader continues through the text, each cycle precedes and follows the previous one, with the brain's aim in mind (Israel & Duffy, 2014d, p. 95). Thus, the word semantic refers to the meaning of the word it goes beyond the literal meaning. It involves a series of cognitive and linguistic abilities that enable learners to get a deeper understanding of the meaning. When the learners read, they do not only read to comprehend words and sentences but also infer information and grasp the conveyed message.

1.8. Reading Processes

Goodman (1988) claimed that there are five processes employed in reading. The first one is '*recognition initiation*', it is an important process. It occurs when the brain recognizes the words on the page and starts to make sense of them. Once the brain acknowledges the words, it can decode and understand written language. Reading can be interpreted by other activities such as; examining pictures and illustrations, this can take readers' attention away from the text for a moment, and then they can reinitiate reading by going back to where they left (p.16). The second process is '*prediction*', the brain is always trying to make sense of the information and expects what will happen. The brain actively tries to make connections between words and sentences to create a coherent understanding of the text (p. 16). The third process is '*confirmation*', this process of verifying and adjusting our prediction helps readers to stay actively engaged. Here, the brain confirms or disconfirms predictions if the input aligns with what was expected, our brain confirms their expectations, and this confirmation reinforces understanding and helps readers to make sense of the text. On the other hand, if the input deviates from what was expected our brain disconfirms the prediction (p.16). The fourth process is '*correction*'. When the brain discovers its predictions are proven false, it reprocesses. This reprocessing allows readers to update predictions (p.16). The fifth process

is *'termination'*. When reading is finished, the brain stops it, but it can also stop for other reasons, such as when the work is unproductive, not much meaning is being formed, or meaning has already been formed (p.16). Simply saying, these five processes are very important and work together. In the recognition process, the readers visually recognize words. Once we recognize, the brain makes predictions. These predictions help us to expect what we read. As we read further, we compare our prediction with the actual text information to assert if they align or not. When predictions are disconfirmed, our brain reprocesses the information. The final process is *'termination'*, which is the point where readers decide to stop reading either because they have reached the end of the text or to pause reading if they lose interest.

1.9. The Role of Context in Reading Comprehension

Contextualization enhances reading comprehension by embedding texts in real-world circumstances, adding depth and meaning beyond the text itself. Reading comprehension and interpretation rely on contextualization. Understanding the context around a piece allows readers to better grasp the intended meaning (Baddane & Ennam, 2023, p. 149).

Furthermore, understanding the linguistic context around a text allows readers to infer meaning, detect word connections, and comprehend figurative language. It also aids in comprehending the syntactic structure, syntax, and collocations of a text. Understanding linguistic context allows readers to follow the conversation and grasp the coherence of various sections of the text. Historical contextualization sets events, ideas, or occurrences in their historical context, which enhances understanding and analysis. It enables readers to comprehend the author's goals, symbols, and societal concerns, raised in the literature, as well as the reasoning behind actions or policies. Contextualization enables readers to interact critically with a text, uncover underlying meanings, and appreciate the subject's relevance (Baddane & Ennam, 2023, p. 150). Simply saying, context gives readers clues to comprehend

the author's message and purpose. It plays a crucial role in reading comprehension, when readers understand it they can easily grasp the meaning of the text.

1.10. Compensatory Strategies while Reading

Compensatory strategies while reading refer to strategies that individuals use to overcome difficulties. Readers use these strategies to help compensate for any limitations or obstacles that may hinder comprehension.

1.10.1. Slow the Rate of Reading

Baker and Brown (1984) argued that as readers become more skilled in slow-rate reading, they can better control their reading pace (as cited in Walczyk et al.,2007, p. 561) Thus, by reading at a slow pace, readers can focus more on comprehension, which allows them to grasp the content more effectively, as they become more proficient to increase their reading rate. Furthermore, Baker et al. (2006) argued that slow reading helps to avoid a lot of misunderstandings. Thus, slow reading is helpful, especially for readers who may find difficulties. It allows inefficient readers to better understand the informant and to give more attention to each word and sentence so, by being a bit slower, readers can avoid the feeling of being lost or confused.

1.10.2. Pause

Haviland et al. (1974) stated that “less skilled readers pause longer and more often than do skilled readers” (p. 512). That is to say, insufficient readers pause longer because they may need extra time to decode words and understand sentence structure. This pause allows them to understand the text and become more proficient. While skilled readers have developed the ability to read more fluently and smoothly.

Walczyk et al (2007) declared that when a pause during reading is unusually long and gives an ineffective reading subcomponent (such as reading a word by sight) enough time to succeed, it is considered compensating. Pausing might be a fallback if reading more slowly

does not provide enough time (p.562). So, pausing becomes a helpful strategy, by taking short breaks readers can give themselves a moment to reflect on what they have read. Furthermore, readers may pause while attempting to comprehend the nature of the difficulty and choose other solutions, when the cause of the confusion is unknown (Pressley et al., 1995, pp. 561-562). Simply saying, the compensatory pause is a long pause during reading that allows time for less skilled readers to comprehend. Certain word recognition may sometimes need time to catch up. When there is confusion, readers might try different strategies to resolve it, for example, reading the passage using context clues or seeking clarification from others.

1.10.3. Look Back

Ehri (1994) stated that looking back is necessary when it clears out uncertainty by reinstating information that was lost from working memory, or by giving details that were missed during the initial reading of the text. It can help the less skilled readers by identifying textual clues that reveal the meaning of an unfamiliar term.(as cited in Walczyk et al., 2007,p. 562).So, when readers come across a complex sentence that they did not fully understand on the first reading, instead of moving, they go back to reread to get a better grasp of the information. Furthermore, the look-back strategy allows readers to restore information, or discover information that was overlooked during the first reading.

1.10.4. Read Aloud

It is an important compensatory strategy; when readers read aloud, they engage in both visual and auditory senses, which can help improve comprehension and word recognition. By hearing the words out loud, readers can catch any mistakes easily. It also allows them to focus more on the content. Chall (1996) stated that “Reading aloud often occurs spontaneously to difficult text or noisy reading environments” (as cited in Walczyk et al., 2007a, p. 562). Thus, sometimes, when readers read they may come across a passage that

grasps their attention, they might find themselves spontaneously reading aloud, without even realizing it. Additionally, reading aloud can be also beneficial in a noisy environment because it helps readers to concentrate on the words they are speaking by blocking the distractions around them.

1.10.5. Sounding out, Analogizing to Known Sight Words, or Contextual Guessing

Ehri (1994) declared that there are four different ways that children use to read words. When they become skilled or familiar with words, they can read by sight. This means they recognize words as a whole and quickly activate their sounds and meanings from memory. It is like automatic word reading. The other three ways are reserve strategies when automatic word reading does not work. One way is sounding out, which involves sounding out words using phonics rules. Another way is analogizing to known sight words, where readers look at a word's spelling and thinking of similar words to understand its meaning. The last way is contextual guessing, where children use the surrounding text to figure out the meaning of an unknown word (as cited in Walczyk et al., 2007b, p. 562). Simply saying, if readers come across a word they don't know, they can try sounding it out by saying the sounds of each letter, or thinking of similar words they already know. If that does not work, they can use the words around it to guess what it means.

1.10.6. Jump Over

"Jumping over" or skipping over a difficult word is another compensatory strategy that some readers use instead of getting stuck on a word they do not understand, they skip over it and continue reading to maintain the flow of the text. Walczyk et al. (2006) stated that "If readers conclude that an un-familiar word or other confusion involves a minor detail, or that resolving it will take too much time, they can jump over it" (as cited in Walczyk et al., 2007c, p. 562). Thus, readers jump to unfamiliar words in the text, if they feel that it is not essential to understand the meaning. This can save readers time to focus on the parts that are

more important for comprehension. However, skipping too much can lead to missing important details and lead to low comprehension.

1.10.7. Reread Text

It is considered as a compensatory strategy; reviewing multiple words helps readers become more knowledgeable about the content for better understanding (Walczyk et al., 2004, p. 47). In other words, going back and rereading text allows readers to grasp the content and recognize the words and structure of the text to facilitate comprehension.

Conclusion

Reading is a crucial skill that all learners work to master. It is very important for learners, especially EFL learners because it exposes them to different vocabulary, grammar structures, and various writing styles and genres to improve their communication skills. This skill has great benefits, it makes learners think critically, analyze information, and express their thoughts clearly. It also keeps the mind actively engaged in processing new information, reduces stress, and improves memory and focus. Until now, reading comprehension is challenging to develop. So, it is necessary to teach learners several reading comprehension strategies and techniques for the text they are reading to become proficient reader who read not just to read but to comprehend.

Chapter Two: Informal Digital Learning of English

Introduction

In the study of learning languages, Informal Digital Learning of English has become a complex idea that's hard to define simply. This chapter starts with an overview of Informal Digital Learning of English, exploring its definitions, historical background, and contextual aspects as educators come to understand its importance in establishing language competency. Initially, it gives a complete look at informal learning, describing its different types outside of regular classrooms. Following this, it explores the complex terrain of Informal Digital Learning of English, following its development and outlining its contextual details, particularly within the extracurricular and extramural domains. Additionally, the chapter discusses the essential dimensions of Informal Digital Learning of English and emphasizes its importance in modern language learning programs. Moreover, it covers the many platforms and tools that help Informal Digital Learning of English showing how important they are for improving language learning chances. In the end, the chapter points out how crucial Informal Digital Learning of English is for improving language skills and abilities. This sets the stage for talking about how it's used and its teaching impacts.

2.1. Definition of Informal Learning

Informal learning is defined differently by many scholars; Dron and Anderson (2023) generally saw informal learning as unplanned, based on experiences, and separate from formal school systems (p. 1374). Accordingly, Livingstone (2001) defined it as “any activity involving the pursuit of understanding, knowledge or skill, which occurs without the presence of externally imposed curricular criteria” (p. 4). Similarly, Cross (2011) stated that “informal learning is the unofficial, unscheduled, impromptu way people learn to do their jobs” (p. 15). He added that informal learning is how people learn to do their jobs without it being planned or scheduled (Cross, 2011, p. 15). Thus, informal learning is all about learning outside of

formal school settings and schedules. It's about gaining knowledge, skills, and understanding without someone telling you what to learn or following a strict curriculum. Cross (2011) believe that informal learning involves planned actions, which contrasts with the definition used by the European Union in its official journal:

Informal learning means learning resulting from daily activities related to work, family or leisure and is not organized or structured in terms of objectives, time or learning support; it may be unintentional from the learner's perspective; examples of learning outcomes acquired through informal learning are skills acquired through life and work experiences, project management skills or ICT skills acquired at work, languages learned and intercultural skills acquired during a stay in another country, ICT skills acquired outside work, skills acquired through volunteering, cultural activities, sports, youth work and through activities at home (e.g. taking care of a child). (2012, p. 5)

This definition sees informal learning more as something that happens accidentally while doing other things, rather than something you purposely do without a set plan. In the late 1980s, when educational technologies were not as developed as they are today, Dib (1988, p. 307) regarded informal learning as a supplementary aspect to formal and non- formal educational activities. Dib argued that informal learning includes different practices such as museum visits, participation in conferences and lectures, viewing specialized television programs, or involvement in professional associations (1988, p. 307). Additionally, Werquin (2010) represented informal learning as “learning that results from daily activities related to work, family or leisure. It is not organized or structured in terms of objectives, time or learning support” (p. 22), leading scholars to link informal learning with individuals' online and digital engagements. In simple terms, informal learning means learning outside of

traditional environments, like when you visit places or do things with your family. It is the stuff you learn just by living life, not from a teacher telling you what to do.

Later, Schugurensky (2004) outlined three types of informal learning: (1) self-directed learning (p. 3), where the learner actively looks for knowledge and skills according to their own goals; (2) incidental learning (p. 4), where knowledge is learned unintentionally but acknowledged by the learner; and (3) socialization (p. 4), involving learning that happens naturally without intentional effort or conscious awareness of the process. Basically, Schugurensky's ideas show how individuals learn outside of school in different ways. Whether it's learning on your own, acquiring things accidentally, or just being around others, informal learning shows how people can keep learning and getting better at things without formal classes. Many efforts have been made to understand informal learning from different angles within this structure.

When we look at different dictionaries or scholars' explanations of "informal learning," we find a wide range of meanings and definitions. According to Oxford Dictionary (2023), informal learning is "learning from experience that takes place outside formally structured, institutionally, sponsored class-room based activities". The Collins Dictionary in turn, defined informal learning as "The process of learning skills and knowledge from everyday situations and experiences, rather than through formal teaching methods" (Collins Dictionary, 2022).

As an example, some scholars defined learning according to factors like where it happens, purposefulness or the level of organization involved in the learning process beyond formal educational environments (Bäumer et al., 2011, p. 91). Thus, So et al. (2008) made a plan for informal learning based on where it happens and whether it's intentional or not (p. 101). Others saw informal learning as a type of learning where people guide themselves, deciding what and how to learn on their own (Eshach, 2006; Lai et al., 2013, p. 415).

Looking at all these ideas, it is clear that informal learning is unique and can be studied in different ways.

The main characteristic of informal learning methods characterized by self-directed, self-instructed, and learner-driven principles (Bennett, 2012, p. 25). Within this structure, and in contrast to traditional educational models where the teacher typically assumes a central role, in informal learning, it is the learner who takes the lead (Bennett, 2012, p. 25). With this change, students can now prioritize their own interests and preferences without being limited by traditional educational structures (Clough et al., 2008). According to Benson (2011, p. 73), formal education is distinguished because it takes place in controlled classroom settings with direct goals and curricula. Informal learning activities, on the other hand, are more closely matched with personal preferences and interests, allowing students to make decisions based on their own feelings without guidance from educators or other authority figures. This feature is described by Benson and Reinders (2011, p. 7) as a center of influence, where students take control of their education outside of the normal classroom. So, informal learning lets learners control their education based on what they like, which is different from traditional formal education where teachers are responsible. In informal settings, learners can focus on what they're interested in without worrying about exams or following a strict plan.

In addition, Dron and Anderson (2023, p. 1375) said that informal learning can also happen in families or groups of people who are similar. It's often something people do on their own, but it can also happen when people do things together, like at work or in clubs, or just by experiencing things in real life. So, informal learning is usually not planned, but sometimes people do try to learn, although it is most of the time not for a long time or very organized.

Eraut (2000) claimed that most human learning happens informally and happens from early infancy to maturity (p. 114). This informal learning, as showing by Rogers (2008), is usually spontaneous, unintentional, and often subconscious, leading to the acquisition of implicit knowledge, skills, attitudes, and understandings (p. 134). Nevertheless, the definition of "informal learning", leading many writers to try to clarify their viewpoints. In recent years, within the field of second language acquisition (SLA), scholars introduced various concepts similar to informal learning, but emphasize specific characteristics of informal learning practices.

2.2. Related Terminology

Informal learning is related to various concepts including the following:

2.2.1. Out-of Class Learning

According to Altan and Ünaldı (2021), in modern ways of teaching that focus on building knowledge through real-life experiences, people talk about how places outside of classrooms help connect real-life experiences with what we learn (p. 2). The origins of out-of-class learning can be traced back to ancient times, with influences from thinkers like Plato and Aristotle (Adalar al., 2023, p. 1). Accordingly, Dewey and Illich are known as influential voices in modern education, advocating for learning experiences beyond the traditional classroom (Tay & Tokcan, n.d. as cited in Adalar et al., 2023, p. 253). Dewey argued that education must be lived in order to last over time (Tay & Tokcan, n.d.as cited in Adalar et al., 2023, p. 253). In other words, Dewey and other researchers focused on the importance of out-of-class learning, suggesting that knowledge gained through direct experience is more likely to be memorized and applied effectively in the long term compared to knowledge acquired just through passive learning.

People who work in out-of-class learning have different opinions. Among them, Lappin (1984) defined out-of-class learning as “a means of curriculum enrichment, whereby

the process of learning takes place out of doors (p. 3). Ford (1986) employed the phrase as “the activities of education carried out outside the classroom” (1986, as cited in Adalar et al., 2023, p. 253). Brookes (2002) characterized it as “the process that the individual builds through experiences”, whereas Priest (1986) employed the phrase as “an experiential process of learning by doing, which takes place primarily through exposure to the out-of-doors” (p. 13) and clarified it as the interaction between natural events through the use of senses and social factors. Hence, scholars in the field of learning outside the classroom offer varied perspectives. Some defined it as educational activities conducted beyond traditional classroom boundaries, while others saw it as an experiential learning process involving all senses, exploring the effective relationship between nature and society.

Studies on learner autonomy have also grown to include educational activities happening outside of traditional classrooms; these activities are often called out-of-class learning, or OCL. According to Benson (2007), the term "out-of-class learning" has been utilized to describe how students registered in language courses' classroom looking for opportunities to acquire and use the language outside of the classroom (p. 26). This means that students are more likely than their teachers to participate in out-of-class learning activities and that when opportunities for learning outside of the classroom seem limited, students often show remarkable creativity. In this view, students often participate in learning activities outside of school more than teachers realize, with a focus on intentional efforts rather than accidental ways to get better at English (Benson, 2007, p. 27).

Furthermore, out of class learning is often selected by the learner, utilizes authentic materials, and involves enjoyment, curiosity, and language acquisition. Benson (2013) claimed that a lot of out-of-class learning takes the form of 'self-directed naturalistic learning, where learners engage themselves in language use for both the main goal of learning and enjoyment (p. 139). He added that “out-of-class’ and ‘out-of-school learning’ which are used

interchangeably, are often used to describe unstructured activities that students complete alone to increase their knowledge of a subject” (Benson, 2011, p. 9). That is to say, they refer to informal tasks that students complete on their own to develop the understanding of a topic.

Interestingly, Benson (2013, p. 2013) argued that there are many language learning activities that occur outside the traditional classroom setting can also occur in school and are common. For example, in schools in Hong Kong, English language activities such as 'English-only' days, debates, public speaking competitions, performances, and school magazine productions are highly supported.

2.2.2. Learning beyond the Classroom (LBC)

In present times, education happens in various settings, including both traditional classrooms and non-traditional environments, whether physical or digital so, this will affect how learning happens differently depending on the context. According to Reinders and Benson (2017), LBC has been recognized under a number of titles, such as “out-of-class, after-class, extracurricular, self-access, out-of-school, and distance learning; informal, non-formal, and naturalistic learning; non-instructed learning and self-instruction; autonomous, independent, self-directed, and self-regulated learning” (p. 5). Therefore, Bentley (2012) defined learning beyond the classroom as “a new landscape of learning: a vision of education which combines the rigor and depth of the best professional instruction with the flexibility and motivational power of community-based, collaborative learning” (p. 2). This means that learning is not just about what happens in school. It is also about using both good teaching and working together in groups to learn.

The concept of LBC includes various types of contexts that are distinguished by their absence from the traditional classroom setting. Viewing these environments as possible elements of larger social systems that support language learning is a useful way to comprehend them (Kramsch, 2003, p. 51). From this, LBC does not exist in isolation from

the classroom, but rather complements it (Reinders & Benson, 2017, p. 8). For instance, students in traditional classrooms can also participate in learning activities beyond their class sessions in order to enhance their linguistic skills. Moreover, Reinders and Benson (2017) argued that self-directed learners can use textbooks designed for classroom instruction, while individuals who prefer independent study can still participate in traditional language courses (p.8). This means that people who like learning on their own can still use regular textbooks, but those who want to study alone can also join regular classes.

According to Nunan and Richards (2015), while learning a language outside of school is usually seen as extra to classroom lessons, combining both in-class and out-of-class activities should make each other stronger (p. 48). Chern and Dooley (2014) stated that many studies have indicated that Learning outside of the classroom gives the best results when it is well-planned, supported, and included into a course or class (p. 114). As a result, studies on language acquisition outside of formal educational settings frequently place the learner's experience in context. This means viewing education as a long-term process that goes beyond typical educational environments, either to supplement formal education or act as a link between classroom knowledge and practical use (Lehtonen, 2017, p. 2). In addition, research explores language learning in different contexts such as study overseas, students' personal learning journeys, workplace environments, and immigrant experiences (Macalister, 2017, p. 2). This mixed approach aims to understand the quality and effectiveness of LBC learning experiences (Lai et al., 2013). In other words, studies into LBC takes into account different viewpoints and conditions, noting that language acquisition is not related to formal guidance, but happens through different experiences and environments. Researchers hope to learn more about the effectiveness and impact of informal language learning on learners' ability and skill development by exploring various situations.

In addition, Benson and Reinders (2011) said that the main way that this type of learning happens is of the need to use, explain, comprehending, and communicate clearly (p. 8). That is to say, when language learning takes place beyond the classroom, it creates independent and meaningful social learning experiences where understanding the meaning is crucial. Thus, Ke and Cahyani (2014) gave an example of the English as a Lingua Franca paradigm in their study, where English as a Foreign Language learners change to English as a Lingua Franca users (p. 29).

To sum-up, 'out-of-class learning' and 'beyond classroom learning' are interchangeable terms that refer to educational experiences outside regular classrooms. This type of learning is considered as self-directed study including extracurricular activities and applications in the real world.

2.3. Origins and Definition of Informal Digital Learning of English (IDLE)

The rapid growth and improvement of digital tools have created many chances for learning and made it easier for everyone to find and share information in English. From that, Richards (2015) claimed that modern second language (L2) learners are slowly improving their language skills through different informal digital environments (p. 2). IDLE, according to Lee (2019), the process of learning English without guidance in digital environments (p. 3). For example, an Algerian learner of English engages in frequent conversations with native English speakers through language exchange platforms, an activity not included in any structured language course or evaluated by their formal teacher. Mohammed and Ali (2021), defined it as "autonomous learning, which is unstructured and naturalistic" (p. 347). That is to say, IDLE means learning English by yourself online, without going to English classes, and it's about learning naturally without any strict plans or structure.

Interestingly, there has been more attention given to this new method, resulting in the development of wide ideas about learning languages in casual and digital settings. These include ‘autonomous language learning with technology’, ‘extramural English’, CALL in the digital wilds’, and ‘online informal learning of English’ (Lee, 2019a, p. 3). They all think that having easier access to digital tools and information makes it more likely for people to learn another language outside of regular school.

According to Benson (2011, p. 145), IDLE is an important sub-domain of focus within the field of CALL (Computer Assisted Language Learning) because it sheds light on language learning environments and methodologies that are rarely explored in traditional classroom. Interested in informal digital learning of English (IDLE), Benson's (2011) framework provides a contextualized structure outlining four dimensions of L2 learning outside traditional educational settings (p. 8). Utilizing this structure, Lee (2019b) examined IDLE through ‘formality’, ‘location’, ‘pedagogy’, and ‘locus of control’, defining it as autonomous learning of English in digital settings outside the classroom, with little or no professional teaching guidance (p. 115). The four dimensions are indicated in the following figure:

Figure 2.1. Classification of IDLE based on Benson’s Four Dimensions

	Formal Digital Learning of English	Non-Formal Digital Learning of English	IDLE	
			Extracurricular	Extramural
Formality	Structured; Certification	Structured; No certification	Semi-structured; Certification	Unstructured; No certification
Location	In-class	Out-of-class	Out-of-class	Out-of-class
Pedagogy	Instructed	Instructed	Self-instructed	Naturalistic
Locus of Control	Other-directed	Other-directed	Self-directed	Self-directed

Adapted from: Lee, 2019c, p. 115.

To provide more clarification on the distinctions within informal digital learning of English (IDLE), Lee (2019b) outlined two contextual domains: the extracurricular and the extramural (p. 116). The initial one, L2 activities are organized within digital platforms external to the traditional classroom, where a language teacher stills involved (Lee, 2019b, p. 116).by contrast, the last one relates to independent L2 engagement in digital settings without formal language guidance (Lee, 2019b, p. 116).

According to Lee and Dressman (2017), IDLE activities can be categorized in various ways (p. 2). They suggested that these activities can be differentiated based on whether they focus on communicative meaning or linguistic form. The former focuses on linguistic complexities and language mastery, while the last places language application in real-life or practical situations (Lee & Dressman, 2017, p. 4). IDLE activities, as explained by Lee and Dressman, can be collected in different ways. Thus, they can focus on either understanding how language works or using language in everyday situations.

According to Lee and Drajadi (2019, p. 169), next study of informal digital English learning (IDLE) among EFL students in Indonesia, learners frequently engage in both receptive IDLE activities (RIA) and productive IDLE activities (PIA). Receptive IDLE activities (RIA) value comprehension of English information and emphasize on language learners' roles as content consumers, whereas productive IDLE activities (PIA) concentrate on producing English content and emphasize language learners' roles as content producers (Lee & Drajadi, 2019, p. 169). That is to say, learners in Indonesia use online methods to learn English informally, which include both understanding English content and creating it. Receptive activities are about understanding, while productive activities involve making content.

Furthermore, in the field of English as a foreign language, the idea of IDLE self-directed English learning activities outside of typical classroom settings has become highly

popular (Lee, 2019a, p. 3). Hence, Soyoo et al. (2021) proposed that this type of learning happens within informal digital platforms, where second language learners use online tools such as blogs, social networks, and MMORPGs (Massively Multiplayer Online Role-Playing Games) on their own to enhance their language acquisition without official teaching supervision (p. 5). However, Reinders and Wattana (2014) emphasized that IDLE would not apply if EFL researchers or teachers gave English as Foreign Language (EFL) learners' activities within digital platforms like MMORPGs structure (p. 39). Differently, many people are choosing to learn English on their own using the internet, rather than in regular classes. They use things like blogs and social media to do this, but it's not considered self-directed learning if teachers or researchers give them tasks or rewards for doing it.

To sum up, in language learning research, the study of informal digital learning of English (IDLE) has become more popular. Scholars emphasize the spread of this phenomenon in online environment, where students utilize digital tools to enhance their language study without official guidance.

2.4. Contexts of Informal Digital Learning of English

As mentioned before, Lee (2019) presented two main contexts of Informal Digital Learning of English (IDLE) as follows:

2.4.1. The Extracurricular Context

According to Lee (2019b), an extracurricular context is “self-directed, self-instructed, digital learning of English in semi-structured, out-of-class environments that are still linked to a formal language program” (p. 115). In other words, extracurricular English learning means studying on your own online, outside of regular classes, but still connected to a formal language program. For example, EFL students may watch subtitled tutorial videos on YouTube for homework, which is later evaluated by their teacher. Extracurriculars, as we know them today, originated in the early 19th century with the establishment of student

literary societies at Harvard and Yale Universities, which later became common in other American higher education institutions (Tenhouse, 2003, as cited in Reva, 2012, p. 2). Accordingly, some historians like Thomas (1971) viewed that the founding of student organizations in American universities in the first few decades of the 1800s was a right step for students who wanted to change higher education, support democracy, and match with Western institutions (as cited in Reva, 2012, p. 2)

Participating in extracurricular L2 activities is connected to school settings to support formal learning. Stephens and Schaben (2002) claimed that most of a student's time is spent outside of the classroom, and how they choose to spend that time can have an impact on their academic performance (p. 35). This means that traditional classroom instruction doesn't have the only impact on academic achievement. According to Marsh and Kleitman (2002) extracurricular activities, such as language clubs, online forums, or interactive language-learning apps, serve as additional ways for learners to engage with English outside the classroom (p. 468). Given this, studying how people learn English online without formal classes is clearer when we also consider their outside activities.

Taking this into consideration, Marsh and Kleitman (2002) also pointed out “that educational practitioners and researchers have taken a more positive perspective, arguing that extracurricular activities may have positive effects on life skills and may also benefit academic accomplishments” (p. 466). These settings offer chances for independent study, social engagement, and actual language use—all of these promote language development in situations that are relevant to daily life.

Throughout the twentieth century, many scholars like Tchibozo (2007) focused on understanding the influence of extracurricular activities (ECAs) on students' academic performance and their acquisition of essential life skills (p. 2). Interestingly, extracurricular activities offered various benefits for language learning, such as enhancing relationships

between students and teachers, enhancing school morale, and strengthening ties with the community (Anderson & Van, 1972). In addition, ECAs facilitate social interaction, leadership development, and positive health, leading to improved academic performance (Marsh & Kleitman, 2002, p. 468). Thus, many scholars in the past century looked at how after-school activities affect students' grades and skills. These activities seem to have lots of benefits, like making friendships better, boosting happiness at school, and helping students work together, which all seem to help them do better in school.

Moreover, Mahoney and Cairns (1997) noticed that extracurricular activities help prevent some student groups from leaving school (p. 242). Research has shown that ECAs are equally important for the development of social and intellectual abilities when compared to traditional classroom settings (Darling et al., 2005, p. 52). So, engaging with real articles, music, and videos that align better with the learners' interests can boost motivation, and extracurricular environments allow the learners to tailor their assignments to suit their interests.

2.4.2. Extramural Context

The concept of extramural was first conceptualized by Sundqvist (2009) in her research on non-formal English language learning. It describes efforts that happen outside of the official classroom and includes various activities in which students interact with the English language outside of regular learning environments (Leffler, 2021, p. 6).

Later, the term was used to refer to situations in which students interact with English outside of the classroom. Accordingly, Lee (2019b) defined “extramural context” as “self-directed, naturalistic, digital learning of English in unstructured, out-of-class environments, independent of a formal language program” (p. 116). That is to say, ‘extramural context’ means learning English Online relying on one’s self outside of regular classes, without following a formal language program. For example, L2 learners might engage in reading or

writing English posts on Facebook to connect with others. Based on that description, Sylvén and Sundqvist (2016) claimed that EC include all English encounters happen beyond the borders of formal education settings. Such contexts involve a range of activities, including gaming, television viewing, reading, or engaging in English communication within online forums (p. 3). They added that students take the responsibility in this form of language learning or involvement, rather than teachers, and it's often a decision made voluntarily by the students themselves (Sylvén & Sundqvist, 2016, p. 3). Extramural language learning takes place outside of official educational settings, is totally free, and involves students choosing to use the language outside of regular classroom settings based on their own interests and choices.

According to Sundqvist and Sylvén (2016), Extramural English (EE) refers to the interaction English learners have with the language beyond the boundaries of the classroom, and it has been shown that it improves the acquisition of a new language (p. 6). Additionally, in the field of EFL, this idea has been developed to indicate learners' engagement in English- activities motivated mainly by personal interest, where learning happens as a consequence rather than a purposeful aim (Sylvén & Sundqvist, 2016, p. 8). Ebadi et al. (2023) provided an example when teaching English as a foreign language (EFL) in Iran; scholars noticed a remarkable deference in English proficiency among students who regularly engaged in extramural English (EE) activities compared to those who did not engage in such activities (p. 2).

In short, the extramural context of informal digital English learning relates to language use outside of official educational settings. The term 'extramural context' refers to the informal digital English learning environment that exists outside of traditional educational settings. These relationships cover a variety of activities, including online gaming, social media discussions, and the use of English-language publications on digital platforms.

Scholarly research has emphasized the important impact of exposure to non-direct English on language acquisition, showing improvements across deferent aspects of language domains.

2.5. Dimensions of Informal Digital Learning of English

Due to the increasing interest in comprehending language acquisition in informal digital learning environments (IDLE), Benson (2011) introduced four aspects of out-of-class second language (L2) learning, including “location (inside or outside)”, “formality (formal or informal)”, “pedagogy (instructed or non-instructed)”, and “locus of control (self-directed or other-directed)” (p. 9).

To begin with, “location” according to Noy et al. (2016) is “a key attribute of learning that refers to the setting in which it occurs, that is, at school, work, community, or home” (p. 12). This statement emphasizes the importance of considering the physical context in which learning occurs, highlighting that learning can happen in different settings beyond traditional classrooms. As such, Benson (2011) pointed out that 'Out-of-class', 'out-of-school', 'after-school', 'extracurricular', and 'extramural' learning primarily emphasize the location or environment where learning occurs, typically serving as supplementary to formal classroom instruction (p. 9). In this regard, Benson (2011) added that 'Out-of-class' and 'out-of-school learning' usually indicate independent activities done by students to enlarge their understanding of a subject, while 'after-school', 'extracurricular', and 'extramural' often describe informal programs in schools, which are less structured than regular lessons and may be organized by students themselves (p. 9). Moreover, as 'out-of-school' learning is solely linked to physical location, it could also reasonably involve attending private learning schools when the regular school day concludes (Benson, 2011, p. 9). This means that the notion of learning outside formal school hours highlights the significance of addressing physical settings, as illustrated by the addition of activities like attending private learning schools after school hours. For example, a study by Johnson (2018) may have explored how

private schools contribute to out-of-school learning environments and influence student learning outcomes.

In the second place, the aspect of “formality” was defined by Benson (2011) as “the degree to which learning is independent of organized courses leading to formal qualifications” (p. 10). In other words, formality refers to the degree to which learning occurs autonomously, independent of structured educational courses. Considering this, Benson (2011) asserted that non-formal and informal education are different from formal education, which takes place in educational institutions and requires structured classroom teaching and recognized certificates (p. 10). Considering this, Lee (2017) indicated that informal education usually refers to non-institutional programs or individual learning, whereas non-formal education usually includes classroom or school-based programs that are carried out for personal interest without assessments or certificates (p. 2). These differences show the different ways and environments in which learning takes place outside of classroom settings.

Moreover, Benson (2011) argued that although many students look for qualifications outside of formal schooling, language acquisition outside of these settings does not necessarily weaken the existence of examinations and qualifications (p. 10). So, learning can still happen in the absence of explicit teaching because teaching is a necessary component of many different types of educational interaction (Benson, 2011, p.10). An example of this idea is self-directed learning, where people learn alone without a teacher's help. Even without direct teaching, they still learn by using educational materials and resources to reach their goals. Thirdly, when looking at the effects of teaching in informal learning, the idea of public “pedagogy”—a concept not often discussed in language learning studies—could provide useful views (Giroux, 2012, p. 186).

Studying theories of language learning, Benson (2011) emphasized the differences between structured teaching methods and non-formal learning outside of traditional

classroom environments (p. 11). He detailed the complex range of teaching methods, explaining the progression from self-directed learning, which is defined as purposeful interaction with personalized materials, to naturalistic learning, which lacks explicit teaching or set goals (Benson, 2011, p. 11). Also, emphasis is placed on the subtleties of language learning in the classroom, as examined by Van Lier (1988), where the presence of the instructor may change spatial dynamics (Van Lier, 1988, as cited in, Benson, 2011, p. 11). Stated differently, he stresses the importance of understanding the complicated parts of learning a language in the classroom and how a teacher's presence can shape the space and interactions in the learning environment.

Additionally, Ellis (2005) talked about learning languages through tasks in classrooms. He highlighted how teaching methods and the environment, both in and out of traditional classrooms, interact in complex ways (p. 210-218). This shows how difficult it is to compare how successful training works in various learning settings.

Lastly, the term “locus of control” means to what degree language learners take control of their own learning. Benson (2011) examined concepts related to who is responsible of teaching and learning, such as ‘autonomous, self-directed, and independent’ language acquisition (p. 12). Adults often want to learn languages to get better or for fun, so they have more control. But in required education, learners might not have as much freedom at first. According to him, the locus of control and learning location have a complex relationship since learners often have to make important decisions outside of the classroom (Benson, 2011, p. 12). This conversation illustrates how place, formality, pedagogy, and locus of control interact. For instance, learners might start with formal self-learning materials, but as they get more comfortable with informal learning methods, they start to manage them on their own. To sum-up, Benson's four dimensions of language learning examine how the

formality of settings, control over learning decisions, the physical location of learning activities, and the teaching methods employed to build language acquisition.

2.6. Tools of Informal Digital Learning

There are different types of digital learning tools personalized to different learning needs and styles, which can be used within informal learning; these are the most common ones: Facebook, YouTube, LinkedIn, WhatsApp, television, Twitter, blogs, and Wikipedia.

First, Facebook is a platform that allows individuals to communicate and exchange opinions with one another. According to Kumar and Nanda (2022), a variety of academic and non-academic organizations are subscribed on Facebook with the goal of promoting and sharing knowledge (p. 13). Members improve learning chances by exchanging personal experiences and stories. In addition, Kumar and Nanda (2022) argued that Facebook helps in staying informally informed about what's happening in universities (p. 5).

Kumar and Nanda (2022) claimed that Facebook is a flexible platform that may be used for a variety of objectives (p. 5). First of all, it gives people a way to plan social events and make connections with unofficial university organizations, enabling them to stay in touch with their friends. Facebook also helps users to remain informed about world events, including lectures and seminars that are streamed live, creating chances for informal learning through group conversations and experience sharing (Kumar & Nanda, 2022, p. 13). This platform encourages the exchange of ideas and resources by facilitating cooperation between parents, teachers, and students (Kumar & Nanda, 2022, p. 5). Furthermore, it fosters communication between students, frequently in an informal setting, where they may share their work, tag peers, and get comments on their posts using tools like Facebook Notes (Kumar & Nanda, 2022, p. 13).

Second, YouTube ranks as the third most visited website globally (Holland, 2016, p. 2). So, to support informal learning, YouTube offers a wide range of video lessons with

brilliant content and instructional guidance (Lange, 2018, p. 8). This means that viewers can engage in informal learning processes through many channels, such as the YouTube chat system or other online platforms, where teachers can be privately contacted and comments and feedback can be placed on films. Furthermore, YouTube promotes incidental learning, where viewers may unintentionally get helpful advice while watching amusement videos (Arndt & Woore, 2018, p. 125). Thus, this platform provides a friendly atmosphere for a variety of informal learning activities, supporting the development of skills and knowledge in an acceptable and fun way. Islam et al. (2020) emphasized the innovation of recorded online lectures, which include functions like play, fast-forward, and rewind, allowing students to listen to lectures whenever and at whatever speed suits them best (p. 1). This does not only enhance students' listening comprehension, but also aids in enhancing their pronunciation skills through imitation of speakers in the videos (Hamad et al., 2019, p. 191).

Third, LinkedIn is a popular social media platform for professional connections, enabling users to create a professional profile quickly and efficiently, following standardized formatting guidelines (Kumar & Nanda, 2019, p. 14). In addition to allowing users to create, and share their professional profiles online, LinkedIn gives its users the chance to develop their professional networks (LinkedIn, 2018). By creating tasks and projects, it is possible to use LinkedIn as a teaching tool in online, informal learning contexts. Students can conduct interviews with professionals in the field to obtain informal perspectives on particular topics (LinkedIn, 2018). Based on their findings, they can then prepare papers or presentations. Joining LinkedIn groups also makes it easier for people to share articles, news, and other useful information, which enhances learning opportunities outside of the classroom (Mogaji, 2019, p. 3).

Fourth, WhatsApp is a messenger service owned by Facebook that is available for free and is mostly used for quick chatting (Kumar & Nanda, 2022, p. 9). In addition to making

audio and video calls, texting, and holding conference calls, users may also participate in group chats (Kumar & Nanda, 2022, p. 9). Additionally, students actively participate in informal learning environments beyond the classroom, where they have the freedom to learn at their own pace and collaborate with classmates using WhatsApp (Zhang et al., 2020, p. 3). In other words, students not only seek information online but also quickly share it with peers via WhatsApp, using various formats like audio, video, images, and animations. Learning mostly occurs through social interaction. As they explore materials outside classroom boundaries, students independently devise learning strategies. Furthermore, teachers can organize activities via WhatsApp groups and offer personalized feedback to students (Robles et al., 2019, p. 234).

Fifth, Television is one of the most well-known and widely used media technologies. Since the 1980s, scholars have been investigating how popular media can be utilized to enhance the English learning process (Lin & Siyanova-Chanturia, 2014, p. 1). Research has shown that allowing English as a Foreign Language (EFL) student to watch and interact with English-language television and movies outside of the classroom is a commonly recommended practice that improves vocabulary, discourse, and cultural awareness (Lin & Siyanova-Chanturia, 2015, p. 3). For language learners, Webb (2015) defined television as an effective learning medium that is further enhanced by interactivity, which makes communication and knowledge retrieval easier (p. 1). Students themselves have recognized the benefits of watching television in their extracurricular education, and research has shown that it improves vocabulary acquisition, listening comprehension, and cross-cultural understanding (Richards, 2015, p. 2).

Sixth, Twitter is another tool that is defined as a social media platform that facilitates direct connection between people in various nations. Through user-generated hashtags, it offers a useful platform for information discovery, making links between subjects and current

affairs easier (Tang & Hew, 2017, p. 2). By following specialists in various disciplines and topical hashtags, users can keep updated on various interesting that twitter is also a lively community platform that encourages the development of online informal learning groups by allowing users to openly discuss their educational experiences (Tang & Hew, 2017, p. 3). Furthermore, Using Twitter, educators and students may quickly spread information about assignments and homework (Tang & Hew, 2017, p. 3). Studies have shown that when it comes to learning, tweeting is more active and engaging than traditional techniques such as lectures because of its focus on short, powerful material (Menkhoff et al., 2015, p. 1296).

Seventh, blogs are interesting websites for informal learning, featuring informational or interactive discussions; they represent an important appeal for students due to its interactive nature (Chen et al., 2020, p. 1). As Chen et al. (2020) pointed out; blogs foster reflective learning and help reduce feelings of isolation among distance learners (p. 3). Furthermore, they provide flexibility for how content is seen and presented, as noted by Dickey (2004, p. 280). That is to say, when students engage with blogs for various purposes such as reading, writing, and creating content, they experience increased motivation and opportunities for feedback, as supported by academic studies.

Eight, Wikipedia or Wiki is a collaborative online site that allows users to edit and add to the material, making it easy for users to work together to create and adjust Web pages (Parker and Chao, 2007, p. 1). According to Sugar et al. (2004, p 3), wikis are an effective means of advancing computer-supported collaborative learning, which is the process of using technology to improve learning and research projects. This facilitates the sharing and exchange of knowledge and skills within a learning community and encourages increased peer participation and teamwork (Lasse Lipponen, 2002, p. 6). Additionally, wikis help students learn together and communicate independently, promoting a working environment

rather than a competitive one (De Pedro et al., 2006, p. 9). In short, various tools emerged in the digital age to aid learners in their informal learning journey.

2.7. The Importance of Informal Digital Learning

Informal digital learning (IDL) plays a crucial role in modern education, offering flexible and accessible activities for acquiring knowledge and skills outside formal classroom settings. In today's digital age, individuals have new opportunities to engage in self-directed learning through various online resources and platforms, enhancing their learning experiences and outcomes (Lee, 2017, p. 3). Accordingly, many scholars started to look at informal learning through the perspective of digitalization. They claimed that using technology to learn a language in an informal setting allows learners to modify their learning, encourage teamwork, and choose suitable methods for task completion according to their preferences (Ma, 2017, p. 4).

According to Sundqvist and Wikström (2015), empirical findings regarding informal English language learning approaches detect that students who engage in informal learning activities in virtual settings more regularly tend to have higher levels of productive vocabulary, perform better in school, and have improved oral proficiency (p. 67). Research on the impact of digital gaming on L2 vocabulary acquisition in European nations, particularly within the domain of IDLE, has seen remarkable growth. For instance, Olsson (2011) discovered that Swedish adolescents who participated more often in EE activities outside of school, primarily through digital games, achieved superior scores in English writing tasks and demonstrated wider and more elaborate English vocabulary usage (p. 15). Sundqvist and Sylvén (2014, p. 6) further demonstrated that frequent participants in digital gaming within EE environments surpassed moderate and non-digital gamers on L2 English vocabulary tests, demonstrating a tendency to utilize more sophisticated English vocabulary in written pieces. These outcomes are possible because technology makes it easier for ideas

and concepts to be shared via textual, audiovisual, and visual media. This improves critical thinking, intercultural communication, and collaborative learning skills (Zadorozhnyy & Yu, 2020, p. 353).

In EFL context, several advantages of IDL have been proposed by different scholars. First and foremost, IDL encourages learner autonomy by giving students the freedom to determine their language learning experiences by selecting materials that meet their unique needs and interests (Lee, 2021, p. 20). Furthermore, IDL provides opportunities for real-world language use, providing learners the ability to practice their English language proficiency in true social contexts and promoting cross-cultural communication (Lee, 2017, p. 3). Moreover, IDL fosters student motivation and engagement because it makes use of digital tools and interactive platforms, which increase students' pleasure and passion (Lee, 2021, p. 20). However, it's also important to consider obstacles like limited access to technology, worries about digital literacy, and other obstacles.

IDLE enhances the socio-cultural engagement of learners studying English as a foreign language. Lee and Lee (2020) claimed that participating in online interactions with both native speakers and fellow learning partners, individuals actively take part in socio-cultural differences linked to it (p. 4). Similarly, Fauziah and Diana (2023) found that informal digital learning of English (IDLE) develops learners' identities as English language users, fosters intercultural competency, and facilitates the progression of ideas (p. 198). Through digital platforms, students traverse societal norms, cultivate relationships and connections that are essential to their socio-cultural development (Lee, 2021, p. 44). This means that IDLE is greatly impacted by socio-cultural engagements, which have a variety of effects on learners' growth.

Kukulska-Hulme (2012, p. 1) argued that students have more freedom and flexibility in informal digital environments compared to formal contexts. This independence results

from the absence of time constraints, place restrictions, or prescribed instructional materials set by teachers (Kukulska-Hulme, 2012, p. 2). This means that during IDL practice, students are responsible of their own education and are free to select the resources that best suit their needs as well as the method by which they want to learn English. According to Lee (2021), when learners acquire pleasure from learning the target language, their emotional barriers decrease, facilitating L2 acquisition (p. 42). In IDLE settings, learners usually engage in English activities without the presence of teachers or peers, resulting in a relaxed environment conducive to comprehensible materials. For example, watching English content on Netflix allows learners to feel more at ease, thus optimizing conditions for incidental acquisition of English vocabulary and expressions.

Nomass (2013) suggested that technology can enhance reading skills (p. 113). By utilizing IDLE, students can maintain interest when facing text that is simplified and easy to comprehend. Moreover, informal digital learning of English materials facilitates interaction with texts, personalized attention to individual needs, and enhanced autonomy by allowing students to engage with texts they might not access other way (Truscott, 1999, p. 362). Different techniques are available to enhance reading skills in online learning environments, including the utilization of computer reading-based programs, multimedia software, online searching, electronic dictionaries, and CD-ROM-based newspapers (Lai & Zheng, 2017, p. 3).

In conclusion, informal digital learning of English (IDLE) fosters a learning environment based on discovery and experiential learning. It encourages active student engagement inside and outside the classroom while facilitating group work and adapting individual learning preferences. IDLE acts as a tool of motivation which aids in the reinforcement and organization of acquired knowledge. Additionally, it functions as an effective activity for educators to share ideas and integrate creative teaching methods.

Conclusion

To sum up, this chapter has covered a range of viewpoints on the field of informal digital Learning of English (IDLE) and has produced a comprehensive understanding of its importance and implications. The chapter began by delving into the basic ideas and situational specifics of IDLE, explaining its complex nature and innate significance in modern language learning environments. It also explored the critical role that IDLE platforms and tools play in supporting language learning experiences, highlighting their critical role in promoting linguistic competency and proficiency. Building upon this basis, the chapter emphasized the critical role that IDLE plays in fostering learner autonomy, engagement, and motivation, providing a framework for integrating IDLE into instructional strategies.

Chapter Three: Field Investigation

Introduction

The present chapter is committed to the practical framework of this study, which seeks to reveal the views of EFL learners towards the role of informal digital learning in fostering reading comprehension. Therefore, it aims to delve into participants' characteristics, research design, and methodology. A structured questionnaire was administered to gather information about the issue of reading comprehension and informal digital learning. The chapter sheds light on the role of informal digital learning in improving reading comprehension. In conclusion, the chapter summarizes and presents the results of the investigation as well as data analysis and interpretation.

3.1. Aims of the Students' Questionnaire

The questionnaire was used as a data collection tool in this study. It aimed at figuring out whether students use informal digital tools effectively. The questionnaire further intended to discover whether learners use informal digital tools to enhance their reading comprehension skills. The current questionnaire also seeks to find out how students perceive and use digital tools to improve their reading comprehension skills. Primarily, the questionnaire aims to understand students' thoughts on the significance of using informal digital methods. Additionally, it seeks to find out the extent to which students engage with these informal digital tools. Furthermore, the questionnaire aims to capture students' opinions on the efficacy of informal digital learning in augmenting their cognitive capacities for processing, and understanding written materials. Through this comprehensive investigation, the questionnaire aims to shed light on the role of informal digital learning in fostering reading comprehension skills.

3.2. Population of the Study

This study centers on the attempt to develop reading comprehension through informal digital learning among third-year students at the Department of English, University of 8 May 1945-Guelma. The choice of this sample stems from their experience and familiarity with the academic environment. Unlike first and second-year students, third-year students are expected to have an advanced level that makes it easier for them to voice thoughts objectively, which is a critical factor in determining how well informal digital learning improves reading comprehension. They also possess the necessary knowledge and expertise to interact with digital learning resources efficiently because of their experience with online learning during the COVID era. Eventually, the questionnaire was administered to a random sample composed of 115 third-year students in order to provide information about their experiences and opinions about using informal digital learning to enhance reading comprehension abilities.

3.3. Description of the Students' Questionnaire

The students' questionnaire is divided into three sections (*See Appendix A*). The first section (from questions 1 to 4) includes general information about students' gender, age, level of English proficiency, and the years of experience in studying English. It aims to collect data about students' gender, age, years spent studying English, and their level of English. The second section (from questions 5 to 10) is about students' points of view on reading comprehension, what they prefer to use when they read, and whether they are motivated to read the different sources or not. It contains twelve questions; it begins with the fifth question (Q5) where the participants are asked about which type of material they prefer to read printed or digital one. Then in the sixth question (Q6), they are asked about which material is important for them printed digital, or both. In the seventh question (Q7) students are asked if reading is a matter of comprehension or word recognition. The eighth question

(Q8) deals with the student's level of comprehension whether excellent; good, average, or weak. For the ninth question (Q9), the students are asked if they are motivated to read or not and they are required to choose the objectives behind reading. Then, they are asked about the obstacles they faced during reading comprehension, and options are given to pick up the right option or to provide other answers (Q10). In the eleventh question (Q11), they are asked to tell what they should do to increase their reading comprehension of a text. The twelfth question (Q12) aimed to know the frequency of students' application of some reading strategies like skimming, scanning, and SQ3R. In the thirteenth question (Q13), the students are asked which reading models they use: bottom-up, top-down, or both of them (interactive). Then, students are asked whether they used compensatory strategies or not (Q14), and which compensatory strategies they use while reading (Q15). In the last question of the section (Q16), students are asked about whether reading stages like pre-reading, while reading and post-reading may help them achieve reading comprehension.

The third section (from questions 17 to 26) is about the influence of informal digital learning on reading comprehension. The seventeenth question (Q17) is designed to know if students are familiar with the concept of informal learning or not. In the next question (Q18), students are asked if they preferred formal learning, informal, or both of them. The nineteenth question (Q19) is about students' beliefs about the efficacy of informal learning in fostering English proficiency. In question twentieth (Q20), the students are asked whether they agree that informal digital learning is a necessity in the digital age. The question twenty-one (Q21) is about how often they engage in informal digital learning by giving four options to pick one of them. In the next question (Q22), students are asked which devices they use for informal learning; additional options can be suggested. The question twenty-three (Q23) aims to collect students' views about the importance of informal digital tools in improving students' reading comprehension. For question twenty-four (Q24), students are asked about

the platforms or applications they use for informal digital learning. Then, the question twenty-five (Q25) is about students' way of assessing the success of their informal digital learning. The last question (Q26) is left for students to suggest further comments about the topic.

3.4. Administration of the Students' Questionnaire

The questionnaire was administered at the Department of English, University of 8 May 1945, Guelma. It was administered to one hundred fifteen (115) third-year students on April 15th, 16th, 2024. The students were informed that their answers would be kept anonymous and used for the success of the research.

3.5. Analysis of the Students' Questionnaire

The following section includes data analysis and interpretation of students' answers after coding and counting the percentages, as well as data interpretation:

Section one: General Information

Question one: What is your gender?

Table 3.1

Students' Gender

Gender	Frequency(N)	Percentage %
Male	24	20,86%
Female	91	79,13%
Total	115	100%

The majority of respondents who answered the questionnaire were female, representing 79,13% of the sample, while males represented only 20,86%, which means that females may be more interested than males in studying foreign languages.

Question two: How old are you?

Table 3.2

Student's Age

Option	Frequency (N)	Percentage (%)
20	38	40%
21	57	60%
Total	95	100%

Concerning the students' age, the majority of the informants (60%) are 21 years old. This entails that these learners had natural educational course. whereas, 40% of them are 20 years. Thus, the total number is ninety-five. Twenty (20) students did not answer this question.

Question three: How long have you been studying English?

Table 3.3

Students' Years of Studying English

Option	Frequency (N)	Percentage%
10 years	74	70,47%
More than 10 years	31	29 ,52%
Total	105	100%

As shown in Table 3.3, the majority of the informants (70,47%) have been studying English for 10 years which implies that they have an acceptable proficiency level; while, a few participants (29, 52%) studied English for more than 11 years. This indicates that they witnessed failure during their studies. Ten (10) informants did not respond to this question.

Question four: How is your English proficiency?

Table 3.4*Student's Level of Proficiency*

Options	frequency (N)	percentage(%)
High	12	10, 43%
Average	102	88, 69%
Low	01	0, 86%
Total	115	100%

The vast majority of respondents (88,69%) claimed that they have an average level in English. However, some of them (10,43%) have a high level of English, which means they can communicate fluently and accurately. This opens for them vast opportunities for academic success. While, a small percentage of respondents (0.86%) confessed that they have a low level, which means they need more support and practice to enhance their English proficiency.

Section Two: Reading Comprehension

Question five: What type of materials do you like to read more?

Table 3.5*Students' Preferred Reading Materials*

Options	frequency (N)	percentage (%)
Printed	50	43, 47%
Digital	65	56, 52%
Total	115	100%

As mentioned above, more than half (56,52%) of informants said that they prefer to read from digital devices, it is easier for them to read from their smartphones, and

tablets quickly and anywhere; whereas, the rest (43,47%) declared that they prefer printed text because they may find it easier to focus and more comfortable for eyes compared to digital screens.

Question six: Which one is more important: reading inside or reading outside the classroom?

Table 3.6

Reading inside vs. Reading outside the Classroom

Options	Frequency (N)	Percentage (%)
Reading inside classroom	11	9, 56%
Reading outside the classroom	21	18, 26%
Both (equally important)	83	72, 17%
Total	115	100%

Based on the results displayed in Table 6, most respondents (72,17%) declared that they chose both inside and outside learning, which means they prefer to learn in different contexts. Both of them offer new experiences to the learner. Whereas, 18,26% of them claimed that reading outside the classroom is more beneficial. This indicates that students are autonomous. They may learn through E-learning and Virtual Learning Environments (VLEs). They have the freedom to choose what interests them from a plenty of digital online sources. However, few respondents (9,56%) stated that reading inside the classroom plays an important role in fostering reading comprehension through classroom discussion and feedback as well as teachers' presence and guidance.

Question seven: Do you think that reading requires comprehension rather than word recognition?

Table 3.7*Comprehension and Word Recognition in Reading*

Options	Frequency (N)	Percentage (%)
Yes	99	86, 08%
No	16	13, 91%
Total	115	100%

As it is noticed from the results in Table 3.7, the majority of the participants (86,08 %) said they read to comprehend, this shows that reading is a matter of understanding the meaning behind the words. When they read, students want to make sense of the text and engage with it to foster their reading comprehension. However, 13.91 % of the respondents opted for no, this may show that they are not interested in comprehending. They want just to pick the words quickly without making any effort to fully understand the text. For them, recognition of the word is sufficient.

Question eight: How do you rate your reading comprehension level?

Table 3.8*Students' Reading Comprehension Level*

Options	Frequency (N)	Percentage (%)
Excellent	9	7, 82%
Good	83	72,17%
Average	23	20%
Weak	0	0%
Total	115	100%

When we asked about the reading comprehension level of students, the majority (72,17%) said they have a good level of comprehension, which indicated that they understand and interpret effectively. Whereas 20% of the respondents avowed they have an average level, which means, they have an acceptable level to comprehend at least the main ideas. They need to make a little effort to improve their proficiency, in this case, there is hope for improvement with persistence and effort they can make significant progress in their reading comprehension. A small number of students (7,82%) said they have an excellent level of comprehension. This indicates that they have a deep understanding without making any effort. However, no one chooses the weak level, which means that they may not want to identify their level or they may not feel comfortable admitting a weak level.

Question nine: a- Are you motivated to read?

Table 3.9

Students' Motivation to Read

Options	frequency (N)	percentage (%)
Yes	82	71, 30%
No	33	28, 69%
Total	115	100%

In an attempt to know students' motivation to read, the majority (71,30%) said they are motivated, which is something good, it means that they have a strong desire to read. This motivation increases their comprehension. In contrast, only 28,69% said no, this implies that they may not find reading as an enjoyable activity. They may struggle to concentrate or comprehend content. That is why it is important to know the reason behind the lack of motivation to provide them with support or solutions.

b-If yes, what are your objectives behind reading?

Table 3.10*Students' Objectives behind Reading*

Options	Frequency (N)	percentage (%)
For pleasure	49	42, 60%
Personal interest	27	23, 47%
Enriching vocabulary	37	32, 17%
Raising English proficiency	26	22, 60%
Classroom environment	11	9, 56%
Teachers method	5	4, 34%
Interesting topics	32	27, 82%
Others	0	0%

To get clarification about the purpose behind reading, students were asked to choose the objectives. 42,60% of the participants opted for reading for pleasure, which indicates they read to learn new things to relax from the stress of daily activities 32,17% of informants opted for enriching vocabulary. This means informants read to improve their communication skills. Through reading a variety of genres, students encounter new words, and vocabulary to boost their confidence and to be more engaged and motivated. 27.82% of them chose interesting topics. This indicates when readers read topics that pick their interest, it becomes easier for them to stay focused and motivated. 23,47% of the informants opted for personal interest which means that they read to feed their curiosity. Only 22,60% claimed that raising English proficiency is their objective behind reading. The rest (9,56% and 4,34%) selected classroom environment and teacher method respectively. This shows that students prefer to read in a suitable classroom environment and that the teachers' method plays an important role. Peer or

group work with teacher guidance helps them to develop their reading comprehension. No one of the respondents opted for other choices and suggestions.

Question Ten: What obstacles do you face in reading comprehension?

Table 3.11

Obstacles Learners Face in Reading Comprehension

Options	Frequency (N)	Percentage (%)
Limited vocabulary	53	46, 08%
Lack of familiarity with the topic	48	41, 73%
Limited use of reading strategies	15	13, 04%
Emotional state	37	32, 17%
Others	1	0, 86%

As it is shown in Table 3.10, 46,08% of the informants reported that they suffer from limited vocabulary when they read this implies that they did not engage in extensive reading or they may not invest efforts to expand their vocabulary. Others (41,73%) chose a lack of familiarity with the topic as a struggle. This may suggest that those students may not have prior knowledge about the subject. Some unfamiliar topics contain specialized vocabulary that students have not encountered before, which may create a struggle to understand the content. Whereas, 32,17% of the respondents claimed that emotional state like; stress and fatigue barriers to comprehend. When readers read and they are feeling stressed and anxious it will be hard for them to focus. 13.04% of the informants claimed that they suffer from limited use of reading strategies. This means when students are not aware of this strategy, they read just to decode words instead of comprehending. 0,86% of the respondents (which equals one student) suggested another obstacle that is absent-minded, which can be a big obstacle to their comprehension.

Question eleven: What should learners do to increase their reading comprehension of a text?

Table 3.12

Ways for Increasing Reading Comprehension

Options	frequency (N)	percentage (%)
Enrich their vocabulary	50	43, 47%
Skim the text before scanning it	15	13, 04%
Write a summary of what they have read	12	10, 43%
All the above	38	33, 04%
Total	115	100%

From the results displayed in Table 3.12, 43,47% of the respondents stated that enriching vocabulary is the best way to increase their reading comprehension. This indicates that with rich vocabulary students can read faster because they spend less time figuring out the meaning of the words. While, a small number of respondents (33, 04 %) avowed that all the suggested factors are helpful, in enriching reading comprehension. This means they skim, scan, enrich vocabulary, and write a summary to organize their reading. This powerful combination makes reading comprehension easier and more effective. Moreover, 13,04% of the informants claimed that skimming the text before scanning it is a powerful way, to foster understanding. This means when students have an overview of materials, they can rapidly glimpse what they expect, which helps them mentally prepare for important ideas. While 10,43% said that writing a summary is an effective way, it requires them to process the main ideas in their own words and this requires a deep understanding of the content.

Question twelve: How often do you apply some of the reading strategies such as skimming, scanning, and SQ3R to understand what you read?

Table 3.13*Students' Frequency of applying Reading Strategies*

Options	frequency (N)	percentage (%)
Always	15	13, 04%
Sometimes	82	71,30%
Rarely	15	13, 04%
Never	3	2, 60%
Total	115	100%

As it is shown in Table 3.13, a high percentage of respondents (71,30%) admitted that they sometimes use reading strategies. This may show that they apply strategies to overcome obstacles to make sense of what they read. While a percentage (13,04%) of participants voted for always and rarely. This implies that when students always use reading strategies, they are aware of their benefits while if they use them rarely, they feel that they can understand the content without the need for specific strategies, or they may not be aware of the benefits of employing reading strategies. Very few informants (2,60%) voted for never which means using those strategies is time-consuming for them.

Question thirteen: When you read, do you focus more on the bottom-up model, top-down, or both of them?

Table 3.14*Reading Models followed by Students*

Options	frequency (N)	percentage (%)
Bottom-up processing	21	18, 26%
Top-down processing	33	28, 69%
Both of them	61	53, 04%
Total	115	100%

When we asked students about the model used when they read, less than half of the population (53,04%) of students believe that both models are important. This implies that they use both prior knowledge and textual information to decode text meaning, and this is the skill of a skilled reader. While 28,69% of informants focus more on top-down processing. This may show that they rely on their prior knowledge, rather than decoding smaller units of words, to overcome linguistic difficulties. Also, through their existing knowledge, they can rapidly grasp ideas to save time and effort. The rest of the students (18,26%) said that they use bottom-up processing. This means that those students are smart, they focus first on decoding words and understanding grammatical structure before they move to higher levels of comprehension.

Question fourteen: Do you use compensatory strategies?

Table 3.15

Students' Use of Compensatory Strategies

Options	frequency (N)	percentage (%)
Yes	60	52, 17%
No	55	47, 82%
Total	115	100%

When we asked participants whether they use compensatory strategies or not, (52,17%) of them claimed they do. Whereas (47,82 %) they do not. This indicated that they are active and creative in finding alternative strategies to overcome ambiguities to achieve their aims.

Question fifteen: Which strategies do you use while reading?

Table 3.16*Students' Strategies while Reading*

Options	frequency (N)	percentage (%)
Slowing reading rate	49	42, 60%
Pause	31	26, 95%
Look back	28	24, 34%
Read aloud	38	33, 04%
Sounding out analogizing...	7	6,08%
Jump over to skip over a word	2	1, 73%
Reread text	27	23, 47%

To know more, students were asked to choose which strategy they used while reading. 42,60% opted for a slowing reading rate, provably those respondents have problems with reading fluency. So, reading slowly may give them more time to understand ambiguous information. 33,04% avowed that reading aloud is the best strategy to improve their reading comprehension. When they read aloud, they say the word and hear it at the same time. This may develop their pronunciation, allowing for better oral communication. 26,95% said that pause is an effective strategy while reading to reflect on what they have read to absorb content effectively. Whereas, 24,34% of respondents reported that they use the look-back strategy seeing that they focus on their reading through looking back to catch missed information to reinforce their understanding. Yet, in this table, data showed that 23,47% of informants reread text to focus on details. While, 6,08% of respondents sounded out. Very few informants (1,73%) voted for jump over to skip over a word. This conveys that they may encounter difficult or unfamiliar words that they don't understand ;so, they skip over them to continue reading without getting stuck.

Question sixteen: Do you think that using reading stages like pre-reading while reading and post-reading may help students achieve reading comprehension?

Table 3.17

The Importance of Reading Stages in Raising Comprehension

Options	frequency (N)	percentage (%)
Yes	110	95, 65%
No	5	4, 34%
Total	115	100%

Nearly all the respondents (95,65%) contended that using reading stages may help them achieve reading comprehension. However, very few informants (4,34%) said the opposite. Thus the majority of respondents are aware that reading stages lead to good reading comprehension.

Section Three: The influence of informal Digital Learning of English on reading comprehension

Question seventeen: Are you familiar with the concept of informal digital learning?

Table 3.18

Students' Familiarity with the Concept of Informal Digital Learning

Options	frequency (N)	percentage (%)
Yes	55	52,17%
No	60	47, 82%
Total	115	100%

As indicated in Table 3.18, the majority of respondents stated familiarity with the concept of informal digital learning. 52,17% of the participants answered "yes," indicating their awareness of informal digital learning. This suggests that a significant portion of the surveyed population has likely engaged with digital resources outside of formal educational

settings. However, 47,82% responded "no," suggesting that a considerable percentage of the students may not have experience with informal digital learning.

Question eighteen: Which one is better: formal or informal learning?

Table 3.19

Formal Learning vs. Informal Learning

Options	frequency (N)	percentage (%)
Formal learning	28	24, 34%
Informal learning	23	20%
Both	65	65, 52%

As it is displayed in table 3.19, the majority of participants, comprising 56.52%, stated that both formal and informal learning are preferable for them. This implies that many students recognize the benefits of combining structured educational methods with self-directed learning experiences to enhance their overall learning process. In contrast, 24,34% of the respondents preferred formal learning, suggesting a preference for traditional classroom-based instruction. On the other hand, 20% of informants favored informal learning, indicating a preference for learning through self-organized activities outside of formal education opportunities to meet specific needs and interests. These results show that people have different ways they like to learn, highlighting the importance of using various methods and techniques for teaching.

Question nineteen: Do you rely on informal digital learning to raise your English proficiency?

Table 3.20

Students' Reliance on Informal Digital Learning to Raise their English proficiency.

Options	frequency (N)	percentage (%)
Yes	101	87, 82%
No	14	12, 17%
Total	115	100%

Based on the given findings in Table 3.20, the vast majority of participants (87.82%), use informal learning, like learning outside the classroom, to boost their English skills. This means that many people in the survey rely on methods such as online resources or self-study to get better at English. In contrast, 12.17% of informants do not depend on informal learning to improve their English proficiency. This denotes that some learners might prefer traditional classroom learning or other ways to learn English, or they might not have many chances for informal learning.

Question twenty: Do you agree that informal digital learning is a necessity in the digital age?

Table 3.21

The Necessity of Informal Digital Learning in the Digital Age

Options	frequency (N)	percentage (%)
Strongly	66	57, 39%
Neither agree nor disagree	48	41, 73%
Strongly disagree	1	0, 86%
Total	115	100%

According to the study's statistics in Table 3.21, the majority of respondents (57.39%) strongly believe that informal digital learning is necessary in the digital age. This indicates a

widespread agreement among the students regarding the importance of informal digital learning in today's digital world. Whereas, some informants (41.73%) are neutral. This means that they are uncertain or they have mixed feelings on the matter. On the other hand, a very limited number of students, just 0,86% of the participants strongly disagreed with the idea that informal digital learning is crucial in the digital age. This demonstrates that students generally agree on the importance of informal digital learning in helping them adjust to the benefits and problems of the digital age.

Question twenty-one: How often do you engage in informal digital learning?

Table 3.22

The Frequency of Students' Engagement in Informal Digital Learning

Options	frequency (N)	percentage (%)
Always	53	46, 08%
Sometimes	41	35, 65%
Rarely	19	16, 52%
Never	2	1, 70%

As indicated in Table 3.22, the rate of engagement in informal digital learning was examined among participants. A considerable number of respondents (46.08%) indicated that they always engage in informal digital learning. This implies that a large percentage of participants regularly rely on digital resources for learning outside traditional settings. Furthermore, 35,65% of participants said they sometimes use them, indicating that many students utilize digital learning resources on an occasional basis. Moreover, 16,52% mentioned rare engagement in informal digital learning, suggesting that some participants do not frequently utilize digital learning materials. Remarkably, just 1,70% of respondents stated that they never engage in informal digital learning.

Question twenty-two: Which devices do you use for informal digital learning?

Table 3.23*Devices Used by Students for Informal Digital Learning*

Options	frequency (N)	percentage (%)
Smartphone	95	82, 60%
Laptop	39	33, 91%
Tablet	15	13, 04%

The results presented in Table 3.23 show that 82,60% of the participants, or the largest percentage, said they used their smartphones for informal digital learning. This indicates that the most common device used by participants to access digital learning resources is a smartphone. Although not as regularly as cellphones, laptops are also commonly used for casual digital learning, as seen by 33,91% of the respondents who acknowledged using them. Furthermore, 13,04% of participants reported using tablets, indicating that a smaller, but statistically significant percentage of participants use tablets for non-formal digital learning. It's interesting to see that, not a single respondent indicated utilizing other tools for informal digital learning.

Question twenty-three: How important are informal digital tools in improving student's reading comprehension?

Table 3.24*The Importance of Informal Digital Tools in Improving Student's Reading Comprehension*

Options	frequency (N)	percentage (%)
Not important	6	5, 21%
Important	86	74, 78%
Extremely important	23	20%
Total	115	100%

The importance of using digital tools to help students understand what they read is really important. In the results shown in Table 3.24, most of the people (74.78%) said that using digital tools outside of class is important for understanding what they read. This means they think using digital tools can really make reading and understanding better. Also, 20% of people thought digital tools were extremely important for getting better at reading, showing they believe a lot in how helpful digital tools can be. While a few students (5.21%) did not think digital tools are that important for making reading better. Overall, these results show that most people think using digital tools can really improve how well students understand what they read.

Question twenty-four: Which platforms/sites/applications do you use for informal digital learning?

Table 3.25

Tools for Informal Digital Learning

Options	frequency (N)	percentage (%)
YouTube	40	68, 69%
Podcasts	18	43, 47%
Blogs	7	12, 17%
Social media	33	54, 47%
others	4	3,47%

As presented in Table 3.25, 68,69% of participants utilize YouTube for informal digital learning. This implies that the most widely used platform by participants to obtain digital learning resources is YouTube. Furthermore, a significant percentage (54.78%) indicated that they used social media platforms for informal digital learning, demonstrating the widespread use of social media for this purpose. Additionally, 43,47% of respondents

stated they used podcasts, suggesting that podcasts are a well-liked method of obtaining digital educational resources. Moreover, a few participants (12.17%) reported they used blogs for informal digital learning, indicating that a lesser but significant percentage of people use blogs for this purpose. Notably, just 3.47% of the respondents said they used other platforms for unofficial digital learning.

Question twenty-five: How do you evaluate the success of your informal digital learning?

Table 3.26

Students' Ways of Evaluating the Success of Informal Digital Learning

Options	frequency (N)	percentage (%)
By completing tasks and activities/quizzes	41	35, 65%
Self-assessment	68	59, 13%
Seeking other's feedback	19	16, 52%

As it is noticed in table 3.26, most participants (59.13%) use self-assessment to gauge the effectiveness of their informal digital learning. This suggests that in order to evaluate the success of their digital learning efforts, the students examine their own development and comprehension. Furthermore, 35,65% of the respondents said they evaluated their performance by finishing assignments, tests, or activities. This implies that a significant number of participants assess their level of learning according to their capacity to finish tasks or activities that have been assigned to them. In addition, 16,52% of respondents said they asked for comments from others to assess how well they had done with informal digital learning. This signifies that while evaluating their learning results, some participants value outside opinions and contributions. It's interesting to note that not a single responder indicated utilizing any other techniques to assess their progress with informal digital learning. Overall, these findings show the various ways participants employ to evaluate the

effectiveness of their informal digital learning, with self-assessment being the most prevalent method.

Concerning the last question about further comments and suggestions related to the topic, out of 115 students, only 5,21% answered this question. Their comments are summarized as follows:

-I like the topic and am very interested. It means that students find the topic of fostering reading comprehension through informal digital learning interesting because, through digital platforms, students can access to wide range of content.

-I hope that the teacher allows us to use digital advanced tools. With digital tools students can access a wide range of resources they can make collaboration with peers, and receive feedback

-I'm not familiar with the topic because I think that formal learning is better. When students are not familiar with the concept of informal digital learning, it might be because they are more adapted to traditional classroom settings, they believe that formal learning provides organized learning.

3.5. Summary of the Results and Findings from the Students' Questionnaire

From these findings, it is concluded that students who participated in this questionnaire read not only to read but to comprehend. They use different reading techniques, and strategies to develop reading comprehension of text. Thus, reading comprehension is the main focus of third-year students, of the University of 8 May 1945. According to the analysis of students' responses about the second section of reading comprehension, more than half of the respondents (56,52%) preferred to read from digital materials, this indicates that they feel more comfortable, using digital tools rather than printed ones; while 72,17% of informants claimed that reading inside and outside the classroom is equally important, in the sense that both of them offer the opportunity to use different reading styles and practice new

experiences. Furthermore, 86,08% of the participants asserted that reading requires comprehension rather than word recognition. This implies that students read to make sense of what they read to develop their reading comprehension. Moreover, the level of reading comprehension of a large proportion of the participants (72,17%) is good. So, comprehension is not a major issue for them. Many respondents (71,30%) reported that they are motivated to read. In comparison to other objectives, pleasure is emphasized by 42,60% as the main objective behind reading. Furthermore, a great proportion of respondents (46,08%) avowed that limited vocabulary creates obstacles, in their reading comprehension. Additionally, 43,47% of the respondents believe that when they enrich their vocabulary, reading comprehension of text will be increased. Moreover, a remarkable percentage of the respondents (71,30%) assumed that sometimes they use reading strategies such as skimming, scanning, and SQ3R. This conveys that they are aware of the benefits of those strategies. Additionally, less than half (53,04%) of the population claimed that they use both models: the bottom-up model and the top-down model. Unexpectedly, 52,17% use compensatory strategies, to overcome difficulties during the reading process. 42,60% opted for slow reading as a good strategy. While vast majority (95,65%) claimed that reading stages like pre-reading, during, and post-reading help students achieve reading comprehension. This may show that respondents are involved in the reading process, to enrich their understanding and it is a good sign of attentive readers.

Furthermore, less than half of the participants (52,17%) were aware of the concept of informal digital learning. Concerning their opinion about formal learning; and informal learning students showed interest in both of them (56,52%) which indicates that they are complementary to each other. Additionally, the majority of the respondents (87,82%) declared that they rely on outside learning to raise their English proficiency, this indicates that they recognize and acknowledge the importance of informal digital learning in the digital age. More than half of

the informants (57,39%) totally agree that informal digital learning is important in the digital age. This denotes that they benefit from widespread digitalization. Concerning the frequency of using informal digital learning large percentage of participants (46,04%) stated that they always use it. This implies that they recognize and acknowledge its role in learning. The highest number of respondents (82,60%) depended on smartphones in Informal Digital Learning. This denotes that smartphones are the most available device that everyone can own. Additionally, the majority of informants (74,78%) acknowledge the importance of informal digital tools in improving student's reading comprehension which implies the effectiveness of such tools in enhancing students' reading comprehension. Concerning the platforms used for informal digital learning, YouTube is classified as the most useful platform for respondents (68,69%), this implies that the majority of learners prefer audio- visual devices. For the evaluation of the success of informal digital learning, self-assessment is the most useful one (59,13%), this shows that the learners assess their comprehension by themselves.

Conclusion

Reading comprehension skills are fundamental in all aspects of education. This chapter examined the practical side of the research by analyzing and discussing the questionnaire results. The results reveal that there is a relationship between fostering reading comprehension and informal digital learning. Hence, informal digital learning can serve as a powerful tool for learners to improve and foster their reading comprehension competencies. Depending on the student's point of view, reading comprehension should be raised through the appropriate use of digital devices and applications.

General Conclusion

The current study was conducted in order to explore the role of informal digital learning in fostering reading comprehension. The chapters focused on both the theoretical side and the practical side. The two variables were exhaustively examined in the first and second chapters, with explanation of some concepts related to reading comprehension and informal learning, then with a more practical investigation in the third chapter to analyze research data. The results obtained from the students' questionnaire confirmed the hypothesis, that if learners study in an informal digital learning context, their reading comprehension will improve. The results revealed that students are aware of the efficacy of studying outside the classroom using technological tools. Online platforms and applications can be beneficial for students, to practice reading through online chats with peers via social media, to receive feedback. They can also benefit from visual aids and online content. This new way of learning promotes deeper understanding. Additionally, educational websites play a huge role in developing understanding, students can access to a range of resources that may not be available in a traditional context, and through this experience, students acquire new methods of learning tailored to their unique needs. Thus, from the obtained results, it is proven that EFL third-year students at the Department of English, 8 May 1945 University (Guelma) are aware of the importance of using informal digital learning.

Pedagogical Implications

Reading comprehension is the goal of many students to achieve. It requires strategies to be done effectively. Students need to show their willingness to achieve reading comprehension in many ways one of them is informal digital learning. The use of digital technologies in education has changed the way that people study. It provides new opportunities to improve reading comprehension. Informal digital learning platforms offer dynamic settings, where students can interact with texts in a variety of ways. Here are several pedagogical implications for fostering reading comprehension through informal digital learning:

-Informal digital learning platforms can offer personalized learning; these platforms provide opportunities for students to learn anytime and anywhere without the constraints of traditional classroom setting.

-By analyzing students' reading habits and performance, teachers can provide specific recommendations for text and activities that support students' reading comprehension objectives.

-Digital platforms provide multifaceted and interactive information, such as audio recordings, animations, and videos that can improve understanding and engagement.

-Multimedia components can be incorporated into reading materials to support a variety of learning styles and aid students in comprehending the text on a deeper level.

-Informal digital learning can facilitate connections between reading comprehension skills and real-world contexts.

-Through the incorporation of authentic texts, such as news articles, blogs, and social media posts, students can apply their comprehension skills to meaningful content.

-Digital learning tools provide immediate assessment features, allowing students to evaluate their progress and identify weaknesses that need development.

-Informal digital learning improves diversity and accessibility by offering tools like text-to-speech, font size modifications, and translation options. These accessibility features provide equal access to reading materials and to the learners, including EFL learners.

-Students can build reading comprehension strategies with the aid of guided practice exercises.

-Instructions, graphic organizers, and pre-reading exercises draw on past experiences to help students' reading comprehension.

-Students are encouraged to reflect on their reading processes and techniques through informal digital learning, which fosters learner awareness. Through exercises like goal-setting, and self-evaluation, they can learn about their strengths for improvement as readers.

-Digital platforms allow for differentiated instruction by offering a variety of reading materials at different levels of complexity. Due to this, teachers can adapt their lesson plans to fit the different needs of students by giving them access to materials that suit their interests and reading levels.

-Digital learning environments give students access to different and various resources and knowledge on a wide range of subjects, which encourages curiosity. With the aid of digital technologies, students may investigate topics, follow their interests, and discover new concepts.

-Teachers can explore new instructional strategies, and learn about the importance of technology, through collaboration with colleagues in online communities to enhance their knowledge, and skills in teaching reading comprehension effectively.

-It is essential for students to practice first reading, then reading comprehension, to know where their weaknesses are. They have also to engage with the text through some reading

strategies such as skimming, scanning, and SQ3R to create a mental image, after finishing reading they may discuss the reading with peers.

-Students must bear in mind that the more they read the better they understand, and acquire critical thinking to live their lives in a good and healthy way.

-Reading inside and outside the classroom, aids in developing students' reading comprehension. In the classroom, it is more academic for students to discuss, and analyze content with the guidance of teachers, and peers, this environment helps them to understand complex ideas, by asking questions for more clarification of ambiguous points. Also, feedback from classmates assists students in paying attention to things they didn't notice. In contrast, reading outside the classroom is another experience for students, to be more autonomous and self-directed to practice new reading strategies. They may use what they want to read and any materials and platforms they want. So they have more freedom.

-Teachers play a crucial role in guiding students on how to effectively, and correctly utilize informal digital learning to achieve reading comprehension, by providing them with how to use for example online articles, websites...

-Making digital devices available for all students. It will be helpful if universities provide devices to ensure that all students have equal opportunities to learn and develop their skills.

-Educational courses are a great idea to provide students with instruction in various reading strategies; they also provide guidance on how they pause during reading, and how well they breathe.

To sum up, teachers who want to help students to become more proficient readers. They might benefit greatly, from the pedagogical implications of encouraging reading comprehension, through casual digital learning. Teachers may build dynamic and engaging learning environments that foster critical thinking, deep comprehension, and lifelong learning.

Limitations of the Study

Like many academic endeavors, this research is far from perfection. This study faced its fair share of challenges. The following are remarkable limitations encountered during the course of this research:

- The study encountered a significant challenge in accessing relevant sources, as there were very limited scholarly papers addressing fostering reading comprehension through informal digital Learning.
- Within the lack of opportunity to do an experimental study, this research relied only on students' questionnaire to gather data.

References

- Adila, D. N. O., & Weganofa, R. (2018). The Effect of SQ3R Strategy on Students' Reading comprehension. *Journal Ilmiah Bahasa Dam Sastra*, 5, 48-57.
- Alieto, E., Eijansantos, A., dela Rama – Morgia, J., & Dela Rama – Ricohermoso, C. (2020). Print-Based Texts or Digitized Versions: An Attitudinal Investigation Among Senior High School Students. *SSRN Electronic Journal*, 27 (2), 308-339.
<https://doi.org/10.2139/ssrn.3615800>
- Altan, M., & Ünalı, Ü. E. (2021). The use of non-classroom learning environments in geography education: Garden-based education. *Garden-Based Education International Journal of Pedandragogy*, 1 (2), 78-93. <https://trdoi.org/10.27579808/e-ijpa.39>
- Alyousef, (2012). Teaching Reading Comprehension to ESL/EFL Learners, *the Reading Matrix Journal*, 5 (2).
- Amaliah, E. R. (2018). A Thesis Submitted in Partial Fulfillment of the Requirements for Degree of Sarjana Pendidikan in English Education Department of Tarbiyah and Teaching Science Faculty of UIN Alauddin Makassar By Eka Rezqi Amaliah 20400113078 English Education Department Tarbiyah And Teaching Science Faculty Uin Alauddin Makassar
- Anderson, L. W., & Van, L. A. (1972). Secondary school administration. Houghton Mifflin Company, Cop.
- Andini, S. (2016). Exploring readers' strategies in stages of reading narrative text: a reflection of efl learner at iain syekh nurjati cirebon (pp. 15–16).
- Anjuni, G. R., & Cahyadi, R. (2019). Improving students' reading comprehension through SQ3R technique. *PROJECT: Professional Journal of English Education*, 2 (1), 1-6.
- Arcos, E. B. (2013). Reading: An overview prior to reading comprehension.
- Arcos, E. B. (2018). Reading comprehension among college students. *SATHIRI*, 6, 3.

<https://doi.org/10.32645/13906925.288>

Arndt, H., & Woore, R. (2018). vocabulary learning from watching YouTube videos and reading blog posts. *Language Learning & Technology*, 22(3), 124–142.

<https://doi.org/10125/44660/>

Bäumer, T., Preis, N., Roßbach, H.-G., Stecher, L., & Klieme, E. (2011). *Education*

Bennett, E. E. (2012). *A Four-Part Model of Informal Learning: Extending Schugurensky's Conceptual Model*. New Prairie Press.

Baha, O. A. (2017). Reading Models: A Review of the Current Literature. *International Journal of English Literature and Social Sciences*, 2(3), 44–49.

<https://doi.org/10.24001/ijels.2.3.6>

Bamford, J., & Day, R.R. (1997). Extensive Reading: why is it? Why brother?. *The Teacher Language Online Editor*.

Bamford, J., & Richard, R. D. (2004). *Extensive Reading Activities for Teaching Language* (pp 1-4.). Cambridge, England: Cambridge Handbooks for Language Teachers.

Bano, S., & Abdulaziz, D. M. (2022). EFFICACY OF READING COMPREHENSION MODELS IN SCHEMA DEVELOPMENT PROCESS - AN EMPIRICAL INVESTIGATION. *Palarch' S Journal of Archaeology of Egypt Egyptology*, 766.

Basaraba, D., Yovanoff, P., Alonzo, J., & Tindal, G. (2012). Examining the structure of reading comprehension: do literal, inferential, and evaluative comprehension truly exist? *Reading and Writing*, 26(3), 349–379. <https://doi.org/10.1007/s11145-012-9372-9>

Benson, P. (2007). *Autonomy in Language Teaching and Learning*. *Language Teaching*, 40(1), 21–40.

Benson, P. (2011). *Teaching and researching autonomy*. Longman/Pearson.

Benson, P. (2013). *Teaching and researching Autonomy in language learning*. Routledge.

- Benson, P., & Reinders, H. (Eds.). (2011). *Beyond the Language Classroom*. Palgrave Macmillan UK. <https://doi.org/10.1057/9780230306790>
- Bentley, T. (2012). *Learning beyond the Classroom*. Routledge.
- Brookes, A. (2002). Lost in the Australian bush: Outdoor education as curriculum. *Journal of Curriculum Studies*, 34 (4), 405–425. <https://doi.org/10.1080/00220270110101805>
- Bilokcuoglu, H. (2012). Theories of reading and their implications to the teaching of reading in ESL/EFL classes and places of schemata theory on foreign language reading comprehension. Retrieved 2014, from Developing Teachers: www.developingteachers.com/articles_tchtraining/readingpf_hasan.htm.
- Brassell, D., Rasinski, T. V., & Yopp, H. K. (2008). *Comprehension that works: taking students beyond ordinary understanding to deep comprehension*. Shell Education.
- Browne, Ann (1998) *A Practical Guide to Teaching Reading in the Early Years*. Paul Chapman Publishing Ltd. p. 9.
- Brown, D. (1988). *A World of Books: An Annotated Reading List for ESL/EFL Students (2nd ed) : Teachers of English to Speakers of Other Languages (pp 400-450)*. Washington DC
- Brown, H. D. (2001). *Teaching by principles: An integrative approach to language pedagogy*. Prentice Hall
- Budi, A. S., & Zuhro, C. (2023). Literal Reading Comprehension Ability of English Study Program Students of Politeknik Negeri Jember. *Journal of English in Academic and Professional Communication*, 9(1), 28–36. <https://doi.org/10.25047/jeapco.v9i1.3760>
- Burns, P. C., Roe, B. D., & Ross, E. P. (1999). *Teaching reading in today's elementary schools*. Houghton Mifflin.
- Butterfuss, R., Kim, J., & Kendeou, P. (2020). Reading Comprehension. Oxford Research Encyclopedia of Education. <https://doi.org/10.1093/acrefore/9780190264093.013.865>

- Basheer N. B. (2013). The impact of Using technology in teaching English as a Second Language. *English Language and Literature Studies*, 3(1).<https://doi.org/10.5539/ells.v3n1p111>
- Chao, J. (2007). Student project collaboration using Wikis. *Proceedings of the 20th Conference on Software Engineering Education and Training (CSEE&T 2007)*, Dublin, Ireland: July 3-5. Manuscript accepted for publication.
- Chen, A. P., Cannon, D. M., Gabrio, J., Leifer, L., Toye, G., & Bailey, T. (2020). Using Wikis and Weblogs To Support Reflective Learning In An Introductory Engineering Design Course. <https://doi.org/10.18260/1-2--14895>
- Chern, C. ., & Dooley, K. (2014). Learning English by walking down the street. *ELT Journal*, 68 (2), 113–123. <https://doi.org/10.1093/elt/cct067>
- Clough, G., Jones, A. C., McAndrew, P., & Scanlon, E. (2008). Informal learning with PDAs and smartphones. *Journal of Computer Assisted Learning*, 24 (5), 359–371. <https://doi.org/10.1111/j.1365-2729.2007.00268.x>
- Coiro, J., (2003). Reading comprehension on the Internet: Expanding our understanding of reading comprehension to encompass new literacies. *The Reading Teacher*, 56, pp.458-464.
- Collins Dictionary. (2022). Collins Dictionary | Definition, Thesaurus and Translations. Collinsdictionary.com. <https://www.collinsdictionary.com/>
- Creed, A., Dennis, I., & Newstead, S. (1987). Proof-reading on VDUs. *Behaviour & Information Technology*, 6, 3–13.
- Cross, J. (2011). *Informal learning: Rediscovering the natural pathways that inspire innovation and performance*. Wiley.
- Dallmann, N., Rouch, R. L., Char, L. Y. C., & DeBoer, J. J. (1982). *The teaching of reading (6th ed.)*. CBS College Publishing.

- Darling, N., Caldwell, L. L., & Smith, R. (2005). Participation in School-Based Extracurricular Activities and Adolescent Adjustment. *Journal of Leisure Research*, 37(1), 51–76. <https://doi.org/10.1080/00222216.2005.11950040>
- Davis & Davey (2014). *Tech tools for improving student literacy*. Routledge
- Elleman, A. M., & Oslund, E. L. (2019). Reading comprehension research: Implications for practice and policy. *Policy Insights from the Behavioral and Brain Sciences*, 6 (1), 3–11. <https://doi.org/10.1177/2372732218816339>
- De Pedro, X., Rieradevall, M., López, P., Sant, D., Piñol, J., Núñez, L., et al. (2006). Writing documents collaboratively in Higher education (I): Qualitative results from a 2-year project study. Congreso Internacional de Docencia Universitaria e Innovación (International Congress of University Teaching and Innovation), Barcelona.
- Dib, C. Z. (1988). Formal, non-formal and informal education: Concepts/applicability. *AIP Conference Proceedings*, 173 (1). <https://doi.org/10.1063/1.37526>
- Dickey, M. (2004). The impact of web-logs (blogs) on student perceptions of isolation and alienation in a web-based distance-learning environment. *The Journal of Open, Distance and E-Learning*, 19 (3), 279–291. <https://doi.org/10.1080/0268051042000280138>
- Dron, J., & Anderson, T. (2023a). Informal learning in digital contexts. *Handbook of Open, Distance and Digital Education*, 1373–1389. https://doi.org/10.1007/978-981-19-2080-6_84
- Dron, J., & Anderson, T. (2023b). Informal Learning in Digital Contexts. *Handbook of Open, Distance and Digital Education*, 1373–1389. https://doi.org/10.1007/978-981-19-2080-6_84
- Ebadi, S., Z Mohammad Amini, & Nouzar Gheisari. (2023). On the relationship between mobile-based extramural activities and vocabulary development of EFL learners: A

- mixed-method study. *Smart Learning Environments*, 10 (1).
<https://doi.org/10.1186/s40561-023-00252-y>
- Ellis, R. (2005). Principles of instructed language learning. *System*, 33 (2), 209–224.
<https://doi.org/10.1016/j.system.2004.12.006>
- Eraut, M. (2000). Non-formal learning and tacit knowledge in professional work. *British Journal of Educational Psychology*, 70 (1), 113–136.
<https://doi.org/10.1348/000709900158001>
- Eshach, H. (2006). Bridging In-school and Out-of-school Learning: Formal, Non-Formal, and Informal Education. *Journal of Science Education and Technology*, 16(2), 171–190.
<https://doi.org/10.1007/s10956-006-9027-1>
- European, U. (2012). I (Resolutions, recommendations and opinions).
https://www.cedefop.europa.eu/files/Council_Recommendation_on_the_validation_20_December_2012.pdf
- Fatmawan, A. R., Dewi, N. P. A., & Hita, I. P. A. D. (2023). Skimming and scanning technique: is it effective for improving indonesian students' reading comprehension? *Edusaintek: Jurnal Pendidikan, Sains Dan Teknologi*, 10 (3), 1181–1198.
<https://doi.org/10.47668/edusaintek.v10i3.897>
- Fauziah, F., & Diana, N. (2023). Exploring Students' Informal Digital Learning of English (IDLE) and Self-Regulated Language Learning from a Sociocultural Perspective. *Indonesian Tesol Journal*, 5 (2), 197–214. <https://doi.org/10.24256/itj.v5i2.4225>
- Flores, D., & Moran, A. (2004). Reading Comprehension Graphic Organizers, Gr. 1-3, eBook. *Creative Teaching Press*.
- Frankel, K. K., Becker, B. L. C., Rowe, M. W., & Pearson, P. D. (2016). From “What is Reading?” to What is Literacy?. *Journal of Education*, 196(3), 7–17.
<https://doi.org/10.1177/002205741619600303>

- Gerhard Meßmann, Segers, M., & Filip Dochy. (2018). *Informal learning at work: triggers, antecedents, and consequences*. Routledge, Taylor Et Francis Group.
- Giroux, H. A. (2012). *Disturbing Pleasures*. Routledge.
- Goodman, K. S. (1967). Reading: A psycholinguistic guessing game. *Journal of the Reading Specialist*, 6 (4), 126-135. DOI: 10.1080/19388076709556976
- Goodman, K.S. (1971). Psycholinguistic Universals in the reading process. In P. Pimsleur & T. Quinn (Eds.), *The psychology of second language learning*. Cambridge University Press.
- Goodman, K. S. (1988). The reading process. In P. L. Carrell, J. Devine, & D. E. Eskey (Eds.), *Interactive Approaches to Second Language Reading* (pp. 11–21)
DOI:10.1017/CBO9781139524513.005
- Grabe, W., & Stoller, F. L. (2018). How reading comprehension works. In J. M. Newton, D. R. Ferris, C. C. M. Goh, W. Grabe, F. L. Stoller & L. Vandergrift (Eds.), *Teaching English to second language learners in academic contexts: Reading, writing, listening, and speaking* (pp. 9-47). Taylor & Francis.
- Hamad, M. M., Metwally, A. A., & Alfaruque, S. Y. (2019). The Impact of Using YouTube and Audio Tracks Imitation YATI on Improving Speaking Skills of EFL Learners. *English Language Teaching*, 12(6), 191. <https://doi.org/10.5539/elt.v12n6p191>
- Hannibal Jensen, S. (2019). Language learning in the wild: A young user perspective. *Scholarspace.manoa.hawaii.edu*, 23(1). <http://hdl.handle.net/10125/44673>
- Harmer, J. (2007). How to teach English. Retrieved from <https://fr.slideshare.net/osamamuneer333/jeremyharmerthepracticeofenglishlanguage Teaching-58843991>.
- Harmer, J. (1991). *The practice of English language Teaching*. Longman.

- Hasan, A. H., Dehham, S. H., & Hasan, A. A. N. (2022). Investigating EFL teachers' perspectives towards using extracurricular activities in developing secondary school students' performance in learning English language. *International Journal of Health Sciences*, 1839–1850. <https://doi.org/10.53730/ijhs.v6ns5.9906>
- Haviland, S.E., & Clark, H.H. (1974). What's new? Acquiring new information as a process in comprehension. *Journal of Verbal Learning and Verbal Behavior*, 13, 512–521.
- Hayati Adalar, Hamide Kılıç, & Yakup Subaşı. (2023a). Social Studies in Out-of-Class Learning Environments: A study on Teacher Candidates' Views and Awareness. *International Journal of Education and Literacy Studies*, 11 (4), 253–271. <https://doi.org/10.7575/aiac.ijels.v.11n.4p.253>
- Herber, H. L. (1970). Teaching reading in the content areas. Englewood Cliffs, NJ: Prentice Hall.
- Kendall, J. R., Mason, J. M., & Hunter, W. (1980). Which comprehension? Artifacts in the measurement of reading comprehension. *The Journal of Educational Research*, 73, 233–236.
- Hirsch, E.D. (2003). Reading comprehension requires knowledge of words and the world: Scientific insights into the fourth-grade slump and the nations stagnant reading comprehension scores. *American Educator*, 27(1), 10.
- Holland, M. (2016). How YouTube Developed into a Successful Platform for User-Generated Content. *The Journal of Undergraduate Research*. <https://www.semanticscholar.org/paper/How-YouTube-Developed-into-a-Successful-Platform-Holland/ef0e6312770b01155356b213cddbde0c460e9b28>
- I.S.P Nation, & Macalister, J. (2021). *Teaching ESL/EFL reading and writing*. Routledge.
- Ibrahim, S. K. A. (2020). Using digital reading strategies for developing efl reading comprehension skills among faculty of education students.

- Islam, M., Kim, Dan-A., & Kwon, M. (2020). A Comparison of Two Forms of Instruction: Pre-Recorded Video Lectures vs. Live ZOOM Lectures for Education in the Business Management Field. *Sustainability*, 12 (19), 8149. <https://doi.org/10.3390/su12198149>
- Israel, S. E., & Duffy, G. G. (2014). *Handbook of Research on Reading Comprehension*. Taylor Francis.
- Jafar, T. N.(2012). Improving student reading comprehension using small group interaction.
- Jensen, S. H. (2016). Gaming as an English Language Learning Resource among Young Children in Denmark. *CALICO Journal*, 34(1), 1–19. <https://doi.org/10.1558/cj.29519>
- Jumiati, A. A. (2014). Inference strategy to improve the students' literal comprehension. *Exposure: jurnal pendidikan bahasa dan sastra inggris*, 3(2), 222. <https://doi.org/10.26618/ejpb.v3i2.839>
- Ke, I-Chung., & Cahyani, H. (2014). Learning to become users of English as a Lingua Franca (ELF): How ELF online communication affects Taiwanese learners' beliefs of English. *System*, 46, 28–38. <https://doi.org/10.1016/j.system.2014.07.008>
- Khadija Baddane, & Abdelghanie Ennam. (2023). Contextualization Strategies and Reading Comprehension: An Investigation among IELTS Test-Takers. *International Journal of Linguistics, Literature and Translation*, 6(11), 148–156. <https://doi.org/10.32996/ijllt.2023.6.11.19>
- Kirby, J. R. (2007). Reading comprehension: Its nature and development. *Encyclopedia of Language and Literacy Development* (pp. 1-8). *London, ON: Canadian Language and Literacy Research Network*. Retrieved from <http://www.literacyencyclopedia.ca/pdfs/topic.php?topId=227>
- Kosch, L., Stocker, G., Schwabe, A., & Boomgaarden, H. G. (2022). Reading fiction with an e-book or in print. *Scientific Study of Literature*, /358966934(/358966934). <https://doi.org/10.1075/ssol.21012.kos>

- Kozak, M. (2011). The Types of Reading and Exercise for Teaching Reading.
- Kramsch, C. (2003). *Language Acquisition and Language Socialization*. Bloomsbury Publishing.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30 (3), 607–610.
- Kukulska-Hulme, A. (2012). Chapter One Language Learning Defined by Time and Place: A Framework for Next Generation Designs. *Left to My Own Devices: Learner Autonomy and Mobile-Assisted Language Learning*, 3–20.
[https://doi.org/10.1108/s2041-272x\(2012\)0000006004](https://doi.org/10.1108/s2041-272x(2012)0000006004)
- Kumar, V., & Nanda, P. (2022). Social Media as a Learning Tool: A Perspective on Formal and Informal Learning. *International Journal of Educational Reform*, 105678792210943. <https://doi.org/10.1177/10567879221094303>
- Kuppens, A. H. (2010). Incidental foreign language acquisition from media exposure. *Learning, Media and Technology*, 35(1), 65–85.
<https://doi.org/10.1080/17439880903561876>
- Lai, C., & Zheng, D. (2017). Self-directed use of mobile devices for language learning beyond the classroom. *ReCALL*, 30(3), 299–318.
<https://doi.org/10.1017/s0958344017000258>
- Lai, C., Zhu, W., & Gong, G. (2015). *Understanding the Quality of Out-of-Class English Learning*. *TESOL Quarterly*, 49(2), 278–308. <https://www.jstor.org/stable/43893754>
- Lai, K.-W. ., Khaddage, F., & Knezek, G. (2013). Blending student technology experiences in formal and informal learning. *Journal of Computer Assisted Learning*, 29(5), 414–425. <https://doi.org/10.1111/jcal.12030>
- Lange, P. G. (2018). Informal Learning on YouTube. *The International Encyclopedia of Media Literacy*, 1–11. <https://doi.org/10.1002/9781118978238.ieml0090>

- Lappin, E. (1984). Outdoor Education for Behavior Disordered Students.
- Lee, J. S. (2017). Informal digital learning of English and second language vocabulary outcomes: Can quantity conquer quality? *British Journal of Educational Technology*, 50(2), 767–778. <https://doi.org/10.1111/bjet.12599>
- Lee, J. S. (2019a). Informal digital learning of English and strategic competence for cross-cultural communication: Perception of varieties of English as a mediator. *ReCALL*, 1-16, 1–16. <https://doi.org/10.1017/s0958344019000181>
- Lee, J. S. (2019b). Quantity and diversity of informal digital learning of English. *Scholarspace.manoa.hawaii.edu*, 23(1), 114–126. <https://doi.org/10125/44675>
- Lee, J.S. (2021). *Informal digital learning of English*. Routledge.
- Lee, J. S., & Drajeti, N. A. (2019). Affective variables and informal digital learning of English: Keys to willingness to communicate in a second language. *Australasian Journal of Educational Technology*, 35(5). <https://doi.org/10.14742/ajet.5177>
- Lee, J. S., & Dressman, M. (2017). When IDLE Hands Make an English Workshop: Informal Digital Learning of English and Language Proficiency. *TESOL Quarterly*, 52(2), 435–445. <https://doi.org/10.1002/tesq.422>
- Lee, J. S., & Lee, K. (2020). The role of informal digital learning of English and L2 motivational self system in foreign language enjoyment. *British Journal of Educational Technology*, 52(1), 358–373. <https://doi.org/10.1111/bjet.12955>
- Lee, J. S., & Sylvén, L. K. (2021). The role of Informal Digital Learning of English in Korean and Swedish EFL learners' communication behaviour. *British Journal of Educational Technology*, 52(3), 1279–1296. <https://doi.org/10.1111/bjet.13082>
- Leffler, A. (2021). CULTURE-LANGUAGES-MEDIA Independent Project with Specialization in English Studies and Education 15 Credits, First Cycle The consequences of digital extramural activities for the formal classroom Konsekvenser

- av digitala aktiviteter utanför det formella klassrummet. <https://www.diva-portal.org/smash/get/diva2:1523765/FULLTEXT02>
- Lehtonen, T. (2017). "You will certainly learn English much faster at work than from a textbook." – Law students learning English beyond the language classroom. *System*, 68, 50–59. <https://doi.org/10.1016/j.system.2017.06.013>
- Liao, H. C., & Wang, Y. H. (2018). Using comprehension strategies for students' self-efficacy, anxiety, and proficiency in reading English as a foreign language. *Social Behavior and Personality: an international journal*, 46(3), 447-458.
- Lim, F. V., & Toh, W. (2020). How to teach digital reading? *Journal of Information Literacy*, 14(2), 24. <https://doi.org/10.11645/14.2.2701>
- Lin, P. M. S., & Siyanova, A. (2014). Internet television for L2 vocabulary learning. In D. Nunan & J. C. Richards (Eds.), *Language learning beyond the classroom* (pp. 149-158). London:Routledge.
- LinkedIn. (2018). In [linkedin.com](https://www.linkedin.com/company/linkedin). <https://www.linkedin.com/company/linkedin>
- Lipponen, L. (2002). Exploring foundations for computer-supported collaborative learning. *Proceedings of the Computer-supported Collaborative Learning Conference*, 72-81. <https://doi.org/10.3115/1658616.1658627>
- Liu, Z. (2012). Digital Reading: an overview. *Chinese Journal of Library and Information Science*, 5(1), 85-94.
- Livingstone, D. W. (2001). Adults' informal learning: definitions, findings, gaps and future research. [Tspace.library.utoronto.ca](https://tspace.library.utoronto.ca). <https://tspace.library.utoronto.ca/handle/1807/2735>
- Lyriqkou, C. (2018). Not to be overlooked: agency in informal language contact. *Innovation in Language Learning and Teaching*, 13(3), 237–252. <https://doi.org/10.1080/17501229.2018.1433182>

- Macalister, J. (2017). English and Language Teacher Education in Malaysia: An Exploration of the Influences on and Experiences of Pre-Service Teachers. *RELC Journal*, 48(1), 53–66. <https://doi.org/10.1177/0033688217690936>
- Maden, S. (2018). Digital reading habit of pre-service Turkish language teachers. *South African Journal of Education*, 38(2), 1-10.
- Madge, C., Meek, J., Wellens, J., & Hooley, T. (2009). Facebook, social integration and informal learning at university: “It is more for socialising and talking to friends about work than for actually doing work.” *Learning, Media and Technology*, 34(2), 141–155. <https://doi.org/10.1080/17439880902923606>
- Mahoney, J. L., & Cairns, R. B. (1997). Do extracurricular activities protect against early school dropout? *Developmental Psychology*, 33(2), 241–253. <https://doi.org/10.1037//0012-1649.33.2.241>
- Ma, Q. (2017). A multi-case study of university students’ language-learning experience mediated by mobile technologies: a socio-cultural perspective. *Computer Assisted Language Learning*, 30(3-4), 183–203. <https://doi.org/10.1080/09588221.2017.1301957>
- Marjolijn Verspoor, Kees de Bot, & Eva van Rein. (2011). English as a foreign language. 147–166. <https://doi.org/10.1075/aals.8.10ver>
- Merriam-Webster. (n.d.). Ref. In Merriam-Webster.com dictionary. Retrieved February 29, 2024, from <https://www.merriam-webster.com/dictionary/ref>
- Marsh, H., & Kleitman, S. (2002). Extracurricular School Activities: The Good, the Bad, and the Nonlinear. *Harvard Educational Review*, 72(4), 464–515. <https://doi.org/10.17763/haer.72.4.051388703v7v7736>
- Menkhoff, T., Chay, Y. W., Bengtsson, M. L., Woodard, C. J., & Gan, B. (2015). Incorporating microblogging (“tweeting”) in higher education: Lessons learnt in a

- knowledge management course. *Computers in Human Behavior*, 51, 1295–1302.
<https://doi.org/10.1016/j.chb.2014.11.063>
- Mikulecky, B. S. (2011). *A short course in teaching reading: Practical techniques for building reading power*. Boston, MA: Allyn & Bacon. understanding component of language to raise mind ability to understand.
- Mogaji, E. (2019). Student Engagement with LinkedIn to Enhance Employability. *Employability via Higher Education: Sustainability as Scholarship*, 321–329.
https://doi.org/10.1007/978-3-030-26342-3_21
- Muchtar, N. (2019). Intensive and extensive reading in improving teaching reading comprehension. *Journal of English Teaching Studies*, 1 (2),
- Murray, T. (2003). Applying Text Comprehension and Active Reading Principles to Adaptive Hyperbooks. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 25(25), 840.
- | *NSW Department of Education Literacy and Numeracy Teaching Strategies -Reading Literal Comprehension Stage 2 Overview Learning intention* (p. 5). (2024).
- Nadea A. B., B., Jumariati, J., & Nasrullah, N. (2021). Bottom-up or Top-down Reading Strategies: Reading Strategies Used by EFL Students. *Atlantic Press*, 578.
- Nation, K. (2005). Children’s reading comprehension difficulties. In M. J. Snowling & C. Hulme (Eds.). *The science of reading: A handbook*. Blackwell.
- Nation, P. (2005). Reading faster, 36, 23–24.
- National Research Council . (1996). National science education standards. *National Academy Press*.
- Noy, M., J. H., & Bedley, C. (2016). Reconceptualizing Learning: A Review of the Literature on Informal Learning. <https://equityinlearning.act.org/wp-content/uploads/2017/07/Informal-Learning-Lit-Review-Final-April-2016->

1.pdf?fbclid=IwAR3d0Nu0IiG7aNLLeTY667yeeTk-

Pa82b2ypNk9CoBE4BoZo8zIahMLOKM_I

Nurdianingsih, F. (2021). Teachers' strategies in teaching reading comprehension. *PROJECT:*

Professional Journal of English Education, 4 (2), 285-289.

Nurjanah, R. L. & Putri, S. R. (2022). The Effect of Literal Comprehension on the Higher

Levels of Comprehension in Reading Skill: A Longitudinal Case Study. *English*

Language & Literature International Conference Proceedings, 5 (1)

<https://jurnal.unimus.ac.id/index.php/ELLIC/index>.

Nuttall, C., (1996). *Teaching reading skills in a foreign language*. Heinemann Educational

Books.

Nunan, D., & Richards, J. C. (2015). *Language Learning Beyond the Classroom*. Routledge.

Olsson, E. (2011). On the impact of extramural English and CLIL on productive vocabulary.

https://gupea.ub.gu.se/bitstream/handle/2077/41359/gupea_2077_41359_1.pdf

Oxford Dictionary, R. (2023). Informal learning: Definition and application. The Oxford

Review . [https://oxford-review.com/oxford-review-encyclopaedia-terms/informal-](https://oxford-review.com/oxford-review-encyclopaedia-terms/informal-learning-definition-application/)

[learning-definition-application/](https://oxford-review.com/oxford-review-encyclopaedia-terms/informal-learning-definition-application/)

Pardede, P. (2019). Print vs Digital Reading Comprehension in EFL: A Literature Review.

JET Journal of English Teaching, 5(2), 77. <https://doi.org/10.33541/jet.v5i2.1059>

Pardo, L. S. (2004). What every teacher needs to know about comprehension. *The Reading*

Teacher, 58 (3), 272–280. DOI:10.1598/rt.58.3.5

Paris, S. G., Carpenter, R. D., Paris, A. H., & Hamilton, E. E. (2005). Spurious and Genuine

Correlates of Children's Reading Comprehension. In S. G. Paris, & S. A. Stahl (Eds.),

Children's reading comprehension and assessment (pp. 131-160). Lawrence Erlbaum

Associates Publishers.

- Parker, K., & Chao, J. (2007). Wiki as a Teaching Tool. *Interdisciplinary Journal of E-Learning and Learning Objects*, 3(1), 57–72. <https://www.learntechlib.org/p/44798>
- Pattemore, A., & Muñoz, C. (2020). Learning L2 constructions from captioned audio-visual exposure: The effect of learner-related factors. *System*, 102303. <https://doi.org/10.1016/j.system.2020.102303>
- Pennell, D. (2002). Explicit instruction for implicit meaning: Strategies for teaching inferential reading comprehension. Retrieved from <http://.wm.edu/TTAC/> .
- Peters, E., & Webb, S. (2018). INCIDENTAL VOCABULARY ACQUISITION THROUGH VIEWING L2 TELEVISION AND FACTORS THAT AFFECT LEARNING. *Studies in Second Language Acquisition*, 40(3), 551–577. <https://doi.org/10.1017/s0272263117000407>
- Pressley, M., & Afflerbach, P. (1995). Verbal protocols of reading: The nature of constructively responsive reading. Hillsdale, NJ: Erlbaum ,561-562
- Priest, S. (1986). Redefining Outdoor Education: A Matter of Many Relationships. *The Journal of Environmental Education*, 17(3), 13–15. <https://doi.org/10.1080/00958964.1986.9941413>
- Rumelhart, D. E. (1977). Toward an interactive model of reading. In S. Dornic (Ed.), *Attention and performance*. Hillsdale, NJ: Laurence Erlbaum Associates.
- Robinson, Francis Pleasant: *Effective Study*. 4th Edition. New York 1970.
- Raitman, R., Ngo, L., Augar, N., & Zhou, W. (2005). Security in the online e-learning environment. Proceedings of the Fifth IEEE International Conference on Advanced Learning Technologies (ICALT'05), Kaohsiung, Taiwan: July 5-8, 702-706
- Reinders, H., & Benson, P. (2017). Research agenda: Language learning beyond the classroom. *Language Teaching*, 50(4), 561–578. <https://doi.org/10.1017/s0261444817000192>

- Reinders, H., & Wattana, S. (2014). Affect and willingness to communicate in digital game-based learning. *ReCALL*, 27(1), 38–57. <https://doi.org/10.1017/s0958344014000226>
- Reva, A. (2012). The Role of Extracurricular Activities in Foreign Language Learning in University Settings.
- Richards, J. C. (2015). The Changing Face of Language Learning: Learning Beyond the Classroom. *RELC Journal*, 46(1), 5–22. <https://doi.org/10.1177/0033688214561621>
- Robles, H., Guerrero, J., Llinás, H., & Montero, P. (2019). Online Teacher-Students Interactions Using WhatsApp in a Law Course. *Journal of Information Technology Education: Research*, 18, 231–252. <https://doi.org/10.28945/4321>
- Rodgers, M. P. H., & Webb, S. (2019). Incidental vocabulary learning through viewing television. *ITL - International Journal of Applied Linguistics*, 171(2). <https://doi.org/10.1075/itl.18034.rod>
- Rogers, A. (2008). Informal Learning and Literacy. *Encyclopedia of Language and Education*, 2, 544–555. https://doi.org/10.1007/978-0-387-30424-3_41
- Samuals, S.J, &Kamil, M.L. (1988).Models of the reading process. In P.L. Carrell, J. Devine, & D.E. Eskey (eds.), *Interactive approaches to second language reading* (pp. 22- 36). Cambridge: Cambridge University press.
- Sauro, S., & Zourou, K. (2019). What are the digital wilds? *Language Learning & Technology*, 23(1), 1–7. <https://doi.org/10125/44666>
- Schugurensky, D. (2004). THE FORMS OF INFORMAL LEARNING: TOWARDS A CONCEPTUALIZATION OF THE FIELD Centre for the Study of Education and Work. <https://tspace.library.utoronto.ca/bitstream/1807/2733/2/19formsinformal.pdf>
- Seyed Hossein Fazeli, M. e. (2010). Language in India:some Gaps in the current Studies of reading in Second/Foreign language learning. (Vol.10).issue4. (p376).
- Shen, Y. (2009). *AP Chinese language & culture*. Barron’s Educational Series.

- Shortcut Edition. (2021). SUMMARY - How To Read A Book: *The Classic Guide To Intelligent Reading* By Mortimer J. Adler And Charles Van Doren. Shortcut Edition.
- Sidabutar, M., Theruvil Sayed, B., Ismail, S. M., Teves Quispe, J., Yangali Vicente, J. S., Suardi Wekke, I., Jassaim Shanan, A., & Nourabadi, S. (2022). Reading Digital Texts vs. Reading Printed Texts: Which One Is More Effective in Iranian EFL Context? *Education Research International*, 2022, 1–9. <https://doi.org/10.1155/2022/7188266>
- Snow, C. (2002). Reading for understanding: toward an R & D program in reading comprehension. Santa Monica. Rand Corporation, 11.
- Sockett, G., & Toffoli, D. (2012). Beyond learner autonomy: a dynamic systems view of the informal learning of English in virtual online communities. *ReCALL*, 24(2), 138–151. <https://doi.org/10.1017/s0958344012000031>
- So, H.-J., Kim, I., & Chee-Kit Looi. (2008). Seamless Mobile Learning: Possibilities and Challenges Arising from the Singapore Experience. *Educational Technology International*, 9(2), 97–121.
- Soyoof, A., Reynolds, B. L., Vazquez-Calvo, B., & McLay, K. (2021). Informal digital learning of English (IDLE): a scoping review of what has been done and a look towards what is to come. *Computer Assisted Language Learning*, 1–27. <https://doi.org/10.1080/09588221.2021.1936562>
- starros , A. (2012). Active Reading *Why Good Readers Make Better Writers*.4.
- Stephens, L. J., & Schaben, L. A. (2002). The Effect of Interscholastic Sports Participation on Academic Achievement of Middle Level School Students. *NASSP Bulletin*, 86(630), 34–41. <https://doi.org/10.1177/019263650208663005>
- Sundqvist, P., & Liss Kerstin Sylvén. (2016). Extramural English in Teaching and Learning From Theory and Research to Practice. London Palgrave Macmillan Uk :Imprint: Palgrave Macmillan.

- Sundqvist, P., & Sylvén, L. K. (2014). Language-related computer use: Focus on young L2 English learners in Sweden. *ReCALL*, 26(1), 3–20.
<https://doi.org/10.1017/s0958344013000232>
- Sundqvist, P., & Wikström, P. (2015). Out-of-school digital gameplay and in-school L2 English vocabulary outcomes. *System*, 51, 65–76.
<https://doi.org/10.1016/j.system.2015.04.001>
- Sutz, R., & Weverka, P. (2009). *Speed Reading For Dummies*. John Wiley & Sons.
- Suraprajit, P. (2019). Bottom-up vs Top-down Model: The Perception of Reading Strategies among Thai University Students. *Journal of Language Teaching and Research*, 10(3), 454. <https://doi.org/10.17507/jltr.1003.07>
- Sylvén, L. K., & Sundqvist, P. (2016). Computer-Assisted Language Learning (CALL) in Extracurricular/Extramural Contexts. *CALICO Journal*, 34(1), i–iv.
<https://doi.org/10.1558/cj.31822>
- Tang, Y., & Hew, K. F. (2017). Using Twitter for education: Beneficial or simply a waste of time? *Computers & Education*, 106, 97–118.
<https://doi.org/10.1016/j.compedu.2016.12.004>
- Tasnimi, M. (2017). Critical Reading: An Introduction. *Humanising Language Teaching*, 1755-9715(6), 5.
- Tata, G. (n.d.). The Role of Extracurricular Activities in Foreign Language Learning in University Settings. *Www.academia.edu*. Retrieved February 16, 2024, from https://www.academia.edu/12149861/The_Role_of_Extracurricular_Activities_in_Foreign_Language_Learning_in_University_Settings
- Tay, B., & Tokcan, H. (n.d.). Okul Dışı Sosyal Bilgiler Öğretimi ve Öğrenme Teorileri OKUL DIŞI SOSYAL BİLGİLER ÖĞRETİMİ. In *www.academia.edu*. Retrieved February 10, 2024, from

https://www.academia.edu/35716461/Okul_D%C4%B1%C5%9F%C4%B1_Sosyal_Bilgiler_%C3%96%C4%9Fretimi_ve_%C3%96%C4%9Frenme_Teorileri_OKUL_D%C5%9EI_SOSYAL_B%C4%B0LG%C4%B0LER_%C3%96%C4%9ERET%C4%B0M%C4%B0

Tchibozo, G. (2007). Extra-Curricular Activity and the Transition from Higher Education to Work: A Survey of Graduates in the United Kingdom. *Higher Education Quarterly*, 61(1), 37–56. <https://doi.org/10.1111/j.1468-2273.2006.00337.x>

Thomas Spencer Harding. (1971). *College Literary Societies: Their Contribution to Higher Education in the United States, 1815-1876. Pageant Press International.*

Truscott, C. C., Diane M. (1999). ISSUES IN TECHNOLOGY: THE LURE OF BELLS AND WHISTLES CHOOSING THE BEST SOFTWARE TO SUPPORT READING INSTRUCTION. *Reading & Writing Quarterly*, 15(4), 361–369. <https://doi.org/10.1080/105735699278161>

Vacca, R.T. & Vacca, J.L. (2009.). *Content area reading: Literacy and learning across the curriculum (9th ed.). Boston: Pearson Education.*

Van Lier, L. (1988). *The Classroom and the Language Learner.* Addison Wesley Publishing Company.

Walczyk, J. J., & Griffith-Ross, D. A. (2007). How important is reading skill fluency for comprehension?, *The Reading Teacher*, 60 (6), 560-569, doi: 1598/rt. 60.6.6
the use of sq3r reading strategy to improve student's skill and interest on reading comprehension (A Classroom Action Research at the seventh grade of MTs. Al-Muhajirin Boarding School Jakarta Academic Year 2020/2021) as cited in p 16.

Walczyk, J.J., Marsiglia, C.S., Johns, A.K., & Bryan, K.S. (2004). Children's compensations for poorly automated reading skills. *Discourse Processes*, 37-47.

- Webb, S. (2015). Extensive Viewing: Language Learning through Watching Television. *Language Learning beyond the Classroom*, 159–168. <https://ir.lib.uwo.ca/edupub/107/>
- Werquin, P. (2010). Recognising Non-Formal and Informal Learning. *OECD*.
<https://doi.org/10.1787/9789264063853-en>
- Woolley, G. (2011). Reading Comprehension: Assisting Children with Learning Difficulties. Retrieved from
http://www.springer.com/cda/content/document/cda_downloadaddocument/9789400711730-c1.pdf?SGWID=0-0-45-1158048-p174102871.
- Zadina, et al., (2014). *College Reading: The Science and Strategies of Expert Learning*. Cengage Learning.
- Zadorozhnyy, A., & Yu, B. (2020, August). The importance of informal digital learning practices for English language acquisition. *Researchgate*.
https://www.researchgate.net/publication/343382375_The_importance_of_informal_digital_learning_practices_for_English_language_acquisition
- Zhang, X., Tlili, A., Nascimbeni, F., Burgos, D., Huang, R., Chang, T.-W., Jemni, M., & Khribi, M. K. (2020). Accessibility within open educational resources and practices for disabled learners: a systematic literature review. *Smart Learning Environments*, 7(1). <https://doi.org/10.1186/s40561-019-0113-2>
- Zhenyu, Z. (1997). Intensive reading: Getting your students to see the forest as well as the trees. *English Teaching Forum*, 35(1), 40-43.

Appendices

Appendix A: Student's Questionnaire

Dear students,

You are kindly asked to answer this structured questionnaire which is administered to gather data and information in order to accomplish our Master Dissertation. This questionnaire aims at investigating whether students use effectively informal digital learning. In addition, it aims at tackling the use of informal digital learning in fostering reading comprehension, in addition to the influence of the effective use of informal digital learning on fostering reading comprehension. The questionnaire is anonymous, and your answers remain confidential. Hence, you are politely invited to answer the following questions either by ticking the option(s) that seem appropriate for you or by making full and complete answers. Put in your mind that your answers are crucial for the success of this research.

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Section One: General Information

1. What is your gender?

Male	
Female	

2. Age years.

3. How long have you been studying English? (Including this year) years old.

4. How is your English proficiency?

High	
Average	
Low	

Section two: Reading Comprehension.

5. What type of material do you like to read more?

Printed	
Digital	

6. Which one is more important?

Reading inside the classroom	
Reading outside the classroom	
Both (equally important)	

7. Do you think that reading requires comprehension rather than word recognition?

yes	
no	

8. How do you rate your reading comprehension level?

Excellent	
Good	
Average	
Weak	

9. Are you motivated to read?

Yes	
No	

-If yes, what are your objectives behind reading?

For Pleasure	
Personal interests (reading as a tool to reach an aim)	
Enriching vocabulary	
Raising English proficiency	
Classroom environment	
Teachers' method	
Interesting topics	
Other(s), would you please specify below	

.....

10-What obstacles do you face in reading comprehension?

Limited vocabulary	
Lack of familiarity with the topic or subject	
Limited use of reading strategies/techniques	
Emotional state (stress, fatigue...	
Other (s), would you please specify below	

.....

11. What should learners do to increase their reading comprehension of a text?

Enrich their vocabulary	
Skim the text before scanning it	
Write a summary of what you have read	
All the above	

12. How often do you apply some of the reading strategies such as skimming, scanning, andSQ3R to understand what you read?

Always	
Sometimes	
Rarely	
Never	

13. When you read do you focus more on?

Bottom-up Processing (moving from small units to larger units to get the message)	
Top-down Processing (relying on prior/background knowledge to get the message)	
Both of them (Interactive)	

14. Do you use compensatory strategies?

Yes	
No	

15. Which strategy do you use while reading?

Slowing reading rate	
Pause	
Look back	
Read aloud	
Sounding out analogizing to a known word or contextual guessing	
Jump over to skip over a word	
Reread text	

16. Do you think that using reading stages like pre-reading, while- reading, and post-reading may help students achieve reading comprehension?

Yes	
No	

Section Three: The influence of Informal Digital Learning of English on reading comprehension

17. Are you familiar with the concept of informal digital learning?

Yes	
No	

18. Which one is better for you?

Formal learning	
Informal learning	
Both	

19. Do you rely on informal learning (learning outside the classroom) to raise your English proficiency?

Yes	
No	

20. Do you agree that informal digital learning is a necessity in the Digital Age?

Strongly agree	
Neither agree nor disagree	
Strongly disagree	

21. How often do you engage in informal digital learning?

Always	
Sometimes	
Rarely	
Never	

22. Which devices do you use for informal digital learning?

Smartphone	
Laptop	
Tablet	
Other (s) , would you please specify below	

.....

23. How important are informal digital tools in improving students' reading comprehension?

Not important	
Important	

Extremely important	
---------------------	--

24. Which platforms/sites/applications do you use for informal digital learning?

YouTube	
Podcasts	
Blogs	
Social media	
Other(s), would you please specify below	

.....

25. How do you evaluate/assess the success of your informal digital learning?

By completing tasks and activities/quizzes	
Self-assessment	
Seeking others' feedback	
Other (s), would you please specify below	

.....

26. If you have further comments about the topic, please specify below

.....

Thank you for your cooperation

ملخص

إن فهم النصوص المكتوبة مهم جدا في أقسام تدريس اللغة الانجليزية كلغة أجنبية. وعليه ينبغي على الطلبة تحسين فهمهم للقراءة من خلال التعلم الرقمي غير الرسمي باستعمال التكنولوجيا خارج القسم. في هذا الصدد، يهدف هذا البحث إلى تحري دور التعلم الرقمي غير الرسمي في تحسين فهم الطلبة أثناء القراءة. وقد افترضنا أن التعلم الرقمي غير الرسمي من الممكن أن يؤدي إلى الفهم الجيد للقراءة. لاختبار صحة الفرضية تم اعتماد المنهج الوصفي الكمي من خلال إجراء استبيان إلى طلبة السنة الثالثة ليسانس بجامعة 8 ماي 1945 قالمة. وقد أظهرت النتائج أن استعمال وسائل التعلم الرقمي غير الرسمي في قسم تعليم اللغات الأجنبية يمكن أن يعزز فهم الطلبة للقراءة.