

People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
Kasdi Merbah Ouargla University
Faculty of Letters and Languages
Department of Letters and English Language



Dissertation

Academic master

Domain: Letters and Foreign Languages

Major: Linguistics

A Shift from Print Reading to Electronic Reading
The case of First Year Licence Students at the
University of Kasdi Merbah- Ouargla

Submitted by: Mounira Chenine

Omaïma lahreche

The jury:

Dr Halima Benzoukh	UKM – Ouargla	President
Dr Malika Kouti	UKM – Ouargla	Supervisor
Dr Nawal Dib	UKM – Ouargla	Examiner

Academic year: 2020/2021

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Dedication

This work is dedicated to my bond and my strength in life, to the owner of a fragrant biography and enlightened thought, for he had the first credit in reaching to the higher education (my beloved father “Abd-el-Kader”), my god prolong his life.

I also dedicate this work to my soul and my lovely mother ‘Fatma’: You are the symbol of persistence and the treasure of existence; you are my inspiration; You are the greatest mother in the whole world. I really would like to thank you because the reason I reached this stage was all due to your efforts.

To my dear grandfather, Mohammed (Tekah) and my beloved grandmother, Zohra

To my brothers Abdennour, Oussama , Mohammed (affectionate brother)

To my dear sisters: Afaf, Salima, and the spoiled sister Imene ...

To my uncles Yahia, Belkhir, Abdelbasset, Abdelbari, Abdelmonaim, and Yacine

To my aunts Mbarka, Atika, Meriem, wafaa, and the spoiled aunt Djemaa

To my niece, Iline

To my supervisor, Doctor Malika Kouti: thank you is not enough after all you have done for me. You did not only teach me, but you inspired me to do good and to do well in life. Thank you for your love and efforts. I am grateful to you, my dear teacher.

MOUNIRA

Dedication

I dedicate this work to:

- the memory of my father
- the memory of my beloved sister
- Every challenging work that needs hard and self efforts as well as support, guidance, and love of elders, especially those who have been very close to our hearts and those we care about.
- my loving Mom:
I would thank you for being everything in my life for being the father and the mother, I know that my words cannot describe what is in my heart. So thank you again for the thousands of times; you pray for me to reach my goals and to be able get such success and honor.
- To my sisters who has gave me the encouragement and inspiration to follow my dreams.
- To my uncle, and all my family who I care about.
- To my best friend for her support and for being with me in every time I need her.
- To all my friends and to the one that I really care about.

Thank you all for being the source of my strength.

OMAIMA

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Abstract

The growth of electronic information that is available online and the increasing use of digital files in academic activities have driven more and more people in society including students to use digital materials instead of print materials. The aim of this thesis is to depict the reasons of the shift from print reading to electronic reading and the rate of this shift among bachelor students at the university of Kasdi Merbah, Ouargla, adopting a descriptive analytical approach. A questionnaire was selected as a main tool for collecting data, and was distributed to 60 English students for the sake of gaining insights on the students' reading types and what materials they read: print reading or electronic reading .The results revealed that most of the readers prefer electronic reading over print reading, due to the fast and proliferation of information available online and its lack in academic libraries.

Keywords: *reading, print reading, electronic reading, digital materials, print materials*

List of Abbreviations

ER: Electronic Reading

KMUO: Kasdi Merbah University of Ouargla

PR: Print Reading

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Introduction

Introduction

The 21st century is the age of technology, which has invaded all aspects of life, with the extensive use of the Internet facilitating access to information. Students, nowadays, are always searching for a more convenient way to obtain knowledge, and they find what they need from the numerous available sources on the Internet that can be read and downloaded on computers, cell phones, and so on...for academic studies and purposes.

Reading is a skill that all students should acquire, to live up to the standards of the educational process, help students learn a lot of things with novel values or traditional meanings, and even flourish in general. In other words, in order to become effective and efficient learners in various disciplines, one must master this skill proficiently. In fact, several things must be seriously considered, especially those related to education and reading.

At this juncture, it should be noted that due to the apparent popularity of e-books, reading today is no longer limited to reading printed materials (Foasberg, 2014). Where an increased development of Electronic Reading has been observed (Rainie, Zichur, Purcell, Madden, and Brenner, 2012). Some researchers have reported the preference of students to read in digitized materials (Revelle, Messner, Shrimplin, & Hurst, 2011) rather than printed materials (Wu & Chen, 2011). That is why, we notice that most of the students are increasingly dependent on Electronic Reading, and this is due to the global electronic hegemony.

Background of the Study

Reading entails recognizing and deciphering phrases, as well as comprehending the larger sense in which the words are read (Duran, 2013). Reading has a vital part in education; it is considered as one of the main important skills in academic studies (Saville-Troike, 2006 as cited in El Kouti, 2017).

Electronic book tools and features can help struggling readers or English language learners read texts independently by scaffolding literacy learning and making tough readings easier (Moody, 2010). If students hear a word they are unfamiliar with, it can be pronounced and described for them using storytelling and dictionaries, allowing them to continue reading a text that is beyond their reading ability (Grimshaw, et al 2007).

With the advancement of technology, students are no longer dependent on print books as the only source of getting information. Students are rapidly reading from screens as a result of the abundance of electronic information accessible online and through academic libraries (Walsh, 2016). Students' perception about reading practice has been changed due to many reasons that lead them to switch to a new method of reading which is electronic reading.

At this juncture, it should be noted that due to the apparent popularity of e-books, reading today is no longer limited to reading printed materials (Foasberg, 2014). Where an increased development of Electronic Reading has been observed (Rainie, Zichur, Purcell, Madden, and Brenner, 2012). Some researchers have reported the preference of students to read in digitized materials (Revelle, Messner, Shrimplin, & Hurst, 2011) rather than printed materials (Wu & Chen, 2011). Students choose e-books because they are inexpensive, compact and easy, and they allow them to store all their course materials in one unit rather than bringing several heavy print books. According to Rockinson-Szapkiw et al. (2013), higher education students who used the electronic edition of a core textbook were more actively interested in learning than those who used the written textbook, but their final grades did not vary as cited in (comfort makwanya, 2019), where Bill Gates discussed one of Microsoft's 'learning anytime, anywhere' projects and believed that technological development has affected all aspects of human life. It provides students with great learning opportunities, and provides them with the right to use laptops and other scientific equipments that help them in their studies. On the other hand, print reading has always been a traditional form of reading. People believe that this way of reading will gradually decline and predict that it will eventually disappear due to the rise of technology which gave birth to digital reading. By the 1980s, print reading was expected to be in a state of death (Sun & Huang, 2013). In contrast, Lamb and Johnson (2011) believe that since the printed text is still the main activity in reading teaching, the printed text reading will continue to dominate in the classroom environment and on other occasions (Wolk, 2010; Rainie et al., 2012). Indeed, the expected expiration of print-based reading failed to materialise. On the contrary, although the fact that more and more learners are interacting with information and communication technologies (Kaman & Ertem, 2018), the number of people reading printed materials has increased exponentially (Stephens, 2014), indicating its popularity and interest to print materials and its preference over the electronic-based medium.

In the end, it is undeniable that technology has completely changed many aspects of education. It seems that the reading of printed matters can still attract people reasonably which proving the adage 'old but gold'.

Statement of Purpose

The principal aim of this study is to identify the main reasons for the shift, as well as counting the rate of the shift from print reading to electronic reading.

Statement of Problem

Reading is one of the main important skills that people need acquire, especially university students who are considered as the core of any society. They are always in need to read and to improve what they had acquired by the availability of information on the Internet. Because we are living in a digital age in which new ways of reading are offered.

As we know, humans are naturally curious about knowing or using new things, so their perception about reading has been changed due to the time they are living in. They are no longer dependent on the traditional books as the only sources for getting information. On these grounds, university students are increasingly shifting from print reading to electronic reading for different reasons.

Research questions

1. To what extent is there a shift from print reading to electronic reading?
2. What are the main reasons for the shift from print reading to electronic reading among first year students?

Hypotheses

We define the following hypotheses based on the research questions mentioned above:

1. There is kind of shift from print reading to electronic reading.
2. It is hypothesized that technological advancements have made information more accessible to students, as a result most of the students to shift to Electronic reading.

Methodology

To conduct the current study, we have selected a descriptive analytical approach that is based on gathering and analyzing data by combining both quantitative and qualitative data at some point during the research phase within a single study in order to better understand the research issue (Creswell, 2002). We have used this approach to distinguish the main reasons for the shift from print reading to electronic reading and to count the rate of this shift. For approaching this topic, a questionnaire including both open-ended and close-ended questions has been selected as a main tool for gathering data. All quantitative findings will be statistically analyzed using the statistical package for social sciences software (SPSS). To this end, the questionnaire was administered and distributed to first year First year undergraduate students at the department of English at kasdi Merbah university of Ouargla during the second semester of the 2020 / 2021 academic year.

Structure of Dissertation

This dissertation is structured in two main parts: theoretical and practical. The theoretical part includes two chapters. The first one is an overview of the history of printing and papers, including the importance of print reading, its types, kinds, and tools. As well as the rate of comprehension through reading prints, and the differences between print and electronic media. Then we concludes the chapter with the impact of technology on Print reading. The second chapter is about electronic reading and its characteristics, types, the rate of comprehension through it, and one of the main popular E-readers devices as well as E-readers applications besides electronic reading during COVID-19. The third chapter is about the practical part; the rate of transition from print to electronic reading was measured, and the main reasons for the shift from print reading to electronic reading.

Definition of key Terms

A. Reading

- Reading is “Development, interactive, and global process involving learned skills (Ieu and Kinder. p. 9, 1987).
- “Reading is a process carried out and used by a reader to acquire message which is conveyed by a writer through words could be seen and known by reader” (Tarigan . 2008, p. 7 as cited in Amam Musfiroh . 2014).
- According to Aebersold and Field (1997), reading is “a powerful activity that confers knowledge, insight, and perspective on readers” (p. 6 as cited in El Kouti, 2017).
- Guthrie, Benneth & McGough (2007) believe that “reading” is the act of getting meaning from printed or written words, which is the basis for learning and one of the most important skills in everyday life.

A. Print reading: it is a traditional reading method that enables readers to get the information related to their subject area by using printed materials (books, handouts, etc.).

B. Electronic reading: electronic reading skills defined as “the act of reading texts electronically and digitally via the screens of electronic tools such as computers , tablets and smartphones” (Güneş , 2010 ; Güneş , 2015 as cited in Ömar Faruk tavşanlı, p.571, 2015).

C. Print materials: it means any publications, document, or record including, but not limited to, the following: newspapers, magazines, books, photographs, drawing, prerecorded magnetic audio tape (Yap, 2014).

D. Digital materials: are those materials that can be accessed by computer. Some of them are ‘born-digital’, or originated in a digital form (for example, pictures taken with a digital camera, web pages, twitter feeds, etc.); others were converted into digital files. (Digital materials and where to find them, 2021)

Chapter One: Print Reading

Introduction**IN THE NAME OF ALLAH, THE BENEFICENT, THE MERCIFUL**

Read In the name of your Lord Who created- (surat al alaq, p. 96)

A Messenger from Allah, reading purified pages containing correct scriptures- (p. 98)

The importance of reading in Islam attains a high position, so the first word that Gabriel, peace be upon him, used in his conversation with the Prophet, may God's prayers and peace be upon him, was the word "read," when the Almighty said: (Read in the name of your Lord who created) [Al-Alaq: 1]. It indicates the great position occupied by reading in the Islamic religion.

There are many situations mentioned in the biography of the Prophet (PBUH) that show the importance of reading. In these situations, there are the sacrifices of prisoners in the Battle of Badr. The Prophet once asked the polytheists who wanted to freedom to ten Muslims to read and write. The Muslims in Badr needed money and needed to keep captives to force rogues to communicate with Muslim prisoners, but the Prophet found that teaching Muslims is more important than other things.

Therefore, the Islamic State was established and became prosperous and strong because of the Companions who learnt to read and write. As an excellent example, Zaid Ben Thabit may God be pleased with him, who was introduced to others, and was almost always accompanying the Prophet was the writer of revelation and of letters even though he was not more than thirteen years old.

1.1. History of Papers

Paper was invented in China centuries before Christ, and the first production of paper was associated with the name of the Chinese dignitary Cai Lun and refers to the year 105 AD (Lityuga, 2014). It was used as a writing material around the beginning of the first thousand AD. In the Thousand eras, due to the unity of Islam—unifying the vast areas of West Asia and North Africa in one cultural field—papermaking technology was brought from the deserts of Central Asia to the Atlantic coasts of Morocco and Spain. From Spain and Italy (and also from the Arab world), they spread to other parts of Western Europe. This was due to the development of movable type printing by Gutenberg in the mid-15th century. Relatively cheap writing materials made printing mass-produced books more common and easier to use than manuscripts copied onto parchment.

The Arab world discovered the secrets of papermaking in 751 AD. At that time, the Governor of the Khalifa Region of Baghdad captured two Chinese papermakers in Samarkand and established a paper mill in Uzbekistan with their help. From then, with the help of a large amount of hemp and linen, two high-quality raw materials that were very suitable for papermaking were produced and spread to other Asian cities, especially Baghdad and Damascus.

The papermaking process used by the Arabs involved soaking and macerating garnet in water to obtain a uniform pulp, which is then sieved to separate the macerated fibres from the water. The obtained sheet was then pressed, dried, and finally covered with a layer of rice flour to make it easier to absorb ink. During the same period, people in Egypt and North Africa also began to use the same technology used in the Arab world for making paper.

1.2. Printing Revolution

Because we are at the threshold of a new electronic revolution that redefines all aspects of our lives, it is worth reviewing and understanding how another revolution, the ‘Printing Revolution’, brought lasting and profound changes in Western and Eastern societies. This change may have a similar life-changing effect on people who have lived for hundreds of years shortly after the invention of the printing press. These changes led to a leap in scientific progress. Carter (1955) recognized the revolutionary influence of paper and printing, which ‘paved the way for religious reform and made popular education possible’ from the perspective of Eurocentrism. On the other hand, Frank (1998) viewed the importance of printing for the dissemination of knowledge from an oriental perspective:

It is significant that woodblock printing was invented and used in China up to half a millennium earlier than elsewhere. Colour printing began in China in 1340, and five-colour printing was in use

there in the 1580s and was widespread (certainly far more than in the West) in both China and Japan in the seventeenth and eighteenth centuries. The movable metal type came from Korea and was soon introduced elsewhere, though not into the Islamic world for a long time. In China. .. Economically and socially speaking, printing, publishing, and literacy expanded enormously and surely had much more widespread effects than in Europe –including even the counterfeiting of paper money until the Ming withdrew it from circulation (Frank, 1998).

By the end of the second century, printing was most likely to be widely known in China because the Chinese had mastered the three elements necessary for printing: paper, the manufacturing technology they had known for decades, and printing technology. They have known the basic formula of ink for 25 centuries and characters with embossed characters on the surface. Laufer (1973) said that the turning point in the history of printing was the invention of paper. Block printing, for example, because of the use of seals (the earliest mention was i255 BC, and subsequently related to Emperor Shi who built the Great Wall in the Qin Dynasty), it began to be commonly used in the Han Dynasty.

Temple,(p. 6, 1986) pointed out that the Chinese "got the idea of seals from the Middle East, where Babylonians and Sumerians are flooded with seals"). After the fall of the Western Roman Empire, seals were no longer used in Western culture, but they were restored in the second half of the eighth century, and the copper castings are the pioneers of portable and have been used in China 600 years before the Christian era. The Chinese also envisioned the use of stone rubbing as a method of mass production of religious writings. Seven Confucian classics with more than 200,000 characters were engraved on about 46 stone tablets between 175 and 183, and these engravings were subsequently rubbed with ink. In the West, stone carvings are also very common, but in the West, stone carvings are used more as artistic materials than for writing (Tsien, 1985).

1.3. The Importance of Print Reading

According to learning-education (2021), when you think about learning, typically you envision students at their desks putting pencil to paper, or listening to a teacher in the front of the classroom. However, today there are a variety of tools that support learning and literacy. New classroom learning methods and tools, including digital technology, are being adopted around the world at an increasingly rapid pace. Interestingly, current research reports that there are learning and retention limitations to engaging digital technology in the classroom and as a studying tool when compared to pencil and paper. Two Sides have compiled some eye-opening facts about learning and literacy that demonstrates why print, paper and pencil remain highly effective learning tools. From handwriting to reading, to comprehension and retention—print, paper, and

handwriting deliver proven benefits and continue to play an essential role in education and development.

1.4 The benefits of print reading

According to Stanborough (2019), reading books offers various benefits as following:

• Reading can strengthen your brain

Many studies have shown that reading will indeed change your mind. Researchers used MRI scans to confirm that trusted sources stated that reading involves complex circuits and signal networks in the brain. As your reading ability matures, these networks will become stronger and more complete.

In one study conducted in 2013, researchers used functional MRI scans to measure the effect of reading novels on the brain. Research participants read the novel "Pompeii" in 9 days. As the tension in the story increases, more and more brain activities become active.

Brain scans showed that brain connectivity increased throughout the reading process and in the following days, especially in the somatosensory cortex, which is the part of the brain that responds to physical sensations such as movement and pain.

• It increases Empathy

Speaking of the pain that is felt, research indicates that people who read literary novels (stories that explore the inner life of characters) show an enhanced ability to understand the emotions and beliefs of others.

• It builds your vocabulary

Reading researchers as far back as the 1960s have discussed what is known as “the Matthew effect”, a term that refers to biblical verse Matthew 13:12: “Whoever has will be given more, and they will have abundance. Whoever does not have, even what they have will be taken from them.”

The Matthew effect sums up the idea that the rich get richer and the poor get poorer a concept that applies as much to vocabulary as it does to money. Researchers have found a Trusted Source that student who read books regularly, beginning at a young age, gradually develop large vocabularies and vocabulary size can influence many areas of one’s life, from scores on standardized tests to college admissions and job opportunities.

• It prepares you for a good night's rest

Doctors at the Mayo Clinic suggest reading as part of a regular sleep routine. For best results, one may want to choose a print book rather than reading on a screen, since the light emitted by the device could keep the reader awake and lead to other unwanted.

• It helps prevent age-related cognitive decline

The National Institute on Aging recommends reading books and magazines as a way of keeping your mind engaged as you grow older. Although research has not proven that reading books prevents diseases like Alzheimer's, studies shows that seniors who read and solve math problems every day maintain and improve their cognitive functioning.

In a 2013 study conducted by Rush University Medical Center found that people who have engaged in mentally stimulating activities all their lives were less likely to develop the plaques, lesions, and tau-protein tangles found in the brains of people with dementia.

• It reduces stress

In 2009, a group of researchers measured the effects of yoga, humor, and reading on the stress levels of students in demanding health science programs in the United States. The study found that 30 minutes of reading lowered blood pressure, heart rate, and feelings of psychological distress just as effectively as yoga and humor did.

1.5. Kinds of Print Reading

According to Mariam (1991), reading is the main way of learning. Understanding is therefore a major concern of all teachers who use printed material in the classroom. Reading is the act of observing and understanding several words in a sentence that make them meaningful. It is also a psychological process. In addition, it refers to a situation where someone views a written text and begins to absorb the information contained in the written language. In Longman Dictionary of Language Teaching and Applied Linguistic, reading is said to be as:

1. " Perceiving a written text in order to understand its contents ". This can be done silently (silent reading). The understanding that results called reading comprehension.
2. Saying a written text aloud (oral reading). This can be done with or without an understanding of the content."

Several kinds of reading may occur in a language classroom:

1.5.1. Silent Reading

Silent reading is a reading skill that allows one to read without voicing the words. This may involve subvocalization or silent speech. It is defined as the internal speech made when reading a word, thus allowing the reader to imagine the sound of the word as it is read.

This is a natural process when reading and helps to reduce cognitive load, and it helps the mind to access meanings to enable it to comprehend and remember what is read. Although some people associate sub-vocalization with moving one's lips, the actual term refers primarily to the movement of muscles associated with speaking, not the literal moving of lips. Most sub -vocalization is undetectable (without the aid of machines) even by the person doing the sub -vocalizing.

1.5.2. Aloud Reading

According to Fox (2001), reading with your child should start from birth. When children are born, their brains are not fully developed and will continue to develop during the first year of their lives. Reading to babies helps to create mental pathways and lays the foundation for language development.

A study by Keller and Just (2009) found that when children listen to someone reading and they try to store spoken words in their memory, the activity of the language output centre in the brain increases. This is a key step in understanding language because children's understanding of the sound system of language enables them to convert from spoken language to written language, understand the various components of language, and gradually understand that letters make sounds (Robertson, 2011). Therefore, reading aloud has been proven to develop a variety of language skills, which are essential for the success of reading teaching in the future (Russ et al., 2007). As well as what is said in Reading Rocket" (Reading), "Reading aloud is one of the most important things parents and teachers treat their children. Reading aloud can develop many important basic skills, introduce vocabulary, provide a fluent, expressive reading model, and Help children understand what is hedonic reading?". Usually during reading aloud, the teacher puts the book aside and the students listen to the teacher reading. According to Wright (2015), "reading aloud refers to a lesson that a teacher, parent or other proficient reader reads to one or more students from a book or other textbook" (p. 197). Reading aloud is very effective for helping English learners learn to read. In addition, reading aloud can help teachers help students understand the book being read to them, which is very important for ELL students (Reading Rockets, n.d.). Reading aloud is important for ELL students because not all students have parents who can read aloud in English at home. In addition, some parents may not have the money to buy books at home

or use public libraries. In the process of reading aloud, the teacher will model fluent, accurate, and expressive reading. When teachers read aloud, they are demonstrating the connection between spoken and written language (Wright, *ibid*). After reading aloud, it is important to check students' understanding by asking comprehension questions before proceeding to the next course.

1.5.3.1. Intensive Reading

Intensive reading means concentrating on reading. According to Palmer (1921/1964), p. 111 as cited in Day & Bamford, 1998, p. 5), intensive reading is to “take a text, study it line by line, referring at every moment to our dictionary and our grammar, comparing, analysing, translating, and retaining every expression that it contains”. In fact, intensive reading is not about reading a book a day, nor is it about reading 10 articles a day. Even if you are reading single-line quotes, you should try to understand what these words are meant to convey.

Intensive reading is one of the most critical skills you can master, allowing them to understand information better. For example, when you need to read a work report. You must have a deeper understanding of what is written, evaluate the purpose and evaluate the results to make it meaningful. Intensive reading helps you deal with complex text. You will be able to enhance reading skills, vocabulary, and linguistic skills

1.5.3.2. How to Read Intensively

A-Taking notes

When reading, readers try to write down notes and ideas in the margins. Maybe they have a text-related question or an idea they want to express. It is convenient to take notes when rereading a text and it is especially useful when reading longer reports. They can add notes with questions, thoughts, and opinions so that they can share them with the author. Not only can they keep track, but they can also give you some key points while reading.

B-Break down the reading process

A convenient technique for intensive reading is to divide it into three steps-pre-reading, reading, and post-reading. The first step is to prepare: use your existing knowledge to understand the purpose of the text. The second is the actual reading process and taking notes. The last step is to finish reading. Here, they can summarise all the information, ask questions and organise ideas.

C-Apply what you have learnt

It is not enough to keep the information to yourself and forget it the next day. If you find a way to use this information, you can keep it longer. For example, if you are reading a report on

achieving sales goals, you can take notes to share with the team in the future. These may include points to pay attention to, advertising strategies, and other ideas that pop up as you read.

1.5.4. Extensive Reading

According to Day and Bamford (1998), extensive Reading is an approach to second language reading. When learners read widely, they will read very relaxed and interesting books to improve reading speed and fluency. Students learn to read by actually reading, rather than checking text by learning vocabulary, grammar, and phrases.

In extensive reading, students silently read large quantities of materials. These materials are usually at a level that permits students to gain at least a fair understanding of what they are reading without outside help (Jacobs & Gallo, 2002). These large quantities of reading materials provide large amounts of comprehensible input in students' new language in order to make progress toward the overall command of that language (Krashen, 1982). This does not only benefit reading proficiency but overall language proficiency as well. Other characteristics that are generally thought to be among the most important ones for making extensive reading successful include: 1) Students choose what they want to read; 2) Students take part in post-reading activities; 3) Teachers read with their students, thus serving as role models of good readers; 4) Teachers and students keep track of student progress, and 5) Teachers provide help and guidance where needed (Campbell, 1989; Davies, 1995; Bamford & Day, 1997). All these characteristics were taken into account in the reading course where this research was conducted, and focused mainly on teachers and students keeping track of students' progress, specifically using the reading journal.

1.5.4.1. Skimming

Skimming is a way to move your eyes quickly above the text, the purpose of which is to get only a general overview of the main ideas and content (Grabe, 2009 as cited in El Kouti, 2017a). Sometimes, it is called a gist reading. By skimming, readers can find the most basic textual content. Usually, they can use magazines or newspapers to accomplish this. This will help them mentally quickly organise a shortlist of articles for further reading.

Example of Skimming

Newspaper

Skimming is used in reading the day's magazine to rapidly obtain broad information, quickly locate articles, business, and travel brochures that you would like to read in further depth. It also assesses the situation as soon as possible.

1.5.4.2. Scanning

Scanning is another useful way to speed up reading. Unlike skimming, when scanning, you only look for specific facts or information without reading everything (Grabe, *ibid* as cited in El Kouti, 2017a). You scan when you look for your favourite shows listed in the cable guide, phone numbers of friends in the phone book, and sports scores in newspapers... In order for the scan to be successful, readers need to understand the structure of the material and the understanding of the reading in order to find the specific information you need. Scanning also allows them to quickly find detailed and other information.

1.6. Print Materials

Print materials do not include non-print materials that provide intended course information. Print resources include textbooks, workbooks, reference books, newspapers, journals, and magazines, among other (Ramoshannahansharina, 2015).

Examples of Print Materials:

Ramoshannahansharina (*ibid*) set some examples of print materials as follows:

• **Books:** A book could be a set of written, printed, illustrated, or blank sheets, made from ink, paper, parchment, or alternative materials, mounted along to hinge at one facet. It is a medium for recording data within the style of writing or pictures, usually composed of the many pages (made of papyrus, parchment, vellum, or paper) bound together and protected by a cover (IEILS, p. 41). The technical term for this physical arrangement is codex (plural, codices).

Within the history of hand-held physical supports for extended written compositions or records, the codex replaces its forerunner, the scroll. One sheet in a very codex could be a leaf and every facet of a leaf could be a page.

As an intellectual object, the length of the prototype of a book is so long that it takes a lot of time to write and is still considered as an investment in reading time. A book is a self-sufficient part or part of a longer work. This usage reflects the fact that in ancient times a long work must be written in several scrolls, and each scroll must be identified by the book it contains. Each part of Aristotelian physics is called a book. In an unrestricted sense, a book is a whole of these parts, regardless of whether these parts are books or chapters or parts.

• **Magazines :** are printed or electronic periodicals. Online magazines are the names given to the versions that are available online.

• **Newspaper:** A newspaper is a periodical that includes news, other instructive content, and, in most cases, advertisements. A newspaper is typically produced using newsprint, which is a low-cost, low-grade paper.

• **Photographs:** A photograph, often known as a photograph, is an image generated by light falling on a light-sensitive surface, such as photographic film or an electronic media such as a CCD or CMOS chip. The majority of images are taken with a camera, which employs a lens to focus the scene's visible light wavelengths into a replica of what the human eye would perceive.

1.6.1. Advantages of Print Materials

One the main the important advantages of print materials are set by Ramoshannahsharina (2015) as follows:

A. It is incredibly portable: Print materials can be used anywhere.

B. High level of comfort: When it comes to learning, most pupils are highly comfortable with printed materials.

C. Effective in terms of value: Print materials may be easily manufactured and duplicated at a low cost.

D. Easily accessible: Many remote learning courses can use existing textbooks instead of producing unique content, saving time and money.

1.6.2. Disadvantages of Print Materials

The main disadvantages of print materials are set by Ramoshannahsharina (ibid) follows:

A. No built-in interactions: Print materials rarely provide built-in interactions. Additional technologies, such as e-mails, should be added.

B. There are no audio or visual elements: Print materials are static, making them unsuitable for teaching languages or visual concepts.

C. Require reading skills: Print resources will not be successful if the learners are not readers.

D. Time lag: It could take days or weeks for printed materials to reach the student and teacher.

1.7.1. The Importance and Definition of Reading Comprehension

The primary goal of reading is comprehension (El Kouti, 2017a). Sun et al. (2013) pointed out in their research that since the 1980s, the differences in reading comprehension between printed media and computer screens have been explored and that these previous research results are inconsistent because reading on a computer screen requires certain technical skills and two levels of information processing, such as speech decoding and word recognition, and the process of Sun

comprehension to create coherent representations (Grasser, Singer, and Trabasso, 1994; Just & Carpenter, 1987, cited in Sun et al, 2013).

Research also shows that reading comprehension requires a higher level of cognitive and language skills than just reading the words on the page (Sun et al., *ibid*).

Reading comprehension also means that people have the ability to search and understand the information presented in the text and the ability to establish connections between parts of the text to understand the intended meaning, also known as inferential text understanding (Cornoldi & Oakhill, 1996, Sun et al., *ibid*). This is also a dynamic and multifaceted process Readers, texts, and activities or readings interact with each other and bring one's cognitive ability, knowledge, experience, and motivation into the process, including one's self-concept as a reader (Smagorinsky, 2009; Snow, 2002; & Ford, 1992; Guthrie & Klauda, 2014; Pintrich, 1999; Snow, 2002; Wigfield & Guthrie, 1997; Winne, 1985, cited in Walsh, 2015). This process combines the meaning of the text with a person's prior knowledge.

To further understand how to play a role in reading ability, Tulving (1985) developed an understanding theory called the "remember-know" learning paradigm. This theory explains that there are two ways the brain recognizes information: memory (temporal memory) and knowledge (semantic memory), which requires the brain to recollect information related to its information. In this case, some researchers believe that "comprehension" can also be considered as a good result of learning, and it is also a goal that higher education must strive to achieve (El Kouti, 2017; Garrison & Cleveland-Innes, 2005; Mangen et al., 2013).

For Walsh (2016), reading comprehension is also considered as a multi-dimensional structure in which researchers have to challenge to fully develop measures with good internal consistency (Clinton, 2014; Kamalski, 2004, Clinton, 2019). It involves (1) the performance of reading comprehension assessment, (2) the process of inquiry, (3) the metacognitive process, and (4) the characteristics of the reader and the text, such as genre and age (Clinton, *ibid*).

1.7.2. Reading Comprehension Through Print

Since print reading has become one of the main reading media over the course of overtime, there have been several findings regarding reading comprehension in print media to date. In the study by Sun et al. (2013), it has been concluded that there are important gender differences and effects of education on print reading comprehension, particularly among middle-aged students aged 45-49 who achieved superior reading comprehension regardless of reading medium compared to ages 50-54. It was also found that the level of understanding of printed text among middle-aged students is clear compared to reading the screen. They further explained that linear

texts or traditional printed material may still play a huge role among such students in terms of their reading activity although they also suggest that if proper use of hypertext documents can provide reading literacy, middle-aged learners may also be able to take advantage of it.

Another study conducted by Tunder and Bahadir (2014, cited in Walsh, 2016) showed that students who read from the screen performed poorly compared to students who read from paper. However, another study conducted by Daniel and Woody (2013, cited in Walsh, *ibid*) claimed that electronic and paper media had almost no difference in the understanding. They also pointed out that those who read the given information from e-books spent more time than those who did not read the book. Walsh (*ibid*), through her findings, believes that during the writing period, most recent studies have shown that there is almost no difference in comprehension when reading from print or digital media, and pointed out that students have also gradually become accustomed to everyday Read and edit electronic documents. However, she added that students still like to read a lot of printed academic materials (Rose, 2011, cited in Walsh, 2016).

Alisaari, J., Turunen, T., Kajamies, A., Korpela, M., & Hurme, T. R., (2018) drew their conclusions from a study involving 12-year-old participants. They found that regardless of the reading media, students with better reading ability have better decoding skills and a higher self-concept. They were able to match their research with previous results, showing that the decoding effect is good.

Reader skills and self-concept are closely related to better reading comprehension (Cain, 2009; Torppa et al., 2016, Alisaari et al., 2018 cited). Despite the above findings, boys and girls also have significant differences in reading comprehension (OECD 2010; Vettenranta et al., 2016, Alisaari et al., 2018 cited).

In a meta-analysis conducted by Clinton (2019), it was found that reading through the screen compared with the paper performs better in the evaluation. This conclusion also supports the following findings: Compared with paper, readers have difficulty concentrating when reading from the screen, and reading on the screen can also cause distraction (Mizrachi, 2015; Muir & Hawes, 2013, cited in Clinton, 2019). Such results show that people have less understanding of the text on the screen than the text on the paper (Delgado, P. & Salmeron, L., 2020). Delgado and Salmeron (2020) also added that, given the impact of screen reading and learning and how learners can fully participate in the text through text, similar findings should not be considered as the main ones if it becomes obvious information sources, This will hinder learners' work attention or monitoring of their metacognitive comprehension abilities.

Their research involves reading comprehension, which includes covariates related to participant characteristics, such as working memory, prior knowledge, subject interest, and moderate performance and use. They include perceived textual difficulties and contexts to further improve the scope of their research. They also found that compared with reading in free time, paper readers reduced thought wandering when reading under time pressure.

1.8.1. Printed Text

The printed text began in the 1st century AD when literary works were written in papyrus sheets sewn or glued together and placed in the form of a roll (Clemente, 1997). It evolved when monks in medieval monasteries transcribed texts on paper. Its evolution is due to the invention of the printing machine by Guttenberg in the mid-15th century. Capable of producing 3,600 pages per day, over several decades Guttenberg's printing machine made reading materials easily accessible and increased literacy across Europe. A new development of printed text was the use of "cold typescript" in the 1960s and now texts are reproduced on a page of paper via high resolution.

A printed text is a tangible thing that has a beginning and an end. It is also hierarchical, intended for private reading, and provides a very linear and static reading experience for the reader. Different from web text, in which text navigation can be fluent and driven by the reader, the printed text is "modeled by the author and readers have no choice but to follow the plot or the exhibition structure envisaged by the author" (Coiro, 2003, p. 4). Although readers can control their experience when reading printed text in terms of reordering what they read when flipping through the pages, it is "designed to be read in a linear way "and " its characteristics are not malleable " (Coiro, 2003, p. 4).

In a practical sense, there are two ways to read printed texts: linear or deep. Linear reading implies concentration and emotional commitment. Readers do this starting from the top left corner of the page, descend vertically downward, and end at the lower right corner. During reading, they interpret and interact with the text to understand the author's interpretation posts. The text presents the information in sections as well. To avoid missing parts of information, readers should follow the logical relationship of sections of the text while moving from paragraph to paragraph and page to page. Since the text is linear and static, readers may decide to pause to pay more attention to specific parts or re-read certain parts to keep focus. This helps them capture the ideas of the author. The scanning is carried out to read some printed texts (for example, dictionaries and encyclopedias) that are designed to allow readers to jump from one page to another to locate specific information.

1.8.2. Comprehending Print Texts

Since the Nineteen Eighties, an in-depth analysis has been conducted scrutiny reading comprehension from written text. Reading comprehension requires a higher level of cognitive and language skills than basic word reading. Even if there is no basic level of word reading skills, the comprehension task cannot be successfully completed.

Cornoldi and Oakhill (1996) pointed out that the most important elements of reading comprehension are the ability to search and understand the information available in the text (text comprehension), and the ability to establish connections between different parts of the text in order to fully understand the intended meaning (inferential textual understanding) (Grabe, 2009 as cited in El Kouti, 2017).

In the context of the obvious dichotomy between printed text and electronic text, a large number of research reviews have shown that compared with text-based text, printed text contributes more to increased comprehension and recall. For example, (Singer, L. M. & Alexander, P. A., 2016) found that although students can recall the main idea regardless of the type of text, they are better able to recall key points related to the main idea and other related concepts when reading printed materials.

Another study (Jeong, 2012) showed that higher test scores indicate that printed-based texts have better comprehension, while students report higher eye fatigue and fatigue when reading electronic texts. In terms of metacognitive learning rules (ie higher-order thinking), learning based on electronic text is less effective than learning based on printed text (Ackerman, R. & Lauterman, T, 2012) ; Lauterman and Ackerman, 2014).

A Research on learners' comprehension concluded that the electronic texts are poor to print due to the negative effects related to screening navigation, display, and scrolling (Mangen, A., Walgermo, B. R. & Brønnick, K, 2013) students reading print-based texts performed considerably higher on a reading comprehension task than those reading e-texts. whereas this distinction might so ensue to the modes of navigation at intervals the document, with scrolling employed in digital mode, the problem could, after all, be a lot of complexes: if the text navigation is straightforward and, therefore, less onerous cognitively – as is arguably the case with print-based texts – the reader might have the more free capacity for comprehension.

1.9. Print vs. Web Texts

Academic reading is important (Saville-Troike, 2006 as cited in El Kouti, 2017a), yet it is sometimes a difficult skill to learn. At the university, students need to get information through a lot of readings, either from WebPages, or printed books in preparation for an assignment.

According to Murray (p. 34, 2003), “most of the differences between reading print and computer-based interfaces are caused by specific characteristics of the media itself”. Jennifer Thurston’s article in Outlook (2004) provides an excellent summary. You cannot distinguish between printed text and web text based on format alone. Structurally, although there may be some significant differences between them, they can be roughly classified according to the layout and organisation of printed and online texts. Despite the fact that the differences between them are not discussed, it is important to realise that many different kinds of text appear on the Web. Various researchers usually group or classify these different types of texts in a variety of ways according to their structure or function. The term "Internet type" is used to describe "electronic text implemented on the Internet-first appeared in electronic form, never as a stand-alone text" (Bauman 1999, p. 273). Bauman (ibid) believes that Internet text "exists in multiple ubiquitous copies" and can be produced collaboratively without time pressure to restrict the production of printed text (p. 273). Although this feature provides a useful definition that can be used to clarify certain features that distinguish Internet text from printed text, it focuses more on text generation techniques rather than language and other symbolic and structural features of the text. For teachers and learners, the language function of these texts is more important, and the distinction made by Lipscomb (2002) may be more useful. Lipscomb (ibid) identified two different types of text: the Web-regular text and Internet-specific text. She claims that conventional texts, or those that are essentially printed texts in electronic format, are relatively easy to read for students, while Internet-specific texts that do not correspond to the printed types or genres of text are more difficult to read without prior experience of this type texts.

1.10. Media Reading Preference (Electronic vs. Print)

Screen reading studies have been cited in Dillon's 1992 paper which reviewed a series of documents to see whether or not one media is better than another one in reading. Since 1992, with the event of electronic documents and technology, specific problems have evolved significantly. As an example, electron beam tubes and flashing screens are not any longer relevant. However, Dillon (1992) discovered some issues in reading analysis twenty years ago and that are still helpful these days. These embrace the sound judgment of reading, the distinctive surroundings of every analysis, the various results measured within the reading analysis, and therefore the focus of the

analysis is on the speed and accuracy of short texts instead of qualitative understanding of multi-page complicated data. These factors facilitate making a case for a number of the ostensibly contradictory results of reading analysis. Noyes and Garland's (2003) is one of the foremost comprehensive studies of screen and paper reading in an educational context. In their analysis, fifty students from the University of Bristol were asked to review economic science materials while they had no idea about them. Though the study revealed variations in minimum speed and recall rates between screens and paper, they did realise that data transfer from long-term memory was more practical on paper. Supported their succeeding 2004 analysis, Noyes and Garland (2003) concluded that reading from paper will result in higher data retention and data.

Stoop and colleagues (2013a) worked on two papers focusing on students' use of written and electronic documents. The initial analysis compared students' use of the written and electronic versions of textbooks. The UN agency students who used e-readers and e-textbooks on laptops, complained about the inflexible nature of the text for annotation (*ibid*). Through this analysis, it appeared that students prefer paper to electronic documents. Within the second study, a study on the utilisation of interactive learning maps as instructional resources was conducted. Numerous web contents are accustomed to illustrate totally different data, rather than scrolling on an extended text screen. The scholars within the study are obsessed with the potential of electronic documents to reinforce reading expertise. However, despite their enthusiasm, the researchers additionally found that students have a higher understanding of complicated paper data rather than electronic documents (*ibid*). In short, the researchers pointed out that for long and complicated texts, the paper still obtains higher learning and data retrieval results. However, electronic files do have the potential to draw in students after they are designed for media. Rockinson-Szapkiw et al. (2013) additionally found that UN agency students who use electronic core textbooks are highly active in learning than UN agency students who use written textbooks; however, there is no distinction in their final grades.

Another study conducted within the same year found that when participants having a particular level of technical skills, there was nearly no distinction in understanding between UN agency learners who scanned on screen or on paper (Sun et al., 2013). They found that the flexibility of machine-readable text to integrate data into electronic documents encompasses a positive impact on the psychological feature process of old learners, thereby promoting a deeper understanding of the content. This study additionally shows that the age of the reader instead of the age of the media could have an effect on an individual's memory ability. In their analysis, no matter the document format, the understanding of the 45-49 cohort is better than that of the 50-54 cohort.

In 2014, participants in a study performed equally well in reading in both media. In this study, participants' information retrieval was tested from general news articles published in *The Guardian* and *The Economist*. The text of each story is concise and clear, and the paper version of the navigation prompt is copied on the screen. Although the results showed a small difference between screen comprehension and printed reading, participants still expressed a preference for the printed version. The study also found that the highly sensory nature of online documents and their annotation, navigation, and formatting defects may promote skimmed reading (Young, 2014).

Another study published in the same year found that after participants acquired a certain level of technical skills, there was almost no difference in understanding between learners who read on screen or on paper (Sun et al., 2013). They further found that the ability of hypertext to integrate information into electronic documents has a positive impact on the cognitive processing of middle-aged learners, thereby promoting a deeper understanding of the content. This study also shows that the age of the reader rather than the age of the media may affect a person's memory ability. In their research, regardless of the document format, the understanding of the 45-49 age group is better than that of the 50-54 age group.

In their study of a small group of people between 18 and 25 years old, Qayyum and Williamson (2014) found that for news, online media is considered faster, updated, and accessible than printed newspapers. The cohort researcher may be familiar with what was read on the screen before the study. Interestingly, among the participants, the printed newspaper was a source of authoritative news and was considered a less distracting way to read news in leisure time.

Tuncer and Bahadir's (2014) study of 78 kinds of students reading on each medium found that students who read from the screen did not perform as well as those who read from paper. Performance is measured by knowledge scores before and after the test. In this study, the course was an "Introduction to Computer" course of a vocational college. It is not clear how the participants read from the screen before the study.

In order to realise that more and more colleges and universities organise students to perform screen reading when preparing for exams and writing assignments, Eden and Alkalai (2013) also studied the active reading behaviour of electronic and paper documents. They identified active reading as reading while editing documents, and studied this behaviour in print and electronic media. In their research, 93 students read, edited, and improved short electronic and printed documents. The evaluators found that the student's performance on both media was quite good. Although the students who read from the screen were faster, their performance was not lower than that of their colleagues who actively read the paper. This shows that as students become

accustomed to reading from the screen, they can effectively perform an active reading on both media.

Daniel and Woody (2013) also found that there is little difference in the understanding of electronic documents and paper documents. In a study of nearly 300 students reading text chapters in printed and electronic formats at home and in the laboratory, they found that the results of comprehension were not much different, but they did notice that those who read electronic textbooks took longer, and found distinctive parts were more useful. The study also found that students reported high multitasking skills when using electronic text at home. Daniel and Woody (2013) pointed out that printing can increase concentration without distracting advertisements and communication pop-up windows. They suggested that further research is needed to make electronic documents more interactive.

All in all, variables such as the participants' current technical expertise, their age, background knowledge of the test subject, and the test document length make it difficult to compare the understanding results of various studies. However, from recent studies, most studies have found that there is almost no difference between printed matter and screen for reading comprehension (Daniel & Woody, 2013; Grzeschik, Kruppa, Marti and Donner, 2011; Sun et al., 2013; Young, 2014). Nonetheless, many studies have not focused on reading complex academic literature. Noyes and Garland (2003) and Stoop et al. (2013a) concluded that participants would understand the content better when reading from paper. Although some research participants (Daniel and Woody, 2013; Qayyum and Williamson, 2014) noticed the dispersion of advertisements and pop-up windows in electronic materials, other researchers found that the interactive features of electronic documents have a positive effect on attracting student's potential. (Stoop et al., 2013b; Rockinson-Szapkiw et al., 2013). These results indicate that each medium may play a role in education, especially as students become more and more accustomed to reading and editing electronic documents.

1.11. The Impacts of Digital Technology on Traditional Reading

The Internet has changed the world in incredible ways. It has changed how people communicate, how business is done, and how information is shared and received. The Internet also has a great influence on how people read, and the materials they use while reading. As Reading from printed pages is the traditional mode of reading, we see that the rapid development of computers, information, and technology has contributed to the increased volume of material that people can read from computer screens.

The increase in printing mechanisation has contributed to the shift from intensive reading to extensive reading. Around 1750, the way people read documents changed drastically. Before that, people used to read intensively. They only had a few books to read, and read them over and over again. However, by the early 1800s, people started to read widely. They read all kinds of materials, especially periodicals and newspapers, and browsed them over and over again (Darnton & Wilson Quarterly, 1989). With the advent of computers and the Internet, the past few decades witnessed another great change in the way people read: in today's information-intensive environment, browsing or scanning has become a major way of reading. According to Birkerts (1996), the problem is not in access but in diffusion and that the reading behaviour must be different from the original era. Readers are afraid of the availability of text while the impossibility of distinguishing text, which makes them tend to move on all surfaces, browse, and accelerate from one site to another without allowing these words to resonate inward. Bolter (1991) pointed out that the shift from print to the computer screen does not mean the end of literacy in itself, but the literacy of print reading, for electronic technology provides us with new books and new ways of writing and reading. The media has brought changes in the way of reading. They also introduce many powerful benefits that traditionally do not exist in the print tradition, such as interactivity, non-persistence, instant access to information, and the fusion of text and images audio and videos.

Lanham (1995) compared the difference between printing literacy and digital literacy. He stated that:

In the printing world, this idea and its expression are actually one. The meaning is the form of the word; the word produces meaning. Digital literacy works in an inherently different way. If the parameters of the expression are adjusted, it means the word The same digital code as a number can generate sounds and images. This parameter change is the center of the digital expression ability, which is a role it can never play in printing" (p. 198).

Although new media brought unprecedented freedom to readers, they also gave rise to a new form of restraint (Hillesund, 2012).

In the print surroundings, the textual content is constant and the writer determines the order wherein ideas are organised. However, in hypertext (HTTP), the writer provides alternatives, but readers choose the order by activating links (Ross, 2003). The spread of hyperlinks has a significant impact on people's reading habits, particularly nonlinear reading (jumping from page to page and site to site) in order to obtain fresh information. Even if readers start reading on the same page, what they read will alter depending on which link is selected. Because every page on the Web competes for the user's attention with many other pages, hyper-reading may reduce

sustained interest in any textual material and result in more fragmented reading. In hypertext linking, the writer's assessment of the significance of the link may differ from the reader's. Imposed links may be illogically related to the original issue, causing readers to become confused by referring them to a URL for no apparent reason (Miall & Dobson, 2001).

A number of scholars believe that the emergence of digital media with the fragmented nature of hypertext is threatening continuous reading. According to Birkerts (1994) and Stoll (1995), there is a trend in the digital environment that can encourage widespread discovery of a variety of topics, but only on a surface level. Hyperlinks can divert attention away from in-depth study and contemplation on a single topic. Readers who read hypertext or linear formats of the same material are stimulated to literate, according to research. Furthermore, hypertext is not favorable to describing the absorption and reflection mode of literacy (Miall & Dobson, 2001).

Conclusion

In sum, in this chapter, we shed light on the main type of reading which is "print reading". We exhibited some of the studies that dealt with the shift from reading print media to reading digital media, by focusing the importance and the degree of comprehension of reading from paper between the past and today.

Chapter Two: Electronic Reading

Introduction

Technology has changed our perception of reading and how we deal with it. By the extent of technology in the publishing world has offered a new means of reading that reshape the reader's relationships with the book.

Since the invention of the printer in Gutenberg in 1447, printed books has been considered the core of any civilisation that saves its history. Nonetheless, with the development of technology, we no longer consider printed books as the only source that saves the culture; a new type began to show up, the e-books, which offer readers ease of access and the reduce of time, money, and space. Electronic reading devices began to appear on a large scale in 2010. The e-reader market has flourished since 2017, which attracted people's attention by the clarity of screens that rely on e-ink technology, and providing a reading experience similar to reading printed books. Also, many giant companies such as Amazon, Apple, and Google provide and increase a high number of a variety of books by attracting many publishers. They also develop reading applications so that readers can easily read from any device (Moustafa, 2018).

2.1. A brief history of E-reading

E-reading is a new option of reading that has been made available to readers thanks to technological advancements. E-reading entails reading on-screen devices such as a computer, smartphones, or other similar devices. As a result, the appearance of those devices has promoted this form of reading.

E-books were first introduced at the same time as paperback books. It all started with a concept defined by a writer called Bop Brown in 1930, the "readies". After seeing his first "talkie", he wrote an entire book about his concept for an e-reader that would enable readers to read books on a screen.

Briefly in 1971, after entering the US declaration of independence into the machine, Michael Hart produced the first e-book, which he made available for everyone to read and download. In the same year, Michael initiated the Gutenberg project, a volunteer initiative to create electronic copies of cultural texts for storage in the archive. The voyager company was established in 1985 and began publishing books on CD-form's before progressing to "expended books". In 1993, digital book INC .began selling floppy disks containing 50 e-books in digital book format (Bolton, 2012).

2.2. Types of E-reading

There are types of E-reading.

2.2.1. Reading on screen

It is the reading of all written words of visual reading, that is, an electronic reading of the written and visible on the screen regardless of its form Khalaf (2016). This type of reading has two types of electronic text. First, the linear text which is the traditional text that must be read from beginning to end is referred to as linear text.

The reader deduces meaning from the text based on the grammatical and syntactic structure of the sentences. Texts written on paper are usually thought of as linear texts. Novels, poems, short stories, letters, and educational texts are all linear texts that we read from beginning to end. Second, the non-linear text refers to a text that does not have to be read from beginning to end and it includes digital texts. In other words, readers are not required to read the text in sequential order to comprehend it (Hasa, 2018).

(Sewaldro, 2020) Classified reading into two ways:

- **Linear reading:** is the standard method of reading that we are all taught from the beginning; reading from left to right, from beginning to end.
- **Non-linear reading:** is reading that bounces from section, often without ever completing a single piece of literature. Non-linear reading is used to skim and find information easily.

2.2.2. Audio Reading

Reading that takes place utilising audio recording devices, by listening to audiobooks is called audio reading. One of its benefits is that it introduces students to books above their reading level and provides a bridge to important topics for parents to discuss with their children after they have listened together for a topic. It is through the permanent practice of this type of reading that the student is taught critical listening. Besides, audiobook reading supports development in all morphological, cognitive, phonological language system, semantic and grammatical aspects, etc. Khalaf (2016).

2.3. E-reading Materials

Electronic reading materials are in high use among people of twenty-one century, they are considered as a beneficial way that can serve any users' needs. One of the multi-materials that are mostly used:

WebPages: It is widely known among internet users, which allows them to search for any information on internet pages. 'A page of information on the internet about a particular subject, that forms (a part of) a website' Cambridge dictionary.

Audiobooks: audio books become a useful way for foreign learners to acquire languages by listening to a native speaker's recording; also helps in teaching children. According to the Cambridge dictionary 'A recording, on a CD or made available on the internet, of a book being aloud'.

E-books: Are the electronic versions of printed books, they are the most known materials. In which they provide a similar experience of reading printed books.

E-journals: Multi articles are published via e-journals, in which they offer the accessibility in anytime and anywhere, also they reduce less time to publish. “Are the simple electronic representation of a journal?. They replicate exactly the printed version of the journal, occasionally including additional information (such) as interactive graphs or external links)” (Lisbdnetwork, 2018). Multi articles are published via e-journals.

2.4. Characteristic of E-Reading

When you engage yourself in reading through electronic materials you will find some multi-features that differentiate electronic reading overprint reading. It can be said that electronic reading requires portability and ease of access to information anytime, anywhere and that what people of the twenty-one century are looking for. E-books are mainly used by university students for the different characteristics that e-books offer, such as the ability to highlight. Take notes, weigh, and so on.

In most cases, e-books contain the entire text of the printed textbook, as well as all figures and illustrations, in most e-books, there is a table of contents that you can use to jump to specific chapters or sections and In most e-books, you can scan for text and navigate to a particular page number by typing it into a text box. In the e-book, will often bookmark sites. You can usually highlight and make notes in an e-book, your notes and highlighting are stored between sessions and are accessible whenever you open the e-book. When viewing an e-book, you can normally zoom in and out. You can sometimes open media such as videos by clicking on links in the e-book; interactive elements are included in some of the additional media. Pages from an e-book will normally be printed. You can sometimes download the e-book to your computer and read it offline. Some older e-books include Adobe Flash players, both of which are free (Cengage, 2021).

These include, among other things, the ability to store large amounts of data, the ability to retain and view multimedia content, accessibility at any time and from any place, the ability to scan contents from any full-text, eco-friendliness , built-in dictionary functionality, the ability to control font size, and so on (Kumbhar, 2013).

Multimodal resources including written text or oral storytelling, lyrics, sound effects, dictionaries, thesaurus, hotspots, and animation are popular in e-books (Korat, 2009). Most e-books also have instructional features such as highlighting, bookmarking, note-taking, scan, and other helpful resources for more advanced, educational reading (de Jong & Bus, 2002). Computers and portable electronic reading systems have a private, secure reading environment in which humiliation is reduced (Oakley & Jay, 2008).E-books are becoming students’ favorite for they are portable, compatible with internet devices, convenient, searched easily, less expensive, less weight and provides remote access.

2.5. Reading Comprehension Through E-Reading

Even though print reading is considered a conventional method of reading that has evolved over the decades, e-reading has emerged as a vital medium for those who need a large amount of knowledge simply by browsing the internet. As a result, several studies have looked at reading comprehension performance on both print and screen. Reading E-books can help children improve their literacy skills, especially their reading comprehension (Korate, 2009; de Jong & Bus, 2002; Grinshaw et al., 2007). E-books, according to many teachers and scholars, help in reading comprehension and literacy acquisition for both normally developing children and children with learning disabilities or communication problems (Black, 2010; de Jong & Bus, 2004; Korat, 2009; Shamir, 2009).

The most important elements of reading comprehension, according to Cornoldi and Oakhill (1996), are the ability to search for and understand the pieces of information available in the text (literal text comprehension) as well as the ability to make connections between different parts of the text to fully understand the intended meaning (inferential text comprehension). Students who read printed texts performed substantially better on the reading comprehension test than students who read electronic texts (Mangan, Walgermo & Bronnick, 2013).

Students' comprehension increases because they spend less time decoding and have more access to comprehension, meaning prompts, and helpful note-taking features while they use electronic books. Electronic books increase students' comprehension in two ways. First, they remove the need for students to concentrate on decoding and fluency. Another way that electronic books help students understand text is that they have a wider range of comprehension signals than paper books (Pearman & Lefever-Davis, 2006). Larson (2010) witnessed two students using a Kindle to take notes while reading and discovered that they used comprehension techniques like asking, linking, retelling, answering text questions, and reviewing their notes. They were able to highlight and underline key concepts to help them summarize the story later, which improved their comprehension and interpretation of the story (Szu-Yuan Sun, 2013).

2.6. E-Reading Devices

We are in an age where everything can be obtained electronically. Some people tend to read to obtain knowledge, or to fill their leisure through their computers or cell phones or by using special devices for downloading or storing different e-books. Those devices are called e-reader devices. People who are interested in reading literary work will find some joy when they can access the book they want on an e-reader. Thousands of e-books, periodicals, and newspapers are available on most e-readers.

2.6.1. Definition of E- Readers and E-books

E-readers

According to long man dictionary, "a small piece of electronic equipment for reading e-books" (ldoconline.com)

According to the Cambridge dictionary, it is "a small electronic device with a screen that allows you to read books in an electronic form". (dictionary.cambridge.org)

“An e-reader is a device that can display an e-book while many e-books can be displayed on a computer screen there is a new bread device called an e-reader that is either fully or partially devoted to accessing and displaying e-books. Some of these devices are compact and light weight and can hold hundreds of digital books” (unknown author, 2011).

E-books

According to long man dictionary “(electronic book) a book that read on a computer screen or on a special small computer that you can hold in your hands, and that is not printed on paper” (ldoconline.com)

According to the Cambridge dictionary, it is “an electronic book which can be read on a small personal computer” (dictionary.combridge.org).

An e-book is a digital file containing the context of a book mostly, that means text (Sometimes very simple text) but can also include illustrations, specific layout and other things we are accustomed to seeing when thinking ‘ book’ (unknown author 2011).

E-book as contrast to e-text, an e-book is a hardware and software combination that is used to store electronic data on specially developed portable device (Morgan 1999 as cited in Susan K 2002). Simply, e-books are mainly the electronic form of any type of printed book, which can be read on any electronic device: computers, cell phones or can be read on a special device "E-reader" which is designed just to read E-books, store, and downloading E-books.

Many libraries recognise that E-Books are an excellent way to expand current holdings and improve user experiences. Although several libraries have implemented large e-book acquisitions programmes, the librarians think that e-books are still in their infancy and that the market for e-books is still evolving. By searching for keywords in e-books, you can find relevant content much

faster. E-books can be used at any place and any time, unlike library books, which are frequently unavailable when needed (Springer, 2008).

2.6.2. E-books Formats

E-books have many formats that are known for their ease of use, and some of the main popular formats are PDF, EPUP, and AZW.

PDF: stands for portable document format, it is the most familiar format among people. It is created by Adobe; pdfs are known for their ease of use and ability to hold custom layouts.

EPUP: stands for electronic publication, which can be read on a variety of devices such as computers, smartphones, tablets, and most e-readers (except kindles).

AZW: A Kindle E-book format file has the AZW file extension, which is just a MobiPocket e-book file that has been DRM encrypted and renamed from MOBI or PRC. These files are compatible with Amazon's Kindle e-book readers.

2.6.3. E-book Devices

Computers, smart phones, and tablets are the most familiar devices that e-book can be read on. In recent years and by the high speed of technology a new device designed for reading and storing a digital book only, this device is called e-reader.

2.6.4. E-reader Devices

A dedicated e-reader is a compact, portable electronic device that allows you to read. It enables users to read digital documents in conditions and surroundings comparable to those in which they would read them on paper. Annotation tools, the ability to highlight or underline text, bookmarking, and a search capability are all included in these readers. Many volumes can be immediately downloaded to these devices. E-readers are simple to operate, and users may quickly learn how to page ahead and backward, as well as use other e-reader features like a hyperlinked table of contents (Schcolnik, 2001). Most dedicated E-Readers on the market today use electronic ink technology to address the challenges associated with reading on a computer screen. These devices have a static screen that looks like paper and use extremely little energy; users can store hundreds of books on a single gadget that can be read like a book (Ernst & Van der velde, 2009).

There is a huge number of e-reader devices that are specifically invented for the sake of reading and storing books only. The following are a few of the most well-known devices which are reported by Michael Kozlowski (2020):

➤ **Kindle Paperwhite 4**

The first generation Kindle e-reader was released by Amazon in 2007. They are the only company that has been producing e-readers for the longest time and is still active in the market. They have made a lot of progress over the years, like making some of the best front-light displays on the market and even some that are waterproof, including the paperwhite4. This computer connects to the world's largest e-book store. The kindle paperwhite4 features a high-resolution options. There are 16GB and 32 GB models available, as well as four different colors, LTE for on-the-go reading, and just WIFI.

➤ **Kobo Forma**

This is Kobos' flagship e-reader, and it is for those who want the best e-book reading experience possible. They have the world's second best digital bookstore and make it simple to purchase content. This eight-inch computer has plenty of space to read a book. The company is also known for offering a very advanced customisation scheme, enabling users to change fonts or a dictionary. You can purchase the Forma for \$ 219 for the 8GB edition.

➤ **Kindle Oasis 3**

Oasis 3 is the king of the e-readers. It is the most expensive in terms of offers. Oasis 3 is the company's largest screen, at seven inches. It has plenty of space to read a book from the massive bookstore of mainstream and independent titles. The hardware is different from the paperwhite4, despite the fact that it has many of the same software features. This is the only kindle with a dual-core NXP processor, which was created specifically for E INK screens. It is also the first kindle with colour temperature LED lights: simply connect a pair of Bluetooth headphones or ear buds to the computer to access Audible. The oasis has been back into use thanks to COVID-19.

➤ **Tolino Epos 2**

Epos 2 is mainly sold in Germany and neighbouring countries where the language is spoken. It has a large 7.8-inch screen and is widely available. Most e-readers come with just one bookstore preloaded, but this one has access to four separate ones as well as a couple of library systems where you can borrow books. It has a shape that is similar to the Kobo Forma.

➤ Boyue Lkebook Mars

It is distinct from the company's other cameras. It is the only system that is designed for e-reading rather than taking digital notes using a stylus. Reading e-books and PDF files is a breeze on this 7.8-inch screen. Google Play is now available for free, and can be used to get Apps. It recently got an Android 8.1 firmware update, making it more modern by e-reader stand.

2.6.5. E-readers APPS on Other Devices

E-readers applications are delivered for the sake of making reading e-books more accessible for readers, so they do not need to own e-readers; they can just read e-books through their cell phones, computers, and so on. Hindy (2020) mentions the following most popular e-reader APPS:

➤ Aldiko Book Reader

One of the oldest e-book reader software is Aldiko Book Reader. For those who need it, it is also a great simple choice. It includes EPUB, PDF, and Adobe DEM – protected e-book support for library books on loan. The App also includes a simple, if dated, GUI, customization options, phone and tablet support, and global text searches inside books. There are advertisements in the free edition. The paid edition does not have this feature. Aside from that, they are pretty much the same.

➤ Amazon Kindle

One of the most well-known e-book reader software is Amazon Kindle. It operates one of the Internet's largest and most reliable e-book stores. The App also includes a plethora of reading features, as well as cross –device syncing and a huge library of free books. The user interface is littered with advertisements. The actual reading of the book, on the other hand, is devoid of such nonsense. There are also several customisation options available. This is a solid option based solely on book availability. If necessary, books can also be downloaded for online reading.

➤ Al Reader

In comparison to other e-book reader Apps, Al Reader is one of the newer ones. It also works with much older Android models. This has become increasingly uncommon these days. The App also supports the majority of popular e-book formats, including EPUB (no DRM), RTF, MOPI,

PRC, and many more. The interface comes with customisation options, auto-scrolling, page turning animations, and various view modes for your comfort. The App is free for use.

➤ **FB Reader**

Another older E-Reader App is FB Reader. It is a great choice for most simple use cases, just like Aldiko. That includes support from AZ3, EPUB (up to EPUB3), FB2, RTF, HTML, and even plain text documents. It syncs books between your devices using the Google Drive cloud service. We also enjoyed the user interface. It is a little dated, but it is still functional and pleasing to the eye. It also supports gestures. For the time being, the software is completely free to use.

➤ **Foxit PDF Reader**

Foxit is one of the most popular PDF reader Apps. It is the perfect balance of efficiency and reading. Almost all forms of PDF files are supported by the App. It also includes features like annotations, form filling, and connected PDF for privacy. It can read PDFs aloud and even supports audio and video content when it comes to reading. It has the best cross-platform support of any E-Reader or PDF App on the market.

➤ **Google Play Books**

Google Play Books is an e-book reader app that competes with Amazon Kindle and Barnes & Noble Nook. It is a kind of online bookstore. There are books, magazines, and a variety of other items available. It can read a variety of e-book formats, including e-books, comic books, and other types of e-books. Books can also be saved to the cloud and read from any place. As a result, it offers a great storage choice.

➤ **Kobo Books**

Like Amazon, Nook, and Google playbooks, kobo is an online bookstore. The App is really easy. It appears that it can only read books that have been purchased via the service. However, both audiobooks and regular e-books are supported by the service. Cross –device syncing, streaming for offline use, and a night mode for late-night reading are among the other features. The search and discovery features are also very good. The software is available for free download. Books, of course, are not cheap.

➤ Nook

Amazon, Kobo, and Google Play Books all have Nook as a rival. Unlike the majority, this one has physical book places. You should go to Barnes and Noble, which is Nook's parent company. The E-Reader is a fairly common device. It has personalised reading choices as well as support for books, comics, manga, and other media. It also supports cross-device syncing, as do the majority of Apps. Magazines and newspapers are still supported. It is a fantastic experience.

2.7. The Advantages and Disadvantages of E-Reading

With the expanding use of digital materials, many people now change their reading practice; they spend a lot of time at their laptops, cell phones and tablets screens, etc. This change leads us to shed light on the advantages and disadvantages of electronic reading.

The main advantages are:

- Teachers and students can use e-books to communicate and share information, create relationships through literacy –rich environments (Strickland and Marrow, 1989).
- Numerous studies show that reading e-books is an effective way to improve literacy skills especially reading comprehension (Korat, 2009; de Jong & Bus, 2002; Grimshaw et al, 2007).
- The benefits in terms of low weight, small dimensions and versatility are clear (Eva Siegenthaler et al, 2010).
- By clicking and scrolling through WebPages and hyperlinks, the reader has become more engaged in the reading process (Adams Bodomo, et al. 2013).
- The relative accessibility and versatility in terms of time and space are some of the benefits of using electronic or digital materials. Multimedia components such as sound and video clips can also be used in electronic content, which are not possible in print books (Adams Bodomo, et al .2013).
- Many libraries have realized that e-books are an excellent way to expand their current collections. (Springer, 2008).
- By searching for keywords in e-books, you can find similar material much faster. You can use them whenever and wherever you want, unlike library books, which are not always accessible when you need them (Springer, 2008).

- Animations and pictures offer a rich, eye-catching atmosphere that aids students in visualizing where and when the story takes place, as well as constructing or triggering more complete narrative schemas (Bus, de Jong & Verhallen, 2006).
- Students and academic personnel profit from having 24 hour access to these services through laptops, multimedia devices, and e-readers (Walsh G. , 2016) .
- One of the main benefits of hyperlink technology is that it allows for greater flexibility in screen reading than paper pages (Szu-Yuan Sun, 2013) .
- Introduce interactivity, nonlinearity, the immediacy of content delivery, and the integration of text, images, audio, and video, all of which are typically absent in the print world (Liu, 2012) .

Electronic reading has in-depth many disadvantages which are:

- E-reading requires a lot of concentration, and the mind and body adjustments add to the reader's distraction, reducing their comprehension ability (Sajjad Hussain et al . 2015)
- According to Birkerts, the younger generation growing up in a digital world lacks the opportunity to read deeply and maintain long-term reading engagement (Liu, 2012).
- In comparison to reading a written text, several studies suggest that reading a digital text contributes to lower comprehension (Liu, 2012).
- Less visual, with fewer memory cues; eyestrain and reading fatigue; reduced comprehension due to a lack of linear reading approach; loss of meaning and broader author perspectives; and obstacles to successful learning (Mizrachi, 2015).
- Reading from a screen can cause fatigue and slow reading speeds.
- Reading from a tablet causes the brain to be more stressed than reading from a text, and research participants become exhausted faster when reading from screens (Wästlund, Reinikka, Norlander, & Archer, 2005).

2.8. E-Reading in COVID-19

The learning process nowadays involves the use of the Internet because of the huge number of features that the Internet provides to support education. During the COVID-19 people relied on using Internet to buy things and to work online, also spending their leisure time by learning new things and reading some e-books. All that is due to the help of the Internet. When school closure because of the pandemic, there was a need for finding a solution to continuing teaching, so many countries relied on e-learning in their education system. In this period of the time, students were more engaged in e-learning, and they depended more on e-reading in their online courses.

E-learning refers to online, networked, or stand-alone computer-based education (Nedeva, 2010). As the term suggests, e-learning is via the use of digital devices. This is what electronic reading entails. Also, e-learning involves using e-reading.

The e-book market had been declining for the previous six years, but now that it is one of the most convenient ways to get new books during the pandemic, libraries and publishers are reporting an increase in new demand. Major publishers' e-book revenues have grown as a result of the stay-at-home boom. The Association of American Publishers estimates that e-book sales increased 11% in April compared to the same month last year, to \$ 93 million. This is the first monthly rise in e-book since July of last year, and it reversing a long-term downward trend (Perssman, 2020). The COVID-19 home lockdown has prompted library users to devote more time to reading digital content, especially e-books, sparking a debate about whether library policies should be revised to allow for the purchase of more digital content and e-books (Saurin, 2020).

Conclusion

E-reading is regarded as a beneficial tool for assisting with reading practice. In this chapter, we have provided an in-depth look at the key qualities, benefits, and drawbacks of E-reading as well as how it has evolved during COVID19. It is believed that E-reading plays a significant role in the lives of readers as it meets their demands.

Chapter Three:
Methodology and Data Analysis

Introduction

This chapter introduces the research methodology used in this study in order to test the research hypotheses, including the tools of research that best served it. These include: the pilot study and a questionnaire. The pilot study aimed at testing the validity and reliability of the questionnaire. The questionnaire after being revised was distributed and analyzed.

1. The Sample

The target population is that English students and the case study population is that of First Year Undergraduate students at the University of Kasdi Merbah, Ouargla. A convenience sampling technique has been selected. The subjects in this study are 60, which makes the sample representative to some extent. They are pursuing a three-year Licence degree in English Language and Literature in Faculty of Letters and Languages at the University of Kasdi Merbah, Ouargla.

2. Research Tools

2.1. Questionnaire's Description

A questionnaire was selected for investigating the hypotheses about a shift from print reading to E-reading. Questionnaires are important sources of information. According to Nunan (1992), "the questionnaire is a relatively popular means of collecting data. It enables the researcher to collect data in field settings, and the data such as free-form fieldnotes, participant observers' journals, the transcripts of oral language" (p. 143 as cited in El Kouti, 2017a, p. 187). The questionnaire was composed of five sections, A, B, C, D and E. The questions are carefully worded. These closed questions, according to Nunan (ibid) are easy to quantify and analyse particularly when a researcher uses computer statistics packages such as SPSS (Cited in El Kouti, ibid).

2.2. Analysis

The findings were analysed both quantitatively and qualitatively.

2.3. Pilot Testing

Pilot testing is an important stage of instrument testing. It solves two essential problems-the semantic problems of the tool and the validity of the items contained in the questionnaire (Johnson, 2010; Alieto, 2019). According to McCarthy (2001), "Piloting of questionnaires is essential to identify ambiguities and other problems before the questionnaire is administered" (p. 60 cited in El Kouti, ibid). Mackey and Gass (2005) claim that "A pilot study is an important means of

assessing the feasibility and usefulness of the data collection methods and making any necessary revisions before they are used with the research participants” (p. 43 cited in El Kouti, 2017a).

For investigating the set hypotheses, we have opted for checking the reliability and validity of the questionnaire by conducting a pilot study on a number of students. Consequently, the questionnaire was distributed to ten First Year Bachelor students at Kasdi Merbah Uiversity of Ouargla. The data gathered in the pilot testing were analysed first, and then the missing, excess, and incomprehensible information was identified, and then returned completely.

3. The Questionnaire Analysis

Section A: Reading reality amid university students

Q1. Do you read?

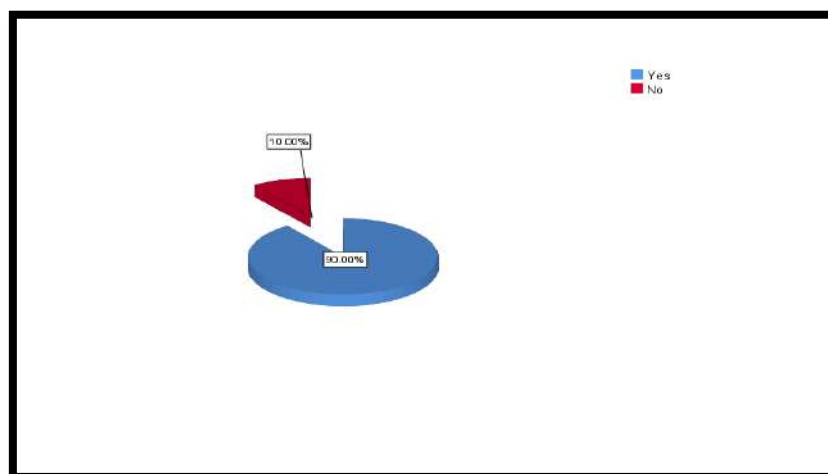
- Yes

- No

Table1. Students who read

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	54	57.4	90.0	90.0
	No	6	6.4	10.0	100.0
	Total	60	63.8	100.0	
Missing	System	34	36.2		
Total		94	100.0		

The results show that (90 %) of the students they read while (10%) do not.



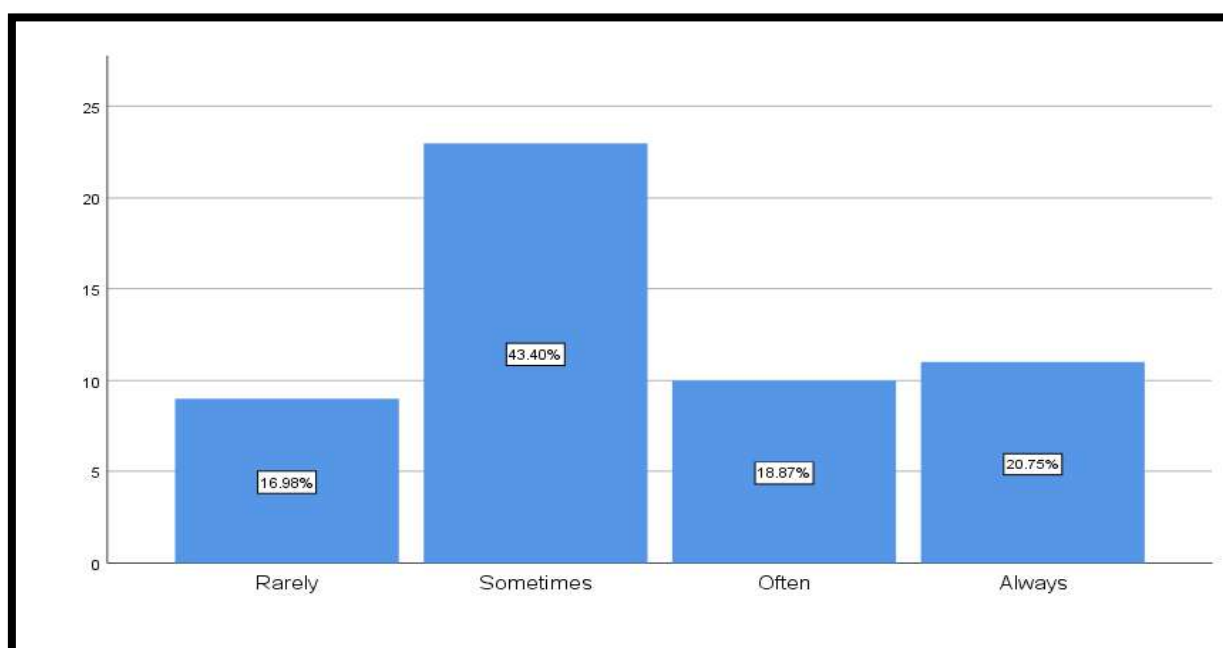
If yes, how often?

- Rarely
- Sometimes
- Often
- Always

Table2. The Amount of Reading among English students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rarely	9	9.6	17.0	17.0
	Sometimes	23	24.5	43.4	60.4
	Often	10	10.6	18.9	79.2
	Always	11	11.7	20.8	100.0
	Total	53	56.4	100.0	
Missing	System	41	43.6		
Total		94	100.0		

The result show that the extent of reading differs from one student to another. Most of the students (43.4 %) sometimes read. However, (20.8 %) and (18.9 %) respectively always and often they read whereas (17 %) rarely read .from this, we conclude that the majority of students have a great passion towards reading.



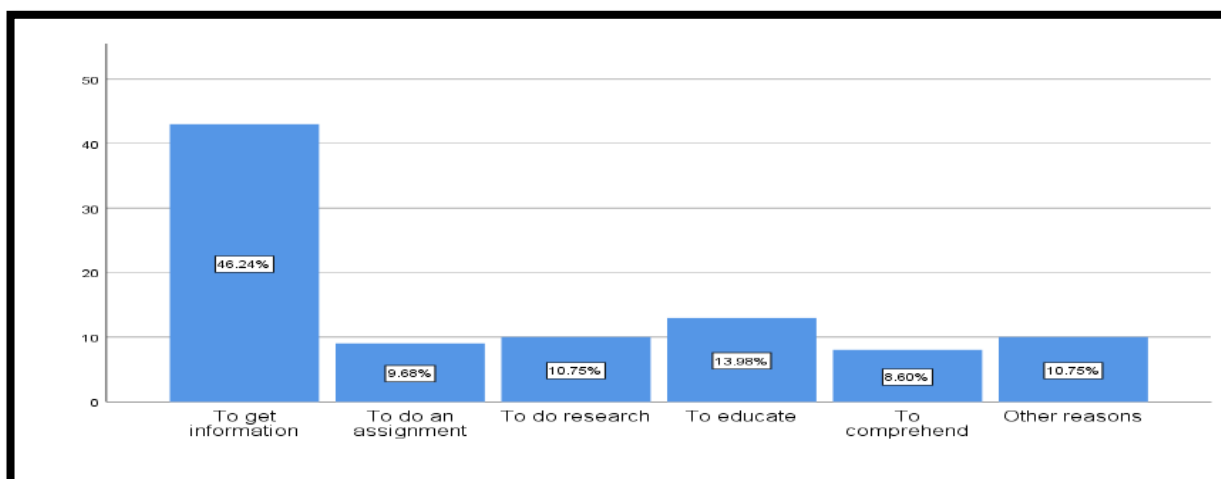
Q2. What is your reading aim?

- A- To get information
- B- To do an assignment
- C- To do research
- D- To educate
- E- To comprehend

Table3. The Goal of Reading

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	To get information	43	45.7	46.2	46.2
	To do an assignment	9	9.6	9.7	55.9
	To do research	10	10.6	10.8	66.7
	To educate	13	13.8	14.0	80.6
	To comprehend	8	8.5	8.6	89.2
	Other reasons	10	10.6	10.8	100.0
	Total	93	98.9	100.0	
Missing	System	1	1.1		
Total		94	100.0		

The above table indicates a variety of goals of reading. We see that (46.2 %) of respondents read in order to get information whereas (14 %) to educate. We also notice that there is an equal percentage in doing research as well as in other reasons. (9.7 %) they read for doing an assignment while (8.6 %) for the purpose of comprehending.



Q3. Where do you prefer to read?

A- In the reading room

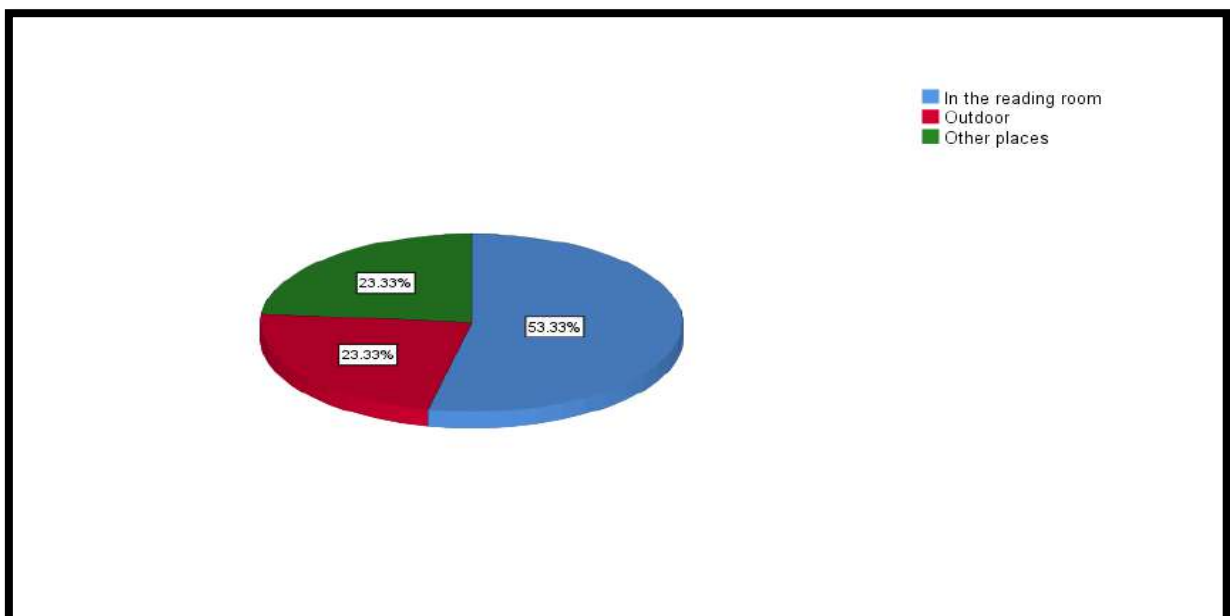
B- Outdoor

C- Other places

Table 4. Favorite Place to Read

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	In the reading room	32	34.0	53.3	53.3
	Outdoor	14	14.9	23.3	76.7
	Other places	14	14.9	23.3	100.0
	Total	60	63.8	100.0	
Missing	System	34	36.2		
Total		94	100.0		

Most of students (53.3 %) prefer reading in the reading room whereas (23.3 %) they do prefer in outdoor. As for the rest (23.3%), they prefer other places.



Section B: Preference of Reading Formats

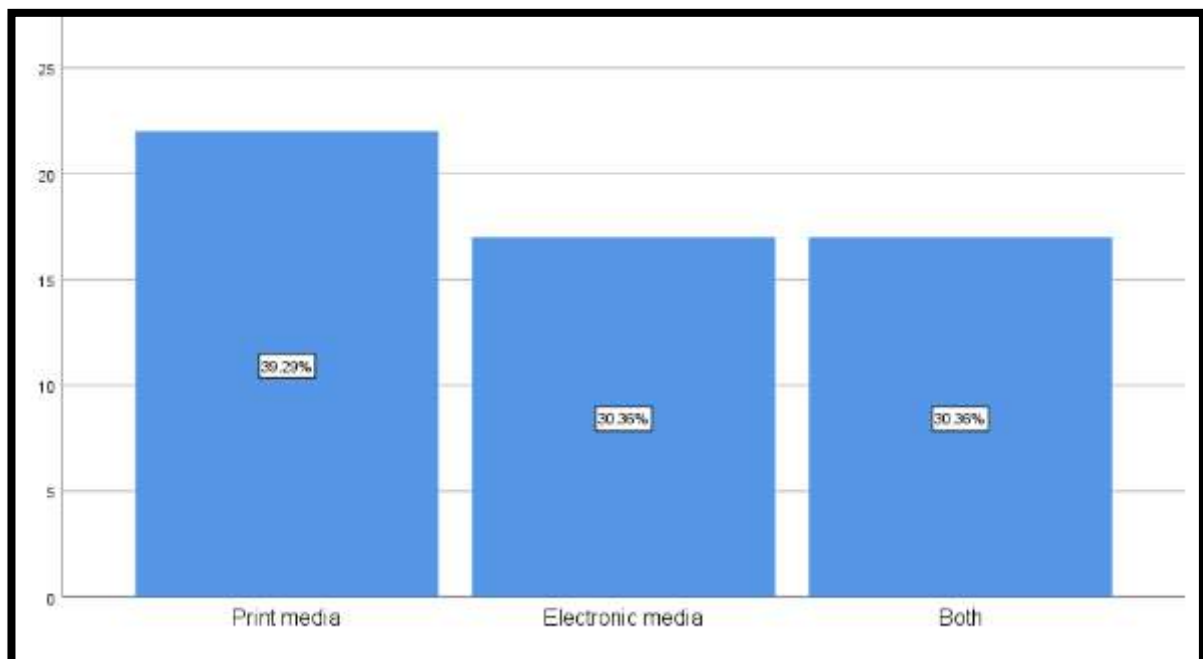
Q4. What type of media do you prefer to read from?

- A- Print media (books, handouts)
- B- Electronic media (Tablets, laptops...)
- C- Both

Table5. Preferred Media Type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Print media	22	23.4	39.3	39.3
	Electronic media	17	18.1	30.4	69.6
	Both	17	18.1	30.4	100.0
	Total	56	59.6	100.0	
Missing	System	38	40.4		
Total		94	100.0		

The table provides the significant difference in the preference of the respondents toward print and electronic media. It shows a difference which is not significant between electronic media (30.4 %) and print media (39.3 %) with the former being better than the latter. Moreover, we notice that a mixture of students prefer them both where the percentage is estimated at (30.4 %).



Why?

Some of the students explicitly expressed favoring printed media

Student 1: " I prefer to read from print media because I like the smell of books, and when I read from the handouts I understand well and my eyes do not get tired " .is an example of the comments made by those who only wanted print media. This answer confirms a conclusion of (Noyes and Garland, 2003; Stoop et al., 2013a) that participants would understand the content better when reading from paper.

Student2: 'I know very well that digital media is more convenient in many ways, but I prefer have it in printed form,'

Even though they believed that electronic material had certain advantages, they still wanted to read and study from print.

Other of the students explicitly expressed favoring electronic media

Student3: " I like electronic media because it is faster to get information" If we go back to the previous studies, we find that (Walsh 2016) mentioned this information.

Section C: Reading habits

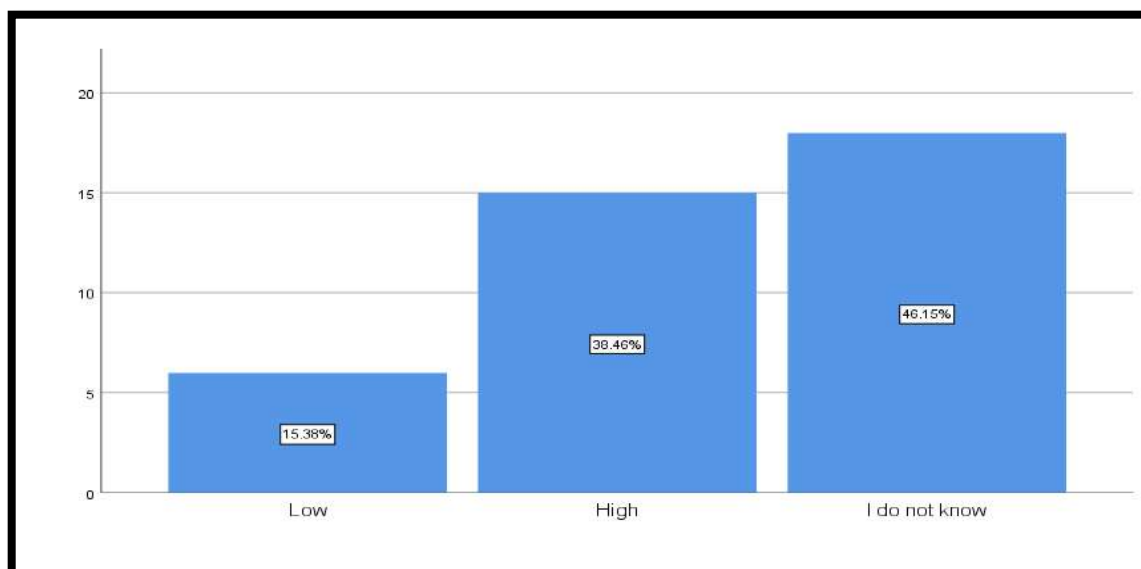
Q5. How would you describe your concentration when using print materials?

- A- Low
- B- High
- C- I do not know

Table 6. Concentration Rate on Prints

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	6	6.4	15.4	15.4
	High	15	16.0	38.5	53.8
	I do not know	18	19.1	46.2	100.0
	Total	39	41.5	100.0	
Missing	System	55	58.5		
Total		94	100.0		

The results indicates that the concentration rate when using printed materials for the students in the lower case is estimated at (15.4%) besides (38.5 %) in the high case. What is noticeable is that most of students could not know their concentration rated while using print materials where the ratio was (46.2%).



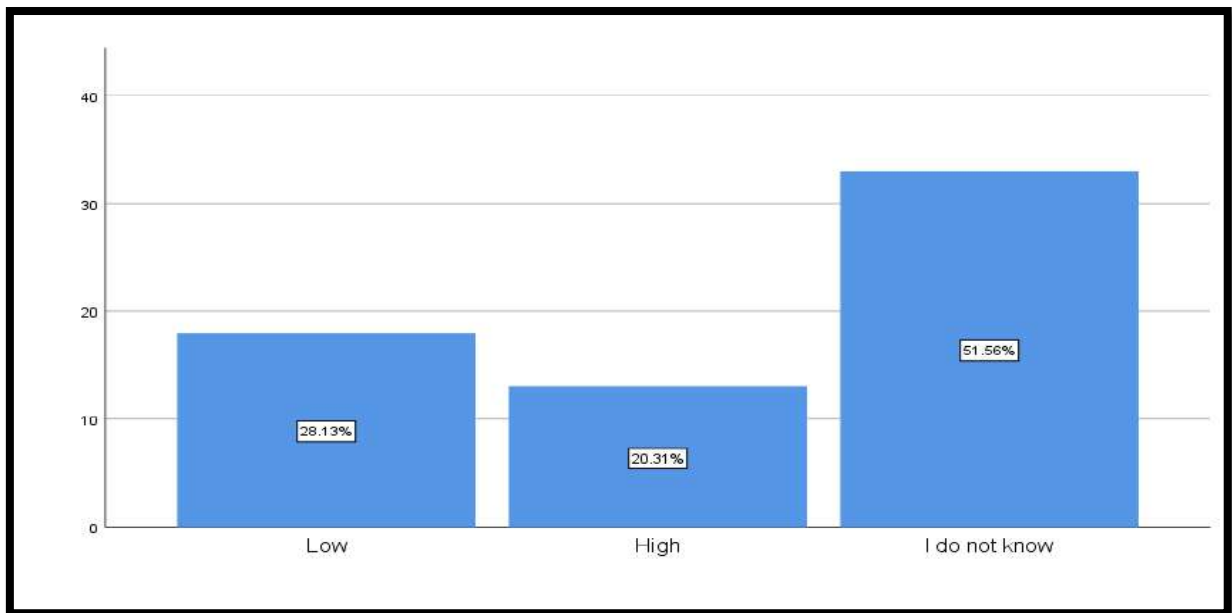
Q6. How would you describe your concentration when using digital materials?

- A- Low
- B- High
- C- I do not know

Table7. Concentration Rate on Digital Materials

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	18	19.1	28.1	28.1
	High	13	13.8	20.3	48.4
	I do not know	33	35.1	51.6	100.0
	Total	64	68.1	100.0	
Missing	System	30	31.9		
Total		94	100.0		

The table above illustrates a description of students' concentration when using digital materials. We see that the majority of students said do not know (51.6%). Third of students said that their focus was low (28.1 %) while the rest said it was high (20.3 %).



Section D : The Rate of Switching from Print Reading to Electronic Reading

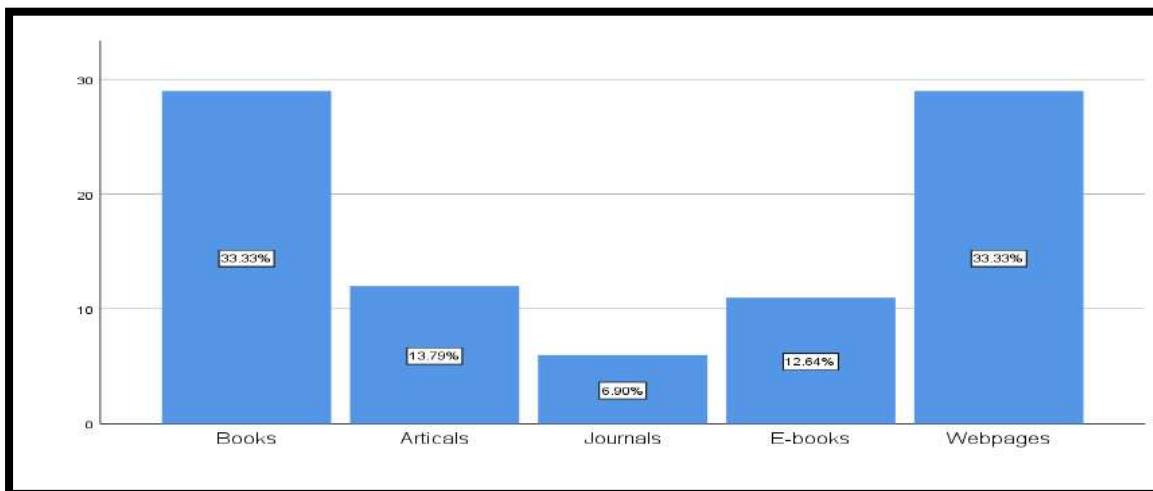
Q 7 : What kind of materials do you read most of the time ?

A. Books B. Articles C. Journals D. E-books E. WebPages

Table8 : kinds of Reading Materials students read

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Books	29	30.9	33.3	33.3
	Articles	12	12.8	13.8	47.1
	Journals	6	6.4	6.9	54.0
	E-books	11	11.7	12.6	66.7
	WebPages	29	30.9	33.3	100.0
	Total	87	92.6	100.0	
Missing	System	7	7.4		
Total		94	100.0		

Table 7 indicates that 33.3% of the respondents read books , 13.8% read articles, 6.9% read journals, 12.6% read e-books and 33.3% read webpages most of the time . The result show that most of the student reported that they read books with a equal percent of thosewho read webpages in most of the time .



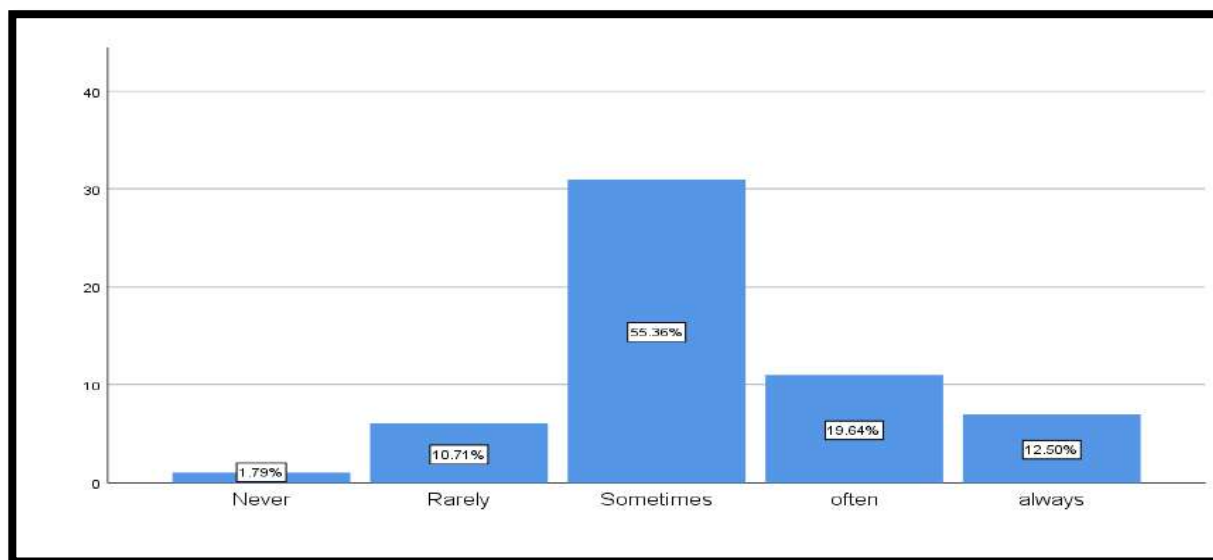
Q 8 : How often do you use print materials ?

- A . Never B . Rarely C . Sometimes D . Often E . Always

Table 9: The use of Print Materials

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1	1.1	1.8	1.8
	Rarely	6	6.4	10.7	12.5
	Sometimes	31	33.0	55.4	67.9
	Often	11	11.7	19.6	87.5
	Always	7	7.4	12.5	100.0
	Total	56	59.6	100.0	
Missing	System	38	40.4		
Total		94	100.0		

The table reveals that about 1.8% of the respondents “never” use print materials and 10.7% they “rarely” use the print materials, yet 55.4% who “sometimes” use print materials., 19.6% chose “often” and 12.5% reported that they “always” use print materials. The result shows that the majority of the students sometimes use print materials and that due to the digital time we are living in.



Q 9 : How often do you use Electronic materials ?

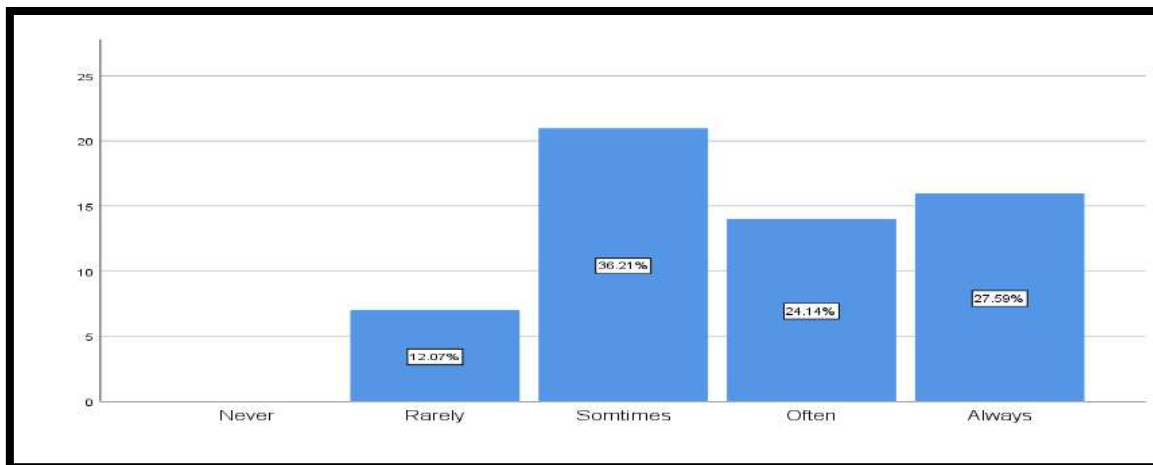
- A . Never B . Rarely C . Sometimes D . Often E . Always

Table 10: The use of Electronic materials

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rarely	7	7.4	12.1	12.1
	Sometimes	21	22.3	36.2	48.3
	Often	14	14.9	24.1	72.4
	Always	16	17.0	27.6	100.0
	Total	58	61.7	100.0	
Missing	System	36	38.3		
Total		94	100.0		

The table demonstrates that there was no respond to “ never ” and 12.1% “ rarely ” use the electronic materials, yet 36.2% “sometimes ” use electronic materials . 24.1% reported “often”

and 27.6% reported that they “always” use electronic materials. The result shows that the majority of the students range between “sometimes”, “often”, and “always” in using the electronic materials and that it seems logical because of the wide speed of these kind of materials.



Q 10 : How can you describe your reading speed when using electronic materials ?

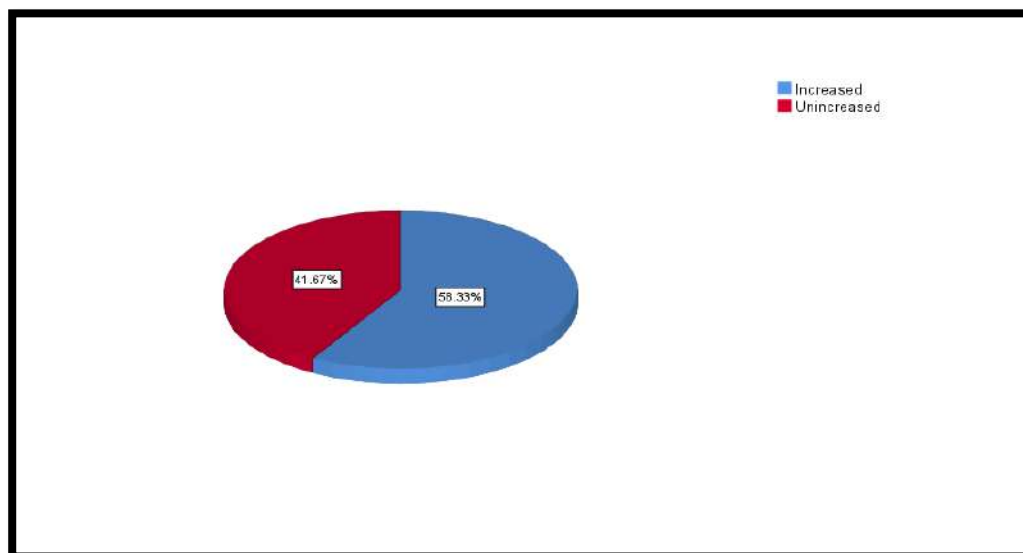
A . Increased

B . Unincreased

Table 11: The Rate of Reading Speed through Electronic Reading

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increased	35	37.2	58.3	58.3
	Unincreased	25	26.6	41.7	100.0
	Total	60	63.8	100.0	
Missing	System	34	36.2		
Total		94	100.0		

The table reveals that 58.3% of the respondent reported that their reading speed using E-reading “increased ” while 41.7% reported that their reading speed “unincreased”. The result shows that the reading speed has increased when using electronic reading among the majority of the students.



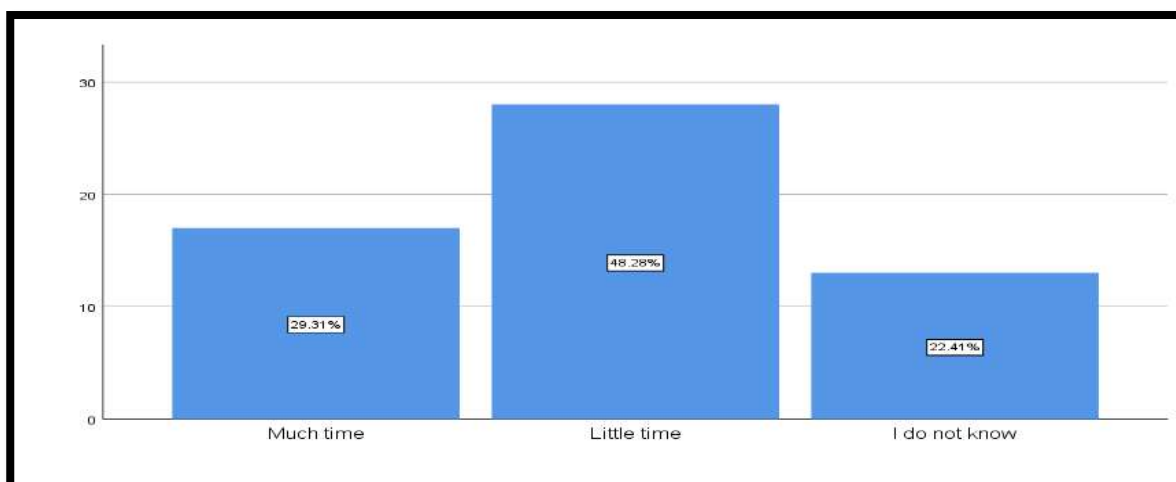
Q 11 : How much time do you spend on reading print materials ?

A . Much time B . Little time C . I do not know

Table 12 : The time spent on Reading Print materials

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Much time	17	18.1	29.3	29.3
	Little time	28	29.8	48.3	77.6
	I do not know	13	13.8	22.4	100.0
	Total	58	61.7	100.0	
Missing	System	36	38.3		
Total		94	100.0		

This table indicates that 29.3% of the respondent spend “much time” on reading print materials and 48.3% spend “little time” whereas 22.4% reported that they “do not know” how much time” they spend on reading print materials. The result shows that the majority of the students spend little time on print reading compared to the ones who spend much time on it.



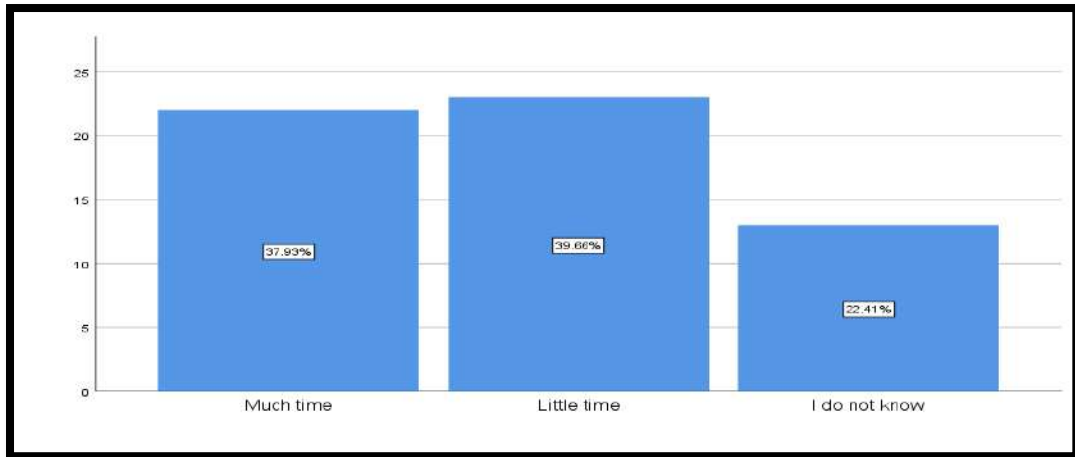
Q 12 : How much time do you spend on Reading Electronic materials ?

A . Much time B . Little time C . I do not know

Table 13 : The time spent on Electronic Reading

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Much time	22	23.4	37.9	37.9
	Little time	23	24.5	39.7	77.6
	I do not know	13	13.8	22.4	100.0
	Total	58	61.7	100.0	
Missing	System	36	38.3		
Total		94	100.0		

The table indicates that 37.9% of the respondent spend “much time” on reading electronic materials and 39.7% spend “little time” whereas 22.4% reported that they “do not know” how much time they spend on reading electronic materials. The result shows that the majority of the students spend much time on electronic reading compared to the ones who spend time on print reading, and little time less than those who spend time on print reading.



Section E : The common reasons for the shift from Print Reading to E-reading

Q13: What type of reading is easier for you to get information?

A-Print reading

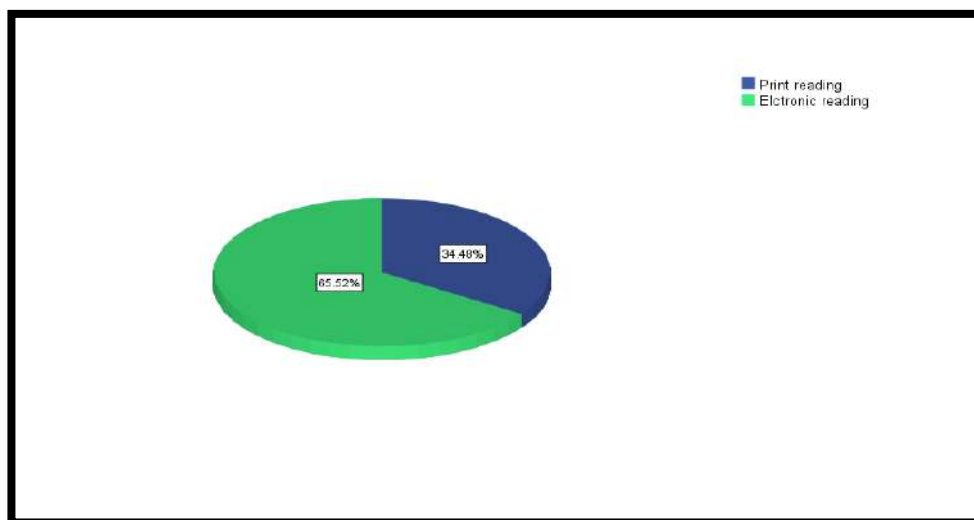
B- Electronic reading

Why?

Table 14: The Easier type of Reading to get information

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Print reading	20	21.3	34.5	34.5
	Electronic reading	38	40.4	65.5	100.0
	Total	58	61.7	100.0	
Missing	System	36	38.3		
Total		94	100.0		

The table indicates that 65.5% of the respondent use electronic reading more than print reading as a way for getting information easily , compared to only34.5% who reported that print reading is the easier type for them to access information . The result shows that the ease of access to information via electronic reading is one of the reasons that lead the students to rely more on E-reading.



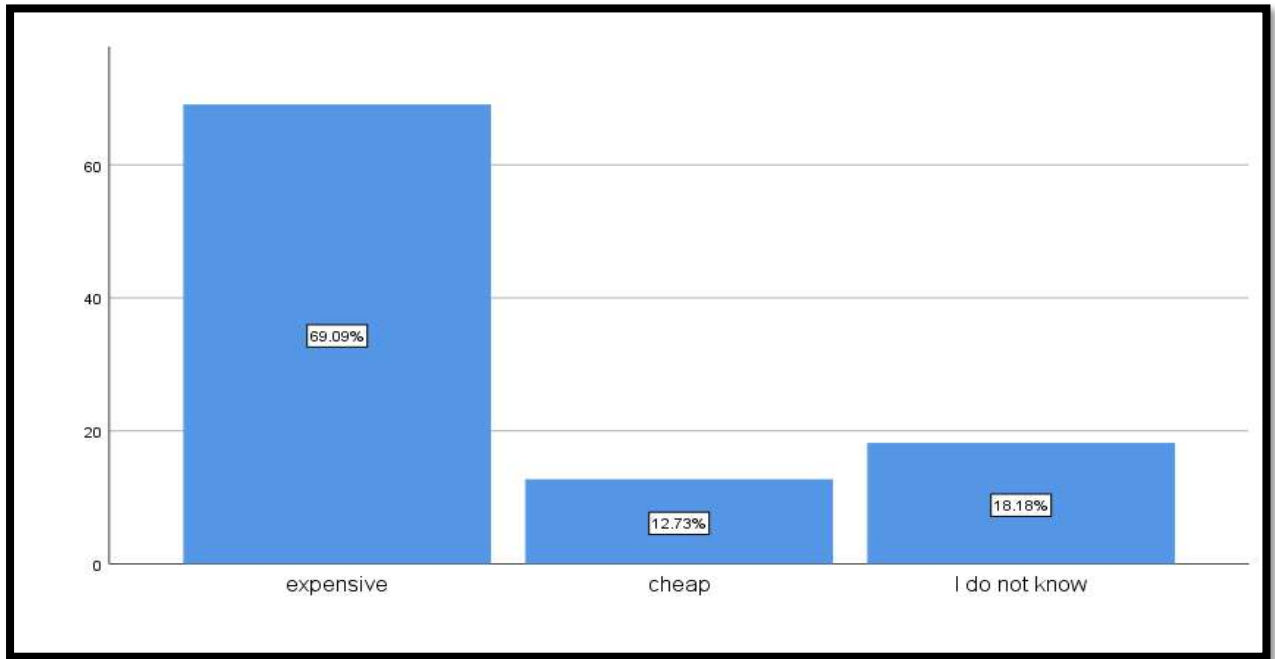
Q14. What do you think of print books' prices?

- A. Expensive B. Cheap C. I do not know

Table 15: Books prices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Expensive	38	40.4	69.1	69.1
	Cheap	7	7.4	12.7	81.8
	I do not know	10	10.6	18.2	100.0
	Total	55	58.5	100.0	
Missing	System	39	41.5		
Total		94	100.0		

The table reveals that about 69.1% of the respondents reported that books are “ expensive “ to buy, and 12.7% reported that they are not expensive , whereas 18.2% reported “I do not know“ . The result shows that the majority of respondents find that buying books is more expensive .



Q 15: Are the books you need available?

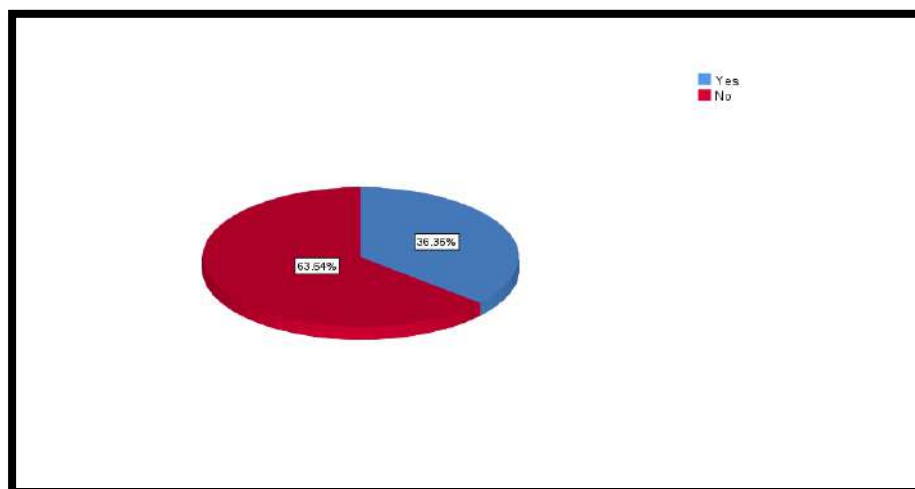
A. Yes

B. No

Table 16: Availablityof Books

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	20`	21.3	36.4	36.4
	No	35	37.2	63.6	100.0
	Total	55	58.5	100.0	
Missing	System	39	41.5		
Total		94	100.0		

The table indicates that 63.6% of the respondents claim that the books they need are not available, whereas 36.4% mentioned that the books they need are available.



Q 16 : What do you use more for your academic study ?

A . Print materials

B . Electronic materials

Why ?

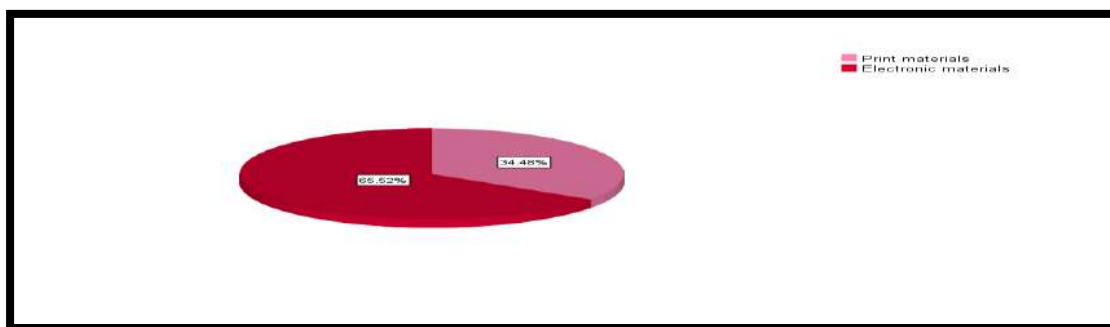
Table 17: Materials used in Academic Studies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Print materials	20	21.3	34.5	34.5
	Electronic materials	38	40.4	65.5	100.0
	Total	58	61.7	100.0	
Missing	System	36	38.3		
Total		94	100.0		

The table indicates that 65.5% of the respondents use electronic materials for their academic study, whereas 34.5% reported that they use print materials for their academic study. The result reveals that using electronic materials in academic studies help students, according to some answers of the respondents. Some student's answers on why they choose electronic reading:

Student 1: "more comfortable and easy to use "

Student 2: “sometime library does not cover all our need from books so using internet make that possible “.



Q 17: How do you feel when you read from an electronic device?

- A. Interested B. More active C. Bored

Why?

Table 18: The Feeling through Electronic Devices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Interested	30	31.9	52.6	52.6
	More active	9	9.6	15.8	68.4
	Bored	18	19.1	31.6	100.0
	Total	57	60.6	100.0	
Missing	System	37	39.4		
Total		94	100.0		

The table reveals that 52.6% of the respondents feel interested when they read from electronic devices, 15.8% reported that they feel more active when they read from electronic devices, whereas 31.6% feel bored when they read from electronic devices . The result shows that most of respondents feel interested in reading through e-devices because of what this devices offer to them , and that what is found in students answers when we ask them why . Some students said: Student 1: “I found what I am searching for and I in feel interested to read more and more “

Student 2: “I am interested to read the book that I know I can found it”.

Some students feel more active in reading through e-devices the reasons why they feel like are shown in their answers when we set the question why, some student’s answers:

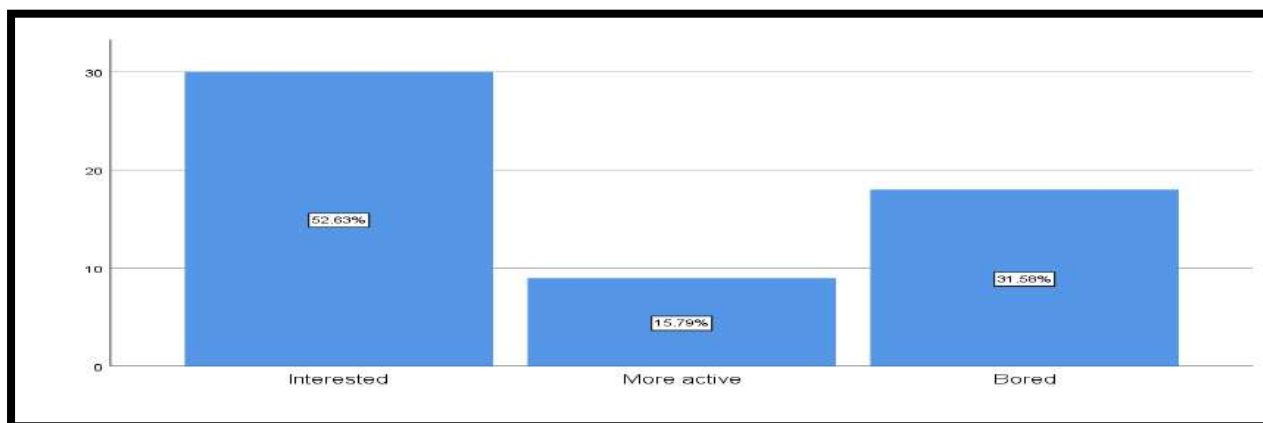
Student: “I think that reading something without the touch connecting make my brain lazy so I feel bored easily”.

Student 3: “I need to zoom every time “.

While the rest of the respondents feel more active in electronic reading and this what we found in students answers

Student 4: “It’s quickly to turn the pages and my phone gives me more energy to carrion”

Student 5: “I like to read from electronic device that’s why I get more active”.



Q 18: How do you feel when you read from a print materials?

- A. Interested B. More active C. Bored

Why?

Table19: The Feeling through Print Reading.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Interested	17	18.1	29.3	29.3
	More active	28	29.8	48.3	77.6
	Bored	13	13.8	22.4	100.0
	Total	58	61.7	100.0	
Missing	System	36	38.3		
Total		94	100.0		

The table reveals that 29.3% of the respondents feel interested when they read from printed materials, 48.3% reported that they feel more active when they read from printed materials. whereas 22.4% feel bored when they read from printed materials . The result shows that most of respondents feel more active in reading through printed materials because of what it offer to them, and that what is found in students answers when we ask them why. Some students said:

Student 1: “it makes me concentrate in reading”

Student 2: “I can write on it notes”

Some students feel interested in reading through print materials the reasons why they feel in this way are shown in their answers when we set the question why, some students answers:

Student 3: “because I like using print material“

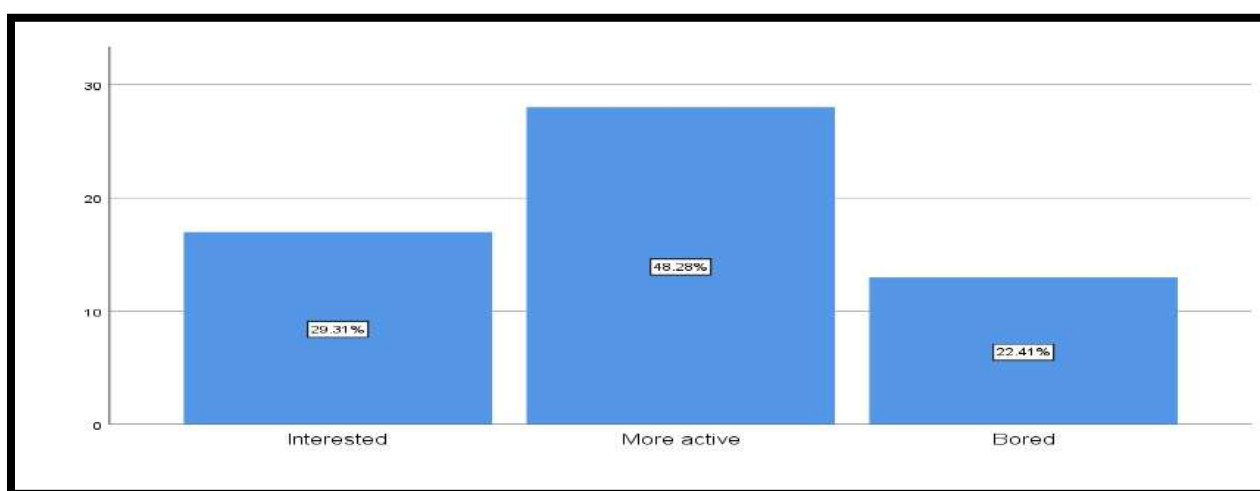
Student 4: “I can’t wait to complete the book”

Student 5:“ when I start reading in print media I stay excited to learn more without being bored”

While the rest of the respondents feel bored in print reading and this what we found in students answers ”

Student 6: “because it takes a lot of time”

Student 7: “There is some books make me bored and I don’t like to read from print materials”.



Q 19: Do you think that technology has helped you in your academic study?

A. Yes

B. No

Why?

Table 20: Technology supports in Academic Studies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	54	57.4	93.1	93.1
	No	4	4.3	6.9	100.0
	Total	58	61.7	100.0	
Missing	System	36	38.3		
Total		94	100.0		

The table reveals that 93.1% of the respondents reported ‘Yes’. whereas 6.9% who reported ‘No’, this result was really shocking in how does not help them especially in time of e-learning or

what is called distance learning during the COVID-19. We have set the question of why to know in which way it help them and how does not help them.

These are some student's answers:

Student 1: “helps in distance learning / distance education. The effective use of digital tools in classroom”.

Student 2: “the sources I need are not available as a hard copies so I get them from the internet”

Student 3: “because it has more options. you have access to unlimited titles ” .

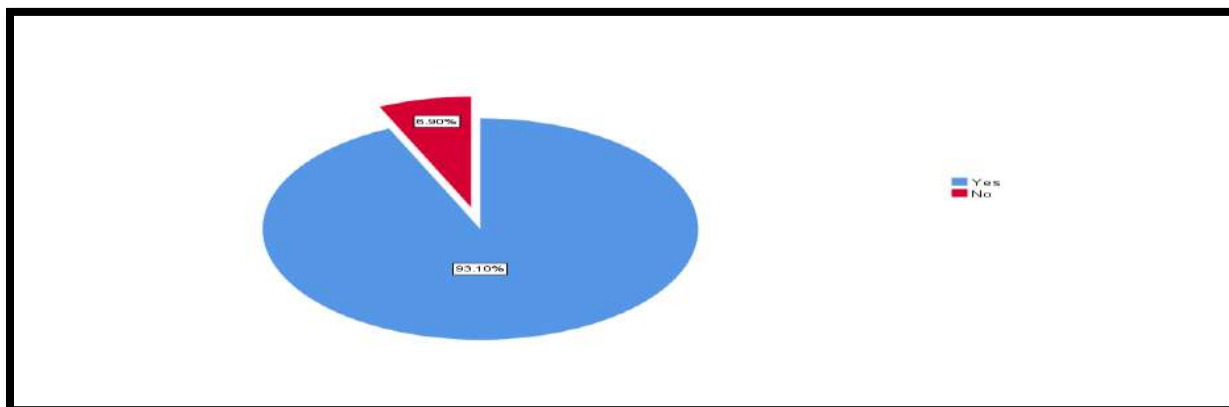
Student4: “everything is available in internet just by clicking the bottom I get any information I want at any time”.

Student 5: “by making get information easier for those can't get it by the original way that the print materials not all ways available for some people”.

Student 6: “when I need some information, I just do a research using technology and this is more easy and fast”.

Six point nine percent who answered ‘No’ only one student has justified why technology is not a helpful way. This is the student answer:

Student 7: “technology is distributing items”.



Results and Discussions

According to the results obtained from (A.B.C) sections of the questionnaire, we can conclude that the majority of students have a great passion for reading; in fact, they consider it as an essential source of getting information rather than other purposes. But the problem here is that most of the students prefer using print media in gathering information (As shown in the graphical 4/5) but at the same time they depend on electronic media and this is because of its ease. Hence, we understand that technology has greatly influenced students' reading patterns.

Regarding the results of section D and E indicate that the reading pattern is not as it is viewed in the past; Students nowadays are more surrounded by all kind of electronic devices. They show

some kind of shift in their reading practice, especially during academic studies. This study shows that students spend an increased amount of time on reading digital materials than reading print materials and their reading speed is highly increased by E-reading. Section E contributes one of the main reasons that lead most of the students to switch from PR to ER which are shown in students' answers and clearly appeared in their comments. Due to the engagement of students in the digital environment, with the high speed of technology and all the benefit that requires, for example; the ease of access to information anytime and anywhere just by browsing the WebPages, a multi free books to download.

Conclusion

The current chapter's goal is to answer the questions raised in the general introduction. This chapter presents the findings and analysis of the chosen corpus. It also includes procedures for data analysis and a description of the corpus.

Limitations of the Study

To conduct the questionnaire and the observation, we encountered a problem in the lack of time, as we only had one week to complete all the procedures and this was due to COVID-19. In addition to that, the second limitation of this study is that the findings of the survey can not be generalized to a large number of students at Kasdi Merbah University Ouargla because of the small size of the sample; thus, it cannot be generalized to all academic reading situations.

General Conclusion

General conclusion

Technology has become extremely pervasive in our daily lives, as the majority of the work we do requires the use of electronic devices. Among the things that technology includes is reading, as we gradually transition from printed books to electronic books. Hence, there is no denying that electronic reading is necessary and has become an integral part of our daily lives.

The current study aimed at answering two main questions. These questions are: to what extent is there a shift from print reading to E-reading among licence students? And what are the main reasons for the shift from print reading to e-reading?" The obtained results have yielded important insights. The findings indicate that 63.33% is the rate of the shift from print reading to e-reading, which is a high percent of electronic readers. First year licence students are not totally shifted from print reading to electronic reading, but there is a high use of E-reading compared to print reading. This study has also shown that although the majority of students use electronic materials in their academic study, they still prefer print reading. We proved statistically the hypothesis that technological advancements has made information more accessible to students, and that in turn leads most of them to switch to E-reading. This is also supported by licence students' answers. The ease of access to information, expensive books to buy, and no available books in the library that cover students' needs are some of the reasons which resulted in the shift from print reading to electronic reading.

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Appendix

A Survey Questionnaire on the Shift from Print Reading to Electronic Reading among First year Licence Students

University: Kasdi Merbah Ouargla

Faculty of Letters and Languages

English Department

Class: First Year bachelor students of English at KMUO.

Introduction: This questionnaire is part of a Master research. The aim of these questions is to shed light on the extent to which students have made the transition from print reading to electronic reading and the major reasons of this shift.

Instructions:

You are kindly asked to answer the following questions by checking (✓) among the below options:

Section A: Reading reality amid university students

1) - Do you read?

Yes No

If yes, how often?

Rarely Sometimes Often Always

2) - What is your reading aim?

A- To get information B- To do an assignment C- To do research D- To Educate E-To comprehend

Other reasons:

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.....

3) – Where do you prefer to read?

A-In the reading room B- Outdoor

Other places:

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.....

Section B: Preference of Reading Formats

4)-What type of media do you prefer to read from?

A-Print media (books, handouts)

B-Electronic media (Tablets, laptops...)

C- Both

Why?

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.....

Section C: Reading habits

5) - How would you describe your concentration when using print materials?

A-Low B- High C- I do not know

6) - How would you describe your concentration when using digital materials?

A-Low B- High C- I do not know

Section D: The rate of switching from print reading to electronic reading

7) - What kind of material do you read most of the time?

A- Books B- Articles C- Journals D- E-books E-WebPages

8) - How often do you use Print materials?

A- Never Rarely B- Sometimes C - Often D - Always

9) - How often do you use Electronic materials?

A- Never Rarely B- Sometimes C- Often D- Always

10)-How can you describe your reading speed when using electronic reading?

A- Increased

B- Unincreased

11) - How much time do you spend on reading print materials?

A- Much time B- Little time C-I do not know

12)-How much time do you spend on reading electronic materials?

A- Much time B- Little time C- I do not know

Section E: The common reasons for the shift from print reading to E-reading

13)-What type of reading is easier for you to get information?

A-Print reading

B- Electronic reading

Why?

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14) - What do you think of print books' prices?

A- Expensive B-cheap I do not know

15) – What do you use more for your academic study?

A- Print materials B- Electronic materials

Why?

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16) - Are the books you need available?

A- Yes B- No

If no, how can you get them?

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17) - How do you feel when you read from an electronic device?

A- Interested B- More active C- Bored

Why?

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18)-How do you feel when you read from a printed material?

A- Interested B-More active C-Bored

Why?

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19- Do you think that technology has helped you in your academic study?

Yes No

How?

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Abstract

The growth of electronic information that is available online and the increasing use of digital files in academic activities have driven more and more people in society including students to use digital materials instead of print materials. The aim of this thesis is to depict the reasons of the shift from print reading to electronic reading and the rate of this shift among bachelor students at the university of Kasdi Merbah, Ouargla, adopting a descriptive analytical approach. A questionnaire was selected as a main tool for collecting data, and was distributed to 60 English students for the sake of gaining insights on the students' reading types and what materials they read: print reading or electronic reading. The results revealed that most of the readers prefer electronic reading over print reading, due to the fast and proliferation of information available online and its lack in academic libraries.

Keywords: *reading, print reading, electronic reading, digital materials, print materials*

Résumé

La croissance de l'information électronique disponible en ligne et l'utilisation croissante des fichiers numériques dans les activités universitaires ont poussé de plus en plus de personnes dans la société, y compris les étudiants, à utiliser des documents numériques au lieu de documents. L'objectif de cette thèse est de décrire les raisons du passage de la lecture imprimée à la lecture électronique et le rythme de ce passage chez les étudiants en licence de l'université de Kasdi Merbah, Ouargla, en adoptant une approche analytique descriptive. Un questionnaire a été sélectionné comme principal outil de collecte de données et a été distribué à 60 étudiants anglais dans le but de mieux comprendre les types de lecture des étudiants et les matériaux qu'ils lisent : lecture imprimée ou lecture électronique. Les résultats ont révélé que la plupart des lecteurs préfèrent la lecture électronique à la lecture imprimée, en raison de la rapidité et de la prolifération de l'information disponible en ligne et de son manque dans les bibliothèques universitaires.

Mots-clés: *lecture, lecture imprimée, lecture électronique, documents numériques, documents imprimés.*

المخلص

إن التزايد السريع للمعلومات الإلكترونية على الإنترنت والاستخدام الأخذ بالانتشار للملفات الرقمية في الأنشطة الأكاديمية جعل العديد من الناس والطلاب خاصة يلجؤون إلى استخدام المواد الرقمية بدلا من المواد المطبوعة.

نهدف في هذه المذكرة إلى قياس نسبة معدل التحول من القراءة المطبوعة إلى القراءة الإلكترونية وذكر الأسباب التي أدت إلى اللجوء والاعتماد على هذا النوع من القراءة عند طلبة السنة الأولى ليسانس في جامعة قاصدي مرباح ورقلة معتمدين على منهج مختلط والذي هو مزيج بين المنهج الكمي والنوعي. حيث قمنا بجمع المعلومات وتحليلها لبيانات، ثم دمجنا النتائج وما استنتجناه معا. تم توزيع الاستبيان على 60 طالب لغة انجليزية من أجل الحصول على نتائج ذات بال حول أنواع القراءة لدى الطلاب وما يفضلونه "القراءة المطبوعة أو القراءة الإلكترونية" مع تبرير ما تم الحصول عليه من معطيات و نتائج. كشفت النتائج أن معظم القراء يلجؤون إلى القراءة الإلكترونية بدلا من المطبوعات بسبب انتشار المعلومات المتوفرة على الإنترنت ونقصها في المكتبات الأكاديمية.

الكلمات المفتاحية

القراءة - القراءة المطبوعة - القراءة الإلكترونية - الأدوات الرقمية - الأدوات المطبوعة