

Academic Purposes Digital Reading *EFL Students' Practices and Challenges*

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ABSTRACT

Digital reading is part of English as a foreign language (EFL) students' academic activity in this digital era. Exploring the practices of academic digital reading and the challenges the students face are the purposes of this qualitative study. The participants were the undergraduate EFL students in a public university in Jambi who were in the process of developing the ideas for their thesis. The data were taken through informal interview in WhatsApp group, questionnaire through google form, and focus group discussion through zoom meeting. Qualitative analysis on the data shows that the students practiced reading digitally for their academic assignment and task. They applied certain strategies such as skimming, rereading the text, highlighting and note taking, and generating keywords. During their reading practice, students faced some challenges that can be grouped into three intervening issues. The first is reading process itself, the second is reading in digital environment, and the last is reading in EFL context. In consequence, these issues influenced the students' comprehension toward the text, such as determining the main ideas and understanding the details. Based on the challenges found, it is important to equip students with digital reading strategies, and information literacy skills.

Keywords: *Academic purpose, digital reading, literacy, reading comprehension*

1. INTRODUCTION

With remarkably abundant reading resources available online, students have enormous access to the resources and gain benefit from them. Starting from light reading such as threads in trade forum, entertainment news, caption on photos posted on social media until 'heavy' reading such as journal articles and textbooks are available. Students are then updated with current situation in society as well as with the knowledge on their field. Based on that, it is quite inevitably for students to move from paper reading to easily-accessed digital reading (Chen & Lin, 2016; Liu, 2005) and develop strategies to read digitally.

In university study, reading is an essential activity for gathering information, ideas, or other necessary updates which are important to produce scholarly outputs (Sohail, 2016). Nowadays, university students are provided both printed and online materials to enrich their input to meet the academic criteria. In reading printed text, students can practice 'traditional' behaviour such as highlighting and annotating, in which becoming one of the issues in digital reading. Within these different media, apparently students cannot just copy their reading behaviour from traditional reading to digital reading.

Related to studies on digital reading, there are challenges that readers encounter when reading on screen (such as bouncing around different browser, unsustain attention) and strategies that readers develop while doing digital reading (such as keyword spotting). In line with that, it is considered important to know how university students practice their online academic reading and how they deal with problems they face during online reading. The purpose of this study is to explore online academic reading practices and challenges faced by final year students. In this study, final year students are those who are about to complete their undergraduate study and are in the process of writing their undergraduate thesis. During the process, students need to read books and journal articles that are not ready in print version in university library.

2. LITERATURE REVIEW

2.1. Reading

Reading deals with meaning construction process from texts involving many strategies for locating, synthesizing, and communicating information (Lopatovska & Sessions, 2016). Reading skills are

defined as the cognitive ability of a person when he/she interacts with texts (Urquhart & Weir, 2014). By understanding academic reading practices, students and teachers are able to achieve better use of textbooks and other academic texts, such as journal article (Sohail, 2016). In the practices of academic reading, students need to be critical as they have to grasp the author's main idea, to restate it in order to check comprehension, to compare ideas, and to evaluate the text in terms of its worthiness.

Interestingly, although it is common to think that language proficiency plays the most important role in EFL reading, apparently this is not always the case. This claim is based on a study by Sohail (2016) where he investigated university graduates reading behaviour in Leeds Metropolitan University. He found that though the graduate students have good language proficiency in English since it is their first language, they did not perform effective reading strategies and it has negative effect on comprehension. Thus, it is clear that employing appropriate reading strategies is very necessary for the students. Students need to develop strategies when reading in first or second language. In his study on exploring academic reading strategies by Arabic postgraduate students, Shehata (2019) found that postgraduate students employ strategies namely skimming, browsing, selective reading, and focused reading. The students set different purpose on each of the strategies and end in focused reading in order to have deep understanding about the text.

From a study by Sutherland and Incera (2021) about critical reading behaviour, the findings indicate that undergraduate student need explicit teaching intervention on their reading skills especially on application skills (the last skill out of five critical reading skill). This study is like a reflection of what the faculties think about the importance of critical reading and to what extent they have done something about that. The faculties think that students are lack in competence of certain area in critical reading and they are required to reflect whether they have provided sufficient teaching on that particular area. This study provides another perspective on research in reading where it is more common to investigate the students and to focus on them, meanwhile this study presents introspective side of the teachers/faculty to know what they think and have contributed to develop students' reading skills.

2.2. Digital Reading

According to Lim and Toh (2020), digital reading is defined as process of obtaining information from texts that are available in tablets or other gadgets. Digital reading is not same with reading in printed format in the sense that it requires different strategies, for example browsing, keywords spotting, non-linear reading, and selective reading (Liu, 2005). Lim and Toh (2020) add

that students have to gain reading skills in digital environment because they deal not only locating specific information, but also engaging with information process for drawing inferences, making connection over all ideas and information, and constructing arguments. Therefore, with the reading behaviour shift from reading from printed materials towards digital reading, students are likely to experience challenges and develop strategies afterward in order to understand reading text comprehensively.

There are many studies done in the area of digital reading. It is important to note that almost on every beginning of the research report on digital reading, the most issues addressed when practicing digital reading are eye strain, shallow comprehension, and lack of attention (Chen & Chen, 2014; Chen & Lin, 2016; Johnston & Salaz, 2019). The studies complemented each other in the sense that they have made efforts and tried to provide solutions to overcome the burdens of digital reading which are outlined in the previous studies. In his study, Liu (2005) reports on the changes in reading behaviour within 10 years. He found that during 2005 and 10-year backwards, there is increasing number of screen-based reading practices, which means movement from paper-based reading, but people still found it difficult to move from traditional activities such as highlighting and annotating when reading papers or books to the digital based reading. In other words, the change of reading behaviour is there, but it is very unlikely that digital reading will totally take over printed media.

Another study on digital reading is an overview of digital reading and this study classified five areas on digital reading phenomenon, namely digital reading behaviour, print vs digital, preference for reading medium, multi-tasking and learning, and technological advancement and traditional attachment (Liu, 2012). In this study, the writer confirms in general that although the change of behaviour is happening, it is somehow difficult for people to read in total digital environment. Readers still maintain their reading habits when doing in-depth reading, namely doing annotation and highlighting. Moreover, people also still love the smell of a book, touch it, and sense the thickness of book. Then, there was even greater study in Australian by Johnston and Salaz (2019) as part of ARFIS (Academic Reading Format International Study) which surveyed the preferences on print versus digital reading. In Australia, students eventually still prefer print text over digital text though they also acknowledge the convenience and cheap cost of e-texts. From these two studies in 2012 and 2019, it can be seen also the changes in people's attitude toward digital reading. People somehow start to do digital reading, but with some notes to be attended.

Good news on digital reading come from a study by Chen and Chen (2014), and Chen, Chen, and Horng (2021) where they reported a successful system to help

students' comprehension on digital reading, namely collaborative reading annotation system. With this system, students can annotate their reading collaboratively with their friends through interactive discussion. This annotation system is claimed to have better impact over traditional paper-based reading. The authors then developed the learning strategy with enabling feedback and formative assessment by using this online annotation system. From these two studies, it can be seen that people adapt their burden in digital reading that become issue in previous years namely being unable to do annotation. There is now a system called online annotation that can be used to mark on our digital reading practice, even it can be done collaboratively, although this system (or probably other digital system that require specific literacy) is still being unknown by others (Johnston & Salaz, 2019).

3. METHOD

This study was conducted under qualitative design to explore the academic digital reading of the final year English students in a public university in Jambi, Indonesia and the challenges faced by the students in practicing academic digital reading. To promote comprehensive understanding of the phenomenon under study, data triangulation was used by involving three different data sources: informal interview in WhatsApp group, questionnaire through google form, and focus group discussion through zoom meeting.

3.1. Participants

The participants were selected through purposive sampling (Saldaña, 2021). The criteria for the participant selection are the university EFL students who are in the progress of writing their proposal for conducting final term research and they were voluntarily agreed to participate. They should also have internet access so each could seek out online reading resources. There were eight participants agreed to participate who consented to participate in the study. The pseudonym (Burles & Bally, 2018) for the participants were P1, P2, P3, P4, P5, P6, P7, and P8.

3.2. Instrument

To answer the research questions, there were three sources of data: informal interview in WhatsApp group, questionnaire through google form, and focus group discussion through zoom meeting. Informal interview in WhatsApp group was an initial step in finding the general data about student digital reading practices and challenges. Then, questionnaire through google form was spread to the participants to gather data which focus on their critical digital reading behaviour. The questionnaire uses critical reading behaviour outlined in the research by Sutherland and Incera (2021). To finalize the data

gathering on the students' digital reading practices and challenges, a focus group discussion through zoom meeting was conducted. The discussion topics are those from the study of Liu (2012) where he outlined five main issues in digital reading, namely digital reading behaviour, print vs digital, preference for reading medium, multi-tasking and learning, and technological advancement and traditional attachment. The discussion record was transcribed for the purpose of coding process.

3.3. Procedure

The data were analysed following the process of coding in six phases: familiarization with data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes, and producing the final report. The framework for data coding was theoretically ground in an inductive approach, which permit the identified themes to be strongly linked to the data themselves. Beside constant comparison and contrast, the irregularities of the data were also looked for. The qualitative data were coded according to themes based on the students' practice and their challenges. During the initial coding process, descriptive coding (Saldaña, 2021) in the form of word or short phrase was used to summarize the transcript.

4. FINDINGS AND DISCUSSION

The findings of this study were delineated into two sections. The first section centres on what data reveal on the participants' reading practice when reading web-based or digital text for their academic purposes. The second section focuses on the challenges the student face that emerged from the data.

4.1. Practice of reading digital texts

From the discussion with students, it is revealed that students' practice on academic digital reading are keyword spotting, skimming, and reread the text in depth when they find useful and related materials. After finding the materials, students performed note taking and highlighting both directly on the digital text and on separate paper with the purpose of better understanding. Another interesting practice of digital reading facilitated by the ease of access to different sources, which was reading other related web or blogs containing simple explanation of the issue that students looked for.

Thus, the first activity that students do to get the sources and references are searching for keywords and skimming the text. They use Google, Google Scholar, or other scholar databases for finding the text they will read. Students usually practice skimming to select which book or journals to be read. In terms of reading journal articles, they skim the abstract to do general review of the articles and then select whether this article is going to be read deeply later. So, doing skimming is for the purpose of

getting the idea quickly. Then, after getting the intended text, the students would read it more deeply.

When choosing articles, I read the abstract first, because it contains the summary of the article. If I feel it is suitable, I will download it. (P6)

When searching for journals, I will see the keywords I want to search for, or important information that I really want to find, so I read skimming. Then sometimes if I have found it, I read it in depth. (P4)

Second, after having the appropriate texts, students did focused reading. There are strategies when they read in depth such as rereading the article, note-taking and highlighting either digitally or taking note in separate paper.

If it is related with my writing, I read it in-depth immediately. I read it over and over again until I find ideas which is appropriate for my thesis. (P7)

In online reading, I highlight the text. If I want to have better understanding (of the text), I take note in separate paper or book. (P5)

If I read website with Explorer, I can highlight, pin the text, and take note directly. (P3)

The highly appropriate source for academic purpose reading is peer reviewed journal articles which have been accepted for publication after having rigorous editorial review process. Other potentially acceptable sources are books, encyclopaedias, and other scholarly works (that is, works written or produced by researchers, official agencies, or corporations). The students read some sources digitally for their academic purposes. However, most of them read three kinds of sources for their academic purposes reading. They are books, journals, and blogs. Some students said that reading books and journals are important but reading blogs would help her to understand the ideas. So, before reading the journal and the book she would read the blog. This can be included as the third step, although not every student does this activity

I spend more time reading academic texts because I basically don't really like reading. ... When I don't have any more ideas to continue writing, I usually go to Google and search for a topic where I'm confused, and the first thing I look for is blog. Only when I understand the blog, I increase the level by looking for PDF files,.... So, I don't find it difficult to understand PDF based text. That's why I started by reading light writing-like a blog. (P6)

In reading the digital text the strategy that most of the students found extremely useful are skimming, rereading the text, highlighting and note taking, and generating keywords. They also practiced making personal connections, connecting two or more ideas from the text, and comparing different ideas from the text. This is called synthesizing skill (Sutherland & Incera, 2021). Students employed this skill in their academic reading to select information and connect ideas in order to develop their thesis writing. These activities are in line with Lockhart and Soliday's (2016) statement that reading brings

students to knowledge construction and reading can improve students' writing. Students perform academic reading in order to improve their knowledge and writing for the purpose of conducting research as the requirement for their undergraduate thesis. Thus, academic reading activities such as selecting information by note taking and highlighting, making mind map, synthesizing facts, and applying information are frequently used when they read digital text academically. It can be seen that students do shallow reading (skimming and browsing) for the purpose of filtering and selecting the text, and they do it for the time efficiency (Urquhart & Weir, 2014).

4.2. Challenges of reading digital texts

The challenge the students face when reading digital text for academic purpose can be classified into two groups, namely challenges related to digital reading and challenges related to academic reading. These groups are based on what scholars have mentioned in their studies. As identified by Liu (2012), digital reading challenges deal with reading preferences (people read digitally for entertainment or short documents like emails, and people read the print media for more serious reading like reading textbooks), multitasking (reading online with several tabs open, which is likely to lead to superficial reading), and traditional attachment to printed material (people resist to read printed materials because they want to sense the book, easiness of navigation, and possibility to do note taking). Meanwhile, in terms of academic reading, the challenges are maintaining concentration and comprehending the texts. According to Sohail (2016), academic reading have philosophies which are expressed in a complex language and may include challenging words and sentences and this results in difficulties in maintaining students' motivation. Not to mention if they have to read in second language texts. In short, reading academic text is exhausting (Sohail, 2016). The data gained from discussion seem to reflect to these challenges.

The first challenge found from data is concentration problem. Reading academic text needs concentration. Unfortunately, some of the students read the digital text through cell phone which has small screen size and small font which resulted on difficulties for focused reading, and it hurt their eyes. Study by Chen and Lin (2016) indicates that small screen can affect reading performance, because the screen limits the information transmission. Another cause on concentration problem is that the students get distracted easily when they are reading academic text. The phone notifications and hyperlinks can lead to concentration loss. Once they loss their focus, they become bored with their reading activity.

...my concentration is also a bit muddled because for example, if the intention is to read seriously, but online sometimes it is easy to get bored and also often distracted,

if for example via cellphone, there are often notifications and hyperlinks. (P1)

To overcome the challenge dealing with the distraction, students performed certain strategies. Among the strategies were turning off the notification and doing entertaining reading.

I'm trying not to get distracted. I turn off all notifications even though I turn on the internet connection on my cellphone. So, if doing in-depth reading, I have to concentrate. It may take up to half an hour until I get what I am looking for. When I am tired, I read comics to entertain. (P5)

Navigation the text is the next challenge when doing digital reading (Liu, 2012). The data reveal that some students find it easy to navigate the text just by using page number and keyword. They can just type keyword(s) and then there appears what they want to look for. It is even easier than reading paper-based material. Nevertheless, some students admit that navigation is becoming problem because when they read digitally and they forget the idea that they have just read, and it makes them scroll the texts repeatedly. It is true that they can type the keyword, but it often doesn't work. The keywords sometimes are not enough because what appear after typing the keyword is the text suggests with many pages to skim.

Maybe the keywords are not specific, for example 'digital reading', there are more specifications from digital reading, such as strategies or something like that. (P7)

In order to overcome the problem, students did note taking in separate paper or took screenshot of particular page so that it would be easier to retrieve ideas from the text. Apparently, students employed some practices from traditional reading such as note taking and highlighting, and bring them to practice of digital reading, with some interesting adjustment, like taking screenshot. This kind of activity helps with text navigation and results in better understanding of the text. Indeed, reading in digital environment brings inevitable challenges; however, the solution is also found whether with the advancement of technology or just with a practical idea.

...If I consider the information is important and I am worry that I will lose them, I copy the information to Microsoft word and save it there. (P1)

I take screenshots (of the important ideas) ... and later I arrange them into files so later I can easily access them. (P3)

Other challenges faced by the students are the language of the text and lack of comprehension. They found it hard to follow the academic text which consist of some academic vocabularies. It looks like reading old novel, the students said. They think that their ability to comprehend academic text is not sufficient. Besides, the love of reading just before the deadline is another challenge that can cause them to not be able to understand ideas and information comprehensively.

The language of academic reading is sometimes too rigid and also some journals. I can't seem to follow the flow of

ideas.... there are a lot of academic words. So sometimes I feel dizzy.... reading academic writings makes me feel like reading old novels. (P3)

I feel my ability to understand academic texts is decreasing because I can't do what... I can't understand more difficult academic based texts quickly. (P6)

When the deadline is closer, I'm going to focus right away, then I'll read it in depth, so I can find all the hyperlinks. That's just how it is, if I read closer to the deadline, it doesn't make much sense. (P8)

Since academic reading can be exhausting, affective reading strategies as an integral part of reading strategies (Sohail, 2016). Affective reading strategies deal with strategies that readers can use to retain attentiveness, maintain motivation, and manage efficient time. In this study, students employed academic reading strategies such as skimming for filtering and selecting texts, making mind map to figure out the relation among ideas, and synthesizing information and data found in text, as well as make use of the information gained from reading to improve their thesis writing. However, affective issues need also to be attended, such as maintaining motivation and retain attentiveness. Students sometimes postponed their assignment and waited until it was close to deadline. Also, they did more entertaining reading if compared to academic reading. The result can be then easily predicted, the understanding of the-e text is not good, not comprehensive. They only understand chunk of information and cannot really understand the whole picture. Probably the best answer to this kind of problem is that students must have more awareness as their role as learner so that they can perform tasks attached to their role better and can help to reach their goals (Weinstein & Meyer, 1991). The problem that students spend more time in reading for leisure and students' habit to postpone to assignment might be overcome by raising their self-awareness.

5. CONCLUSION

Students are already practicing several digital reading strategies for their academic goals. However, they still face some challenges. Combinations and variations of strategies according to needs, and more practice in reading digital academic sources are suggested to be done so that reading objectives can be achieved more optimally. It implies that the teaching and learning of academic reading skills and strategies should be developed earlier. The need of explicit teaching on each step of critical reading is important in order to understand the academic texts better.

REFERENCES

Burles, M. C., & Bally, J. M. G. (2018). Ethical, practical, and methodological considerations for unobtrusive qualitative research about personal narratives shared

- on the internet. *International Journal of Qualitative Methods*, 17(1), 1609406918788203.
- Chen, C.-M., & Chen, F.-Y. (2014). Enhancing digital reading performance with a collaborative reading annotation system. *Computers & Education*, 77, 67–81.
- Chen, C.-M., Chen, L.-C., & Horng, W.-J. (2021). A collaborative reading annotation system with formative assessment and feedback mechanisms to promote digital reading performance. *Interactive Learning Environments*, 29(5), 848–865.
- Chen, C.-M., & Lin, Y.-J. (2016). Effects of different text display types on reading comprehension, sustained attention and cognitive load in mobile reading contexts. *Interactive Learning Environments*, 24(3), 553–571.
- Johnston, N., & Salaz, A. M. (2019). Exploring the reasons why university students prefer print over digital texts: An Australian perspective. *Journal of the Australian Library and Information Association*, 68(2), 126–145.
- Lim, F. V., & Toh, W. (2020). How to teach digital reading? *Journal of Information Literacy*, 14(2).
- Liu, Z. (2005). Reading behavior in the digital environment: Changes in reading behavior over the past ten years. *Journal of Documentation*, 61 (6), 700–712.
- Liu, Z. (2012). Digital reading. *Chinese Journal of Library and Information Science (English Edition)*, 85.
- Lockhart, T., & Soliday, M. (2016). The critical place of reading in writing transfer (and beyond): A report of student experiences. *Pedagogy*, 16(1), 23–37.
- Lopatovska, I., & Sessions, D. (2016). Understanding academic reading in the context of information-seeking. *Library Review*, 66 (8).
- Saldaña, J. (2021). *The coding manual for qualitative researchers*. Sage.
- Shehata, A. M. K. (2019). Understanding academic reading behavior of Arab postgraduate students. *Journal of Librarianship and Information Science*, 51(3), 814–822.
- Sohail, S. (2016). Academic reading strategies used by Leeds Metropolitan University Graduates: A case study. *Journal of Education and Educational Development*, 2(2), 115–133.
- Sutherland, A., & Incera, S. (2021). Critical reading: What do faculty think students should do? *Journal of College Reading and Learning*, 1–24.
- Urquhart, A. H., & Weir, C. J. (2014). *Reading in a second language: Process, product and practice*. Routledge.
- Weinstein, C. E., & Meyer, D. K. (1991). Cognitive learning strategies and college teaching. *New Directions for Teaching and Learning*, 45, 15–26.