

Digital Literacy: Do Undergraduates Read More or Less?

Zuriani Yaacob
Academy of Language Studies
Universiti Teknologi MARA Cawangan Pahang
Malaysia
zurianibtyaacob@pahang.uitm.edu.my

Suriyati Ujang, Wan Rohana Wan Endut
Faculty of Computer and Mathematical Sciences
Universiti Teknologi MARA Cawangan Pahang
Malaysia
{suriyatiujang, wanrohana}@pahang.uitm.edu.my

Abstract—It is without a doubt that reading is a twofold process which allows cognitive processing of information as well as aesthetic appreciation. However, due to the emergence of new media of information and communication technology (ICT) as well as the evolution of electronic devices, student's reading behaviour has changed. The use of ICT is considered as a recent catalyst to bring changes and new information in teaching and learning approaches [1]. Nevertheless, as claimed by some researchers, the introduction of ICT will enable its users particularly university students to get, communicate and manage information at their own pace. Therefore, this study attempted to investigate students' reading habit and engagement with digital contents as well as to ascertain their practices while using electronic media for reading exercise. Quantitative data were collected through valid survey questionnaires which were distributed to 61 respondents from Universiti Teknologi MARA (UiTM) Raub Campus, Malaysia. The results revealed students' preferences in using electronic media and how ICT has presented possibilities for students' reading habit to develop. This study has shed light on possible factors contributing to deficiencies in reading and reasoning. Given the importance of digital literacy, this study is anticipated to benefit future research to provide possible ways to enhance online reading and later critical digital reading skills.

Keywords—*digital literacy; electronic devices; reading habits*

I. INTRODUCTION

Reading has at all times and in all ages been a great source of knowledge. The ability to read receptively and responsively is highly valued and considered paramount for social and economic advancement. In today's world with so much more to know and to learn and also the need for conscious effort to conquer the divisive forces, people need to read more.

In the Report of The Commission on Reading [1], reading is considered as a cornerstone for success, not just in schools, but also throughout the adult life of an individual. Reading is regarded as a process, a mode of thinking and a kind of real experience. Indeed, it involves various complex skills which include the ability to perceive printed words, to skim for information and possibility to read intensively. However, due to the emergence of new multimedia and communication technology, the trend of reading among students at universities and colleges nowadays has changed dramatically from traditional pattern to the digital environment.

Hence, for the purpose of this study, the researchers intended to specifically investigate students' reading engagement with printed and online-based materials and also their preferred online activities when surfing the Internet.

II. LITERATURE REVIEW

Undeniably, reading exercise is essential in all levels specifically in tertiary education. However, not only non-native speakers of English but natives are still struggling with this habit [2]. At the university level, students not only have to comprehend the ideas and knowledge given, but also have to argue, evaluate, expand and improve these ideas so that their intellectual potential can be enhanced. With new emerging technologies, students are permitted to work at their own pace to meet their individual learning needs. Some researchers assert that technology is able to restructure education, transform classrooms, enhance and enrich global communication as well as to welcome the world resources to our fingertips [3]. In terms of English language teaching, Internet is believed to present authentic language input specifically in such target language together with abundance of reading materials. In other words, technology and motivation will satisfy one's affective needs.

Reading performance and academic performance are closely related. The habit is essential to unlock one's potential as it is at the nucleus of student's life and also able to assist him to weave his journey of academic success. Logically, a student who is a good reader is more likely to do well in school and pass the examinations compared to a student who is a weak reader. As demonstrated earlier [4], good readers can understand the individual sentences and organizational structure of a piece of writing. They also comprehend ideas, follow arguments and detect implications. In other words, good readers can extract immediately what is important from the writing they are engaged with.

A. Engagement with Digital Content

The immediacy of feedback that students obtain via online readings is appealing for them to continue interacting and comprehending the materials with technology [5]. In a study conducted on reading habits and attitude in the digital age [6], it was found that university students spend quite a significant amount of time reading newspaper, academic books, and website. Reading has also become a major activity during their leisure time. Their engagement in academic process requires

them to read and their choice of reading materials are the less fictional and more academic in nature. It is also found that websites are seen as increasingly important reading sources among university students.

Nevertheless, the issue of students' engagement with serious online reading is a matter of concern of many parents and educators. A study indicated that the students spend most of their leisure time on the Internet to surf social media sites and very few of them read for knowledge, self-growth and inspiration [7]. This probably due to dominant culture that serious reading is something to be done in class but not during their leisure time.

B. Technological Implications on Students' Reading Habit

With the presence of innovative digital media, students' reading preference has migrated into digital literacy. As it has been defined [8], digital literacy is the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers. The concept of literacy goes beyond simply being able to read; it has always meant the ability to read with meaning, and to understand.

Reading in print and on the Internet are obviously two different activities. On paper, text has a predetermined beginning, middle and end, where readers focus for a sustained period on one author's vision. On the Internet, readers skate through cyberspace at will and as a result, compose their own beginning, middle and end [9]. These differences between print literacy and digital literacy have been written as [10]:

"In the world of print, the idea and its expression are virtually one. The meaning takes the form of words; words generate the meaning. Digital literacy works in an inherently different way. The same digital code that expresses words and numbers can, if the parameters of expression are adjusted, generate sounds and images. This parametric variation stands at the center of digital expressivity; a role it could never play in print."

In another study administered [11], it was examined that students' attitude towards ICT in teaching and learning process was significant. They perceived that technology really supports and enhances their university learning experience. The ICT was seen as the main platform to obtain resources as well as to stay connected with instructors and fellow friends.

C. Practices When Using Electronic Media

In an increasingly digital environment, readers are likely to gradually develop the screen-based reading behavior, and to increasingly use a variety of strategies (e.g. browsing and keyword spotting) to cope with the information-abundant environment [12].

It is further highlighted that motivation to read is one of the significant factors for actively engaging learners in the process of reading which is at the same time, an important element for the students to perform better in classrooms [13]. Hence, students' motivation for reading digital texts is very useful if it can be sustained to proceed with academic-based online materials. This will also provide ideas to teachers of

how digital reading passion can effectively improve their students' participations in reading tasks and class discussions.

III. METHODOLOGY

A total of 61 diploma students from UiTM, Raub Campus were randomly selected for the study. Primary data were collected using survey questionnaire which comprised five sections in order to elicit information on students' reading habit. The questionnaire was divided into five sections, namely the respondents' personal information, types of reading materials read by the respondents and preferred activities while surfing the Internet and techniques they thought would help in developing their reading abilities. The respondents were required to evaluate a statement according to five Likert scale of never, rarely, sometimes, often and lastly very often. It was found that the reliability coefficients of sections two and three about the types of materials read was 0.797.

IV. RESULTS AND DISCUSSION

In this study, the respondents were asked to rate their reading habits according to types of paper-based materials read as shown in Table I. From the figures, about 70.6% and 72.4% of the respondents rated their reading habit in the range of Sometimes to Very Often for newspapers and textbooks respectively. Meanwhile, only 56.9% and 60.4% of the same criteria were recorded for magazines and novels respectively.

TABLE I. PAPER-BASED READING MATERIALS

Reading	Never (%)	Rarely (%)	Sometimes (%)	Often (%)	Very Often (%)
Newspapers	6.9	22.4	53.4	15.5	1.7
Magazines	5.2	37.9	50	5.2	1.7
Textbooks	0	27.6	34.5	34.5	3.4
Novels	17.2	22.4	32.8	20.7	6.9

In addition, the percentages of online- based reading contents are revealed in Table II. Apparently, 80% of the respondents rated Sometimes, Often and Very Often for them to read online information, online news, health information as well as food/nutrition. Nevertheless, reading contents such as online magazines, e-book, comic strips, weather report and horoscope were less popular among the respondents where less than 50% of them opted these reading contents as Rarely or Never Read while surfing the Internet.

TABLE II. ONLINE-BASED READING CONTENTS

Reading	Never (%)	Rarely (%)	Sometimes (%)	Often (%)	Very Often (%)
Online information	0	0	19	44.8	36.2
Online news	0	12.1	27.6	41.4	19
Health information	0	18.2	37.9	39.7	5.2
Job Information	1.7	31	39.7	24.1	3.4
Food/nutrition	3.4	10.3	36.2	39.7	10.3
Movie review	3.4	19	34.5	41.4	1.7
Stories/Novels	3.4	20.7	39.7	22.4	13.8
E-mail	3.4	25.9	46.6	17.2	6.9
Sport	3.4	39.7	37.9	13.8	5.2
Fashion Information	5.2	19	41.4	25.9	8.6
Jokes	5.2	20.7	20.7	41.4	12.1
Online magazines	5.2	44.8	39.7	6.9	1.7
Sales information	6.9	19	32.8	34.5	6.9
e-book	19	43.1	29.3	5	0
Comic strips	8.6	43.1	27.6	19	1.7
Journal articles	10.3	32.8	39.7	17.2	0
Weather report	12.1	37.9	39.7	10.3	0
Horoscope	25.9	50	15.5	6.9	1.7

No) was given in order to ascertain their practices in using the electronic media. Based on the results in Table III, there was an obvious practice where most respondents (more than 80%) opted Yes for the activities such as listening to music, chatting, and look at photo album as their most preferred activities while surfing the Internet. Conversely speaking, more than 50% of the respondents preferred not to play game, use yahoo or MSN messenger and download movies. Not only that, approximately 51.7% of the respondents revealed that they did some online shopping when surfing the Internet.

TABLE III. THINGS THEY DO ONLINE BY RANKING ORDER

What do you do when you surf the Internet	Yes	No
I listen to music	94.8	5.2
I chat with my friends	87.9	12.1
I look at photo album	86.2	10.3
I check email	86.2	13.8
I shop online	51.7	48.3
I play game	48.3	51.7
I use yahoo Messenger	29.3	70.7
I download all types of movies	24.1	75.9
I use MSN messenger	22.4	77.6

Finally, the respondents were also asked whether they read all kinds of information or vice versa when they surf the Internet. On a positive note, the findings demonstrated that 78.57% of the respondents read all the information as in Table IV.

TABLE IV. READING HABIT

Percentage of response 'I read all kinds of information when I surf on the Internet'	
Yes	78.57
No	21.43
Total	100

V. CONCLUSION

Based on the findings of this study, it was observed that students did not spend too much time on reading printed newspapers and textbooks. Nevertheless, about 80% of them preferred screen reading even though they were not really focusing on reading academic materials. Despite the preference, they read less about weather report, horoscope and comic strips. Apparently, the findings demonstrate that the emergence of technology does not encourage the students to read more regardless types of reading materials. Therefore, few pedagogical implications could be drawn for future studies. Instructors have to realize that in this digital era, new different teaching preferences should be employed and one of them is specific approach of screen reading. The growth of gadgets such as e-books, pocket books and tablet PCs can be maximized by educators particularly at universities or colleges to effectively encourage their students to read extensively the materials of academic in nature.

It is no doubt that specific training and guides should be given to the students as some issues in regard to reading from a screen do matter. However, since the students find the use of

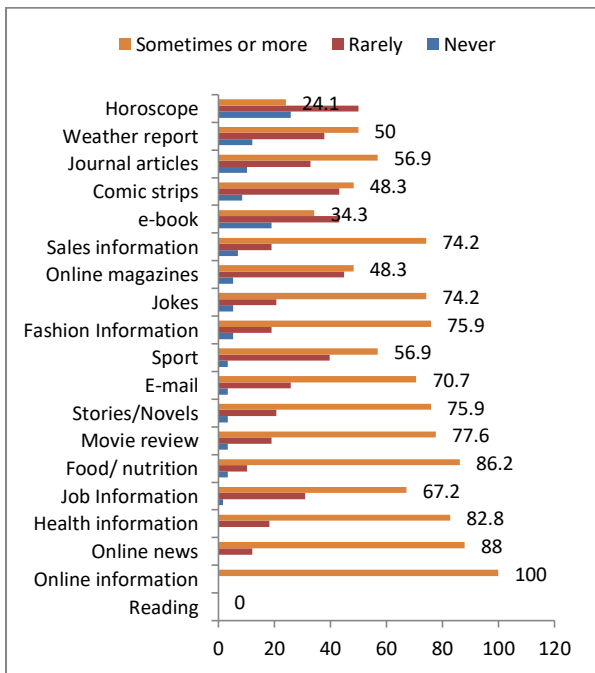


Fig. 1. The online-based reading contents

Based on the information obtained in this study, it is also necessary to highlight the activities that the respondents preferred to commit while surfing the Internet and this was tabulated in Table III. The respondents were asked about several online activities where dichotomous scale (Yes and

ICT is capable of giving them unlimited resources, it has become inevitable for class instructors to rethink its necessity in the current context of education. Although there are limitations and constraints in finding relevancy of technology in a classroom, it is hoped that this research is able to provide better perspective and rationale for having screen reading during lectures, time spent in completing reading tasks as well as to justify its role in assisting the students to improve their reading habit in the target language i.e. English.

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