A Study of On-screen Academic Reading Strategies Among a Group of EFL/ESL Postgraduate Arab Learners in a British University

Hanadi Khadawardi

University of Southampton (UK) Hanadikhadawardi @gmail.com

Abstract

The current study contributes to research on foreign/second language (L2) academic reading by presenting a case study, which sought to investigate specific groups of international (Arab) postgraduate students' L2 academic reading practices in the UK educational context. In particular, the study scrutinises postgraduate students' L2 on-screen based academic reading strategies. The study tracked Masters-level students and examined their reading strategies throughout their Masters programs, in the UK educational context. The academic reading strategies of five students from five different disciplines (Health Science, Computer Science, Psychology, Management, and Education) were investigated at two points during their one-year Masters programs. In addition, the study investigated the same phenomenon with fifteen PhD students drawn from seven different disciplines (Computer Science, Engineering, Psychology, Management, Marketing, Health Science, and Applied Linguistics) during one period of study in the same context. The researcher used think-aloud protocol, field notes, stimulated recall, and semi-structured interviews to collect the data. The data collected was analysed qualitatively. In the current study, the data mainly presents cognitive reading strategies, and illustrates the various ways in which they are used in relation to the reading models. The cognitive strategies examined in the current study are those which are task-specific and which are employed by readers in the process of reading. Readers utilise these types of strategy during their interaction with the academic text, in order to achieve their academic purposes. The results of the study will explain the process of learning in terms of reading L2 on-screen academic texts in the L2 educational context.

1. Introduction

Several educational researchers have found a strong correlation between reading and academic success (Grabe & Stoller 2002; Chu et al. 2011). According ICAS (2002), all students need efficient reading abilities, and one major factor in poor academic achievement is inadequate reading skills. Therefore, university students with better than adequate reading ability typically perform better, and pass examinations more easily, than students with less developed reading skills (Burns & Sinfield, 2012). However, this traditional view of the essential demands for effective academic reading is not sufficient in the current digital information age (Gomez, 2008). The recent proliferation of academic electronic texts has brought about dramatic changes in the ways university students interact with information (Liu, 2008). Thus, today's reading process differs significantly from that employed previously. University students in the 21st Century find themselves exposed to vast quantities of electronic texts and documents that require specific reading strategies.

1.1 Reading as a bottom-up process

The bottom-up model has existed in 1960s. It emphasises that readers, taking reading materials as information input, start from letter, sound and word recognition, and then combine information continuously to accomplish reading tasks (Dambacher, 2010). This model highlights that reading must be done in a fixed sequence to comprehend word meaning gradually, and assumes that readers comprehend the reading materials mainly through language knowledge. However, other researchers have argued that this picture does not reflect the actual reading process in second language contexts. Nunan (2000) argues that 'we don't process print in a serial, linear, step by step way. Nor do we process print as a visual tape-recorder' (p.256). Eskey (1973, cited in Carrell et al. 2000) also claims that the decoding model is inadequate, because it 'underestimated the contribution of the reader' (p.3) and it failed to recognize students' expectations of the text that were based on their knowledge of language and content. Accordingly, the bottom-up model lays more emphasis on the written text, and that readers are put in a passive position, in which they decode whatever is written in the text in a mechanical way. It is only concerned with interpreting, and excludes the reader's knowledge and background experience.

1.2 Reading as a top-down process

Due to the perceived deficiency of the bottom-up model, theorists such as Widdowson (1983); Goodman (1967), and Smith (1994, cited in Hudson 2007a) began to view second language reading as an active process in which the reader is an active information processor, who predicts while sampling only parts of the actual text. Goodman (1967) and Smith (2004) claim that reading is not primarily a process of picking up information from the page in a letter-by-letter, word-by-word manner. Rather, they argued that reading is a selective process. Since it does not seem likely that readers have the time to look at all the words on a page and still read rapidly, it makes sense that readers would use knowledge that they bring to the text, and then read by predicting information, and confirming or disconfirming that prediction. On the other hand, Stanovich (1980, cited in Bernhardt 2011) argues that the top-down process also has its procedural problems; for example, it is possible that the reader has little knowledge of the topic and cannot generate predictions. In this case, the topdown reading approach is not sufficient to enable comprehension of a written text, and the skilled reader who can generate predictions takes a much longer time than it would normally, to recognize the words. Another argument against the top-down technique is that it tends to emphasize higher-level skills, such as the prediction of meaning by means of context clues or background knowledge, at the expense of lower-level skills like the rapid and accurate identification of lexical and grammatical forms (Birch, 2007a). According to Smith (2004), this reading model is good for the skilful, fluent reader, for whom perception and decoding have become automatic, but not for the less proficient, developing reader and second language (L2) reader.

1.3 Reading as an interactive process

Recent reading researchers suggest that the process of reading needs to employ both models (Bottom-up and Top-down) simultaneously, and advocate an interactive model of reading (Birch, 2007b; Maxwell, 2012). This model developed in the late 1970s and early 1980s. In this model, low-level 'bottom-up' processes involving the text, such as letters and words, interact with higher-level 'top-down' processes, including prior knowledge of the text or subject (Hudson, 2007b). Readers engage with what is on the page, as well as with their prior knowledge. The higher-level cognitive processes involved in reading, in conjunction with the lower level processes, are essential for skilled reading and L2 readers, as together they form the cognitive processing faculties that give readers the ability to read for different purposes (Hudson 2007b; Grabe 2012b).

1.4 Cognitive reading strategies

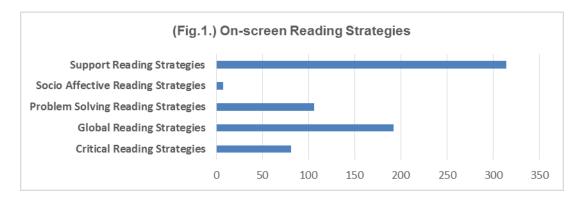
Cognitive reading strategies are defined as learning techniques or study skills, that make reading more effective and efficient (Oxford & Crookall 1989; Anderson 1999). Reading strategies indicate how readers conceive of a task, how they make sense of what they read, and what they do when they do not understand (Koda, 2005). Current research in second and foreign language reading has begun to focus on the reading strategies used by L2 readers to process L2 written text. In this vein, Sheorey and Mokhtari (2001) proposed a scheme of classification for reading strategies, by grouping them in a Survey of Reading Strategies (SORS). The survey measures three categories of reading strategies: global reading strategies, problem-solving strategies, and support strategies. Anderson (2003) adopted the Survey of Reading Strategies (SORS) and re-named it the Online Survey of Reading Strategies (OSORS) to examine the role of second language reading strategies within the context of digital reading tasks. Since one of the main objectives of the current study is to examine readers' on-screen L2 academic reading strategies, using think-aloud protocols, the researcher adopted the (OSORS) classification to investigate the reading strategies utilised by postgraduate Arab students.

2. Results

2.1 Readers' on-screen academic reading strategies

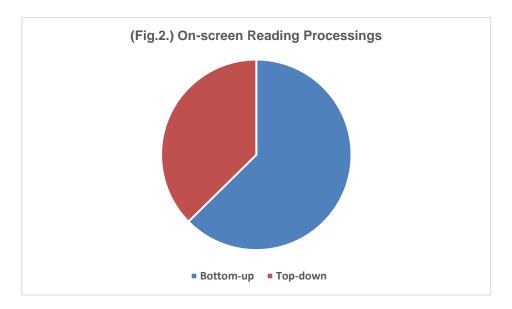
Observing the readers during on-screen reading, reveals several interesting findings. An examination of the type and frequency of strategies that readers were employing during their on-screen reading shows that they utilised the different types of strategy in different ratios. They were all employing the five different types of reading strategy; however, the frequency with which these strategies were utilised varies significantly. The most frequently employed strategy was that of support reading. For example, readers were often vocalising, and translating as they went along. The second most employed strategy was global strategies. For example, readers were skipping, previewing, and identifying main ideas. Problem-solving strategies were also frequently employed. For example, readers were changing their reading speed rate, and re-reading. Critical reading strategies and socio-

affective reading strategies, by contrast, were used far less frequently. The following ranking chart (Figure 1.) presents the frequency of use of the different types of reading strategy by respondents.



2.2 Readers' strategies in relation to reading processes

Analysing the connection between the types of strategy, and the reading processes that were employed reveals the type and the frequency of these reading processes. The readers were utilising both kinds of reading processing, bottom-up and top-down, simultaneously. On the one hand, top-down processing is exemplified in critical reading strategies and in most of the global reading strategies. On the other hand, bottom-up processing is exemplified in most of the support reading strategies and in some of the problem solving strategies. However, the data also presents the differences in the frequency with which these two types of reading processes were utilised. The participants were relying more on bottom-up than top-down processing while they were reading onscreen texts. For example, although they were translating, annotating, and pointing, they were rarely evaluating the content of the text, connecting ideas, or deeply thinking while reading. The utilisation frequency of the two types of processing is presented in (figure 2).



3. Conclusion

These findings prove that the process of L2 reading is a combination of both reading models; bottom-up and top-down. However, the rate of activating the two models is not equal. The findings also show that participants' on-screen academic reading is aimed at searching for and finding information, rather than at evaluating, analysing, and using that information. They were utilising the top-down approach only for checking the relevance of the text content to their academic purposes. Consequently, for these reasons, top-down processing is used much less frequently than bottom-up processing. During their on-screen reading processes, participants do not employ strategies that enable them to comprehend, analyse, and evaluate the text in any depth. They read mainly to assess the location and relevance of the information. For instance, they skip irrelevant sections, have a purpose, and

previewing the text, whilst interacting extensively with the text via the bottom-up approach. That is to say, they mainly annotate, translate, and point during their on-screen reading.

References

- [1] Anderson, N. (1999). Exploring Second Language Reading: Issues and Strategies (p. 144). UK: HEINLE & HEINLE PUBL Incorporated.
- [2] Anderson, N. J. (2003). The Reading Matrix Vol.3. No.3, November 2003, 3(3), 1–33.
- [3] Bernhardt, E. B. (2011). *Understanding Advanced Second-Language Reading* (p. 218). UK: Routledge.
- [4] Birch, B. M. (2007a). *English L2 Reading: Getting to the Bottom* (p. 236). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.
- [5] Burns, T., & Sinfield, S. (2012). Essential Study Skills: The Complete Guide to Success at University (p. 472). London: Sage Publications, Inc.
- [6] Carrell, P. L., Devine, J., & Eskey, D. E. (2000). Interactive approach to second language reading. In P. L. Carrell, J. Devine, & D. E. Eskey (Eds.), *Interactive Approaches to Second Language Reading* (p. 289). Cambridge: Cambridge University Press.
- [7] Chu, S. K. W., Tse, S. K., Loh, E. K. Y., & Chow, K. (2011). Collaborative inquiry project-based learning: Effects on reading ability and interests. *Library & Information Science Research*, *33*(3), 236–243.
- [8] Dambacher, M. (2010). Bottom-up and Top-down Processes in Reading: Influences of Frequency and Predictability on Event-related Potentials and Eye Movements (p. 239). Potsdam: Universitätsverlag Potsdam.
- [9] Gomez, J. (2008). *Print Is Dead: Books in Our Digital Age* (p. 221). United States of America: Palgrave Macmillan.
- [10] Goodman, K. S. (1967). Reading: A psycholinguistic guessing game. *Journal of the Reading Specialist*, *6*(4), 126–135.
- [11] Grabe, W. (2012). Reading in a Second Language: Moving from Theory to Practice. (C. A. Chapelle & S. Hunston, Eds.) (4th ed., p. 467). United States of America: Cambridge University Press.
- [12] Grabe, W., & Stoller, F. (2002). Comparing L1 and L2 reading. *Teaching and Researching Reading. Harlow: Pearson* ..., 34–58.
- [13] Hudson, T. (2007a). Teaching Second Language Reading: A guide to teaching reading skills for teachers of English as a foreign language. (p. 360). OUP Oxford.
- [14] ICAS, I. C. of the A. S. (2002). ACADEMIC LITERACY: A Statement of Competencies Expected of Students Entering California's Public Colleges and Universities. Academic Senate for California Community Colleges, Sacramento, CA. Retrieved February 26, 2013, from http://www.academicsenate.cc.ca.us/icas.html
- [15] Koda, K. (2005). *Insights into Second Language Reading: A Cross-Linguistic Approach* (p. 340). Cambridge University Press.
- [16] Liu, Z. (2008). *Paper to digital Document in the Information Age* (p. 157). United States of America: British Library Cataloguing.
- [17] Maxwell, J. A. (2012). *Qualitative Research Design: An Interactive Approach: An Interactive Approach* (p. 218). London: SAGE Publications.
- [18] Nunan, D. (2000). Language Teaching Methodology: A Textbook for Teachers (p. 264). Hertfordshire: Prentice Hall International.
- [19] Oxford, R., & Crookall, D. (1989). Research on Language Learning Strategies: Methods, Findings, and Instructional Issues. *The Modern Language Journal*, *73*(4), 404–419.
- [20] Smith, F. (2004). *Understanding Reading: A Psycholinguistic Analysis of Reading and Learning to Read* (p. 374). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.
- [21] Usó-Juan, E. (2006). The Compensatory Nature of Discipline-Related Knowledge and English-Language Proficiency in Reading English for Academic Purposes. *The Modern Language Journal*, 90(2), 210–227.
- [22] Widdowson, H. G. (1983). Learning Purpose and Language Use (p. 122). Oxford University Press.