Macrothink Institute™

International Journal of Linguistics
ISSN 1948-5425
2016, Vol. 8, No. 4

ESL/EFL Instructors' Perceptions of the Efficacy of Online Reading Instruction

Khalid Al-Seghayer

College of Languages and Translation, Al Imam Mohammad Ibn Saud Islamic University, Saudi Arabia

E-mail: alseghayer@yahoo.com

Received: June 8, 2016 Accepted: June 22, 2016 Published: August 18, 2016

doi:10.5296/ijl.v8i4.9571 URL: http://dx.doi.org/10.5296/ijl.v8i4.9571

Abstract

New technologies offer significant potential for teaching and learning L2 reading skills. Accordingly, this study examined ESL/EFL instructors' perceptions of the usefulness and effectiveness of online reading in L2 reading instruction. A convenience sample of seventy male and female ESL/EFL instructors was selected, and the respondents completed a 24-item, researcher-constructed questionnaire and responded to open-ended questions. Descriptive and inferential statistical analysis, including means and standard deviations, as well as various statistical tests, such as paired t-tests and bootstrapped p-values, were used to assess the data. Results revealed that the participants held strong beliefs about the usefulness of online reading in improving the quality of L2 reading instruction and developing learners' reading skills. A thorough discussion of these results is provided. These findings highlight significant practical, technical, and pedagogical implications for online L2 reading classrooms, particularly in terms of teacher training and practices of computer integration.

Keywords: ESL/EFL instructors, perception, efficacy, online reading instruction

1. Introduction

Exposure to electronic text is becoming increasingly common among learners of English as a second or foreign language (ESL/EFL). ESL/EFL learners now often spend more time reading online than they do reading books or other print-based materials. This trend has established new norms and personality characteristics among learners.

According to Sadeghi and Soltanian (2010), because of its ability to meet various needs and help students perceive the value of success and their own ability as readers, online reading instruction has the potential to engage English learners in the learning process actively, promote reading comprehension, stimulate interest, and improve reading skills. However, the success of ESL/EFL students' efforts to learn to read English via online text formats depends largely on instructors' perceptions and willingness to embrace online texts in L2 reading instruction and exploit their advantages to the maximum extent. As Teo (2008) contended, instructors have significant potential to transfer their own beliefs to their students. In particular, instructors' attitudes about computers or Internet technologies may, in one way or another, determine students' future use of computers.

Computer technologies, the Internet, and Web-based resources offer instructors vast resources, opportunities, and new directions for developing L2 reading and associated skills. As an integral part of successful teaching, technological applications can help instructors achieve important L2 reading instructional goals. However, some instructors fail to exploit these resources fully as teaching or learning tools in L2 reading instruction. In such cases, ESL/EFL instructors' attitudes about technology are key factors in its use in L2 reading classrooms.

Accordingly, ESL/EFL instructors' beliefs, particularly those concerning the usefulness of online reading as an effective mode of teaching and learning in L2 reading classrooms, need to be examined closely, especially given their potential to influence students. Furthermore, instructors often make value judgments about how relevant newly introduced instructional tools are to their instructional goals. The more valuable instructors judge a tool to be, the more likely they are to use it in their own classrooms. Thus, ESL/EFL instructors' beliefs play a critical role in transforming their integration of technology into more constructivist instructional practices. Within this context, this study examined ESL/EFL instructors' perceptions of the usefulness of online-based L2 reading instruction and the factors involved in online reading effectiveness, as they play a vital role in the success of the L2 reading learning process.

2. Literature Review

Several researchers have highlighted the efficacy of computer-assisted instruction in facilitating L2 reading skills. According to their studies, the unique characteristics of the electronic reading environment are keys to its effectiveness. For example, one of the advantages of the online reading environment is that it can engage readers actively, allowing them to choose the path most relevant to their interests (Kasper, 2003). Electronic texts provide new formats and different ways to interact with the information presented (Tseng, 2010). Thus, learners gain effortless access to various authentic reading materials that appeal to their

individual needs (Lai & Kritsonis, 2006).

According to Son (2003), the integration of textual, audio, and visual presentations of electronic text reinforces reading comprehension and enhances reading strategies. Linking hypertext to the foregoing can also assist L2 readers by providing easy and immediate access to related information. Electronic texts also build critical reading skills, as they facilitate interaction between readers and the text (Kasper, 2003).

Further, because electronic texts provide easy access to multiple cross-references on related topics, they foster a nonlinear and flexible pattern of exploration, encouraging a natural juxtaposition of the ideas presented. In this process, visuals, graphics, and even streamlined videos activate prior knowledge before the learner begins to read. For example, hyperlinks can connect the reader to online information about authors, historical periods, geography, and more, even before they read the text itself. In addition, as pointed out by Brantmeier (2003), current concept mapping software can serve as a valuable brainstorming tool to activate relevant reading schemata.

In the L2 reading classroom, online reading instruction accelerates the development of reading skills, as it affords L2 readers individualized instruction, immediate feedback, easy access to resources, and opportunities to enhance their reading (Singhal, 2006). As Singhal (1999) explained, computer-assisted reading instruction enables instructors to develop individualized instruction that meets the varied needs of L2 learners. Instructors also can guide learners through the development of their reading comprehension skills at whatever pace is most comfortable.

Overall, studies have suggested that a computerized reading environment is risk-free, provides immediate feedback, engages L2 readers actively with visuals and sounds, and supports learners' attempts to read in the L2 effectively (Blachowicz et al. 2009; Yunns et al. 2013; Abdi 2013; and Alfaleh 2015) as well as improves their reading skills (Ward & Mulholland, 2006). For example, Arnold (2009) studied the effect of an extensive online reading program in German as a foreign language. The results indicated that the seven program participants improved their reading comprehension, attitudes, confidence in L2 reading, reading ability, and conscious decisions about reading strategies and dictionary use. Similarly, in a study that compared the usefulness of online and traditional vocabulary learning, Kilickaya and Krajka (2010) found that online vocabulary learning, with its technologically enhanced learning environment, reinforced L2 reading comprehension and vocabulary retention. Further, the online reading environment helped learners develop a connection between the form and meaning of words.

Focusing on the specific factors of the effectiveness of online reading, Huang (2013) explored the motivational patterns among EFL learners who read English texts online. Huang found that the electronic text format had a positive effect on students' motivational constructs, including reading efficiency, challenge, curiosity, involvement, integrative ambition, and appreciation of reading's intrinsic values. Huang argued further that as EFL learners become immersed in reading English online, electronic text represents a time-efficient tool for developing reading skills.

Adopting a similar perspective, Chen, Chen, Chen, and Wey (2013) conducted a study on the effects of extensive English e-book reading on reading attitudes, comprehension, and vocabulary acquisition of 89 Taiwanese tertiary-level EFL students. The authors found that integrating e-books into an extensive EFL reading program improved tertiary-level EFL students' reading attitudes, comprehension, and vocabulary learning. The authors attributed the positive results to the interactive nature of online reading, and e-books that have multimedia elements that evoke better reading comprehension and vocabulary growth. A low-anxiety environment and rich comprehensible input supported these factors further.

Finally, Dehghanpour and Hashemian (2015) examined the efficiency of teaching reading strategies in a Web-based setting to 30 Iranian EFL learners. Participants learned four general reading strategies, which were practiced through three stages of cognitive theory: cognitive, associative, and autonomous. They found that the frequency of participants' use of each reading strategy increased significantly and that participants performed better when they read in a Web-based environment. Moreover, the participants expressed positive attitudes about Web-based reading instruction.

Although these studies have demonstrated the considerable benefits of online reading instruction and the efficacy of computer-assisted instruction in facilitating L2 reading skills, none has investigated specifically ESL/EFL instructors' perceptions of the effectiveness of computer technology in L2 reading classrooms. Thus, this study was designed to fill a significant gap in the literature in the field of L2 reading computer-assisted instruction.

3. The Current Study

Given the potential consequences of ESL/EFL instructors' perceptions of the effectiveness of online reading for L2 reading instruction in terms of classroom practices and learners' success, this study was designed to explore the issue in more depth. The conceptual framework for the study was the Technology Acceptance Model (TAM) proposed by Davis (1989) and Davis, Bagozzi, and Warshaw (1989). According to this model, two main factors determine technology acceptance: perceived usefulness and ease of use. These factors are associated with attitudes about using computer applications, and their actual use as well.

We posed and investigated the following research questions:

1) What are ESL/EFL instructors' perceptions of the effectiveness of electronic text format features in L2 reading instruction?

2) What are ESL/EFL instructors' perceptions of the effectiveness of computer-assisted reading in L2 reading and teaching?

To answer the first question, the study tested the following hypothesis:
$H_{0:}$ ESL/EFL instructors do not value the effectiveness of electronic text format features in L2 reading instruction.

4. Methods

4.1 Study Participants

Participant characteristics. As there were no explicit criteria for selecting participants for this study, we used a convenience sample consisting of 70 college level ESL/EFL instructors at various universities worldwide. They included 39 (56%) males and 31 (44%) females who ranged in age from 30 to 50, with most in their 30s. With respect to native languages, 36 were native Arabic speakers, 19 spoke English (U.S. [13]; British [2]; Canadian [2]; Australian [1], and New Zealand [1]), and the remainder spoke various other languages, including German, Thai, and Portuguese.

The instructors had between 2 to 15 years of teaching experience, with an average of 9 years of experience. A total of 32 (45%) had used computers for less than 5 years and 38 (55%) had used them for more than 5 years. Eight (11%) respondents had a bachelor's degree, 36 (52%) held a master's degree, and 26 (37%) held a doctoral degree. Table 1 outlines the participants' demographics.

We selected the participants according to their teaching experience. Each had spent at least 5 years teaching college-level English and had taught reading skills to college ESL/EFL learners for at least 3 years. Further, all had more than 2 years of experience using computers for instructional purposes. We assumed that ESL/EFL instructors who had more experience in the field would have a wider range of experience teaching L2 reading and a richer perspective on changes that have occurred in the ESL/EFL field.

Table 1. Demographics and Profiles of Participating ESL/EFL Instructors

	%
Gender	
Male	*56%*
Female	*44%*
Ages	
25–34	55%
35–44	24%
45–55	14%
60 and above	7%
Highest degree held	
B. A.	11%
M. A.	52%
Ph. D.	37%
Years of teaching experience	
Less than 1 year	9%
1–4	16%
5–8	16%
9–12	13%
13–16	8%
17 or more	38%
Years of using computers in teaching	
Less than 1 year	7%
1–2	15%
3–4	23%
5 and more	55%

4.2 Instruments

Survey construction. To obtain insight into ESL/EFL instructors' perceptions of the usefulness of computer technology in L2 reading instruction, after an extensive review of the related literature, the researcher developed a two-part, unidimensional, Likert scale-based, cross-sectional questionnaire to measure the variables. The survey consisted of a two-page questionnaire comprised of 24 statements that were presented in random order and divided into two sections, as shown in Table 2.

Section 1: Background Information, collected the participants' demographic information using nine Yes/No and multiple-choice questions. The data collected included gender, age, educational experience, years of teaching experience, level of education completed, computer experience, and level of comfort using computers in teaching.

Section 2, the *Effectiveness Scale*, included 15 items that asked the instructors their views concerning the effectiveness of electronic texts in teaching and learning L2 reading using a four-point scale: "Very Effective," "Somewhat Effective," "Ineffective," and "Of no use." We asked the participants to indicate the effectiveness of various features of electronic texts, including whether they were based on a word level or beyond (i.e., an electronic glossary), tracking devices, authentic reading materials, various multimodalities, immediate feedback, having control over reading tasks, immediate access to vast amounts of information, and interactive reading activities.

The questionnaire also included open-ended questions developed to elicit views regarding the instructional effectiveness of electronic texts that the Likert-scale items might not have captured. These open-ended questions provided qualitative data that complemented and enriched the quantitative responses to the other sections of the survey.

Table 2. Distribution of Questions/Statements of the Developed Survey

Sections	Section 1	Section II
Type of questions/statements	Background information	Queried EFL instructors' views concerning the instructional reading effectiveness of electronic text features for teaching and learning L2 reading
Number of questions/statements	9	15

4.3 Instrument Validity and Reliability

The reliability of the instrument was assessed with Cronbach's alpha, and the coefficient for the effectiveness scale was 0.84.

Piloting the instrument. To refine the research questionnaire developed and ensure that its validity and reliability were acceptable, the questionnaire was pilot-tested with four EFL instructors who had a strong background in computer-assisted language learning. The procedures used in the pilot study were executed exactly as they were in the study. The

instructors were asked to examine the wording, order, clarity, and comprehensibility of the statements closely to identify anything that was confusing or ambiguous. We also asked them to indicate any difficulties they had completing the research instrument. Interviews with each instructor were conducted after survey completion to elicit further details and feedback concerning such issues, and the instrument was modified to reflect its intent with the guidance of the panel of experts and EFL learners.

Survey administration and data collection process. First, the questionnaires were distributed to the participants, and administered either in person or through e-mail. Those who met the spelled out criteria above, were contacted by the researcher to see if they were willing to participant in the study. Each participant received a copy of the survey that included an assigned four-digit ID code, instructions on how to complete the survey, and details about the study's objectives and significance. The ID codes were recorded in a separate file to monitor who returned the survey. Of the 85 ESL/EFL instructors surveyed initially, 70 returned the survey, for a return rate of 83%. All 70 participants responded to all items on the survey; there were no missing data.

Data were collected approximately 3 weeks into the fall semester of the 2015 academic year. On average, it took participants approximately 15 to 20 minutes to complete the survey. The researcher and his assistants were available throughout the data collection process to answer any questions the participants had.

Data analysis procedures. Completed survey responses were compiled into an Excel spreadsheet and then imported into an SPSS dataset. The survey items were converted into multi-item scales of effectiveness. The mean scores in the *Effectiveness Scale* were then computed to represent scores on the construct purported to be measured by scale. Descriptive statistics were computed for the scale scores generated for the *Effectiveness Scale*. Using a one-sample *t*-test, the hypothesis was tested by assessing the significance of the difference between the mean scale value for each section and the neutral point of the measurement scale for the section (i.e., 3.0). The normality of the distribution of scale scores in the effectiveness section was tested using the D'Agostino-Pearson test. Wherever there was a significant departure from normality, bootstrapping was used to estimate the *p*-value of the difference from the neutral value. An alpha of 0.05 was the criterion for statistical significance. The hypothesis was 1-tailed.

4.5 Results

This study hypothesized that ESL/EFL instructors would indicate that electronic text features have a positive effect in L2 reading instruction. The measure of effectiveness was the score on the effectiveness scale, which consisted of the mean scores of the 15 items in section two of the questionnaire. Table 3 presents the descriptive statistics for the effectiveness scale and its component items and the *p*-values pertinent to the test of the hypothesis and to the divergence of each item mean from the means of the other effectiveness items.

Table 3. Descriptive Statistics for the Effectiveness Scale and Its Component Items and p-Values of Differences of Item Means from the Means of Their 14 Item Complements

Effectiveness of Online Reading	N	Minimum	Maximum	Mean	SD	*p*-value
Effectiveness (full scale)	70	2.73	4.93	4.3	0.43	<0.001[a]
1. Improving the reader's vocabulary	70	2	5	4.16	0.77	0.06[b]
2. Tracking progress in learning English	70	2	5	4.16	0.85	0.18[b]
3. Locating and accessing authentic reading materials	70	3	5	4.63	0.57	<0.001[b]
4. Engaging learners in interactive reading activities	70	3	5	4.57	0.60	<0.001[b]
5. Providing access to new tools for learning English	70	3	5	4.23	0.69	0.32[b]
6. Engaging interest by using multiple modalities (text, video, pictures, sound, animations, etc.)	70	2	5	4.64	0.64	<0.001[b]
7. Immediate corrective feedback	70	2	5	4.34	0.700	0.55[b]
8. Hyperlinks to gain access to multiple cross-references on related topics	70	1	5	4.33	0.85	0.64[b]
9. Reader control over paths followed in completing assignments	70	2	5	4.01	0.88	0.00[b]
10. Immediate access to vast amounts of information	70	1	5	4.34	0.88	0.69[a]
11. Multi-linearity in texts and an open-ended reading environment	70	2	5	4.24	0.79	0.53[b]
12. Ease of access to various modalities	70	1	5	4.06	0.96	0.01[c]
13. Accessing extra information without losing track of one's place in a lesson	70	1	5	4.14	0.94	0.08[c]

Effectiveness of Online Reading	N	Minimum	Maximum	Mean	SD	*p*-value
14. Different levels of support and comprehension assistance	70	1	5	4.36	0.77	0.42[c]
15. Developing higher-order cognitive reading skills	70	2	5	4.26	0.78	0.58[b]

We tested the hypothesis proposed by computing the *p*-value of the difference between the mean of the scores on the effectiveness scale and the value of the neutral point of the response scale (i.e., 3.0). The *p*-value for the D'Agostino-Pearson test of the normality of the distribution of importance scores was 0.002, indicating the data failed to satisfy the normality assumption of the one sample *t*-test. Consequently, the *p*-value for the difference between the observed mean and the neutral point was estimated with a bootstrapping process with 5,000 iterations. The resulting *p*-value was < 0.001(1-tailed), and consequently, the null hypothesis was rejected.

The differences between the means of the individual scale items and those of the other 14 items (excluding the item being compared) were tested using a paired *t*-test or, where the normality assumption was not satisfied, a 5,000-iteration bootstrap estimate of the *p*-value of the difference. Given that we performed multiple tests on the differences between the same set of variables, it was necessary to apply the Bonferroni correction to adjust the alpha level of the individual comparisons to achieve a family-wise Type I error level of 0.05, which resulted in a requisite *p*-value of 0.003. The last column of Table 4 lists the resulting *p*-values.

The mean effectiveness ratings of each of the following three items were significantly higher than were those of the other 14 items:

3. Locating and accessing authentic reading materials.

4. Engaging learners in interactive reading activities.

6. Engaging interest through the use of multiple modalities (text, video, pictures, sound, animations, etc.).

The mean effectiveness rating of the following item was significantly lower than were those of the other 14 items:

9. Reader control over paths followed in completing assignments.

There was a range of 0.63 of a scale interval between the lowest and highest means among the 15 items. None of the items' means fell below the fourth response scale interval ("somewhat effective"). The means of items 3, 4, and 6 (listed above) fell into the highest scale interval ("very effective"). The means of the remaining 12 items fell within the fourth interval of the response scale ("somewhat effective").

4.6 Open-Ended Questions

When asked to comment on the effectiveness of online reading in L2 reading instruction, the participants provided insightful replies concerning the effectiveness of electronic text features. The 65 remarks made by the participants fell into two major categories: general and more defined. According to the participants, electronic texts generally make reading English texts easier, provide access to a vast amount of authentic information, accelerate the reading process, and do not disrupt its flow. Specifically, they noted that electronic texts promote higher-order thinking, expand vocabulary, improve visual memory, tap into multiple levels of intelligence, and allow learners to use the learning supports provided effortlessly.

The following are examples of the participants' comments regarding the effectiveness of online reading.

One participant commented, "The effectiveness of online reading lies in prompting high-order reading skills." Another asserted, "It is a very effective tool because it makes the process of learning to read in L2 and teaching L2 reading easier and increases the effectiveness of instruction." In a similar statement, another participant mentioned that "the advantages of online reading can be seen in providing visual aids and instant access to many resources related to the assigned reading materials." Yet another participant stated, "Students can benefit from online reading through expanding their vocabulary knowledge." One participant summed up his position by saying: "Integrating technology in teaching L2 is undoubtedly of a high effectiveness as it, with its built-in capabilities, improves greatly visual memory."

4.7 Discussion

This study's findings demonstrated the effectiveness of electronic text features in L2 reading instruction, and confirmed instructors' perceived value of electronic texts in teaching and learning L2 reading. The mean scores (M = 4.3) of the 15 items examined suggested that the participants were more positive about the effectiveness of certain features of electronic texts, specifically, (a) locating and accessing authentic reading materials, (b) engaging learners in interactive reading activities, and (c) engaging interest through the use of multiple modalities.

These results supported the previously cited theoretical speculations of various researchers, particularly those of Singhal (2006), and Davis, Bagozzi, and Warshaw (1989), specifically that, when integrated into the L2 reading classroom, online reading environments accelerate learners' development of reading skills because they engage readers with visuals and sounds and enable learners to receive individualized instruction, immediate feedback, and opportunities to pace their reading. The study's results also were consistent with other findings in the literature, including those of Kilickaya and Krajka (2010), Huang (2013), and Dehghanpour and Hashemian (2015). Specifically, the current study and these studies together confirmed the advantages that online reading environments offer to L2 reading instructions including engaging learners in interactive reading activities, engaging interest by using multiple modalities (text, video, pictures, sound, animations, reader control over paths followed in completing assignments, and different levels of support and comprehension assistance.

4.8 Implications

This study provides several pedagogical and technological implications with respect to fostering effective online reading instruction. In terms of pedagogy, to harness the potential of technology-mediated instruction, ESL/EFL instructors need to acquire a base knowledge of, and skills in, technology-supported pedagogy. This will help improve their competence in pedagogical design that integrates content with technology.

Thus, the efficient and effective implementation of online-based learning in the L2 reading classroom also requires changes in ESL/EFL instructors' beliefs, attitudes, pedagogical ideologies, and pedagogical and technological knowledge. In particular, knowledge has a significant effect on instructors' decisions. Thus, English instructors need to possess sufficient technological pedagogical knowledge and skills, as well as the ability to integrate various digital technologies effectively into the process of teaching and learning L2 reading.

Although technological knowledge is essential, instructors also must feel confident in using their knowledge to facilitate student learning and achieve instructional goals using technological applications. Thus, ESL/EFL instructors need help to increase their confidence in using technology for L2 reading instruction. To this end, instructors must have opportunities to gain personal experience using technology to increase their self-efficacy.

With respect to technological implications, English instructors may benefit from general technological training opportunities in different formats to gain hands-on experience in incorporating computer-assisted reading instruction into their lessons, and in the delivery of L2 reading instruction based on sound pedagogy and practical skills. Through such training, instructors can learn how to (a) use available technological reading resources effectively; (b) create or select reading-based computer activities; (c) develop computer-assisted reading lessons, and (d) integrate technological reading resources into the L2 reading classroom. The ultimate goal of engaging English reading instructors through training opportunities is to increase their interest in, and willingness to, employ computer-based reading resources in actual practice. Further, professional training opportunities will increase their awareness of the computer's pedagogical value in L2 reading instruction and learning.

4.9 Limitations and Considerations for Future Research

This study had several methodological limitations. First, the scope included only the examination of selected online reading instruction variables. Other variables that we did not address may contribute to a better understanding of online reading effectiveness.

Second, we measured ESL-EFL instructors' perceptions of the effectiveness of online texts formats for L2 reading instruction with a cross-sectional questionnaire and open-ended questions; it also may be useful to measure the effectiveness of electronic texts in teaching and learning L2 reading using different instruments.

Third, this study excluded any factor analysis. Factor analysis could shed more light on the usefulness and adequacy of online reading by clarifying the specific aspects of online L2 reading programs that ESL/EFL instructors appreciate.

Finally, the variables investigated were self-determined based on the literature. Variables excluded here may yield a better understanding of English instructors' perceptions of the effectiveness of online texts in L2 reading instruction.

Based on these limitations, as well as emerging trends in the field of reading motivation, this study suggests several avenues for future research. For example, future studies could determine how ESL/EFL instructors' beliefs and attitudes about technology influence its use in L2 reading classrooms, as well as other factors that affect ESL/EFL instructors' integration of technology. In addition, personal factors related to instructors' beliefs and teaching styles, as well as external or contextual factors, such as computer attributes, cultural perceptions, and computer access could be examined.

Future studies also could address the correlation between ESL/EFL instructors' attitudes about online reading (i.e., their perceptions of the value of online reading environments) and the frequency with which they use digital texts in L2 reading instruction. Similarly, future work could consider the types of technology ESL/EFL instructors use in their L2 reading classrooms, the ways in which they apply them, and why they use them. These studies also could examine the effectiveness of instructors' implementation of online reading instruction, the difficulties ESL/EFL learners face learning languages online, and the acquisition of reading skills in online reading environments. Such studies would provide various accounts of why instructors do or do not use technological applications to their full potential.

5. Conclusion

This study of ESL/EFL reading instructors' perceptions of the effectiveness of online reading in English reading instruction found that they believe strongly that online reading is useful in enhancing L2 reading instruction, prompting and advancing learners' learning processes, and developing their reading skills. Although the participants stressed primarily its usefulness in engaging English learners in a meaningful and authentic computerized reading environment, they believed as well that the breadth of resources and reading materials afforded was important. These findings serve as a starting point for future exploration of ESL/EFL instructors' perceptions concerning the usefulness of online reading in the L2 reading classroom. The outcomes of this study also may be of use in shaping the ways in which computers are integrated in L2 reading classrooms. By identifying potential deterrents to the successful integration of computer technology into the L2 reading classroom, we can help ensure the successful use of these powerful new tools.

References

Abdi, R. (2013). The effect of using hypertext materials on reading comprehension ability of EFL learners. *Procedia - Social and Behavioral Sciences, 83*, 557-62.

Alfaleh, A. (2015). Using technology for developing ESL students' reading comprehension. The 2015 *WEI International Academic Conference Proceedings*, March 19-21 in Athens, Greece. Retrieved from http://www.westeastinstitute.com/proceedings/ 2015-athens-presentations/

Arnold, N. (2009). Online Extensive Reading for Advanced Foreign Language Learners: An Evaluation Study. *Foreign Language Annulus*, *42*(2), 340-366.

Blachowicz, C., Bates, A., Berne, J., Bridgman, T., Chaney, J., & Perney, J. (2009). Technology and at-risk young readers and their classrooms. *Reading Psychology, 30*(5), 387-411.

Brantmeier, C. (2003). Technology and second language reading at the university level: Informed instructors' perceptions. *The Reading Matrix Journal, 3*, 50–74.

Chen, C., Chen, S., Chen, S., & Wey, S. (2013). The Effectiveness of extensive reading via E-book on tertiary level EFL students' reading attitude, reading comprehension, and vocabulary. *TOJEF: Turkish Online Journal of Educational Technology*, *12*(2), 303-312.

Davis, D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*, 319–340.

Davis, F. D, Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, *35*(8), 982–1003.

Dehghanpour, E., & Hashemian, M. (2015). Efficiency of using a web-based approach to teach reading strategies to Iranian EFL learners. *English Language Teaching*, *8*(10), 30-41.

Huang, H. (2013). How does extensive reading online influence L2 students' motivation to read. Global perspective on computer assisted language learning Glasgow 10-13 July 2013. Conference Proceeding World Class 2013.

Kasper, L. (2003). Interactive hypertext and the development of ESL students' reading skills. *The Reading Matrix Journal*, 3(3).

Kilickaya, F., & Krajka, J. (2010). Comparative Usefulness of online and traditional vocabulary learning. *The Turkish Online Journal of Educational Technology*, *9*(2), 55-63.

Lai, C., & Kritsonis, W. (2006). The advantages and disadvantages of computer technology in second language acquisition. *National Journal For Publishing and Mentoring Doctoral Student Research*, 3. Retrieved from http://www.nationalforum.com/Electronic%20Journal%20Volumes/ChengChieh%20Lai%20The%20Advantages%20and%20Disadvantages%20of% 20Computer%20Technology.pdf.

Sadeghi, N., & Soltanian, A. (2010). Motivational and learning effects of computer- aided procedures on students' reading comprehension. *The Journal of Teaching Language Skills (JTLS)*, *2*(3), 108-139.

Singhal, M. (1999). Reading and computer-assisted instruction: Applications and implications. *CALL-EJ, 3*(2), 1-15.

Singhal, M. (2006). *Teaching reading to adult second language learners: Theoretical foundations, pedagogical applications, and current issues*. Reading Matrix Inc.

Son, J. (2003). A hypertext approach to foreign language reading: Student attitudes and

perceptions. *Australian Review of Applied Linguistics*, *17*(1), 91–110.

Teo, T. (2008). Pre-service teachers' attitudes towards computer use: A Singapore survey. *Australasian Journal of Educational Technology*, *24*(4), 413-424.

Tseng, M. (2010). Factors that influence online reading: An investigation into EFL students' perceptions. *The Reading Matrix Journal, 10*(1), 96-105.

Ward, H., & Mulholland, R. (2006). CALL technologies: Survey responses concerning university and school systems' responsibilities. *The Reading Matrix Journal, 6*(3), 322-329.

Yunns, M., Nordin, N., Salehi, H., Sun, C., & Embi. M. (2013). Pros and Cons of Using ICT in Teaching ESL Reading and Writing. *International Education Studies*, *6*(7), 119-130.

Copyright Disclaimer