Using Technology to Assist in EFL Vocabulary Acquisition and Reading Comprehension

Abdulrahman A. Alqahtani

1 Department of English Language and Literature, College of Arts and Letters, University of Bisha, Bisha, Saudi Arabia

Correspondence: Abdulrahman Ali Y Alqahtani, Department of English Language and Literature, College of Arts and Letters, University of Bisha, Bisha, Saudi Arabia. E-mail: ab-alqatani@ub.edu.sa

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Abstract

Technology has significantly assisted ESP vocabulary development and reading comprehension, an aspect confirmed and validated by several research projects. The majority of research has focused on assessment outcomes. However, student input must be addressed to enhance the use of technology and its influence on learning. This study intends to assess the usefulness of technology in this sector in terms of student views, attitudes, and preferences to boost technology acceptance and usage in English vocabulary learning and reading comprehension. 31 students were asked questions about using multimedia tools to learn English. The responses were then compared and examined. The results showed that ESP learners had a good attitude regarding the apps. Furthermore, they prefer to employ a variety of technology instruments.

Keywords: ESL/EFL learners, English language education, technology, CALL4

1. Introduction

Research has shown a high correlation between reading ability and word comprehension. Loucky (2007) explains that second language vocabulary is significant for reading comprehension. This assertion applies especially when individuals learning EFL/ESL find it hard to understand a text because they do not know the meaning of most of the words. Technology has been widely embraced and applied to aid vocabulary development and reading comprehension, as Gettys, Imhof, and Kautz (2001) explained. Therefore, to increase learning and optimize the use of technology, it is critical to thoroughly understand the influence of technology on vocabulary acquisition and reading comprehension, its benefits and drawbacks, and learners' attitudes and views of its usage.

The primary goal of this research is to assess the effectiveness of technology in improving EFL/ESL reading comprehension and vocabulary acquisition. This was examined in terms of student attitudes, beliefs, and preferences regarding the use of technology in boosting reading comprehension and vocabulary learning.

1.1 The Research Questions

The research questions are:

1) What are EFL learners’ perceptions towards using multimedia applications in vocabulary acquisition and reading comprehension?

2) What is the influence of using multimedia applications in vocabulary acquisition and reading comprehension?

1.1.1 Objectives

This study adopts a mixed method. The first is quantitative, aiming to know the correlation between technology use and the ability of reading and vocabulary comprehension; the second is qualitative, aiming to know how this influence is conducted. Therefore, this study aims at investigating the following:

1- EFL learners’ perceptions towards using multimedia applications in vocabulary acquisition and reading comprehension.

2- The influence of using multimedia applications in vocabulary acquisition and reading comprehension
3- EFL learners’ preference regarding reading from screens versus paper
4- The technological tools that EFL learners prefer to improve their English reading comprehension and vocabulary acquisition.

The research design encompassed both questionnaires and an interview. The survey was conducted on 31 participants, after which one person was interviewed. The study investigated how ESL/EFL learners can improve their English vocabulary and reading comprehension ability through using technology.

2. Literature Review

2.1 Multimedia Integration for Vocabulary Retention

The integration of multimedia applications in language learning has garnered significant attention in recent years due to its potential to enhance engagement, interactivity, and effectiveness. The revolution in digital technology has had a tremendous influence on learning. Several studies have highlighted the positive impact of multimedia applications on learner engagement and motivation. The interactive nature of multimedia, including videos, audio recordings, and games, has been found to captivate learners’ interest and sustain their attention during language learning activities.

The revolution in digital technology has had a tremendous influence on learning. For instance, it has created new chances and opened doors to making learning more effective, easy, and straightforward. Many experts and educational institutions agree that technology influences EFL/ESL vocabulary development and reading comprehension. Research on reading resources concluded that using electronic gadgets to supplement classroom teaching is successful and critical. According to Wright, Fugget, and Caputa (2013), pupils who concentrated on multimedia programs were likelier to remember vocabulary than those who worked with non-computerized books. Additionally, several technical equipment and gadgets have successfully taught and learned a second language (Wright, Fugget, and Caputa 2013).

2.2 Mobile Learning and Vocabulary Acquisition

Many individuals throughout the world possess and routinely use mobile phones. Text messaging has become an increasingly popular mode of communication. Similarly, the usage of mobile phones for learning has grown common in information and communication technologies (ICT), which are utilized for learning (Motallebzadeh and Ganjali 2011). According to a recent study by the two authors on the use of SMS to teach English vocabulary, SMS is an excellent self-study technique that allows students to enhance communication skills while expanding their vocabulary knowledge.

2.3 Online Glossing for Enhanced Reading Comprehension

Online glossing is recognized as an effective method of teaching and reading in the context of a foreign language. Research on the benefits of glossing formats discovered that glossing increases general understanding, saves students' time and effort while reading L2 texts, and improves vocabulary comprehension. The studies highlight that it is also a valuable tool for teachers since it allows them to expose their pupils to accurate learning materials above their language level. This component allows pupils to focus on authentic and unabridged texts. Online glossing is excellent because it improves intelligible input, an essential aspect of successful L2 learning (Gettys, Imhof, and Kautz 2001).

2.4 Technological Facilitation of Vocabulary Learning

Vocabulary learning and teaching can be complex and demanding when someone is learning a new language. However, the usage of technology has simplified the process of acquiring vocabulary. Computers and the internet have aided foreign language training, vocabulary acquisition, and the development of reading comprehension abilities by emphasizing various components such as computer-assisted instruction. Additionally, multiple vocabulary tasks help with memory development and the relationship between the meaning and form of a word, which are also accessible. Research assesses the efficacy of online vocabulary teaching compared to other traditional techniques indicated that technology allows learners to gain from activities while simultaneously acquiring vocabulary items (Kilickaya and Krajka 2010).

2.5 Innovative Approaches to Vocabulary Instruction

New advancements are made every day to make studying foreign languages easier for L2 students. Research finds ways to improve vocabulary learning online. According to different authors, numerous vocabulary development tests, programs, and online reading comprehension types have been deemed helpful in guiding classroom or individual L2 vocabulary instruction. The programs' target areas differ in how they strive to teach and measure L2 reading comprehension skills and vocabulary development, depending on their level of
originality and accuracy. Studies also found that most pupils prefer e-readers. (Loucky, 2007/ Welsen et al. 2020)

2.6 Enhancing Vocabulary Skills Through Digital Platforms

Reading habits, and the nature of the content may influence individuals' preferences for reading medium. Younger generations, who have grown up with digital technologies, may be more inclined towards screen reading, whereas older adults may prefer the tactile experience of paper. Vocabulary expertise is essential for conversational communication and academic success. A strong vocabulary can help youngsters decode words and maintain their reading comprehension. Many studies, for instance, support this; research on the benefits of teaching vocabulary to children using e-books found that the electronic storybook is an excellent instrument for reading and language enrichment. Additionally, research explain that e-books allow children to acquire precise spelling, word reading, and the meanings of new words, leading to enhanced story comprehension (Korat and Shamir (2012) Chen et al. (2013).

2.7 Role of Interactive Technology in Reading Comprehension

A recent study found that learning settings and digital technologies improve reading comprehension (Dalton et al., 2011). The study focuses on the role of interactive vocabulary and reading comprehension methods in improving comprehension online (ICON). Technology is a valuable resource that may assist a young teenage learner in improving his or her reading skills. This assumption is shared and endorsed by various learning professionals and organizations.

Videotext that is coded audibly and nonverbally through visuals and words can aid L2 learners in understanding and acquiring accidental vocabulary. It should be remembered that humans have distinct pathways for processing information for auditory and visual representations. With this in mind, it follows that education materials recognized and experienced by learners' ears and eyes can be successfully grasped.

Vocabulary is essential to language understanding. Research on L2 vocabulary learning has indicated that vocabulary may be acquired in many ways depending on the environment and context (Xanthou, 2011). It can be gained both efficiently and inadvertently. Videos include stunning visuals, animations, and soundtrack. These components make a significant contribution to L2 learning. There are various benefits to computer-assisted language learning (Lin 2010).

Research conducted to assess the effectiveness of the video-based CALL program discovered that it improved L2 learners' incidental vocabulary acquisition and comprehension skills. It has dramatically impacted pupils with varying English listening and reading skills. It also facilitates. It also facilitates the acquisition of verbs, nouns, and adjectives of varied proficiency groups. The ability of students to acquire content words is related positively to their video comprehension (VC).

An abundance of knowledge related to technology and learning a foreign language is based on examining specific technological tools, areas, and student performance outcomes. However, the question of technology and learning extends beyond what the studies address. It is critical to grasp the amount of technology's influence on reading comprehension and vocabulary development. This may be accomplished by soliciting input from L2 learners on various technology tools and their preferences and attitudes.

Most learners prefer to use specific applications and tools rather than others. Moreover, learners' attitudes and interests differ. Analyzing these characteristics will provide additional insight into the function of technology in EFL. This will also assist. It will also assist instructors in gathering additional information about how to help their pupils enhance second language reading ability and vocabulary acquisition via technology.

3. Methodology

3.1 Setting and Participants

A combination of a survey and an interview, which served as data-gathering tools, was used to study EFL students' attitudes, preferences, and technologies that they chose to use.

Interview: The researcher focused on the university's SPE program during the given project. Data was acquired from 31 ESP department participants in the mentioned program, and a diverse number of participants were represented during the workshop, including university students from Saudi majors. All who served were young students between the ages of seventeen and twenty whose courses vary in the content that they majored in. Personal interviews were conducted for EFL learners to understand their experiences and preferences regarding techno usage for foreign language study.
Survey: The questionnaire consisted of Likert scale items and open-ended questions on the participant's attitude towards multimedia applications, screen-reading preferences compared to paper, and their most preferred technological tools of choice to enhance English learning.

3.2 Sampling Method

In this study, the population gauging method had to permit the encompassment of EFL students with diverse backgrounds and Language proficiency, thereby enhancing the generalizability of the outcome. The following details explain the sampling procedure:

Sampling Frame: The sampling frame focused on EFL learners, students who study the English language for "Specific Purposes" (ESP), which is a part of a university. The chosen ESP program is known for its student composition with a typical language-centered focus. This creates a homogeneous yet diverse population among students, making it an ideal group for our language skill development project.

Sampling Technique: The research used a convenient sampling method to choose the participants. According to the authors, convenience sampling is among the most appropriate methods that match the ease of access and availability of recruitment for the researchers from the ESP program.

Sample Size: The sample had 31 participants who completed the survey questionnaire, including one who took a face-to-face interview. Despite the limited population sample, it adequately justified the study's exploratory nature.

Inclusion Criteria: The inclusion criteria for participation in the study were as follows: being an EFL learner in ESP, being a Saudi Arabian student between 17 and 20 years of age, and being male- Saudi Arabian among the same age range. These criteria were established as a reference point to ensure that a homogeneous sample with similar features relevant to the research was achieved.

Participant Diversity: Although a convenience sample was used, efforts were made not only to ensure the correct demography of the sample in terms of proficiency levels, educational backgrounds, and majors but also to ensure a homogeneous mix. By doing this diversity project, we wanted to cover a broad range of views on the topic and give different perspectives a chance to be seen.

To sum up, the sampling procedure strived to maintain the practical reasons side by side to reach the valuable and necessary views of the diverse EFL learners interviewed. Besides that, convenience sampling has certain restrictions if extrapolation of the findings is in mind. However, efforts were made to improve the validity and reliability of the results through thoughtful consideration of the inclusion criteria and broad selection of the participants.

3.3 Data Collection Procedure

3.3.1 Survey Questionnaires

The survey questionnaires were administered to participants to collect quantitative data on their attitudes, preferences, and experiences with technology in English language learning. The questionnaires were distributed electronically or in person, depending on participants' preferences and accessibility. Participants were instructed to respond to Likert-scale items and open-ended questions, providing insights into their technology use frequency, proficiency levels, preferences for technological tools, and other relevant factors.

3.3.2 Interview

A semi-structured interview was conducted with one participant to gather qualitative data on his perceptions and experiences with technology use in language learning. Conducting interviews can be time-consuming specially in my situation where time is limited. This is why I interviewed just one person rather than multiple individuals. In addition, interviewing one person allowed for a more focused and in-depth exploration of their perspectives, experiences, and insights. This was useful to me to gain a deep understanding of the technology usefulness in this sector in terms of student views, attitudes, and preferences to boost technology acceptance and usage in English vocabulary learning and reading comprehension.
The interview was conducted face-to-face and audio-recorded with the participant's consent. The interview guide included questions about the participant's technology use habits, preferences for reading mediums, preferred technological tools, and overall attitudes towards technology integration in language learning. The interviewee's responses were transcribed verbatim for subsequent analysis.

3.4 Data Collection Procedure and Plan of Data Analysis

Data was gathered using questionnaires and an interview. Questionnaires were used to get statistical data aimed at answering the research questions. In addition, the data provided influenced and guided the interview portion. The survey questionnaires provided hints that helped the interviewees choose and ask questions depending on the participants' answers.

The participants completed a short survey that took them 5-10 minutes and 30 to finish. The survey was meant to help find out how technology assisted students in second language vocabulary acquisition and reading comprehension. The survey was divided into different sections. The first section had 20 statements. The participants were expected to choose how much they agreed or disagreed with each statement. The following section had 12 statements. This represented questions 20 to 32. They focused on the preference of ESP learners when it comes to technological tools meant to aid in improving reading comprehension and English vocabulary acquisition.

Participants were required to check one box per statement. The response was meant to gauge if the participants highly liked or disliked the content of the statements. The survey also included an open-ended question that focused on two tools ESP learners commonly use to improve reading proficiency and their vocabulary. The last section of the survey had some personal questions that participants were required to answer. The questions were about age, the number of semesters they have studied English, English proficiency level, central, and sex.

A face-to-face interview was essential to gain information on the input of technology in improving reading comprehension and learning English vocabulary from a student's perspective. The interviewee was a 19-year-old EFL/ESP student from Saudi Arabia. He is a male student who enrolled in the ESP program at the university. The participants’ native language is Arabic. He has studied in the ESP program at the university for more than eight months.

Notes were taken during the interview, and they were also recorded. The first questions were demographic and meant to provide information about the participant. These questions covered the participant's name and his language proficiency level. The questions that followed covered aspects of the main topic. The questions that were asked in the survey and interview helped give more insight into the attitude of students, preferences, and perceptions towards the input of technology in learning vocabulary and English reading comprehension.

3.4.1 Survey Questionnaire

(1) Demographic Information:

Age: [ ]
Gender: [ ]
Educational Background: [ ]
Frequency of Technology Use (hours per day): [ ]
Years of English Language Learning Experience: [ ]

1) Technology Use:

Please rate the frequency of your technology use for English language learning activities on a scale from 1 to 5, where 1 = Never and 5 = Very frequently.

Online dictionaries: [ ]
Language learning apps (e.g., Duolingo, Quizlet): [ ]
Social media for language learning (e.g., language exchange groups): [ ]
E-book readers: [ ]
Other (please specify [ ]

2) Proficiency Levels:

Please rate your reading and vocabulary comprehension proficiency on a scale from 1 to 5, where 1 = Beginner and 5 = Advanced.
Reading comprehension proficiency: [ ]
Vocabulary comprehension proficiency: [ ]
Preferences for Technological Tools:

By selecting one option per item, please indicate your preferences for the following technological tools in English language learning.

Google Translate
Very Preferable [ ]
Preferable [ ]
Neutral [ ]
Not Preferable [ ]
Not Preferable at All [ ]

Google Search
Very Preferable [ ]
Preferable [ ]
Neutral [ ]
Not Preferable [ ]
Not Preferable at All [ ]

Facebook
Very Preferable [ ]
Preferable [ ]
Neutral [ ]
Not Preferable [ ]
Not Preferable at All [ ]

Twitter
Very Preferable [ ]
Preferable [ ]
Neutral [ ]
Not Preferable [ ]
Not Preferable at All [ ]

Other (please specify [ ]

3) Open-ended Question:
Please list two technological tools or resources you commonly use to improve your English reading comprehension and vocabulary.

4) Additional Comments:
Is there anything else you would like to share about your experiences with technology use in English language learning?

4. Data Analysis and Discussion

The data analysis will focus on technology-related issues and learning a second language. It will cover the advantages of using technology in English vocabulary acquisition and reading comprehension, the attitude of EFL learners towards multimedia applications, the technological tools they prefer, and whether they prefer reading from a screen or paper. Both the survey and the interview helped provide useful information in answering the research questions.
4.1 Attitude towards Multimedia Applications

EFL learners have a positive attitude towards using multimedia applications in vocabulary acquisition and reading comprehension. The survey had mixed results, but the general deduction was that students favored multimedia applications. In Figure 1, 78% of the participants relayed that multimedia helped them learn English, compared to 12% who did not find it helpful. These findings confirm and align with the study that focused on using SMS to teach English vocabulary (Motallebzadeh & Ganjali, 2011). As indicated by these findings, using SMS presents a practical self-study approach. Moreover, it enables students to develop communication skills. Also, it enlarges their vocabulary knowledge by having a positive attitude toward using multimedia applications in vocabulary acquisition and reading comprehension.

![Figure 1. Attitude towards the use of multimedia applications](image)

Note. EFL learners have a positive attitude towards the use of multimedia applications.

Table 1 shows that most students felt that multimedia applications were motivating, attractive, easy to use, made students feel comfortable, and supported English vocabulary learning and reading comprehension. This can be consistent with the study showing the preference for having electronic readings (Welsen et al., 2020).

<table>
<thead>
<tr>
<th>Attitude Towards Multimedia Applications</th>
<th>Strongly Agree 1</th>
<th>Agree 2</th>
<th>Neutral 3</th>
<th>Disagree 4</th>
<th>Strongly Disagree 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Useful</td>
<td>55%</td>
<td>23%</td>
<td>10%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Waste Time</td>
<td>19%</td>
<td>16%</td>
<td>29%</td>
<td>23%</td>
<td>13%</td>
</tr>
<tr>
<td>Motivating</td>
<td>42%</td>
<td>19%</td>
<td>26%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Interesting</td>
<td>52%</td>
<td>19%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Difficult</td>
<td>13%</td>
<td>39%</td>
<td>16%</td>
<td>19%</td>
<td>13%</td>
</tr>
<tr>
<td>Frustrating</td>
<td>26%</td>
<td>26%</td>
<td>19%</td>
<td>16%</td>
<td>13%</td>
</tr>
<tr>
<td>Supports Learning</td>
<td>48%</td>
<td>26%</td>
<td>10%</td>
<td>16%</td>
<td>0%</td>
</tr>
<tr>
<td>Boring</td>
<td>19%</td>
<td>6%</td>
<td>29%</td>
<td>32%</td>
<td>13%</td>
</tr>
<tr>
<td>Makes me powerless</td>
<td>23%</td>
<td>6%</td>
<td>23%</td>
<td>32%</td>
<td>16%</td>
</tr>
<tr>
<td>More Confidants</td>
<td>48%</td>
<td>16%</td>
<td>13%</td>
<td>16%</td>
<td>6%</td>
</tr>
<tr>
<td>Easy</td>
<td>45%</td>
<td>16%</td>
<td>19%</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>
The obtained data demonstrates that the majority of participants support the usage of multimedia apps. This is consistent with the findings of Wright, Fugget, and Caputa (2013), who concluded that deploying technology gadgets to supplement classroom instruction is successful. Their thoughts about multimedia apps are good. Another obvious fact is that technology has been significantly integrated into EFL education. The respondent indicated that technology motivates EFL learners at the initial level of teaching to read in English. In terms of using social media into teaching English vocabulary and reading, he suggested that it would be a good move. He said that he believed it would make learning more expressive. It would be both fascinating and relevant. The online dictionary assisted him in correcting his pronunciation of English terms. He believes that learners would choose social media since it is a kind of fun. His reaction demonstrated that social media improves learning outcomes. Learning has become more interesting, fascinating, and complex because to technological advances. These features can be ascribed to the reason why it stimulates beginners.

4.2 Reading from Screen versus Paper

According to the poll, EFL learners' preferences for reading on a screen or paper were varied. Figure 3 illustrates that the difference in preferences between the two mediums is not substantial. To enhance his English abilities and vocabulary, the interviewee preferred reading on a screen to reading from paper. According to the respondent, reading from the screen is preferred since everything seems clearer. Furthermore, reading from the screen helps him to search up new vocabulary terms on Google. A study to gauge the effectiveness of e-books revealed that using e-books offers children and EFL learners in the first level of instruction the opportunity to learn accurate spelling, word reading, and meanings of new words, which leads to better story understanding (Chen et al., 2013).

![Figure 2. Mixed feelings about the preference of reading from a screen or paper](Note: Reading from paper vs. screen)

The participant also talked about saving time. He favored scrolling, which was faster than than opening pages when reading material in hard copy. This may be one of the reasons why 49% of the participants, as illustrated in Table 2, read quickly from the screen. Regarding the preferred reading medium, it all boils down to convenience. Some people find reading from a screen is better than reading from paper and vice versa.
Table 2. Reading from paper vs. screen

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree 2</th>
<th>Neutral 3</th>
<th>Disagree 4</th>
<th>Strongly Disagree 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding from screen</td>
<td>19%</td>
<td>29%</td>
<td>35%</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>Understanding from paper</td>
<td>35%</td>
<td>26%</td>
<td>16%</td>
<td>13%</td>
<td>10%</td>
</tr>
<tr>
<td>Read quickly from the paper</td>
<td>26%</td>
<td>35%</td>
<td>29%</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>Read slowly from the paper</td>
<td>13%</td>
<td>19%</td>
<td>26%</td>
<td>35%</td>
<td>6%</td>
</tr>
<tr>
<td>Read quickly from the screen</td>
<td>23%</td>
<td>26%</td>
<td>26%</td>
<td>10%</td>
<td>16%</td>
</tr>
<tr>
<td>Read slowly from the screen</td>
<td>16%</td>
<td>32%</td>
<td>32%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>I feel tired of screen</td>
<td>23%</td>
<td>16%</td>
<td>32%</td>
<td>23%</td>
<td>6%</td>
</tr>
<tr>
<td>I feel tired of paper</td>
<td>0%</td>
<td>19%</td>
<td>32%</td>
<td>39%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Note. I have mixed feelings about the preference of reading from a screen or paper.

4.3 Preferred Technological Tools

Figure 3 shows that the participants preferred the use of different technological tools. There are only so many tools that they all like. Figure 6 shows that the most preferable technological tools for EFL learners, starting from the most popular ones, are Google Translate, Google Search, iPad, Google Docs/Drive, Twitter, Wikipedia, WhatsApp, Facebook, Canvas, LinkedIn, Quizlet, Blogger, and then Kindle.

Note. The participants preferred the use of different technological tools.
Table 3. Technological Tools

<table>
<thead>
<tr>
<th>Tool</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twitter</td>
<td>35%</td>
<td>32%</td>
<td>16%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>Google Docs/Drive</td>
<td>39%</td>
<td>29%</td>
<td>16%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>Facebook</td>
<td>26%</td>
<td>19%</td>
<td>29%</td>
<td>16%</td>
<td>10%</td>
</tr>
<tr>
<td>Blogger</td>
<td>6%</td>
<td>23%</td>
<td>42%</td>
<td>19%</td>
<td>10%</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>35%</td>
<td>23%</td>
<td>29%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Quizlet</td>
<td>23%</td>
<td>13%</td>
<td>45%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Canvas</td>
<td>26%</td>
<td>16%</td>
<td>42%</td>
<td>13%</td>
<td>3%</td>
</tr>
<tr>
<td>WhatsApp</td>
<td>42%</td>
<td>13%</td>
<td>13%</td>
<td>26%</td>
<td>6%</td>
</tr>
<tr>
<td>Kindle</td>
<td>16%</td>
<td>13%</td>
<td>39%</td>
<td>19%</td>
<td>13%</td>
</tr>
<tr>
<td>iPad</td>
<td>52%</td>
<td>23%</td>
<td>13%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Google Translate</td>
<td>61%</td>
<td>16%</td>
<td>10%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Google Search</td>
<td>61%</td>
<td>16%</td>
<td>10%</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>19%</td>
<td>19%</td>
<td>29%</td>
<td>19%</td>
<td>13%</td>
</tr>
</tbody>
</table>

The participant's answers to the open-ended questions about the two technological tools they used to improve their second language vocabulary and reading comprehension varied widely. They mentioned other preferred technological tools that still need to be included in the section. These included Instagram, Google Movie, Netflix, Dictionary.com, Blackberry Messenger, Keek, YouTube and Snapchat.

The interviewee favored the use of social media. He stated that he had used multiple sites. He initially used Myspace but later opted for Facebook. This change was because of its popularity and the fact that he could quickly contact English speakers and read their posted content. His response highlighted things EFL learners consider when choosing the most preferable social media avenues. The variation in the participants' feedback may be a result of the tools' effectiveness in enhancing reading skills and motivating students. This assertion has been shared and supported by Dalton, Proctor, Uccelli, Mo, and Snow (2011), who asserted that learning environments and digital tools positively impact reading comprehension.

Multiple things are apparent from the data collected. L2 learners prefer applying technology, especially social media, in English reading and vocabulary learning. In general, using technology makes learning more accessible and more enjoyable to students.

4.4 Integration of Quantitative and Qualitative Findings

The research employed a mixed methods approach to evaluate technology's impact on English as Foreign Language (EFL) learners' reading comprehension and vocabulary acquisition. The quantitative measures gathered through survey responses provided numerical data on participants' attitudes, preferences, and usage patterns related to technology. Therefore, qualitative research enhanced the understanding of the exact factors pushing or pulling the quantitative trends.

5. Results and Implications

5.1 Conclusion

This study aimed to investigate how EFL learners can develop their language and vocabulary by reading using technology tools.

5.2 Attitudes towards Multimedia Applications

Many EFL students gave good evaluations regarding incorporating multimedia applications in vocabulary building and reading comprehension in their learning courses. They were enthusiastic about using these tools and learned a lot from them.
5.3 Preferences for Reading Mediums
The audience showed a mixed trend; some enjoyed reading from the screen versus those who preferred reading from paper, but to the interviewee, the clear view and easy availability of online resources are the reasons the interviewee preferred reading from the screen.

5.4 Preferred Technological Tools
EFL learners had various opinions towards digital tools, referring to the search engines Google Translate, Google Search, and Facebook as some of the most popular tools for enhancing English reading comprehension and vocabulary development.

5.5 Pedagogical Implications
The study highlights the importance of assimilating multimedia applications into EFL instruction. It shows that instructors have to be much more innovative by using multimedia applications in their EFL instruction because that is how they can increase student motivation and engagement.

Educators should consider the diverse preferences of learners when incorporating technology into language learning activities. For instance, educators who engage an audience with different preferences when using technology in language activities must carefully choose mediums for reading materials and technologies to be used.

The results indicate that the implementation of each tool needs further research due to their contribution to reading comprehension and vocabulary acquisition, which can help in the broader understanding of the suitability of the tools for language learning instruction.

6. Limitations of the Study
Only one individual was interviewed. This posed a serious constraint because only his point of view was considered. The study required more respondents' perspectives and input. This would have offered more data and enabled the comparison and contrast of feedback.

7. Further Research
The study provided insight into users' attitudes, opinions, and preferences about the use of technology by concentrating on statistical data and input from one EFL student. However, further study is needed to discover the causes for the disparities in attitude, perception, and preference toward diverse technical tools and programs. This will assist us improve them depending on the data gathered. The research should rely primarily on open-ended questions to elicit information from EFL learners.

References


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