Ukrainian EFL Learners’ Use and Views of Electronic Dictionaries: a Case Study in Higher Education

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Abstract  
Dictionary usage is one of the potential English as a foreign language learning strategy. The research paper investigates current tendencies in electronic dictionaries use for EFL learning at Ukrainian universities and the attitudes of Ukrainian students toward them. The scholars attempt to answer the following question: What are Ukrainian EFL learners’ use and views of electronic dictionaries? The current study aims to fill a gap in existing literature regarding Ukrainian EFL learners’ preferences and the use of different electronic dictionaries for language learning. The significance of this research lies in understanding the learners’ preferences and support of the electronic dictionaries will help to find effective teaching practices fostering student-centered approaches. We used a quantitative method to collect research data through online tools (Google forms). It was achieved due to analyzing responses to the survey-based questionnaire of 32 learners of Vinnytsia Institute of Trade and Economics of the State University of Trade and Economics, Ukraine. The findings suggest that students usually use various types of electronic dictionaries because they help them to develop four basic language skills. The participants preferred using electronic dictionaries as effective and motivating aids. We concluded that Ukrainian learners had a positive attitude toward electronic dictionaries implementation as they can improve both the teaching and learning process in educational institutions.

Keywords: case study, electronic dictionaries, English as a foreign language, higher education, Ukrainian EFL learners, Ukrainian universities

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Introduction

Modern foreign language teaching is closely related to innovative processes in education. Growth and technological progress have drastically affected teaching methods. The role of digital resources and interactive techniques has increased recently. Using up-to-date electronic didactic tools makes learning much more effective (Tymoshchuk, 2022).

Electronic dictionaries have a unique role among modern learning technologies. They successfully compete with their paper counterparts because they optimize dictionary parameters, i.e., expanding dictionary entries, combining different forms of information (text, audio, graphics, and animation), and rational structuring of information using hypertext technologies. Logically, that the introduction of electronic dictionaries in the learning process is a requirement as it will enable the creation of the modern information society and will be one of the prerequisites for the formation of digital education. Electronic dictionaries have become a link between didactics, linguistics, and computer science.

Electronic dictionaries as instruments used in higher education to foreign language learning evolved from an optional technique to an indispensable tool. The popularity of electronic dictionaries among students is a motivating factor for English learning. This article aims to uncover Ukrainian EFL learners’ viewpoints regarding the role of electronic dictionaries in foreign language learning in higher education. The significance of this study is that understanding the learners’ preferences and support of the electronic dictionaries would help to find effective teaching practices.

Thus, the current study will provide insights into the pros and cons of electronic dictionaries from the perspectives of Ukrainian EFL learners. The following research questions guide our study: 1. What is the attitude of Ukrainian learners toward electronic dictionary implementation in foreign language learning? 2. What are the viewpoints of Ukrainian EFL learners on the obstacles to electronic dictionary implementation to learn English? 3. What is the present electronic dictionary implementation for learning EFL at Ukrainian universities?

Literature Review

There has been a growing interest in electronic dictionaries for the past two decades. Scholars have researched theoretical and practical aspects of electronic dictionaries implementation for learning purposes. Some scientists (Torres & Ramos, 2003; Rashid, Yunus & Mohamad, 2015; Mohamad, Rashid & Mohamad, 2017) have described and analyzed the potential and challenges of electronic dictionaries among ESL learners. Torres and Ramos (2003) highlighted such features of electronic dictionaries as interactivity, quick access, and multimedia effects. According to Mohamad, Rashid, and Wan Mohamad (2017), an electronic dictionary is time-saving and allows learners to look for new definitions. Weschler and Pitts (2000) concluded that the average look-up time for ten words was 168 seconds (about 17 seconds per word) while using a paper-based dictionary. According to his research data, an electronic dictionary requires 130 seconds per ten words (about 13 seconds per word). Thus, the students could look up words about 23% faster using an electronic dictionary than the paper one. However, Zorigt and Tumurbat (2022) have analyzed the difference between using paper dictionary and e-dictionary effects in memorizing new words. They surveyed to identify the use of paper dictionaries in the classroom. The scientists concluded ‘using a paper dictionary has many benefits for language learners, for taking a certain amount of time to look up for the new words definitely sends the information to our long-term memory’ (p. 15).
There are numerous studies on learners’ attitudes toward the use of electronic dictionaries for learning purposes. According to these researches, students adopt positive attitudes toward the use of electronic dictionaries and find them beneficial and facilitative for their learning (Nesi, 2002; Chatzidimou, 2007). The scientists argue that ‘since the introduction of electronic dictionaries in the mid to late 1990s, e-dictionaries have become an indispensable daily gadget for EFL learners and users’ (Park, 2006, p. 30).

Dashtestani (2013) claims that the electronic dictionary implementation for learning English vocabulary has attracted colossal attention lately. Chaker Hamdi (2015) has researched the effects of electronic dictionary use on vocabulary retention and reading comprehension of Algerian EFL second-year students. Rezaei and Davoudi (2016) have explored the different impacts of electronic dictionaries compared to paper ones on the Iranian EFL students’ achievement in learning vocabulary. According to Dashtestani’s (2013) comparison survey on Iranian EFL students’ and teachers’ perspectives on the role of electronic dictionaries, ‘both the EFL students and EFL teachers had moderately positive attitudes toward using of electronic dictionaries for learning EFL’ (p. 61). Levy & Steel (2015) analyzed electronic dictionary implementation by Australian university students. Their study has placed a particular emphasis on gauging learner perceptions of the electronic dictionary advantages. Alamria and Hakami (2022) have investigated Saudi EFL female students’ perspectives utilizing e-dictionaries to increase vocabulary learning. The research result showed that ‘students agreed more on the benefits of using e-dictionaries to verify vocabulary meaning, comprehension, alternatives, extensive definitions, word uniqueness, and examples’ (p. 1595). Furthermore, learners preferred to use electronic dictionaries to translate words. The scholars suggest EFL students should be aware of various types of online dictionaries specifically created to fulfill the need of a non-native English speaker.

There have been several studies (Yonally & Gilfert, 1995; Weschler & Pitts, 2000; Shizuka, 2003; Koyama & Takeuchi, 2003; Koyama, 2004; Koyama & Takeuchi, 2007; Bower & McMillan, 2007; Filer, 2017) examining various aspects of electronic dictionaries implementation for EFL in Japan. According to Shizuka’s (2003) research data, Japanese EFL learners tend to consult electronic dictionaries more frequently than paper ones. Bower and McMillan (2007) investigated Japanese EFL learners’ attitudes toward the portable electronic dictionary implementation. The scholars have also found that the majority of participants used electronic dictionaries frequently.

Alhaisoni (2016) assessed teachers’ and students’ attitudes toward the use of electronic dictionaries. He reported that students use bilingual dictionaries more frequently than others, ‘technology such as smartphones and dictionary applications make accessing word information a convenient process for many language learners’ (p. 47). According to the research data, most learners check word meaning and spelling while paying little attention to pronunciation, illustrated examples, and collocations.

Chen (2010) has researched the implementation of electronic pocket dictionaries by Chinese EFL learners. The scientist concluded that they ‘are gaining increasing popularity among English learners in Chinese colleges and universities and that they are exerting a profound influence on users’ preference and patterns of dictionary use’ (p. 303). Park (2006) has analyzed the current status of electronic dictionary implementation in Korea and the Korean college students’ attitude toward its use. The researcher has also examined e-dictionaries’ usefulness and effectiveness in improving learners’ English skills.
Krajka and Campoy-Cubillo (2020) have analyzed the impact of electronic dictionary use training on students who took their BA in foreign language teaching degree and are training to become teachers in the MA program. Scholars conducted a semi-structured interview at a middle-sized private university in Poland. According to Krajka and Campoy-Cubillo (2020), ‘the major task of the language teacher is to equip them with the self-study procedures, strategies, and tricks, there is a great role for teachers to promote successful, conscious and wise e-dictionary usage’ (p. 1826).

Serbian scholars (Knežević, Halupka-Rešetar, Miškeljin & Milić, 2021) have researched the use of dictionaries among the new millennium generation of English as a foreign language undergraduates. Applying the mixed-method approach (a questionnaire and interviews), they examined the types of dictionaries used, the frequency of dictionary use, information looked for, and problems faced in using dictionaries. Their findings suggest that the participants prefer bilingual online dictionaries; millennials use them primarily for looking up the meaning of unknown words.

The researchers argue that ‘the educational events of the last decade have given impetus to significant changes in the education system in Ukraine’ (Zahorodna, Saienko, Tolchieva, Tymoshchuk, Kulinich & Shvets, 2022, p. 78). The current study aims to fill a gap in existing literature regarding Ukrainian EFL learners’ preferences and the use of different electronic dictionaries for language learning. However, Ukrainian scholars have conducted very few surveys on electronic dictionaries use for teaching English as a foreign language. Thus, insufficient research on learners’ attitudes toward electronic dictionaries implementation in Ukrainian universities has caused the choice of the research topic.

**Methods**

We have used theoretical methods to analyze scientific literature on teaching English as a foreign language, computer-assisted language learning (CALL), emergency remote English learning and teaching, challenges and benefits of electronic dictionaries implementation. We conducted an online survey at Vinnytsia Institute of Trade and Economics of the State University of Trade and Economics (VITE SUTE, Ukraine) in May 2022. We used online tools and techniques to obtain data; we analyzed research data employing computer-aided software; we interpreted the research results using texts and numerical information.

**Participants**

We selected the study population in a non-probabilistic way. The first-year students training at VITE SUTE to become interpreters in the MA program (Philology, Germanic languages, and literature (including translation), first foreign language – English) were under the research. A total of 32 students (four male and 28 female) participated in the interview. However, this figure corresponds to the contingent of students majoring in philology. We also asked the students about their ages. The most significant part of the participants is aged 21, with 20 ratings 62.5% of the population. Those aged 22 got a total number of six and scored a percentage of 18.75%. Four twenty-three-year-old students (12.5%) took part in the survey, whereas only two participants (6.25%) were older than 23.
Research Procedures

We have used a student questionnaire to collect quantitative data on the attitudes towards electronic dictionaries, preferences, and the frequency of their implementation. It has been created using Google Forms and administered online in a randomized and equal way to the students of VITE SUTE. We have reviewed the questionnaires of Lew (2004), Chatzidimou (2007), Dashtestani (2013), and Alhaisoni (2016). We have used particular criteria relevant to the learner questionnaire for our study. Firstly, we collected some demographic information. The respondents determined their gender (Male / Female) and age. Other questions were related to applying electronic dictionaries aimed at EFL. We measured part of the questions using a Likert-scale survey. We had the items related to the learner’s agreement, i.e., ‘Strongly Agree’, ‘Agree’, ‘Neutral’, ‘Disagree’, and ‘Strongly Disagree’. We also had items related to the frequency of EFL learners’ use of electronic dictionaries and their services, i.e., ‘Never’, ‘Occasionally’, ‘Sometimes’, ‘Often’, and ‘Always’. Some other questions enable the learners to choose more than one option. We mean questions investigating the electronic dictionaries used by learners during English as a foreign language learning and EFL learners’ use of services of electronic dictionaries.

Results

This section presents the findings of the gathered data and the obtained results analysis. Figure one shows respondents’ answers on whether it is easy for them to use electronic dictionaries. The item ‘Agree’ has taken the most significant part with a total of 16 participants and a percentage of 50 % of the population, it is followed by the item ‘Strongly Agree’ with a total of 11 students (34.4 %). The last scored thing is ‘Neutral’, with a 15.6 % percentage.

Figure 1. Ease of electronic dictionary use

According to figure two, the items ‘Agree’ and ‘Strongly Agree’ were the most frequent responses that scored 56.3 % and 34.4 %, respectively. Three respondents (9.4 %) have ticked ‘Neutral’, answering if electronic dictionaries are easily accessible to students.

Figure 2. Electronic dictionaries accessibility
Figure three demonstrates the learners’ responses if audiovisual features are used in electronic dictionaries. Participants had choices ranging from ‘Strongly Agree’ to ‘Strongly Disagree’. Twenty-five of the respondents who ticked ‘Always’ constitute 78.1% of the population; five students were neutral (15.6%); one (3.1%) of the respondents’ choice went to the option ‘Strongly Agree’. However, one respondent has claimed audiovisual features are not used in electronic dictionaries.

![Figure 3. Use of audiovisual electronic dictionaries features](image)

Most students (Figure four) have claimed that electronic dictionaries provide more detailed definitions than paper dictionaries. Fifteen learners (46.9%) have ticked ‘Agree’, and six students (18.8%) have chosen ‘Strongly Agree’. However, 25% of the students were undecided. The total percentage of those who disagree is 9.4% (three students).

![Figure 4. Electronic dictionaries provide more detailed definitions than paper dictionaries](image)

According to figure five, 19 students (59.4%) agreed that electronic dictionaries provide students with sufficient input, and two students (6.3%) ticked ‘Strongly Agree’, whereas 22.3% of the sample respondents preferred to remain neutral.

![Figure 5. Electronic dictionaries provide students with sufficient input](image)
Figures 1-5 illustrate that the EFL students had positive attitudes toward the use of electronic dictionaries for foreign language learning. They held positive attitudes toward some benefits of electronic dictionaries, including audiovisual features, ease of use, access, and provision of sufficient input.

The study also finds that 81.3% of the students usually use electronic dictionaries. 15.6% of the sample respondents generally use both electronic and paper dictionaries. Amazingly, only one student prefers paper dictionaries to electronic ones. These results indicate that learners frequently use e-dictionaries to facilitate their learning process (Figure six).

Figure 6. Frequency of electronic dictionary use

The next question aimed to analyze the types of electronic dictionaries students use for foreign language learning. According to research data (Figure seven), 43.8% (14 participants) use various electronic dictionaries. 37.5% (twelve students) prefer online electronic dictionaries. Four participants (12.5%) use electronic dictionaries installed on their cellphones, and 6.3% of the students have electronic dictionaries installed on PC. Thirty-two respondents (100%) have answered that they use electronic dictionaries for learning purposes.

Figure 7. Types of electronic dictionaries used by learners

According to Figure 8, 25 participants (78.1%) use bilingual dictionaries more often than monolingual ones.
Figure 8. Using bilingual vs. monolingual dictionaries

We used multiple items to investigate the electronic dictionaries used by learners during. This section enables the participant to select as many items as they need. According to Table 1 data, the Oxford Dictionary of English ranked first with 21 respondents (65.6 %), followed by other electronic dictionaries, with 18 representing 56.3 % of the population. Seventeen respondents (53.1 %) went for Cambridge Advanced Learner’s Dictionary, and 13 students (40.6 %) were for Macmillan English Dictionary for Advanced Learners. Oxford Advanced Learner’s Dictionary of Current English, TheFreeDictionary, Longman Dictionary of Contemporary English, and Longman Essential Activator is the least used electronic dictionaries by the participants.

Table 1. Electronic dictionaries EFL learners use

<table>
<thead>
<tr>
<th>Electronic dictionaries used by EFL learners</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABBYY Lingvo</td>
<td>11</td>
<td>34.4 %</td>
</tr>
<tr>
<td>Oxford Dictionary of English</td>
<td>21</td>
<td>65.6 %</td>
</tr>
<tr>
<td>Oxford Advanced Learner’s Dictionary of Current English</td>
<td>4</td>
<td>12.5 %</td>
</tr>
<tr>
<td>TheFreeDictionary</td>
<td>5</td>
<td>15.6 %</td>
</tr>
<tr>
<td>Longman Dictionary of Contemporary English</td>
<td>4</td>
<td>12.5 %</td>
</tr>
<tr>
<td>Longman Essential Activator</td>
<td>2</td>
<td>6.3 %</td>
</tr>
<tr>
<td>Macmillan English Dictionary for Advanced Learners</td>
<td>13</td>
<td>40.6 %</td>
</tr>
<tr>
<td>Cambridge Advanced Learner’s Dictionary</td>
<td>17</td>
<td>53.1 %</td>
</tr>
<tr>
<td>Other electronic dictionaries</td>
<td>18</td>
<td>56.3 %</td>
</tr>
</tbody>
</table>

The study intends to examine the frequency of electronic dictionaries used for various types of EFL activities. The findings presented in Figure 9 show that 6.3 % of respondents always use an electronic dictionary for reading, 12.5 % of learners always use it for writing tasks, 9.4 % of students always use an electronic dictionary for reading exercises, 6.3 % of the sample respondents always use an electronic dictionary for listening tasks, and 15.6 % of respondent students always use an electronic dictionary for translating lessons. The study finds that 28.1 % of learners have chosen ‘Often Use’ for reading tasks, 15.6 % of students have selected it for writing tasks, 6.3 % of the sample respondents have ticked it for speaking tasks, 9.4 % of the respondents have chosen it for listening activities, and 28.1 % of respondents have chosen it for translating. Respondent students sometimes use an electronic dictionary for reading (37.5 %), writing (56.3 %), speaking (34.4 %), listening (15.6 %), and translating (37.5 %). Option ‘Occasionally’ was chosen by 21.9 % of students for reading assignments, 15.6 % of learners for writing assignments, 31.3 % of respondent students for speaking activities, 34.4 % for listening, and 18.8 % for translating.
However, two students (6.3 %) never use an electronic dictionary for reading activities, six students (18.8 %) never use it for speaking activities, and 11 respondents (34.4 %) never use an electronic dictionary for listening tasks. None of the respondents indicated ‘Never’ regarding using electronic dictionaries in activities such as reading and writing. The analysis of the obtained results proves that respondents often use an electronic dictionary for reading and translating activities.

\[Figure\ 9.\ \text{Electronic\ dictionaries\ use\ for\ various\ types\ of\ EFL\ activities}\]

The next question that participants had to respond to aims to investigate EFL learners’ use of services of electronic dictionaries. According to data collected (Table two), they often listen to voiced pronunciation and read the definitions of entries. The EFL learners reported that they rarely or never use examples, hyperlinks, and phonetics of words. Checking the etymology of entries available in electronic dictionaries is never used by 32.3 % of the sample respondents.

\[Table\ 2.\ \text{EFL\ learners’\ use\ of\ services\ of\ electronic\ dictionaries}\]

<table>
<thead>
<tr>
<th>Services</th>
<th>Never</th>
<th>Occasionally</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening to the voiced pronunciation of words</td>
<td>6.3 %</td>
<td>6.3 %</td>
<td>34.4 %</td>
<td>46.9 %</td>
<td>6.3 %</td>
</tr>
<tr>
<td>Checking the phonetics of each entry</td>
<td>18.8 %</td>
<td>34.4 %</td>
<td>31.3 %</td>
<td>12.5 %</td>
<td>3.1 %</td>
</tr>
<tr>
<td>Reading examples provided for each entry</td>
<td>0 %</td>
<td>22.6 %</td>
<td>38.7 %</td>
<td>25.8 %</td>
<td>12.9 %</td>
</tr>
<tr>
<td>Using the hyperlinks available in electronic dictionaries</td>
<td>18.8 %</td>
<td>46.9 %</td>
<td>28.1 %</td>
<td>6.3 %</td>
<td>0 %</td>
</tr>
<tr>
<td>Reading the definition of entries</td>
<td>3.1 %</td>
<td>31.3 %</td>
<td>31.3 %</td>
<td>34.4 %</td>
<td>0 %</td>
</tr>
<tr>
<td>Checking different parts of speech of an entry</td>
<td>6.3 %</td>
<td>28.1 %</td>
<td>40.6 %</td>
<td>21.9 %</td>
<td>3.1 %</td>
</tr>
<tr>
<td>Checking the etymology of entries available in electronic dictionaries</td>
<td>32.3 %</td>
<td>38.7 %</td>
<td>19.4 %</td>
<td>6.5 %</td>
<td>3.2 %</td>
</tr>
</tbody>
</table>

\[Discussion\]

The presented study demonstrates that Ukrainian learners expressed positive attitudes toward using electronic dictionaries for EFL learning. The students consider electronic dictionaries essential and accessible tools for learning. The participants have also highlighted that electronic dictionaries provide sufficient input. They also prefer them to paper ones. The finding regarding
the positive attitudes of students toward the electronic dictionaries’ implementation for EFL learning concurs with other previous studies (Nesi, 2002; Chatzidimou, 2007; Dashtestani, 2013; Alhaisoni, 2016) on the perceptions, attitudes, and beliefs in using electronic dictionaries for learning EFL in other EFL contexts. Results from the interview suggest that language learners prefer electronic dictionaries over paper ones. This outcome aligns with previous findings (Tang, 1997; Deng, 2005).

Analyzing electronic dictionaries use for various types of EFL activities, students have mentioned that they primarily use them for reading and translating activities. The learners have also noticed that they have used the electronic dictionaries mostly in listening to the voiced pronunciation of words, reading examples provided for each entry, and checking different parts of speech of an entry. The EFL students occasionally or never use phonetics of words, illustrations, hyperlinks, and etymologies of the entries. These results coincide with those obtained in similar research by Dashtestani (2013) on EFL teachers’ and students’ perspectives on using electronic dictionaries for learning English.

Several surveys have revealed the general learner’s preference for bilingual dictionaries (Nesi, 2014; Alhaisoni, 2016). This finding supports our research results demonstrating that 78.1% of the participants use bilingual dictionaries more frequently than monolingual ones. They also agree with Altuwairesh (2021) as students’ perceptions were in favor of bilingual dictionaries, ‘the fact that the participants prefer bilingual dictionaries is not surprising with the sample being translation trainees’ (p. 78). Thus, the findings obtained from the analysis of the students’ questionnaire revealed Ukrainian students’ positive attitudes towards electronic dictionaries implementation in learning EFL.

Conclusion

The study aims to analyze using electronic dictionaries for EFL learning in Ukrainian higher education, to research various types of dictionaries used in EFL learning and the student’s attitude toward them. The research found that learners prefer and use bilingual dictionaries more frequently than others. Moreover, electronic dictionaries are used significantly more than print versions due to their convenience, comprehensiveness, portability, and up-to-date.

Implementation of innovative pedagogical technologies and techniques in the foreign language classes, such as electronic dictionaries, has increased the foreign language proficiency of students, providing the best conditions for gaining listening and reading skills, increasing motivation for learning, promoting personal development of students and made the teaching and learning process student-oriented. Analyzing electronic dictionaries used for various EFL activities, students have mentioned that they primarily use them for reading and translating activities. The learners have also noticed that they have used the electronic dictionaries mostly in listening to the voiced pronunciation of words, reading examples provided for each entry, and checking different parts of speech of an entry.

It is a fact that electronic dictionaries are gaining increasing popularity among English learners in Ukrainian and foreign educational institutions and have a profound influence on users’ preferences and patterns of dictionary use. As pointed out by Altuwairesh (2021), ‘the move to e-dictionaries is rather a global phenomenon’ (p. 79).

To conclude, an area worth further investigation is finding the teachers’ views and experiences toward electronic dictionaries implementation in EFL teaching.
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References
Dashtestani, R. (2013). EFL Teachers’ and Students’ Perspectives on the Use of Electronic Dictionaries for Learning English. CALL-EJ 14(2), 51-65


Tymoshchuk, N. (2022). The Implementation of E-Learning to Support Learning and Teaching Foreign Language: a Case Study in Ukrainian Higher Education. Arab World English Journal (AWEJ), 2nd Special Issue on Covid 19 Challenges (2), 233-244. DOI: https://dx.doi.org/10.24093/awej/covid2_1

