English Digital Dictionaries as Valuable Blended Learning Tools for Palestinian College Students

Raghad A. A. Dwaik

Correspondence: Raghad A. A. Dwaik, English Department, Hebron University, Hebron, Palestine. E-mail: ragherddwaik@yahoo.com

Received: August 2, 2015   Accepted: September 6, 2015   Online Published: September 9, 2015
doi:10.5539/elt.v8n11p1        URL: http://dx.doi.org/10.5539/elt.v8n11p1

Abstract
Digital technology has become an indispensable aspect of foreign language learning around the globe especially in the case of college students who are often required to finish extensive reading assignments within a limited time period. Such pressure calls for the use of efficient tools such as digital dictionaries to help them achieve their academic purposes. Efficient use of such tools, however, would not be possible unless students are familiar with their special features so as to use them to their maximum advantage. This paper investigates the extent to which Palestinian college students are familiar with the features and advantages of different dictionary types especially digital ones. It also probes the effect of using certain activities on the students' level of awareness and dictionary use. A structured interview and a test were applied on a group of 148 Arts and Science students at two local universities. The interview measured the purposes (skills) that these dictionaries are used for and the domains they are used in. At a later stage in the experiment, these students were involved in an eight week activity that required them to use an online dictionary on a daily basis to complete an assignment. After the experiment, it was found that the frequency of dictionary use declined in the case of the print dictionary and increased remarkably in the case of the electronic (CD-Rom) and online dictionaries. It was also found that exposing students to the authentic language available in electronic dictionaries notably enhanced the students' overall language proficiency.

Keywords: electronic dictionaries, online dictionaries, digital dictionaries, EFL vocabulary learning

1. Introduction
Students at higher education institutions around the globe often feel pressured to finish extensive reading assignments for their various courses. Such readings are mostly done in English, the language of instruction at most universities including those in Palestine. One may also argue that a considerable amount of college reading is done online due to the scarcity of print sources at some universities or to the convenience of such sources for saving, compiling and editing materials that would later be used for the purpose of academic writing. Two of the most valuable sources that students utilize when reading online are the electronic (CD-Rom) and online dictionaries. These dictionaries are suitable for the blended learning mode because even if electronic equipment is not readily available inside the classrooms, such dictionaries can be used out of the classroom, in a lab or at a café, to finish reading and writing assignments, build vocabulary and prepare for presentations. All these features and advantages, however, would go to waste unless the students are familiar with them and can utilize them efficiently. When knowing these features, students will take control of their own learning and will be motivated to spend more time navigating and exploring the dictionary which will offer them an unprecedented opportunity to expose themselves to unabridged or authentic language input that will enhance their overall language proficiency.

This study, hence, attempts to investigate the current state of Palestinian College students' familiarity with the features of electronic and online dictionaries and to check their purposes for using them. The paper also looks at the domains in which students use electronic dictionaries, i.e., home, classroom or campus. The study also probes the change in the above variables after the students were introduced to a new classroom activity, i.e., "word of the day" which impacted the students' overall language proficiency and their awareness of the special
features of electronic dictionaries.

2. Literature Review

Nowadays, one may easily notice that a large variety of electronic and online dictionaries are available for learners to choose from while working on the completion of college reading and writing assignments. These dictionaries enjoy a wide array of functions that are not available in their print counterparts such as the pronunciation feature and the hypertext links. Additionally, these valuable sources can be freely accessed by the student at home as well as at the college library or computer labs.

One may also argue that electronic or online dictionaries are not only sources of information for learners but they also provide an ample opportunity for enhancing students' motivation and for developing a new learning style that entails autonomy and learner centeredness (Sharma & Barrett, 2007).

Boonmoh (2010) lists three types of electronic dictionaries that are available for learners, namely, CD-Rom dictionaries, pocket electronic dictionaries (PEDs) and online or internet dictionaries. Boonmoh goes on to argue that PEDs are not readily available for learners and that the use of PC or CD-Rom dictionaries is not popular when compared to the use of online dictionaries which are favored by the majority of students.

In the Palestinian context, however, one of the most popular dictionary types available for students is the CD-Rom or PC-based dictionary, later referred to in this paper as the electronic dictionary. This dictionary is usually provided alongside the print version, and it may be uploaded into the computer, thus enabling the learner to access additional features such as sound and pronunciation.

As for online dictionaries, they are mostly available on the World Wide Web for free. Besides enjoying the general features of a CD-Rom, online dictionaries also boast an additional feature which is being continuously updated to include new information, hence providing learners with the latest and most recent data. These dictionaries also have several types such as the learner's dictionary, the translator dictionary and the specialist dictionary. Some online dictionaries do not have a print version and have been designed especially for the web, such as Dictionary.com. Online dictionaries possess an additional advantage, namely, the hypertext links which allow them to provide access for unlimited amounts of information and elaboration about specific details on the main page. These details include the origin of certain word parts and the meaning of synonyms. These dictionaries also provide access to educational activities such as worksheets, interactive contests and games, as well as follow up on words newly added to language. Such features make an online dictionary a perfect learning tool besides being a source of information or word definitions and pronunciation.

Plenty of previous research has probed both students' and teachers' views of using electronic dictionary (e.g. Nesi, 2002; Bower & McMillan, 2007; Isaac & Jamil, 2011; Wang, 2012). The majority of previous studies on electronic dictionaries have found that students generally have a positive attitude towards electronic dictionaries and that they find them convenient and useful (Boonmoh, 2003; Chatzidimou, 2007; Golonka et al., 2012; Nesi, 2002). They save them the trouble of bringing heavy paper dictionaries into the classroom (Weschler, 2000).

An experimental study in Iran compared the usefulness of electronic and print dictionaries for learning vocabulary. It was found that students who used electronic dictionaries showed more progress in vocabulary learning than those who used regular print dictionaries (Zarej & Gujjar, 2012).

Another study by Dziemianko (2010) in the Polish context showed that students using electronic dictionaries have achieved better vocabulary retention than those using print or paper ones. Her conclusion applied to both receptive and productive skills. She also found that electronic dictionaries were more convenient for conducting classroom activities since they help students recall a word meaning and its collocations.

In the Chinese context, Jian et al. (2009) compared attitude of science and humanities students towards electronic dictionaries and found that students considered reference speed or speed of reference to be the most important feature of such dictionaries. Students did not deem other multimedia features which characterize such dictionaries to be important.

In Japan, Bower and McMillan (2007) explored the students' attitude towards portable electronic dictionaries. It was found that most students use electronic dictionaries and find them useful, yet, they are not fully aware of the full potential and learning possibilities available through these dictionaries.

Other researchers found that the actual use of electronic dictionaries improves EFL students' skills in searching and looking up information contained in them (Koyama & Takeuchi, 2007). Such improvement in the searching
behavior, however, did not result in an overall improvement in the students' reading comprehension skills. Another study in the Chinese context examined students' reading of electronic texts while using electronic dictionaries. Results showed that use of such dictionaries would improve the proficiency of intermediate students, yet it would not have a significant influence on advanced students (Wang, 2012). Loucky (2005) conducted a study on Japanese engineering students and found that students would prefer to use electronic rather than print dictionaries and that they had a positive attitude towards the use on electronic dictionaries in the context of reading English texts.

3. Statement of the Problem

Despite the wide variety of electronic and online dictionaries available in the World market and on the World Wide Web nowadays, Palestinian college students do not seem to be using them frequently enough to deal with the requirements of their college readings. This is rather strange taking into account results of previous research which found that students around the world enjoy using electronic dictionaries and find them convenient and useful (Boomnoh, 2003; Chatzidimou, 2007; Golonka et al., 2012; Nesi, 2002). It is also surprising when taking into account that Palestinian students generally do most of their reading online due to the shortage in up to date print sources. When using such sources online, it is much more convenient to use an electronic on online dictionary simultaneously instead of leaving the desk, picking a dictionary from the shelf and flipping through the pages.

This lack of involvement in the use of Electronic dictionaries may lead to slow reading and incomplete comprehension of online text that is largely due to the students' lack of awareness of the useful features of these valuable resources. Hence, it is of great importance to familiarize students with the different types of electronic and online dictionaries and to expose them to the features of these dictionaries through direct instruction as well as through involvement in pedagogical activities that promote reliance on dictionaries of this type.

4. Purpose of the Study

The purpose of this study is to explore the influence of using a specially designed activity, namely, "word of the day", on the students' frequency of using different types of dictionaries, as well as on their purposes and domains of using them. College students' actual use of electronic and online dictionaries is compared to their use of traditional print dictionaries. Students' patterns of dictionary use were explored before and after being involved in the 'word of the day' activity which was intended to raise their awareness of the special features of different digital dictionaries.

5. Research Questions

This study aims at finding answers for the following research questions. The first four questions explore the percentage, frequency, purposes and domains of dictionary use prior to applying the awareness activity. As for the last four questions, they investigate the same variables, thus pointing out to the change taking place after the implementation of the awareness activity.

1). To what extent do students use electronic and online dictionaries as compared to print ones?
2). What is the frequency of using the different types of dictionaries?
3). What are the language purposes or skills that students use online dictionaries for?
4). What are the domains, e.g., home, college, transportation that students use online dictionaries in and does that influence the frequency of use?
5). How does the use of awareness activities (word of the day) influence the percentage of students who prefer using electronic and/or online dictionaries over print ones?
6). How does the use of awareness activities influence the frequency of using the electronic dictionary as compared to the online and print dictionaries?
7). How does the use of awareness activities change the students' purposes (skills) for using the dictionary?
8). How does the use of awareness activities change the domains, i.e., (home, school, campus) in which students' use dictionaries?
6. Methodology

6.1 Population and Sample
The researcher used a sample of 148 students specialized in Arts and sciences. Eighty six students were Arts major (six males and 80 females), while 62 were science students (74 males and 28 females). Arts students were enrolled at Hebron University and were taking the reading course at the time of the study. Science students were enrolled in Palestine Polytechnic University and were also taking a reading course at the time of the study.

6.2 Instruments

6.2.1 Structured Interview
The researcher used a structured interview (See appendix One) to probe college students' patterns of dictionary use and whether they rely on print or electronic dictionaries. The questionnaire also probed students' venue or domain of dictionary use and the skill that urges them to prefer an electronic or an online dictionary. The questionnaire further examined whether students use these dictionaries for translation purposes. The interview further elicited the students' suggestions as to how to improve the usefulness of these dictionaries. The structured interview was administered twice, once at the beginning of the experiment to explore the students' current patterns of dictionary use and once after the implementation of a dictionary activity that aimed at raising their awareness of the features and advantages of the online dictionary.

6.2.2 Test
Students were asked to sit for a reading proficiency test at the outset of the experiment. The reading test was a modified version of the Test of English as a Foreign Language (TOEFL) practice test that contained two passages and 20 multiple choice items. Students also sat for an equivalent version of this test at the end of the experiment.

6.2.3 Electronic Dictionary Activity (Awareness Activity)
Students were then exposed to an activity that encouraged them to use the online dictionary: Dictionary.com. The activity is "Word of the Day" which focuses on less frequent English vocabulary and provides word meaning in standard everyday English. They were asked to find the word, read its definition and use it in three sentences that they would later share in the classroom. At the end of the experiment, which lasted for 8 weeks (24 classes), students filled out the questionnaire again and sat for an equivalent version of the reading comprehension test.

7. Results and Discussion
Results of this study are divided into two major sections. The first section discusses the information obtained in the pre-interview and the reading proficiency pre-test. This section shows the students' orientation towards dictionary use prior to any training or instruction provided by the teacher. The second section discusses the information obtained in the post-interview and test stages. Finally the change in the students' proficiency and awareness of electronic dictionary features are highlighted and discussed.

7.1 Results of the Pre-interview and Pre-test
Results in this section will be presented in the order of the research questions.

7.1.1 Question One
1). To what extent do students use electronic and online dictionaries as compared to print ones?
Out of the 148 students participating in this study, 64 used print dictionaries while 50 used electronic and about 34 used online dictionaries of various types. Table one below shows that about 43% of all students used print dictionaries, 33% used electronic and 23% used online dictionaries of various types. The large percentage of print dictionary users obtained might be due to the fact that these are sophomore students who have not been away from the school system for a long time. The reading course is the first course in which they experience extensive amounts of required readings from both online and print sources. It is also the first course in which they are exposed to authentic reading texts that contain less frequent vocabulary items that call for the use of an unabridged dictionary. Table one below also shows that the highest reading proficiency average (M=.66) is possessed by the students who use Online dictionaries. As for print dictionary users, they showed the lowest reading proficiency (M=.39). This may be explained by the fact that most print dictionaries available for students are of the abridged type that contains a smaller number of vocabulary items in addition to shorter and more simplified definitions. Online dictionaries, on the other hand, contain more authentic entries that use less
frequent vocabulary items and more complex grammar. This may be contrasted with the results of previous research which have found that students generally have a positive attitude towards electronic dictionaries and that they find them convenient and useful (Boomnoh, 2003; Chatzidimou, 2007; Golonka et al., 2012; Nesi, 2002).

Table 1. Percentage of users of each dictionary type and their respective proficiency average

<table>
<thead>
<tr>
<th>Type of Dictionary</th>
<th>Percentage of users</th>
<th>Average proficiency in reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print</td>
<td>43%</td>
<td>39/100</td>
</tr>
<tr>
<td>Electronic</td>
<td>33%</td>
<td>48/100</td>
</tr>
<tr>
<td>Online</td>
<td>23%</td>
<td>66/100</td>
</tr>
</tbody>
</table>

7.1.2 Question Two

What is the frequency of using the different types of dictionaries?

When looking at the sample as a whole, it was found that only six students, i.e., 4% used the dictionary more than 20 times per day. Twenty six students (18%) used it 10-20 times per day while seventy eight students (58%) used the dictionary 1-10 times daily. Finally, 30 students (20%) used it 1-10 times per week, and 8 students (5%) used it only once a week. Table two below provides a summary of this information. In other words, about 25% students from both specializations did not consider dictionary use to be a daily necessity despite the fact that they are still sophomore students who need to build their vocabulary for future college assignments and requirements.

Table 2. Numbers and percentages of students using different types of dictionaries according to the frequency of usage

<table>
<thead>
<tr>
<th>Frequency of use</th>
<th>Number of students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20+ times per day</td>
<td>6</td>
<td>4%</td>
</tr>
<tr>
<td>10-20 times daily</td>
<td>26</td>
<td>18%</td>
</tr>
<tr>
<td>1-10 times daily</td>
<td>78</td>
<td>58%</td>
</tr>
<tr>
<td>1-10 times per week</td>
<td>30</td>
<td>20%</td>
</tr>
<tr>
<td>Once a week</td>
<td>8</td>
<td>5%</td>
</tr>
</tbody>
</table>

7.1.3 Question Three

For what purposes do students use electronic and online dictionaries?

The researcher looked at the types of language skills that urge students to use the dictionary and found that they use the dictionary mostly for the purpose of reading comprehension and least for the purpose of translation. A hundred ten students indicated that they use the electronic dictionary for the purpose of reading (74%), 92 for listening (62%), 74 for writing (50%), 30 (20%) for speaking and 16 (11%) for translation. Some of these students used the dictionary for two or three skills at once, hence the discrepancy between the above numbers and the total number of the population. Table three below shows a summary of the above information. These percentages show that the receptive skills of reading and listening motivated the majority of students to use the dictionary (62-74%). This result is natural taking into account the fact that at this stage of their college life, students are exposed to extensive amounts of authentic texts that contain unfamiliar vocabulary items of a less frequent nature. As for the productive skills, writing seemed to urge students to use the dictionary more than speaking; 50% versus 20% for writing and speaking respectively. Students probably used the dictionaries especially the electronic ones to translate certain words or expressions or to check word spelling. These results also show that only a minority of students (20%) use the dictionary in the context of speaking. This is rather strange taking into account that these students suffer from pronunciation problems and that both electronic and online dictionaries could be a great aid in this respect. This may be compared to the results of the study by...
Dziemianko (2010) in the Polish context which showed that students using electronic dictionaries have achieved better vocabulary retention than those using print or paper ones. Her conclusion by contrast applied to both receptive and productive skills.

Table 3. Numbers and percentages of students according to the purpose or skill that they use the dictionary for

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Comprehension</td>
<td>110</td>
<td>74%</td>
</tr>
<tr>
<td>Listening</td>
<td>92</td>
<td>62%</td>
</tr>
<tr>
<td>Writing</td>
<td>74</td>
<td>50%</td>
</tr>
<tr>
<td>Speaking</td>
<td>30</td>
<td>20%</td>
</tr>
<tr>
<td>Translation</td>
<td>16</td>
<td>11%</td>
</tr>
</tbody>
</table>

7.1.4 Question Four
In which domains do students use electronic dictionaries, e.g., home, campus, internet cafes, etc.?

Results of the study show that 80% of the students using print dictionaries use them at home while 20% of them use them at the university library. As for electronic (CD-Rom) dictionary users, 70% of them use the dictionary at home and in the classroom while 30% of them use it only at home. As for online dictionary 80% of them use it at home and 15% use it in internet labs on campus while 5% only use it in the classroom.

One may clearly notice that there is a slight difference among different dictionary types in the domains of dictionary use prior to giving the students the activity aimed at raising their awareness of electronic and online dictionary features. CD-Rom or electronic dictionaries were used a lot in the classroom while online dictionaries were not. This is due to the fact that free Wi-Fi is not available yet at the University classrooms.

7.2 Post Experiment Results
In order to enhance the students' motivation to use the online dictionaries and to raise their awareness of their special features, the researcher added a new requirement to the course, which is looking up "word of the day" from Dictionary. Com. The students were involved in this activity for a period of 10 weeks in the middle of the spring semester. After the experiment, the researcher asked the students to sit again for a parallel version of the TOEFL test and to fill out the questionnaire based on their new extensive experience of using the dictionary.

Again, in this section, results will be presented in the order of research questions.

7.2.1 Question Five
How does the use of awareness activities influence the percentage of students who prefer using electronic and/or online dictionaries over print ones?

Results showed that 78 students out of the 148 participating in the study used electronic dictionary at the end of the experiment. In other words 52% of all students preferred using electronic dictionaries, which is a huge rise from the pre-experimental 33%. As for the online dictionary users, the number rose from 34 to 70 out of 148. In other words the percentage of online dictionary users rose from 23% to 47%. As for the print dictionary users, they declined from 64 to 22 students. The percentage of print dictionary users declined from 43% to 15%.

Table four below shows the change in dictionary use orientation before and after the experiment.

Table 4. Percentages of student use of different types of dictionaries before and after the experiment

<table>
<thead>
<tr>
<th>Dictionary type</th>
<th>Percentage of pre-users</th>
<th>Percentage of post users</th>
<th>change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print</td>
<td>43%</td>
<td>15%</td>
<td>-28%</td>
</tr>
<tr>
<td>Electronic</td>
<td>33%</td>
<td>52%</td>
<td>+19%</td>
</tr>
<tr>
<td>Online</td>
<td>23%</td>
<td>47%</td>
<td>+24%</td>
</tr>
</tbody>
</table>
One may argue that the increase in online use is due to the activity that they were given and which could not be done without resorting to the online dictionary. This is not completely true, however, taking into account that some students asked to receive the word by email, hence refraining from opening the dictionary every day. Students indicated during informal conversations and discussions that they continued to use the type of dictionary they felt more comfortable with. They also indicated on several occasions that the language of the online dictionary is too complicated because it is completely unabridged compared to the versions of print and electronic (CD-Rom) dictionaries they use.

7.2.2 Question Six

How does the use of awareness activities influence the frequency of using the electronic dictionary as compared to the online and print dictionaries?

In the table below, one may clearly notice that prior to giving students the word of the day activity which was intended to raise their awareness of online dictionary features, the dictionary most frequently used was the print and the largest percentage of students used it to look up words 1-10 times per day. The second type of dictionary preferred was the electronic (CD-Rom). The largest percentage of students used it to look up words 1-10 times per week. The online dictionary came last in terms of frequency of use with the largest percentage of students using it 1-10 times per week. As for the online dictionary, it was used least and the largest percentage of students used it for 1-10 times per week.

After the experiment these percentages increased in the case of electronic and online dictionaries and decreased in the case of print dictionary. The percentage of students using print dictionary to look up words (1-10 times per week) decreased from 18-16%. As for electronic dictionary users, the percentage of usage has increased among all groups of students and across all frequencies. In the case of the online dictionary users, the percentages of students looking up words 1-10 times \( \text{\textbackslash} \text{week} \) and 10-20 times a week has almost doubled. One may clearly conclude that the activity given by the teacher caused students to depend less on print dictionaries and more on electronic (CD-Rom) and online dictionaries. The activity required them to visit the online dictionary on a daily basis. It seems, though, that after getting the word, they preferred to get the rest of the information from electronic dictionaries, probably because their language is easier or because they are available for them all the time in the computer lab or on their mobiles.

Table 5. Frequency of dictionary usage across the three dictionary types before and after the experiment

<table>
<thead>
<tr>
<th>Dictionary type</th>
<th>Pre frequency</th>
<th>Post frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-10 times per day</td>
<td>44 (29%)</td>
<td>1-10 times per day 32(22%)</td>
</tr>
<tr>
<td>10-20 times per day</td>
<td>16 (11%)</td>
<td>10-20 times per day 16(11%)</td>
</tr>
<tr>
<td>1-10 times per week</td>
<td>18(12%)</td>
<td>1-10 times per week 16 (11%)</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Electronic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20+ per day</td>
<td>8 (5%)</td>
<td>20+</td>
</tr>
<tr>
<td>10-20 times per day</td>
<td>12 (8%)</td>
<td>10-20 times per day 16 (11%)</td>
</tr>
<tr>
<td>1-10 times per week</td>
<td>46(31%)</td>
<td>1-10 times per week 50 (34%)</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>10 (6%)</td>
<td>Less than once a week 5 (3%)</td>
</tr>
<tr>
<td>Online</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20+</td>
<td>-----</td>
<td>20+</td>
</tr>
<tr>
<td>10-20 times per day</td>
<td>6 (4%)</td>
<td>10-20 times per day 12 (8%)</td>
</tr>
<tr>
<td>1-10 times per week</td>
<td>12 (8%)</td>
<td>1-10 times per week 24 (16%)</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>4 (2%)</td>
<td>Less than once a week 2 (1%)</td>
</tr>
</tbody>
</table>

To summarize, it turned out that the activity brought about an increase in the percentage of use of electronic and online dictionaries and a decrease in the use of print dictionaries. In terms of frequency of use, most students fell within the 1-10 times weekly group which may indicate that they used the online dictionary just to look up the word of the day and not for any further purposes.
7.2.3 Question Seven

How does the use of awareness activities change the students' purposes (skills) for using the dictionary?

In the interview conducted prior to the experiment, a hundred ten students indicated that they use the electronic dictionary for the purpose of reading (74%), 92 for listening (62%), 74 for writing (50%), 30 (20%) for speaking and 16 (11%) for translation.

After conducting the experiment, the students' purposes for using the dictionary seem to have changed. Forty four students (40%) indicated that they use the dictionary for reading. As for reading online, 60 students indicated that they use the dictionary in the context of reading online (41%), a purpose totally missing in the first interview. Forty two students (28%) indicated that they use the dictionary for the purpose of speaking with an increase of 8% from the original percentage. Seventy eight students (53%) indicated that they use the dictionary in the context of writing with a 3% increase in the percentage from the original figures. Forty eight students indicated that they use the dictionary for the purpose of listening (32%). There is a significant decrease in the percentage for using the dictionary for the listening purpose.

One may argue that students started to resort to online dictionaries while reading online, a more efficient procedure than flipping through the pages of a print dictionary that may or may not contain the less frequent word they are looking for. Also, one may notice that students started to use the electronic dictionary more for the speaking skill. This could be due to the students' discovery that such dictionaries have a pronunciation feature that is convenient and easy to use especially while reading online.

7.2.4 Question Eight

How does the use of awareness activities change the domains, i.e., (home, school, campus) in which students' use dictionaries?

Pre-activity results showed that 80% of students who use print dictionaries use it at home while 20% indicated that they use it at the university library. As for electronic (CD-Rom) dictionary users, it turned out that 70% of them used it at home and in the classroom while 30% of them used it only at home. As for online dictionaries, 80% of them used it at home and 15% used it in internet labs on campus, while 5% only used it in the classroom.

After being involved in the activity, 95% of the students using the print dictionary said that they used it at home and at the library. As for the electronic dictionary, 90% of students using it said that they used it at home, on campus, in the classroom and while using means of transportation. In the case of online dictionaries, 50% of the students said they used it at home, 45% used it on campus and 5% used it in all other places—it seems through mobile technology. It is noticed that students' involvement in the activity extended the type of domains in which they use these dictionaries. The task they were required to do, put them under the pressure of finding the word, understanding its various meaning and using it in meaningful, correct sentences. This has urged the students to use all types of dictionaries available to them at all times and in all places.

The researcher also explored whether there was any change in the students' proficiency as a result of this extensive exposure to language through the activity. It was interesting to find that introducing this activity which has resulted in exposing students to online dictionaries on a daily basis caused a rise in students' proficiency average by 3 points out of 20 which is about 15%, a change that can hardly be achieved through regular teaching and classroom activities. This result could be connected to that of Zarej and Gujjar (2012) in the Iranian context who compared the usefulness of electronic and print dictionaries for learning vocabulary. It was found that students who used electronic dictionaries showed more progress in vocabulary learning than those who used regular print dictionaries. Results, however, may be contrasted with those of Koyama and Takeuchi, 2007, who found that the actual use of electronic dictionaries improves EFL students' skills in searching and looking up information contained in them. Such improvement in the searching behavior, however, did not result in an overall improvement in the students' reading comprehension skills.

8. Conclusion and Recommendations

According to Bax (2003), the ultimate goal of CALL is for technology to become normalized, i.e., part of the unconscious everyday practice. In his words: "The technology becomes invisible, embedded in everyday practice and hence 'normalized'." This study has showed that involving students in classroom activities that require the use of digital technology would actually open their eyes to the actual potential and benefits of such electronic resources and would encourage them to resort to these resources more frequently. The unlimited technological
resources available in the market and on the web nowadays might stay largely unexplored in the classroom unless the teachers are aware of the great potential that these resources have for language learning. Hence, it might be necessary sometimes to familiarize teachers with the technology potential in their various classrooms so that they may transfer this information to their own students through direct or indirect ways.

Another important consideration is the students' attitude towards technology and how this attitude may be modified or changed through exposure to certain experiences. Some students, for instance, still think that online reading is a slower and more demanding process due to their low proficiency and underdeveloped computer skills Sokolic (2014). This attitude could be changed once students are trained into technology use as part of their daily classroom work and assignments.

One may also argue that digital technology as a gateway to accessing more authentic language sources should always be emphasized. This is especially important in the case of college students who look up to the university to provide them with intensive language exposure and input that would positively enhance their overall language proficiency. Focusing students' attention on the information they need to get or involving them in some type of competition may divert their attention from the challenges involved in the laborious process of reading authentic sources online. Such extensive reading of authentic resources would surely lead to the incidental learning of vocabulary and development of overall proficiency.

Another consideration is that although this generation is technology savvy, they may still need special guidance when it comes to discovering the special features and potential of technological tools that they may not think about using unless they are asked or required to do so.

Overall, and as Sokolic (2014) has recently argued, teachers and researchers should always remember that incorporating technology in our classrooms would not be effective unless it is guided by our specific teaching objectives and by the students' language learning goals.

References


**Copyrights**

Copyright for this article is retained by the author(s), with first publication rights granted to the journal. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/3.0/).