CHAPTER-IV

RESULTS

AND

DISCUSSION
CHAPTER IV        RESULTS AND DISCUSSIONS

In this chapter statistical information based on the analysis of the students' responses to the questionnaire, the results obtained from the treatment test will be also explained.

4.1. The results of the questions of the study

Questions number: 1, 2 and 3 of the Study:

1- Do all students in Libyan universities, colleges, and institutions practice and understand English writing skills via technology?

2- What are the difficulties encountered by Libyan university students in using computers and mobiles as ways of learning English writing skills, and in this case what are the reasons behind their difficulties in writing in English via educational technology?

3- In which tool the Libyan undergraduate university students are weak in perception and production abilities of learning English language writing skills taught via technology?

To answer these questions the researcher used students’ questionnaire to investigate if all Libyan university students have difficulties in English writing skills via educational technology.

Percentages and pie charts were computed to summarize the students’ responses to the questionnaire.

Questions number 4, 5 and 6 of the Study:

4- Do Libyan university students know how to publish their written works on Websites and how to answer their teachers’ questions asked on the Websites inside and outside classrooms?
5- What are the difficulties encountered by Libyan university students in using Internet, E-Mail writing and chatting with all its types (Written chatting, Audio chatting and Video chatting) as ways of learning English writing skills?

6- What are the problems faced by Libyan university undergraduate students in using Wikis and Weblogs as ways of learning English writing skills, and in this case what are the reasons behind their problems in writing in English via educational technology?

To answer these questions the researcher used students’ treatment test to investigate the quantity of the problems and the reasons behind those problems. Mean and Standard Deviations were computed to summarize the students’ responses to the treatment test.
4.2. Students' Questionnaire

This section is concerned with the discussion of the results obtained through analysing data in chapter three. Statistical information based on the analysis of students’ responses to the treatment test will be explained.

Mobile-Based Writing

The following is the presentation of the results obtained through examining the subjects’ answers targeted in this study. These throw light on the subjects’ ability to use the mobile as a tool of English writing skills.

Pie Chart: 1. The Percentages of the Subjects’ Use of Mobile-Based Writing Tool

It can be seen that this technique was correctly used by 45 of the subjects. But it was incorrectly used by 55 subjects, whereas it was not attempted by 50 subjects. Therefore, the percentages were 30%, 36.3% and 33.3% respectively. It can be said that the majority of the subjects used this technique incorrectly. This clearly signifies that most of the subjects were not able to use mobiles as a tool of learning English writing skills.
The following example (see question NO. 6 in Appendix, A) shows the inability in using this tool in one of subjects’ answers to the following question:

**Q:** Please read each statement and indicate your degree of agreement or disagreement.

SA = strongly agree; A = agree; U = uncertain; D = disagree; SD = strongly disagree

1. Writing via mobiles made me think about and interact with the reader(s) of my texts. (SD)

2. Writing via chatting made me adapt my texts to the potential reader. (U)

3. Writing on the class website made me more careful about sentence and paragraph structure. (D)

4. Writing on the wikis made me check word choice and word spelling more carefully. (U)

5. Writing on the wikis made me check word choice and word spelling more carefully. (SA)

6. Writing via computers made me check my grammar more carefully. (U)

7. Writing via multimedia made me carefully revise the way I present my arguments or put forward my descriptions in essay writing. (D)
It can be seen in table 2 that this technique was correctly used by 70 of the subjects. But it was wrongly used by 60 subjects, whereas it was not attempted by 20 subjects. Therefore, the percentages were 46.6%, 40% and 13.3% respectively. It can be said that the majority of the subjects used this technique correctly. This clearly signifies that most of the subjects were able to use computers as a tool of learning English writing skills.

The following question (see question NO.1 in Appendix A) shows how the students who did not attempt to answer the question related to the use of Computer-Assisted Language learning:

Q: Write your personal Details.

..................................................................................................................................................
Pie Chart:3. The Percentages of the Subjects’ Use of Computer Assisted writing Tool

It can be seen that this technique was correctly used by 60 of the subjects. But it was incorrectly used by 40 subjects, whereas it was not attempted by 50 subjects. Therefore, the percentages were 40 %, 26.6% and 33.3% respectively. It can be said that the majority of the subjects used this technique incorrectly. This clearly signifies that most of the subjects were not able to use computer assisted writing as a tool of learning English writing skills.

However, through examining the subjects’ responses, it was found that the use of the tool of computer assisted writing is limited. For example 26.6% of the subjects did not use this tool in their correct places. This indicates that the subjects’ knowledge of the use of CAW is rather limited.

The following example (see question NO. 7 in Appendix A) illustrates how one of the 26.6% of the subjects who misused the tool of CAW, the students are asked to
Choose three things that he/she found positive about using Computers and ranking them in the order of importance as he/she perceive it, and write 1, 2, 3 next to them.

1. Developing academic writing in English. (___5___)
2. Learning new vocabulary. (___3___)
3. Interaction with readers. (___2___)
4. Developing writing topics in more detail in adequate time. (___1___)
5. Writing in English on the Internet. (___4___)
6. Finding an outlet and an access to my writing. (___6___)
7. Other (Specify) (___1___)
As can be seen in table 4 that this tool was correctly used by 100 of the subjects. But it was wrongly used by 30 subjects, whereas it was not attempted by 20 subjects. Therefore, the percentages were 66.6%, 20% and 13.3% respectively. It can be said that the majority of the subjects used this technique correctly. This clearly signifies that most of the subjects were able to use computer mediated communication as a tool of learning English writing skills.

The following question (see question NO.5 Appendix A) shows how one of those students wrongly used the CMC tool:

Q: Please choose a number (1-5) on the right margin to indicate your true feeling and opinions about the statement on the left. Thanks for your cooperation.
1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree

1. The use of computers has helped develop my comprehensive competence.(2)
2. By using an online learning, I often get confused about what to do next and prefer to have some clearly stated learning materials like a text book. (3)
3. The electronic writing is not worth the time spent on because it cannot help me achieve high score. (4)
4. The task that our group works on has increased my interest in communicating in English. (1)
5. I enjoy using the computer to communicate in English with people around the world. (3)
6. I am afraid that I cannot express myself clearly in my email writing. (1)
7. I feel more confident and comfortable to join discussion via computer. (3)
8. Discussing my ideas and writings with others on line is an enjoyable experience. (5)
9. I am proud of what our group has achieved. (2)
10. After some information being collected, I often think whether it is reliable and acceptable. (1)
11. I now know better about how to effectively ask for information. (5)
12. Email communication has enabled me to write faster. (2)
13. While writing, I try to organize my thoughts in an orderly way and write them down as clearly as possible. (4)
14. Electronic comments from my classmates are very helpful for improving my writings. (3)
15. I pay more attention to grammar than to content while writing via internet. (1)
16. Through this task, I become more aware of my potential readers. (3)
17. While writing, I always keep the cultural differences in mind. (5)
18. The email communication has promoted my confidence in communicating with people from different cultures. (1)
19. It is rather difficult for me to clear the misunderstandings caused by cultural differences. (5)
20. The email communication with foreign partners has improved my understanding of other cultures. (2)
21. I have given more responsibility for my own learning. (5)
22. I help to decide on topics for discussion and writing. (4)
23. I can do what suits my own way of learning. (4)
24. My opinions and suggestions were often neglected. (2)
25. I feel I am part of what is going on in the group. (1)
26. I trust group members to act responsibly. (3)
27. The computer-assisted writing project has enhanced the clarity and creativity in my English writings. (3)
28. The project provides an effective way to learn English. (2)
29. I feel more confident to use language to solve similar problems in daily life. (1)
30. Learning to write with a computer gives me a feeling of accomplishment. (4)
31. I enjoy this writing task. (2)
Word Processor

Pie Chart.5: The Percentages of the Subjects’ Use of Word Processor Tool

It can be seen that this technique was correctly used by 10 of the subjects. But it was incorrectly used by 90 subjects, whereas it was not attempted by 50 subjects. Therefore, the percentages were 6.66 %, 60% and 33.3% respectively. It can be said that the majority of the subjects used this tool incorrectly. This clearly signifies that most of the subjects were not able to use Word Processor as a tool of learning English writing skills.

Here is a sample (see question NO.3 in Appendix A) of the students who used this tool wrongly:

**Q-**Have you ever used a computer to do the following things?  
*Word processing: a lot____ a little ____ never*  
*Sending Email: a lot____, a little ____ never____  
*Surfing World Wide Web: a lot, a little ___ never ____*
Multimedia

Pie Chart: The Percentages of the Subjects’ Use of CDs & DVDs Tools

It can be seen that this technique was correctly used by 65 of the subjects. But it was incorrectly used by 48 subjects, whereas it was not attempted by 37 subjects. Therefore, the percentages were 43.33%, 32%, and 24% respectively. It can be said that the majority of the subjects used this technique incorrectly. This clearly signifies that most of the subjects were not able to use CDs & DVDs as tools of learning English writing skills. The following is an example given by one of the students (see question NO.8 in Appendix A) who did not attempt to use this technique.

Write a 120 – 150-words paragraph to compare and contrast between the last five years of your life and your life after.

..............................................................................................................................................................
..............................................................................................................................................................
..............................................................................................................................................................
..............................................................................................................................................................
It can be seen that this technique was correctly used by 15 of the subjects. But it was incorrectly used by 25 subjects, whereas it was not attempted by 110 subjects. Therefore, the percentages were 10%, 16.6% and 73.33% respectively. It can be said that the majority of the subjects used this technique incorrectly. This clearly signifies that most of the subjects were not able to use smart board notebook as a tool of learning English writing skills.
It can be seen that this technique was correctly used by 120 of the subjects. But it was incorrectly used by 23 subjects, whereas it was not attempted by 7 subjects. Therefore, the percentages were 80%, 15.33% and 4.66% respectively. It can be said that the majority of the subjects used this tool correctly. This clearly signifies that most of the subjects were able to use audio visual aids as a tool of learning English writing skills.
The Internet

Pie Chart:9. The Percentages of the Subjects’ Use of Internet Tool

It can be seen that this technique was correctly used by 99 of the subjects. But it was incorrectly used by 20 subjects, whereas it was not attempted by 31 subjects. Therefore, the percentages were 66%, 13.33% and 20.66% respectively. It can be said that the majority of the subjects used this tool correctly. This clearly signifies that most of the subjects were able to use the Internet as a tool of learning English writing skills.
It can be seen that this technique was correctly used by 4 of the subjects. But it was incorrectly used by 107 subjects, whereas it was not attempted by 39 subjects. Therefore, the percentages were 2.66%, 71.33% and 26% respectively. It can be said that the majority of the subjects used this technique incorrectly. This clearly signifies that most of the subjects were not able to use Synchronous Computer Mediated Communication as a tool of learning English writing skills (see question NO.4 in Appendix A).

Q- How often do you write the following things in English?

Journal/Diary:

Very often___ Often___ A few times/month_____ Never____

Letters to your friends and/or family:

Very often___ Often___ A few times/month_____ Never____
Pie Chart:11. The Percentages of the Subjects’ Use of Asynchronous Tools

It can be seen that this technique was correctly used by 33 of the subjects. But it was incorrectly used by 92 subjects, whereas it was not attempted by 59 subjects. Therefore, the percentages were 22%, 61.33% and 39.33% respectively. It can be said that the majority of the subjects used this tool incorrectly. This clearly signifies that most of the subjects were not able to use asynchronous computer mediated communication as a tool of learning English writing skills (see question NO.2 in Appendix A).

Q: Please rate your typing ability: Poor.......... Fair ...........Good ..........Very good .........................
Weblogs or Blogs

Pie Chart: 12. The Percentages of the Subjects’ Use of Blogs Tool

This table presents the participants’ responses regarding the effect of blogging on their writing skills. It is evident that according to the students, blogging increased the quantity, quality and ease of their writing. Furthermore, all the students agreed that the blog served as an on-line archive where they could organize and showcase their written achievements to their classmates Blog-writing familiarized them with the use and functions of computers, leading to their typing skills being improved.

It can be seen that this technique was correctly used by 140 subjects. But it was incorrectly used by 8 subjects, whereas it was not attempted by 2 subjects. Therefore, the percentages were 93 %, 5.33% and 1.33% respectively. It can be said that the majority of the subjects used this tool correctly. This clearly signifies that most of the subjects were able to use Blogs as a tool of learning English writing skills.
Social Networking Sites

Pie Chart: 13. The Percentages of the Subjects’ Use of Social Networking Site Tool

It can be seen that this technique was correctly used by 70 of the subjects. But it was incorrectly used by 30 subjects, whereas it was not attempted by 50 subjects. Therefore, the percentages were 46.66%, 20%, and 33.3% respectively. It can be said that the majority of the subjects used this tool incorrectly. This clearly signifies that most of the subjects were not able to use social networking sites as a tool of learning English writing skills.
E-Mail Exchanging

Pie Chart:14. The Percentages of the Subjects’ Use of E-Mail Exchanging Tool

It can be seen that this technique was correctly used by 88 of the subjects. But it was incorrectly used by 60 subjects, whereas it was not attempted by 2 subjects. Therefore, the percentages were 58.66%, 40% and 1.33% respectively. It can be said that the majority of the subjects used this tool correctly. This clearly signifies that most of the subjects were able to use e-mail exchanging as a tool of learning English writing skills.

The following example (see question NO.9 in Appendix A) illustrates how one of the subjects who misused the tool of Mail Exchanging

**Q- Correct the grammar errors, style errors and spelling errors in the following E-mail.**

dear Hana

I'm very happy to be your pen friend. my name is Laila. and I'm from Libya. I'm 12 years old, and I'm in 7th in school.

We are a large family. i have an older brother, Ahmed, and he is 19 years old. I also has three sisters rehab, 9, lamia, 7 and sonia, 5 years old
I like handball and I enjoy reading too. at the moment, I'm also learning to make clothes.

can you tell me something about yourself? And what about your family? What do you like doing? Are you learning anything new at the moment

please write soon

Salwa
Chatting

Pie Chart: The Percentages of the Subjects’ use of Chatting Tool

It can be seen that this technique was correctly used by 91 of the subjects. But it was incorrectly used by 43 subjects, whereas it was not attempted by 16 subjects. Therefore, the percentages were 60.66%, 28.66% and 10.66% respectively. It can be said that the majority of the subjects used this tool correctly. This clearly signifies that most of the subjects were able to use chatting as a tool of learning English writing skills.
It can be seen that this technique was correctly used by 7 of the subjects. But it was incorrectly used by 140 subjects, whereas it was not attempted by 3 subjects.

Therefore, the percentages were 4.66%, 93.33% and 2% respectively. It can be said that the majority of the subjects used this tool incorrectly. This clearly signifies that most of the subjects were not able to use Wikis as a tool of learning English writing skills.
Web Quests

Pie Chart: 17. The Percentages of the Subjects’ Use of Web Quests Tool

<table>
<thead>
<tr>
<th>Usage</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correctly Used</td>
<td>58%</td>
</tr>
<tr>
<td>Incorrectly Used</td>
<td>42%</td>
</tr>
<tr>
<td>Not Used</td>
<td>0%</td>
</tr>
</tbody>
</table>

It can be seen that this technique was correctly used by 87 of the subjects. But it was incorrectly used by 63 subjects, whereas it was not attempted by 0 subjects. Therefore, the percentages were 58%, 42% and 0% respectively. It can be said that the majority of the subjects used this tool correctly. This clearly signifies that most of the subjects were not able to use web quests as a tool of learning English writing skills.

The following example (see question NO. 10 in Appendix A) illustrates how one of the subjects and he is one of the 63 of the subjects who misused the tool of Web Quests.

Q- Put a √ to indicate a satisfactory remark and an X to indicate a problem in the boxes

below to help you write your comment on your partner’s post.

# Spelling, capital letters and punctuation

____X_____ Check for spelling mistakes. Indicate any words you think might be wrong.

_____ Check that a capital letter is used in the first letter of each sentence and in the personal pronoun “I”.
__X__ Check that commas (,), full stops (.), question marks (?), exclamation (!) and quotation marks ("“) are used correctly.

# Grammar and vocabulary

__X__ All the sentences are complete: they have a subject, a verb and an object.

__X__ All the sentences make sense and are not confusing.

__X__ Your classmate has used rich vocabulary (linking words, expressions for giving advice)

_____ Your classmate doesn’t repeat the same words again and again.

# Structure

_____ The email has an appropriate greeting and ending.

_____ The email has all key parts (introduction, main body, and conclusion).

_____ The paragraphs are clearly organized.

_____ The main paragraph contains at least 3 pieces of advice.

_____ Your classmate clearly explains how each piece of advice will help.

# Impact

__X__ The advice given is convincing and helpful.

___X__ The email shows understanding and friendliness.
4.3 Students' Treatment Test

Because it is hypothesized by the researcher that Libyan undergraduate students have no idea of using educational technology to develop their EFL writing skills, the tables below show the students’ overall achievements in the treatment test. They present the scores of the test achievements of the control group which was taught writing by pen and paper as opposed to the experimental group which was taught through the writing techniques via technology.

Table:3.3. The Mean Scores and Standard Deviations of the Treatment Test in Ed Tech Tools of Experimental Group in Details.

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Experimental Group</th>
<th>Mean Scores</th>
<th>Standard Deviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALL</td>
<td>75</td>
<td>14.59</td>
<td>6.56</td>
</tr>
<tr>
<td>CAW</td>
<td>75</td>
<td>7.99</td>
<td>4.76</td>
</tr>
<tr>
<td>MBW &amp; CMC</td>
<td>75</td>
<td>22.43</td>
<td>6.66</td>
</tr>
<tr>
<td>SBN</td>
<td>75</td>
<td>25.59</td>
<td>6.85</td>
</tr>
<tr>
<td>B &amp; W</td>
<td>75</td>
<td>7.06</td>
<td>4.39</td>
</tr>
</tbody>
</table>

The table above shows that the mean scores were 14.59 for the experimental Group achieved by using CALL, 7.99 by using CAW, 22.43 by using MBW & CMC, 25.59 by using SBN and 7.06 by using B&W, while the Standard Deviations scores were 6.56, 4.76, 6.66, 6.85 and 4.39 respectively.
Table 3.4: Mean Scores and Standard Deviations of the Treatment Test in Ed Tech Tools of Control Group in Details.

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Control Group</th>
<th>Mean Scores</th>
<th>Standard Deviations Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALL</td>
<td>75</td>
<td>5.30</td>
<td>3.64</td>
</tr>
<tr>
<td>CAW</td>
<td>75</td>
<td>6.30</td>
<td>3.40</td>
</tr>
<tr>
<td>MBW &amp; CMC</td>
<td>75</td>
<td>7.54</td>
<td>4.77</td>
</tr>
<tr>
<td>SBN</td>
<td>75</td>
<td>6.63</td>
<td>3.87</td>
</tr>
<tr>
<td>B &amp; W</td>
<td>75</td>
<td>22.82</td>
<td>5.96</td>
</tr>
</tbody>
</table>

The mean scores were **5.30** by using CALL, **6.30** by using CAW, **7.54** by using MBW & CMC, **6.63** by using SBN and **22.82** by using B & W, for the control group achieved, while the Standard Deviations scores were **3.64, 3.40, 4.77, 3.87** and **5.96** respectively.

That is, the experimental group, which used the computers and mobiles for English writing skills during the study achieved higher scores in writing than the control group which was instructed traditionally.