

The Level to which the Use of the Internet Enriches the Scientific Research Conducted by Postgraduate Students at the Faculties of Education in the Gaza Governorate and the Students' Trends when Using the Internet

Yousef Khalil Mattar

The University College of Applied Sciences
Gaza, Palestine
Email: [ymatter \[AT\] ucas.edu.ps](mailto:ymatter@ucas.edu.ps)

ABSTRACT— *This study aims to find out the level to which the use of the Internet enriches the scientific research conducted by Postgraduate students at the Faculties of Education in the Gaza Governorate. It also aims to identify the students' trends when using the Internet. The descriptive analytical approach was followed, as the study sample were randomly chosen to consist of (93) male and female postgraduate students from various specializations enrolled in the faculties of education at both the Islamic University of Gaza and Al Azhar University. A (46) item questionnaire was constructed by the researcher to cover three domains: (The most important scientific uses of the Internet, Postgraduate students' trends when using the Internet in scientific research, and Postgraduate students' need of using the internet in scientific research). The results found out that most of the respondents use the Internet in scientific research. It also found out that the majority of the respondents believe that the use of the Internet for the purpose of scientific research is very important. The study results of this study confirm that there is a positive trend among the postgraduate students in the faculty of education about the Internet use in the scientific research.*

Keywords— The internet and the Scientific Research

1. INTRODUCTION

The entire manuscript, including mathematical equations, tables, and figures must be prepared in electronic form and submitted as Word for Windows files. Use only fonts that come with Windows software. For the text use Times New Roman size 10. For all special characters (e.g., Greek characters) use the font **Symbol**. Line spacing is single; spacing after paragraphs is 6 pt; first line is indented .2 inches; text alignment is justified. Use carriage returns only to end headings and paragraphs, not to break lines of text. Verify the correct spelling for the final version with the Spelling and Grammar function of Word. The Internet cascade brought an exceptional knowledge in the history of mankind on a form of newly emerged system for exchanging information and communication in a way that the education of our children and preparing them for the future can no longer be away from the World Wide Web. The internet became an essential source of information and knowledge that is necessary for us to keep up with the new era, prepare our students to be confident in their education and learning and to use this technique smoothly and efficiently. This technology has facilitated and accelerated the process of communication and information transfer between peoples and individuals (Hayek 174: 2004) the use of computers and the Internet entered the field of education and scientific research from the wider doors, so the impact is in all levels of educational process. Therefore, no longer any library or information center can ignore the basic Internet service/s as means used by students from different ages and levels; The Internet has a huge storage of books, scientific papers, data and audio recordings of lectures, etc. (Murad 0.1998: 27) allowing the user a tremendous amount of knowledge that is difficult to imagine.

Many previous Arab and foreign studies have been conducted which confirmed the effectiveness of internet use as a source of information and vocals classroom lectures to achieve the principle of lifelong learning through the base of information from foreign Albanese studies.

Albanese (2002), aimed to recognize the students' attitudes and the effect of using the Internet on going to the library and the use of traditional sources in the United States. The researcher used the descriptive approach, as the study sample consisted of (3200) Students and academic staff from 28 academic institutions. The results revealed that 80% of

the respondents have changed their pattern of using the academic library as a result of their access to internet. On the other hand, 32% of respondents approved that their visit to the library and academic rates have significantly declined during the past two years.

Resberg study (2000) also aimed to identify the rates of use of the Internet among the bachelor students. Using the descriptive analytical method, the sample reached (1300) students who were undergraduates from seven universities in the United States in addition to one university in Northern Ireland. The results found out that 10% of the respondents spent their time in front of the online screens which negatively affects their achievement as well as their social and health aspects; moreover, 6% of the respondents stated that they may spend (400) minutes a day or the equivalent of almost seven hours online. Surprisingly, most of what they are browsing and retrieval by the students is not related to the curriculum or the duties assigned to them by their teachers, and that the purpose of use: ranging from sending and receiving e-mail and browsing public sites, participating in the gaming sites, newsgroups and chatting.

Bulgat study (2008) aimed to find out the use of the Internet and ways to invest it in scientific research services. Following the descriptive analysis method, the results showed that 60% of the respondents use the Internet on an ongoing basis. To have access to new information and keep abreast of scientific developments in the field of specialization, and that the proportion of 57.69% of the respondents believes that the online channel continues indispensably to research and scientific important for the professor of the university, the average of Internet use 3 hours per day for respondents. Also the study showed that 50% of the respondents believe that the culture of rational use of Internet capable to raise the level of informational and cognitive return to the researcher.

Hayek study (2006) aimed to recognize the reality of the use of mathematical faculties of education students at Jordanian universities to the Internet and their attitudes toward it, as the study sample reached (478) Students spread over all sport colleges of education in the official Jordanian universities, in the first semester 2004/2005. The results of the study stated that students of the faculty of physical education received the highest proportion among the sample in the sense of using the Internet, reaching 92.5%. The results also showed statistically significant differences between students' attitudes towards the use of the Internet in the four universities. However, there was no statistically significant differences between male and female trends. Finally, the study showed that the computing experience a statistically significant impact on students' attitudes.

Upon the previous studies, we infer the relationship between those previous studies and the current study, in terms of the approach of the study, and study tools while the present study is unique in terms of its sample are postgraduate students, since previous studies have emphasized the possibility of using the Internet to enrich scientific research. It is worth mentioning that the researcher has taken advantages of the previous studies in constructing the study tool, analyzing and interpreting the results of the study.

2. THE STUDY PROBLEM & QUESTIONS

There is no doubt that many of the libraries and information centers has provided Internet service, especially central libraries in the Palestinian universities, whereas many university libraries exist to provide access remotely through the same library site on the Internet. For example, the central library at the Islamic University and Al-Azhar University, in particular where graduate students can identify the amount of use of the Internet graduate students at Palestinian universities, particularly universities of the Islamic Al-Azhar and the Governor of Gaza, this study conducted to answer the following questions:

3. How much do graduate students of the colleges of education use the Internet in scientific research?
4. How important is the use of the internet in scientific research among graduate students for the colleges of Education?
5. What is the need for using the Internet among graduate students in the colleges of education in scientific research?
6. What are the trends do graduate students of high education follow in their online research?

3. THE OBJECTIVES OF THE STUDY

This study aims at identifying how much postgraduates use the internet in scientific research, mainly those from the faculties of education, and identifying the importance of using the internet in scientific research for postgraduates, mainly those from the faculties of education. It also aims at identifying the attitudes of postgraduates towards using the internet in scientific research, mainly those from the faculties of education.

This study may change the way postgraduates think about the internet, and, thus, changing their attitudes and it may discern the importance of using the internet to the Palestinian universities in enriching the scientific research. Additionally, this study places emphasis on the necessity of having good computer skills in the light of the scientific, educational and technology developments.

4. THE STUDY LIMITATION METHODOLOGY AND SAMPLE

This study is limited to the students of higher education in the education faculties in the Islamic University of Gaza and Al-Azhar University, as it was conducted in the first semester for the academic year of 2013 – 2014.

The descriptive analytic method was adopted in the present study, which "studies a phenomenon, a problem or an existing issue that would provide information about the questions of the study without the interference of the researcher". (Agha and Alustaz: 2000, 83). The population of this study consists of postgraduates, who joined the faculty of education in the universities of Gaza in the first semester of academic year of 2013-2014. They were 672, as 310 were students of the Islamic University of Gaza and 362 are students at Al-Azhar University.

The random sample of this study contains 93 male and female postgraduates from the Islamic University of Gaza and Al-Azhar University. Table (1) shows the data of the sample.

Table (1) The distribution of the study sample based on the variables of the study

<i>Variables</i>	<i>Levels</i>	<i>The Number</i>	<i>Percentage</i>
The University	Al-Azhar University	51	.854
	Islamic University	42	45.2
	Total	93	100.0
Gender	Male	45	48.4
	Female	48	51.6
	Total	93	100.0

5. RESULTS AND DISCUSSION

The first question of the study was **(how far do graduate students in the College of Education use the Internet in their scientific research?)**

Table (2) the use of the Internet by the graduates of the faculties of education in scientific research

<i>How much use</i>	<i>Frequency</i>	<i>Percentage</i>
Daily	41	%47.9
weekly	38	%41.9
Monthly	12	%3.1
Never use	6	%6.5

As shown in Table (2) that most of graduates students in the faculties of education use the Internet in a daily base for the purpose of scientific research (48.4%), and some use it weekly in a rate of (41.9%), while a small number of the students in the study sample do not use the Internet at all. This may be due to the availability of computers and devices linked to the Internet using cables or wireless connections which make it easy to access the internet to get information or following whatever new, as well as provide access to any institution or university in the world easily.

The results of the study showed that little percentage of the study sample i.e. a rate of (6.5) do not use the Internet, because they do not have the skills and experience to use the computer and the Internet. The second question of the study is **(What is the importance of using the Internet in scientific research for graduate students in colleges of education?)**

Table (3)The importance of using the Internet in scientific research for graduate students:

<i>Importance of using</i>	<i>Frequency</i>	<i>Percentage</i>
Very important	36	%38.7
Important	51	%54.8
Not so important	6	%6.2

Table (3) shows that most of the graduate students at the Islamic Universities and Al-Azhar university believe that the use of the Internet in scientific research is very important as pointed out by (38.7%) of the study sample, while (54.8%) of the study sample pointed out that the use of the Internet is important for scientific research. Also (6.2%) of the study sample indicated that the use of the Internet in the scientific research of limited importance.

The third question of the study questions is **(What is the need to use the Internet by postgraduates of education faculties in scientific research?)** To answer this question, the researcher used averages, percentages and the total degree for each field of the questionnaire. The following table (Table 4) illustrate the averages, standard deviations, and the

relative weight of each item of the first field, and the most important scientific uses of the Internet. It is worth mentioning that the scale used is: 5 = very much 4 = considerably 3 = moderately 2= low degree 1 = very low degree.

Table 4: The Averages, standard deviations, and the relative weight of each item of the first domain
"The most important scientific uses of the internet "

<i>The Item</i>	<i>Relative weight *</i>	<i>Standard Deviation</i>	<i>Average</i>
Finding research sources	83.87	.65418	4.1935
Requesting information regarding a particular idea or research	89.678	.81121	4.4839
Participating in journals through the Internet	54.194	1.34644	2.7097
Preparing a proposal through the internet	65.162	1.26406	3.2581
Uploading and sharing files	75.484	1.20304	3.7742
Reviewing tools of previous studies to prepare the scientific research tools	77.42	.95715	3.8710
identifying the statistical methods that I can use in my scientific research	69.678	1.20750	3.4839
Contacting colleagues via e-mail	82.58	.99136	4.1290
Collecting data through requesting the Internet users to fill in a questionnaire	58.71	1.48179	2.9355
the scientific research tools reviewed by a panel of referees via email	62.58	1.5650	3.1290
Conducting joint research projects	63.87	1.13782	3.1935
Research Evaluation	69.032	1.12068	3.4516
Searching through the use of the World Wide Web	78.71	1.28933	3.9355
exchanging emails with some colleagues in the domain of specialization	78.71	1.12355	3.9355
Searching through the use of Information list	77.42	.76341	3.8710
Setting up an email	81.29	1.06256	4.0645
Searching for randomly irregular information	65.806	1.34644	3.2903
Searching through the use of news groups	69.032	1.28682	3.4516
exchanging experiences and information sites	73.548	1.16582	3.6774
Attending conferences and research discussion through video conference	63.87	1.42406	3.1935

As shown in Table (4), all of the respondents (83.8) pointed that the most important scientific uses of the Internet is searching of research sources. Meanwhile (89.6) of the respondents indicated that they use the Internet to request information about a particular idea or research. Also (82.5) of the respondents pointed out that they use the Internet for e-mail (sending or receiving e-mail). Additionally, (77.4) of the respondents stated that they use the Internet in order to access the tools of previous studies. The reason for such a large demand for use of the Internet can be attributed to many reasons as stated by Mossi (4: 1999) "speed access to information, lack of material cost, compared with the use of satellite and television stations, help develop students' skills to use the computer, and globalization of the education."

Table 5: The Averages, standard deviations, and the relative weight of each item of the first domain
The Scale used is 5 = very much 4 = considerably 3 = moderately 2 = low degree 1 = very low degree

<i>Item</i>	<i>The relative weight</i>	<i>The Standard Deviation</i>	<i>The Average</i>
Being updated in the field of the scientific research	88.388	.92283	4.4194
Time management for the preparation of scientific research	83.226	1.00322	4.1613
Faster than traditional methods of scientific research	85.162	.85509	4.2581
Contributing to the upgrading of the value of scientific research	76.774	1.09839	3.8387
Helping to reach the largest possible number of scientific material	85.806	.97275	4.2903
Enriching the scientific research	82.58	1.08756	4.1290
Facilitating contact with specialists to take advantage of them	78.71	1.20928	3.9355
Stimulating cooperation between interested people in scientific research	80.646	.98265	4.0323
Encouraging further enjoyment while doing scientific research	80.646	1.04830	4.0323
Helping to make the scientific research strong and distinctive	76.13	1.01388	3.8065
Increasing the readiness for scientific research	8.	1.00000	4.0000
Providing much of the financial expenses in scientific research	82.58	1.17592	4.1290

The fourth question is what **are the trends of the postgraduates of education faculties toward using the Internet in scientific research?** To answer this question, the researcher used averages, percentages and the total degree for each field of the questionnaire. The following tables illustrate the Averages, standard deviations, and the relative weight of each item of the second domain of the questionnaire i.e. "Trends of postgraduates of education faculties toward using the Internet in scientific research.

It is evident from Table (5) that all of the items of the second domain related to the trends of postgraduates to use the Internet in the field of scientific research show that the degree of responses ranged between high and very high. The relative weights ranging between (88.3% -76.1%) demonstrate that trends of the students were positive about the Internet use in scientific research. The students have a great desire to keep up with the technological advances. All the items in table (5) meet this condition, and this confirms the positive trend towards the use of the Internet in scientific research.

6. THE FINDINGS

The study findings revealed that most of the sample uses the Internet in scientific research, as most of the sample regards the use of the internet in scientific research as very important. It also found out that the most important use of the Internet is searching for research sources, as there was a positive trend for the use of the Internet in scientific research among postgraduate students of the Faculty of Education. Additionally, the study concluded that the most common method of Internet use for scientific research is the World Wide Web. On the other hand, the study found that there were no statistical differences between postgraduate students enrolled in the Faculties of Education of the Islamic University and Al Azhar University regarding the amount of use of the Internet in scientific research based on the venue variable.

7. RECOMMENDATIONS

The following recommendations were given in the light of the study findings:

1. Preparing special lists of important research websites for each specialization.
2. Encouraging and directing postgraduate students to participate in international scientific meetings and conferences on the most recent scientific developments in the web to improve the level of their research performance.
3. University administrations should provide computers for students at nominal costs through agreements with computer companies and should work to support this project from the universities' student funds.
4. Universities should be interested in strengthening their students' English. This should be done either by increasing the number of subjects or by encouraging students to enroll in intensive courses organized by the Universities' English Language Centers. This is because English is the main language used in the internet, and also because students can benefit from the sciences and arts many sites provide in English.

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