Use Of Networked Information Sources And Services By Information And Library Science Faculty In Teaching: A Case Study Performed At The School Of Information And Library Science At The University of North Carolina. – (Modified version) / By Dr. Hossam Eldin Mohamed Refaat Abouserie.

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Summary[*]

The purpose of this study was to explore and investigate the ways faculty at The School of Information and Library Science[1], at the University of North Carolina, obtain information to support their teaching tasks. Information and Library Science faculty at the University of North Carolina were chosen as the population for this study. The study matched the various networked information sources and services, faculty use, for different teaching activities or tasks they perform, in order to answer the following two questions: 1-What are the types of information sources, the faculty consult to support their teaching activities / tasks? 2- To what degree does each faculty member depend on different information sources? The study matched the basic teaching tasks of Information and Science faculty with different networked information sources to determine to what degree they depend on each source. Two hypothesis were addressed:

1-There will be a difference in the sources used to perform the basic teaching tasks or activities according to faculty rank, and gender.

2-The degree to which faculty depend on Networked Information Sources electronic sources will differ across the teaching tasks/activities, as follows:

A) They will depend more on electronic mails for teaching tasks than News groups. (Approved).

B) They will depend more on electronic journals for teaching tasks than electronic archives. (Approved).

C) They will depend more on electronic databases for teaching tasks than Internet directories and Search Engines. (Disapproved)

[*] This study is one of the suggested future studies listed by the author in a doctor dissertation titled "Information seeking and communicating behavior of social science faculty in an academic environment with a special reference to the use of electronic journals: A field study".

[1] The School is a major research university, ranked number 1 in USA in 2004, < http://sils.unc.edu/>, [Accessed in 5/2005]

Introduction

University teaching is a unique activity. It is often the main and first task the academic faculty focuses on, as was indicated by three surveys of the Carnegie Foundation in 1969, 1975, and 1996, which showed that seven faculty members out of ten considered teaching to be their main responsibility (Graubard, 2001). Teaching is a complex activity that cannot easily be defined or measured. The reason behind this is that teaching at any level cannot be isolated from the context in which it takes place and particularly from the teachers and learners who are involved. (Theall)

Definition

To teach is "to create a space in which the community of truth is practiced". (Palmer, Parker J). Teaching generally includes the following:

"1- Actual in-class time working with students,

2- Time spent mentoring and directing research by graduate students and preparing for class,

3- Office hours

4- Time spent revising old or creating new courses". (*Faculty roles and responsibilities.)*

Conception of teaching

1- Transmission of knowledge: In this conception, "teaching is seen as a teacher-centered activity aiming to transmit knowledge to the students who were considered passive recipients of information". *(INT. J. OF LIFELONG EDUCATION)*

2- Passing information: "Lecturers holding this conception tended to view teaching as merely passing information to the students. Very often, the emphasis is on covering the whole syllabus". *(INT. J. OF LIFELONG EDUCATION)*

3- Making it easier for students to understand: In this conception, "teaching is conceived as the transmission of knowledge in a way that students can understand and use it". *(INT. J. OF LIFELONG EDUCATION)*

4- Meeting students' learning needs: In this conception**,** it is assumed that students may have differing legitimate learning needs, and it is the responsibility of the\teachers to help students realize and meet those needs. *(INT. J. OF LIFELONG EDUCATION)*

5- Facilitating students to become independent learners: This conception maintains that "teaching is about facilitating students to develop intellectually and become an independent learner". *(INT. J. OF LIFELONG EDUCATION)*

Faculty Role

The teaching role is the most widely shared among faculty members across institutional types. The faculty, in the construction of the teaching role, is the content expert, and students are learners. Faculty members are expected to follow developments in the field so their knowledge base remains current. At many universities, faculty members are expected to participate in creating the new developments that are taught, which sometimes leads to tensions about appropriate priorities for research and teaching roles. (*Faculty roles and responsibilities.)*

Basic principles

The direct responsibility for success is shared by teachers and students. The academic units have also some degree of responsibility for providing the tools, resources, and environments that allow teachers and students to maximize the benefits that result from their efforts. (Theall) James Bess and associates (2000) proposed that college teaching is so complex that its various roles cannot be expected to be filled by only one person. The authors identified seven teacher sub roles – (1) Content research, (2) Instructional design, (3) Instructional delivery, (4) Discussion leading, (5) Content/activity integration, (6) Assessment, (7) Mentoring. The authors argued that collaborating teams can provide more comprehensive service to students than can individual teachers.(*BESS, JAMES L., and ASSOCIATES. 2000)* .

In 1987 Arthur Chickering and Zelda Gamson introduced seven principles for good practice in undergraduate education. These were that good practice: (1) encourages student-faculty contact, (2) encourages cooperation among students, (3) encourages active learning, (4) gives prompt feedback, (5) emphasizes time on task, (6) communicates high expectations, and (7) respects diverse talents and ways of learning.

Purpose of the study

Using information technology and networked information sources in teaching becomes obviously essential for information sharing and communication purposes (Bishop, Giles, & Bryant, 2005). The Internet and networked sources have altered the education landscape. The Web has become an increasingly important medium for providing instruction in an electronic format (Ali, 2003).

The purpose of this study was to explore and investigate the ways faculty at one school at one academic institution, the University of North Carolina, obtain information to support their teaching tasks. Information and Library Science faculty at

the University of North Carolina were chosen as the population for this study. The study matched the various networked information sources and services faculty use, for different teaching activities or tasks they perform, in order to answer the following two questions:

1-What are the types of information sources, the faculty consult to support their teaching activities/tasks?

2- To what degree does each faculty member depend on different information sources?

The study matched the basic teaching tasks of Information and Science faculty with different networked information sources to determine to what degree they depend on each source.

Methodology

This study design will embrace the qualitative methodology. The case study methodology will be used to study behavior of Library and Information Sciences faculty at top American school. The **Task or activity/ Sources approach** will be adopted for this study, measuring the extent to which users actually use different kinds of sources, media, system, documents, materials, or channels for different tasks. The qualitative case study approach used will allow extensive description and analysis.

Methods or tools for collecting data

Questionnaire

The questionnaire was the major research instrument for this study. The questionnaire was sent to the academic staff via email. This was intended to save time and effort while sending and receiving information, and to facilitate the reading process. The questionnaire was through the Internet over three times during the 2005 Spring semester. It was sent to faculty at Library and Information Science schools at the School of Information and Library Science at the University of North Carolina.

The content[*]

The questionnaire included questions that covered faculty teaching activities, networked sources used to obtain information, the degree or the level of dependence on each source, evaluations of each source, and recommendations for improving access to these sources.

[*] The questionnaire was available at the following address <http://www.eun.eg/helwan_poll/teaching.htm>

Scope of the study

The Information Seeking Behavior of Information and Library Science faculty at the School of Information and Library Science at the University of North Carolina was studied. The school was chosen as the site of this study since it is a major research university, ranked number 1 in USA in 2004, whose faculty are involved in high quality teaching activities.

The research covered faculty teaching behavior at one American school. The faculty had been selected as the target of the study because the faculty is the heart of the university that performs its main tasks: teaching, research and service. Because they have the top positions at the university, the tasks they do will have the greatest impact on the institution.

The population of the study and its distribution

The subjects were drawn from full time faculty at all ranks whether in the tenure stream or not. A questionnaire was distributed during working hours (8 AM- 5 PM). It was distributed to faculty via email, to insure that faculty at the Information and Library Sciences School would receive it, and to facilitate the reading process when studying the responses received.

Questions of the study

The study asked the following questions:

1-What are the types of Networked Information Sources the faculty consult most to support their teaching activities/tasks? and

2- To what degree does each faculty member depend on different information sources?

The teaching tasks of Information and Library Science faculty were matched with different information sources to determine what degree faculty depend on each source. Data were collected through a questionnaire distributed electronically through the Web in spring 2005.

Hypotheses of the study

The Hypotheses underlying the study were:

1-There will be a difference in the sources used to perform the basic teaching tasks or activities according to faculty rank, and gender.

2-The degree to which faculty depend on Networked Information Sources electronic sources will differ across the teaching tasks / activities, as follows:

A) They will depend more on electronic mails for teaching tasks than News groups. (Approved)

B) They will depend more on electronic journals for teaching tasks than electronic archives. (Approved)

C) They will depend more on electronic databases for teaching tasks than Internet directories and Search Engines. (Disapproved)

The School of Information and Library Science

"Located in the heart of the University of North Carolina, UNC-Chapel Hill campus, **the School of Information and Library Science (SILS)** prides itself on providing high quality educational and research opportunities in a dynamic, interdisciplinary learning environment. Currently ranked #1 in the nation by U.S. News & World Report ".[**]

Mission Statement

"SILS seeks to advance the profession and practice of librarianship and information science, to prepare students for careers in the field of information and library science, and to make significant contributions to the study of information. Faculty members further these goals by teaching and advisory work, by research and scholarly publication, and by service to the school, the University, the state, and the professional community". [***]

The following table shows the current programs, majors and the degrees offered at the school of Information and Library science.

[**]University of North Carolina, The School of Information and Library Science, (2005) [Online] available from: <<http://sils.unc.edu/about/>

[***] University of North Carolina, The School of Information and Library Science, (2005) [Online] available from: <<http://sils.unc.edu/about/>

Table (2) Programs at The Information and Library Sciences School Demographic information**

Programs offered at The Information and Library Sciences School	
Undergraduate Programs	**Major** Bachelor of Science in Information Science (BSIS) **Minor** Information Systems
Graduate Programs	**Master's Degrees** Master of Science in Information Science (MSIS) Master of Science in Library Science (MSLS) Dual Degrees with other schools and departments Certificates of Specialization **Doctoral Degrees** Doctoral program (Ph.D.)
Certificates	Certificate of Advanced Studies
Graduate Minor	Minor in Information and Library Science
Continuing Education	Distance education On-site workshops
International Programs	International programs

This section of the study provides demographic information about the sample in the study. It presents information about gender, academic ranks, and sample response rate.

Gender

The question was ***[-Gender: Male ( ) Female ( ])].***

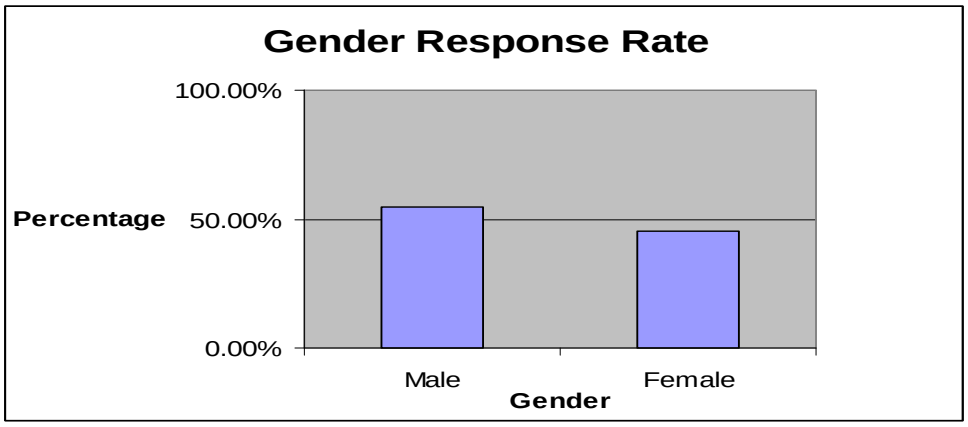
The total number of faculty members who participated in the study was 11; 6 of them were males, and 5 were females. Therefore, 54.54 % were males, and 45.45 % were females. This indicates that males and females participated almost equally in the study. See table (3) for details.

Table (3) Percentage of Library and Information Science faculty responding by gender: University of North Carolina 2005.

Gender	Respondents	Percentage
Male	6	54.54 %
Female	5	45.45 %
Total	11	100 %

Source: Survey of Library and Information Science faculty (n=11)

Figure (2) Percentage of Library and Information Science faculty responding by gender: University of North Carolina 2005.



Source: Survey of Library and Information Science faculty (n=11)

Academic rank

The question was ***[-Rank: Instructor ( ) Lecturer ( ) Assistant professor ( ) Associate professor ( ) Professor ( ) Other---------- ( )]***

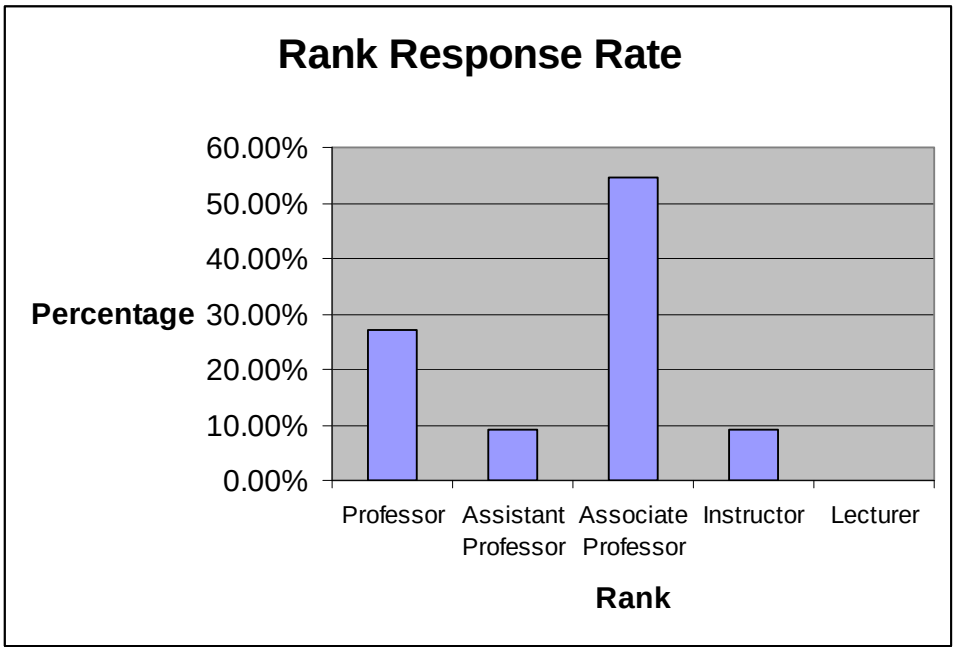
The largest group of those who answered the questionnaire were associate professors, 54.54 %; 27.27 % were professors; 9.09 % were assistant professors and instructors for each, and lectures did not participate in the study. Since the majority of respondents were professors, associate professors, and assistant professors, it can be assumed that they are involved in performing the main academic teaching tasks. The largest group of those who responded to the questionnaire was associate professors, 54.54 %, while the smallest group were instructors and assistant professors, 9.09 % for each. See table (4).

Table (4) . Percentage of Information and Library Sciences faculty responding by rank: University of North Carolina 2005.

Rank	Respondents	Percentage
Professor	3	27.27 %
Assistant Professor	1	9.09 %
Associate Professor	6	54.54 %
Instructor	1	9.09 %
Lecturer	0	0 %
Total	11	100 %

Source: Survey of Information and Library Sciences faculty (n=11)

Figure (3) . Percentage of Information and Library Science faculty responding by rank: University of North Carolina 2005.



Source: Survey of Library and Information Science faculty (n=11)

Sample Response Rate

In order to obtain a quick return and a high response rate, the questionnaire was designed electronically and was accessible for faculty members through the web. The questionnaire was designed electronically using Microsoft Office Front Page and was built and established on the Egyptian Universities Networks, EUN, web site. The questionnaire was sent via email over five times during the spring of 2005 to all faculty members in the School of Information and Library Science at the University of North Carolina. The faculty members' email addresses were obtained from the school' web sites. The questionnaire was sent on February and March of 2005. Out of 23 faculty surveyed, 11 responded to the questionnaire. A Microsoft Office Access Database was created in order to facilitate the process of extracting and analyzing the data. The Microsoft Office Access Database helped in creating the reports and tables required for the analysis. Microsoft Office Excel was used in designing Figures to illustrate data and in performing various calculations.

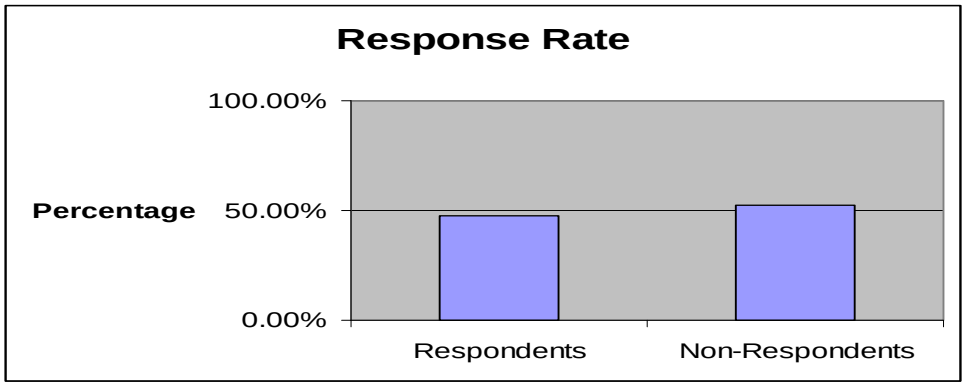
The study was performed at one school at the University of North Carolina, ranked # 1 in US world report in 2004. The response rate was about 47.82 % after sending five emails during the spring of 2005. See table (5).

Table (5). Response rate of Library Science faculty: University of North Carolina 2005.

Population	Number of responses	Response rate
Respondents	11	47.82 %
Non-Respondents	12	52.17 %
Total	23	100 %

Source: Survey of Library and Information Science faculty (n=23)

Figure (4) . Response rate of Library and Information Science faculty: University of North Carolina 2005.



Source: Survey of Library and Information Sciences faculty (n=23)

Teaching activities

The question was ***[Teaching courses ( ) Implementing & Performing Workshops ( ) Advising Undergraduate Students ( ) Supervising Graduate Students Other ( ) I do not teach ( )]***

The study found teaching courses is the main teaching activity that Information and Library Science faculty perform, followed by supervising graduate students. Few faculty members advise undergraduate students and very few perform other teaching activities.

Activities related to Teaching task

The activities Information and Library Science faculty members perform within the teaching task were analyzed. The number of hits for each activity was counted and divided by the total sample, 11, to present the percentage. It was found that **Teaching Courses was the most performed task** where All faculty members at the school, 100 %, are involved in. A high percentage of faculty, 72.72 % implement and perform workshops. However, **Advising Undergraduate Students** was performed by a low percentage of faculty, 27.27 %. **Supervising Graduate Students was also performed by** a high percentage of faculty, 81.81 %. **Other activities** was also performed by a low percentage of faculty members, 9.09 %.

This indicates that teaching courses is the main teaching activity that all Information and Library Science faculty perform, followed by Supervising Graduate Students, followed by Implementing & Performing Workshops, followed by Advising Undergraduate Students. and very few faculty members perform other teaching activities. See table ( ) for details.

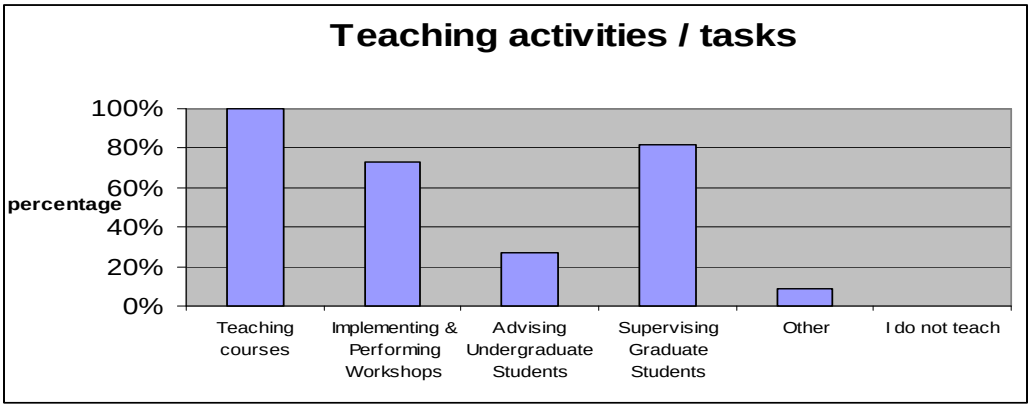
Based on this, the most commonly performed faculty activity is: Teaching courses. Results found in this study are similar to those found in other studies. In a review of previous studies of faculty tasks, **Cook, Wright, and Hollenshead (1996)** tried to understand how satisfied faculty members at the University of Michigan with their roles as teachers, in order to determine the factors and conditions that lead to career satisfaction. He examined faculty experiences and how they differ by rank in performing the tasks: teaching and advising students, scholarship, professional growth and creative work, clinical responsibilities, and service. They found that teaching was the most common task performed by all three ranks, assistant professors, associate professors, and full professors.

Table (6) Percentage of teaching tasks of Library and Information Science faculty

Teaching activities	Distribution	Percentage
Teaching courses	11	100 %
Implementing & Performing Workshops	8	72.72 %
Advising Undergraduate Students	3	27.27 %
Supervising Graduate Students	9	81.81 %
Other	1	9.09 %
I do not teach	0	0 %

Source: Survey of Information and Library Sciences faculty (n=11)

Figure (5) Percentage of teaching tasks of Library and Information Science faculty



Source: Survey of Information and Library Sciences faculty (n=11)

Testing the hypotheses of the study

The two hypotheses were tested using information about the average use by Information and Library Science faculty members of various types of information sources. In order to calculate and test the hypothesis, the average use per Information and Library Science faculty per typical month shown in the table cells was calculated. These numbers are the results of three processes as follow:

1) Calculate the mid range of the main table in the questionnaire (No use, 1-4, 5-14, 15-29, 30-More) to be (0, 2.5, 9.5, 22, 35); 2) Count the number of hits in each cell from the 11 respondents; 3) Calculate the mean by dividing the sum of the results of each row by the number of respondents.

Hypothesis (1)

The first hypothesis was that there will be a difference in the sources used to perform the basic teaching tasks or activities according to faculty rank, and gender. The following table was in the questionnaire.

[Over the last typical month how often did you access the following sources in teaching?]

Sources / usage	No Use	1-4	5-14	15-29	30-More
Emails					
News group and Listserv s					
Electronic Journals					
Index & Abstracts & Full Text Databases					
Scholarly Electronic Archives (ex. Research Index)					
Directories & Search Engines on the Internet (Yahoo, Aol, Ask jeeves, Google, Excite, etc)					

Part (1) Faculty Rank

In order to test the hypothesis (1) and show the variance in using various information sources according to rank, a query was made using Microsoft Office Access to calculate the use of various information sources according to various ranks. The result of this query provided a report that presented the use of sources according to the teaching tasks / activities. Numbers of hits were multiplied by the mid-ranges and were summed and divided by total numbers of individuals of each rank in the sample, in order to calculate the average use of various information sources per faculty member by rank The study found the average number of uses over all types of information sources per faculty member per typical month by rank as follows. Emails and directories and search engines were found to be the type of sources used most by

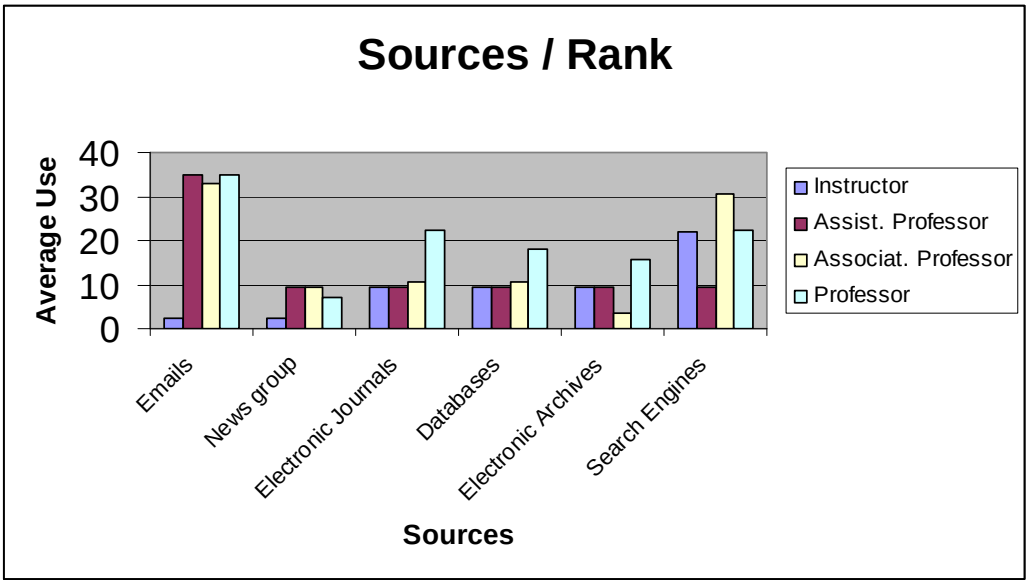
faculty members at all ranks, while news groups and scholarly electronic archives were the least used sources.

Table (7). Average use of networked information sources and services per Information and Library Sciences faculty member per typical month by rank: University of North Carolina 2005.

Sources	Instructor	Assist. Professor	Assoc. Professor	Professor
Emails	2.5	35	32.8	35
News group and Listserv s	2.5	9.5	9.5	7.2
Electronic Journals	9.5	9.5	10.4	22.2
Index & Abstracts & Full Text Databases	9.5	9.5	10.4	18
Scholarly Electronic Archives	9.5	9.5	3.6	15.6
Directories & Search Engines on the Internet	22	9.5	30.6	22.2
Total	55.5	82.5	97.3	120.2

Source: Survey of Information and Library Sciences faculty (n=11)

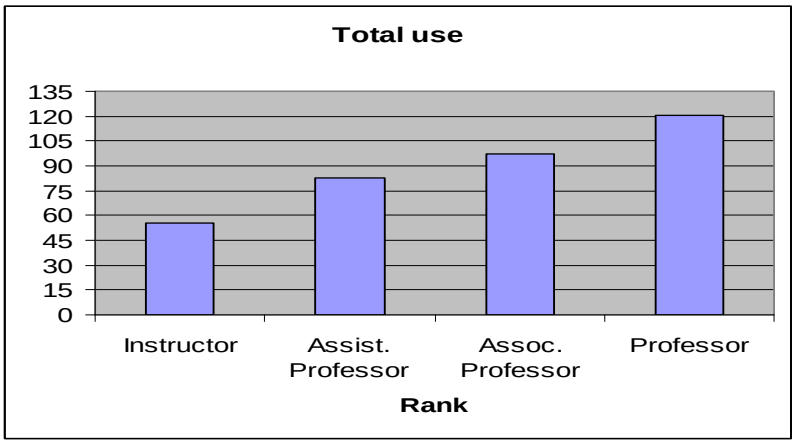
Figure (6) . Average use of networked information sources and services per Information Sciences faculty member per typical month by rank: University of North Carolina 2005.



Source: Survey of Information and Library Sciences faculty (n=11)

The study found the average number of monthly uses per faculty member is higher for professors than for any other rank, followed by Associate professors and Assistant in second and third places. Instructors are at the end of the list. See table () for details.

Figure (7). Total average use of networked information sources and services per Information and Library Sciences faculty member per typical month by rank: University of North Carolina 2005.



Source: Survey of Information and Library Sciences faculty (n=11)

The following list shows how various faculty ranks use various information sources.

Professors: Professors focus on emails most and both electronic journals directories and search engines in the second place. They use electronic scholarly archives and news groups least.

Associate professors: Associate professors use emails most, and directories and search engines in second place. They use both news groups listserv s and scholarly electronic archives least.

Assistant professors: Assistant professors use emails most, while other sources and services come in a same rate.

Instructors: Instructors use directories and search engines most, and emails and news groups and listserv s least.

Part (2) Faculty Gender

In order to test the fourth part of hypothesis (1) and show the variance in using various information sources according to gender, a query was made to calculate the use of various information sources according to gender. The result of this query is a report that presented the use of sources according to the three main tasks. Numbers of hits were multiplied by the mid-ranges and summed and divided by total number of faculty members respondents of each gender, in order to calculate the average use of various information sources per faculty member by gender.

The study found the total use of males is higher than females. Emails and Directories and search engines were found to be used most by both genders, while

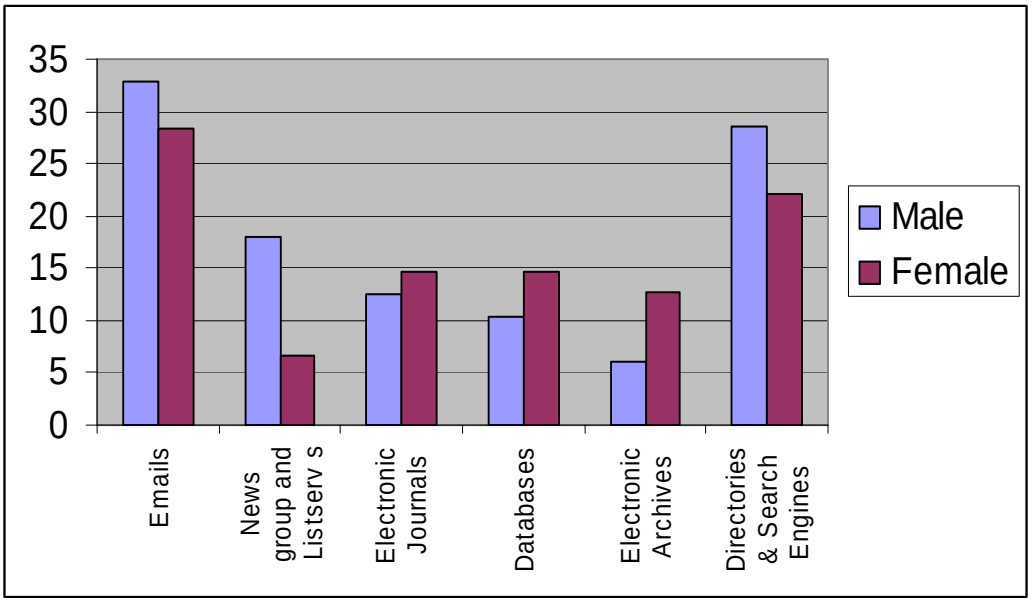
scholarly electronic archives and newsgroups and listserv s were found to be the least used sources. It was also figured out that males use emails, newsgroups and directories and search engines more than females. One the other hand it can be figured that females use electronic journals, databases and scholarly electronic archives more than males. See table (8) for details.

Table (8) Average number of uses per faculty member per typical month by gender

Sources	Male	Female
Emails	32.83	28.4
News group and Listserv s	18	6.7
Electronic Journals	**12.5**	**14.6**
Index & Abstracts & Full Text Databases	**10.41**	**14.6**
Scholarly Electronic Archives (ex. Research Index)	**6**	**12.7**
Directories & Search Engines on the Internet (Yahoo, Aol, Ask jeeves, Google, Excite, etc)	28.58	22.1
Total	108.32	99.1

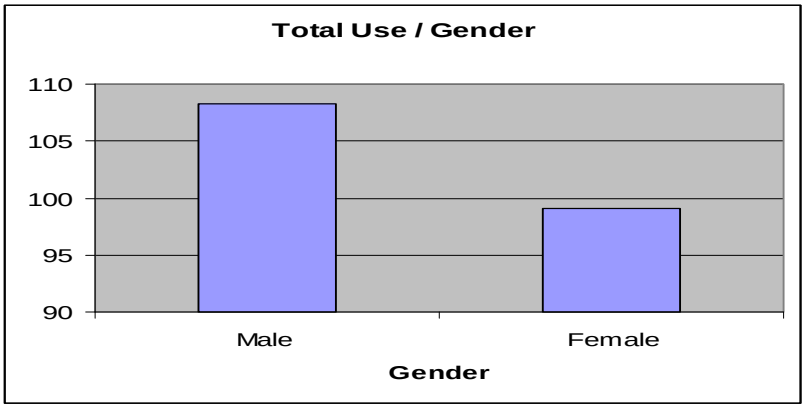
Source: Survey of Information and Library Sciences faculty (n=11)

Figure (8). Average use of information sources per Information and Library Science faculty member per typical month by gender: University of North Carolina 2005.



Source: Survey of Information and Library Science faculty (n=11)

Figure (9). Average use faculty member per typical month by gender: University of North Carolina 2005.



Source: Survey of Information and Library Science faculty (n=11)

Hypothesis (2)

The second hypothesis indicates that the degree to which faculty depend on Networked Information Sources electronic sources will differ across the teaching tasks/activities, as follows:

A) They will depend more on electronic mails for teaching tasks than News groups. (Approved)

B) They will depend more on electronic journals for teaching tasks than electronic archives. (Approved)

C) They will depend more on electronic databases for teaching tasks than Internet directories and Search Engines. (Disapproved)

This hypothesis was partially proved, in that it was found faculty member to depend more on electronic mails for teaching tasks than News groups (Part A).

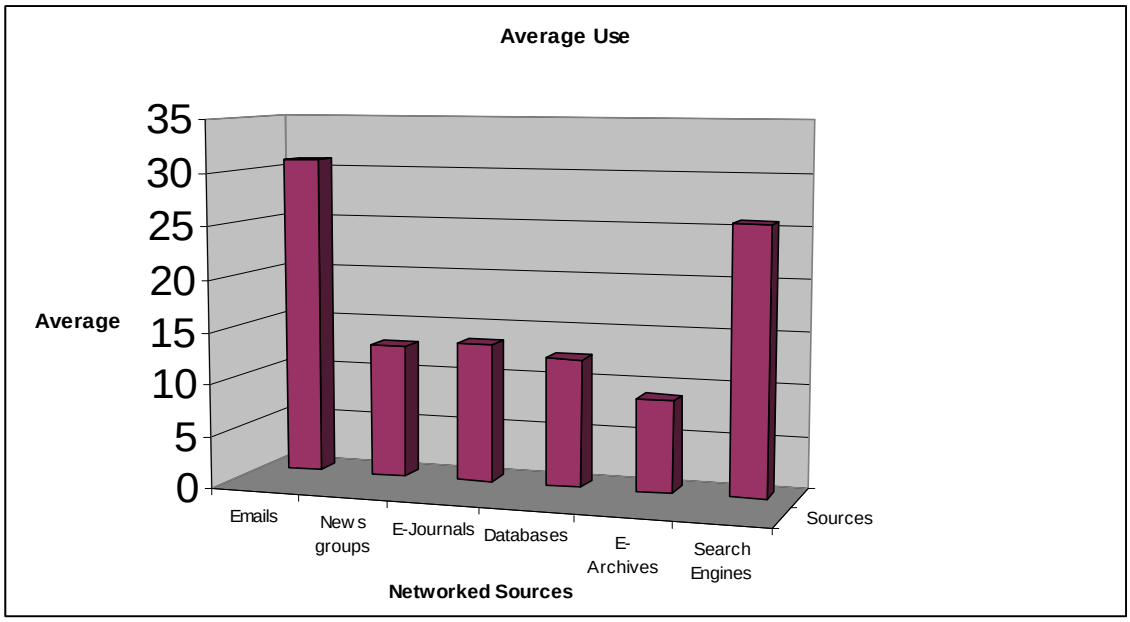
Part B was also approved in that it was found faculty member to depend more on electronic journals for teaching tasks than electronic archives. However part C was disapproved where it was found that faculty members do not depend more on electronic databases for teaching tasks than Internet directories and Search Engines.

Table (9) . The average typical use per typical month of various information sources for the teaching task per Information and Library Science faculty member: University of North Carolina 2005

Teaching / Sources	Emails	News groups	E-Journals	Databases	E-Archives	Search Engines
Average	30.86	12.86	13.45	12.31	8.81	25.63

Source: Survey of Information and Library Science faculty (n=11)

Figure (10). Average number of uses of Networked information sources per Information and Library Science faculty member per typical month: University of North Carolina 2005.



Source: Survey of Information and Library Sciences faculty (n=11)

Evaluation Criteria

In order to measure the level of satisfaction, numbers of hits in each cell were multiplied by 1, 3, and 5 to represent low, med, and high values, and summed, then the result was divided by the total number of respondents. The question was: ***[-Please evaluate each of the following sources based on the last time of usage]***

Information Sources	**Creditability*Accuracy**Reasonableness***Support****		
	Low	Med	High
Emails			
News group and Listserv s			
Electronic Journals			
Index & Abstracts & Full Text Databases			
Scholarly Electronic Archives (ex. Research Index)			
Directories & Search Engines on the Internet (Yahoo, Aol, Ask jeeves, Google, Excite, etc)			

* Creditability was defined in the questionnaire to be known or respected authority.
** Accuracy was defined in the questionnaire to be correct, up to date and comprehensive.
*** Reasonableness was defined in the questionnaire to be fair, balanced, objective and reasoned.
**** Support was defined in the questionnaire to have listed sources and contact information

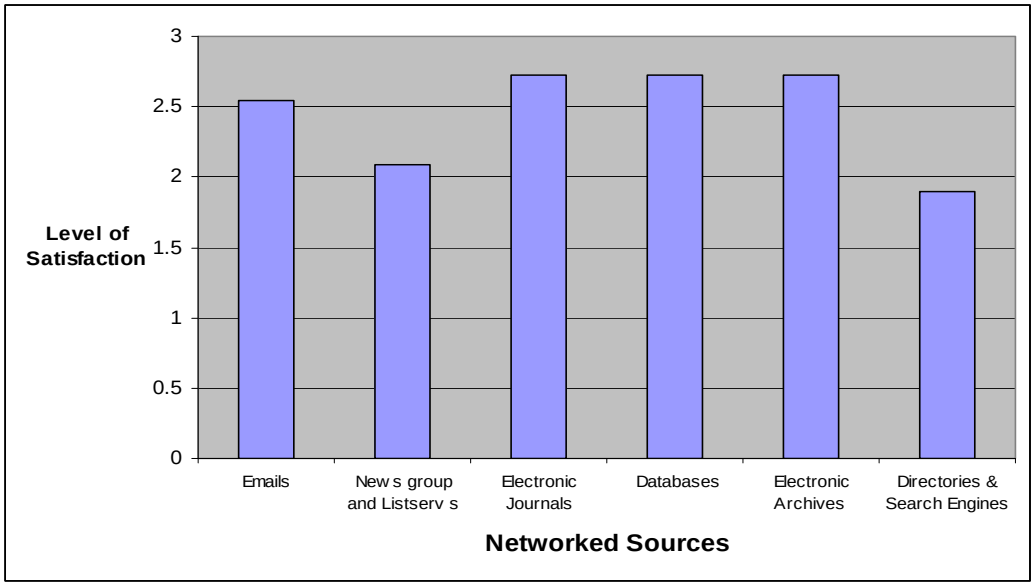
The study found faculty members to be satisfied most with electronic journals, index and abstracts and full text databases and, scholarly electronic archives, while they were least satisfied newsgroups and directories and search engines. See table (10) for details.

Table (10) Faculty evaluation of various electronic sources by CARS criteria of evaluation: University of North Carolina 2005.

Information Source	Level of Satisfaction
Emails	2.54
News group and Listserv s	2.09
Electronic Journals	2.72
Index & Abstracts & Full Text Databases	2.72
Scholarly Electronic Archives (ex. Research Index)	2.72
Directories & Search Engines on the Internet (Yahoo, Aol, Ask jeeves, Google, Excite, etc)	1.90

Source: Survey of Information and Library Sciences faculty (n=11)

Figure (11). Faculty evaluation of various electronic sources by CARS criteria of evaluation: University of North Carolina 2005.



Source: Survey of Information and Library Sciences faculty (n=11)

Analysis of open ended questions

Several of the survey questions were open-ended, offering respondents the opportunity to make longer comments about their use of electronic resources. These comments are summarized below.

Other reasons for using electronic sources

The question was ***[-In addition to these factors (credibility, accuracy, reasonableness, and support), what other reasons do you have for using electronic sources of information]***

When offered the opportunity to explain the factors, in addition to those explicitly identified, that contributed to their use of electronic sources, 10 faculty members chose to comment. Examination of their comments suggests that they can be categorized in the following areas: *accessibility (3 respondents) , ease of access (2 respondents), quick easy accurate, ease of distribution, availability, ease of use, efficiency, and Convenience(1 respondents for each).*

Other reasons for not using electronic sources

The question was ***[-What characteristics of electronic sources limit your use of them?]***

When offered the opportunity to explain the factors that limited their use of electronic sources, 9 faculty members chose to comment. Examination of their comments suggests that they can be categorized in seven areas: 1-format and lack of integration, 2-University Subscriptions and cost, 3- Coverage (incomplete sources and lack of full text), 4-lack of comments, 5-time, 6-impersonality, 7-access.

The difficulty of reading from a screen and problems with portability and printability were basic reasons behind not using electronic sources. In identifying Access as a factor in using electronic sources, respondents referred to the lack of accessibility of these materials out side the campus. In identifying Coverage and University Subscriptions, few respondents identified “incomplete sources”

Suggestions, comments, and recommendations

The question was ***[-Please use the space below for any suggestions comments, and recommendation for improving use of electronic sources]***

When faculty members were offered the opportunity to present their suggestions comments, and recommendation for improving use of electronic sources, 3 faculty members chose to comment. Examination of their comments suggests that they can be categorized in three areas that are better indexing, creating powerful search engines more cross listings references.

Implications and Suggestions

Based on previous analysis, the study showed a difference in using various information sources, where the study found variability in the sources used according

to rank and gender. Thus, in order to provide high quality service, the University Library System should provide the sources that meet each category.

The study also showed a variance satisfaction with electronic sources, where faculty members are most satisfied with Index and abstracts and Full Text Databases and Electronic Journals and least with Directories and Search Engines and Scholarly Electronic Archives.

Faculty members consider electronic journals high creditable, most accurate, high reasonable and most supportive. In addition to this, they consider electronic journals convenient to meet their needs. Therefore, this part suggest specific action for the University Library System, where a single access point for all types of materials, with the ability to search only for specific types of materials, and linkages to the documents themselves.

Appendixes

1) Formal Email
2) Paper- Based Questionnaire
3) Web-Based Questionnaire

Helwan University
Faculty of Arts
Department of Library and Information Science

Use of Networked Information Sources and Services by Information and Library Science Faculty in Teaching: A case study performed at The School of Information and Library Science at The University of North Carolina / By Dr. Hossam Eldin Mohamed Refaat. 2005.

I am a lecturer at the department of Library and Information Sciences at Helwan University, Cairo, Egypt. I am performing a study on Use of Networked Information Sources and Services by Library and Information Sciences Faculty in Teaching. I appreciate your participation, as it will assist in understanding faculty trends in getting information through various electronic sources for teaching. This questionnaire will take less than 5 minutes from each participant to complete it.
http://www.eun.eg/helwan_poll/teaching.htm

There are no foreseeable risks associated with this project. This is an entirely anonymous questionnaire, and so your responses will not be identifiable in any way. Data and information gained from this questionnaire will be confidential and will be used only for scientific purposes. Participation is completely voluntary and the subjects may withdraw from the study at any time and for any reason without penalty. In the meantime, if you have any questions, please ask me:

H. Abouserie, PhD.
E Mail: hossam_usa@helwan.edu.eg

Thank you.

The activities you perform in teaching are:

Teaching courses ( ) Implementing & Performing Workshops ( )

Advising Undergraduate Students ( ) Supervising Graduate Students Other ( )

I do not teach ( )

Over the last typical month how often did you access the following sources in teaching?

Sources / usage	No Use	1-4	5-14	15-29	30-More
Emails					
News group and Listserv s					
Electronic Journals					
Index & Abstracts & Full Text Databases					
Scholarly Electronic Archives (ex. Research Index)					
Directories & Search Engines on the Internet (Yahoo, Aol, Ask jeeves, Google, Excite, etc)					

Please evaluate each of the following sources based on the last time of usage according to **Credibility:** known or respected authority; **Accuracy:** Correct, up to date, comprehensive; **Reasonableness:** Fair, balanced, objective, reasoned; **Support:** Listed sources, contact information, claims supported:

Information Sources	Low	Med	High
Email			
News group and Listserv s			
Electronic Journals			
Index & Abstracts & Full Text Databases			
Scholarly Electronic Archives			
Directories & Search Engines			

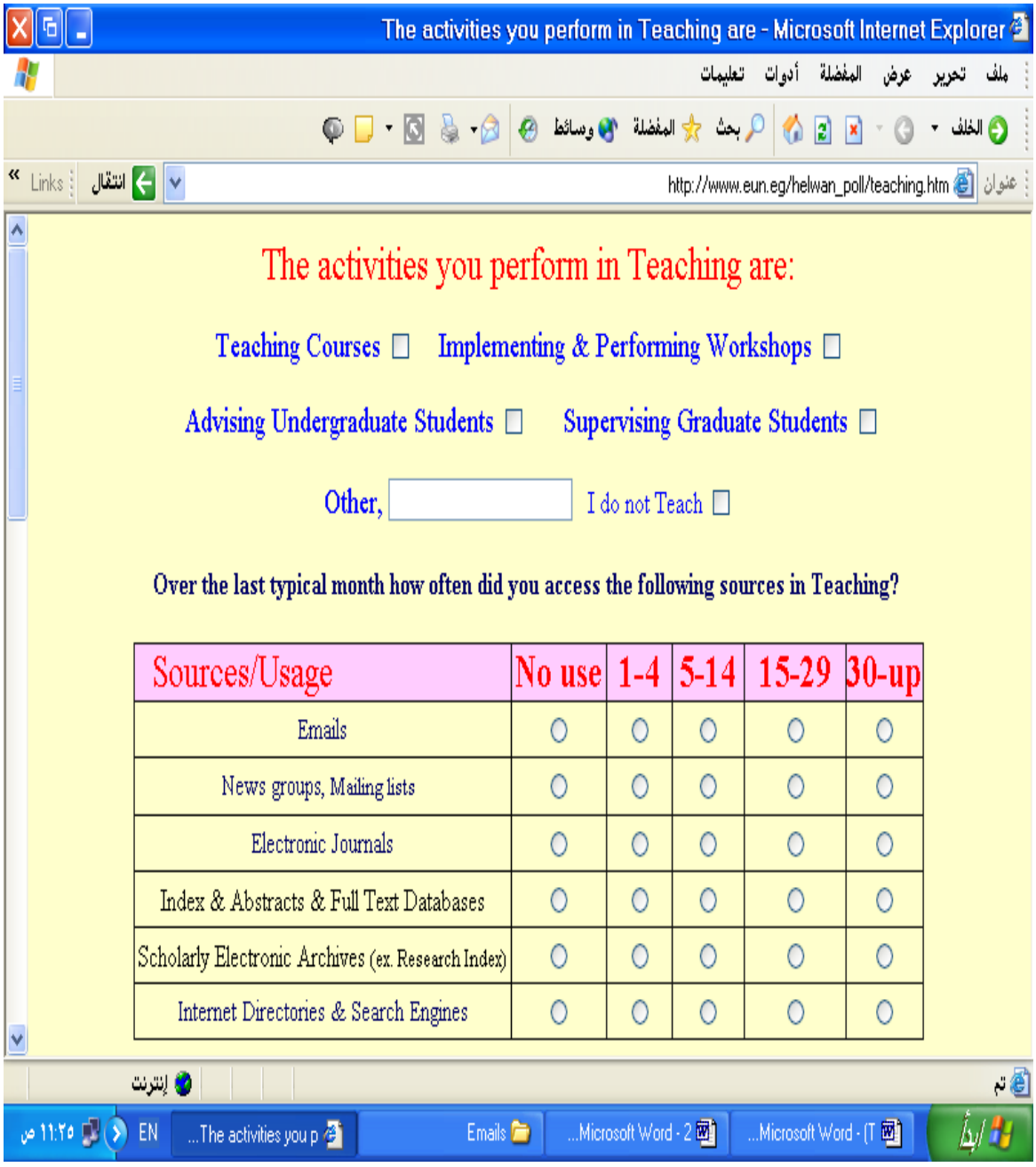
In additions to factors (**Credibility**; **Accuracy**; **Reasonableness**; **Support**) what other reasons do you have for using electronic sources

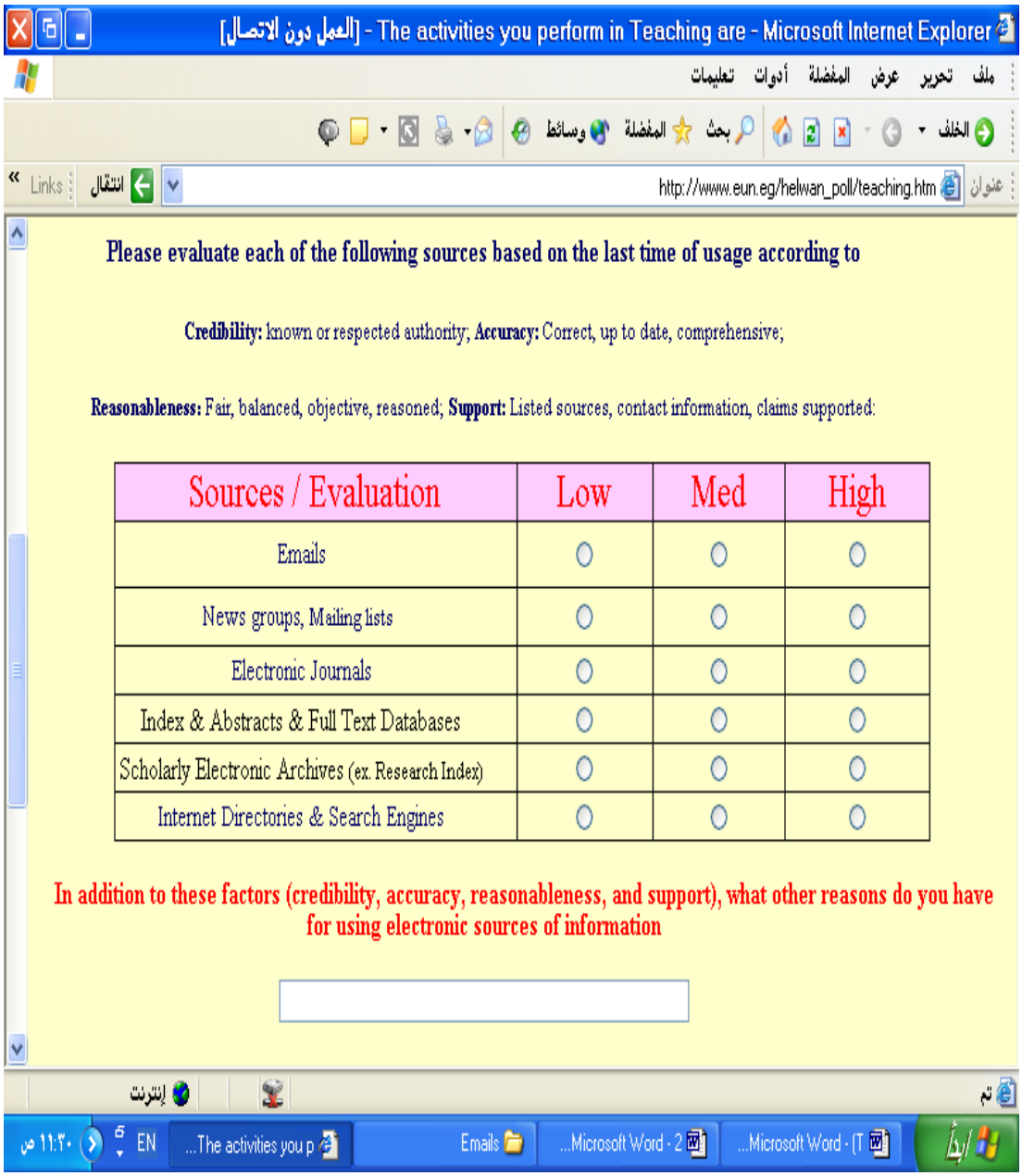
-What characteristics of electronic sources limit your use of them?

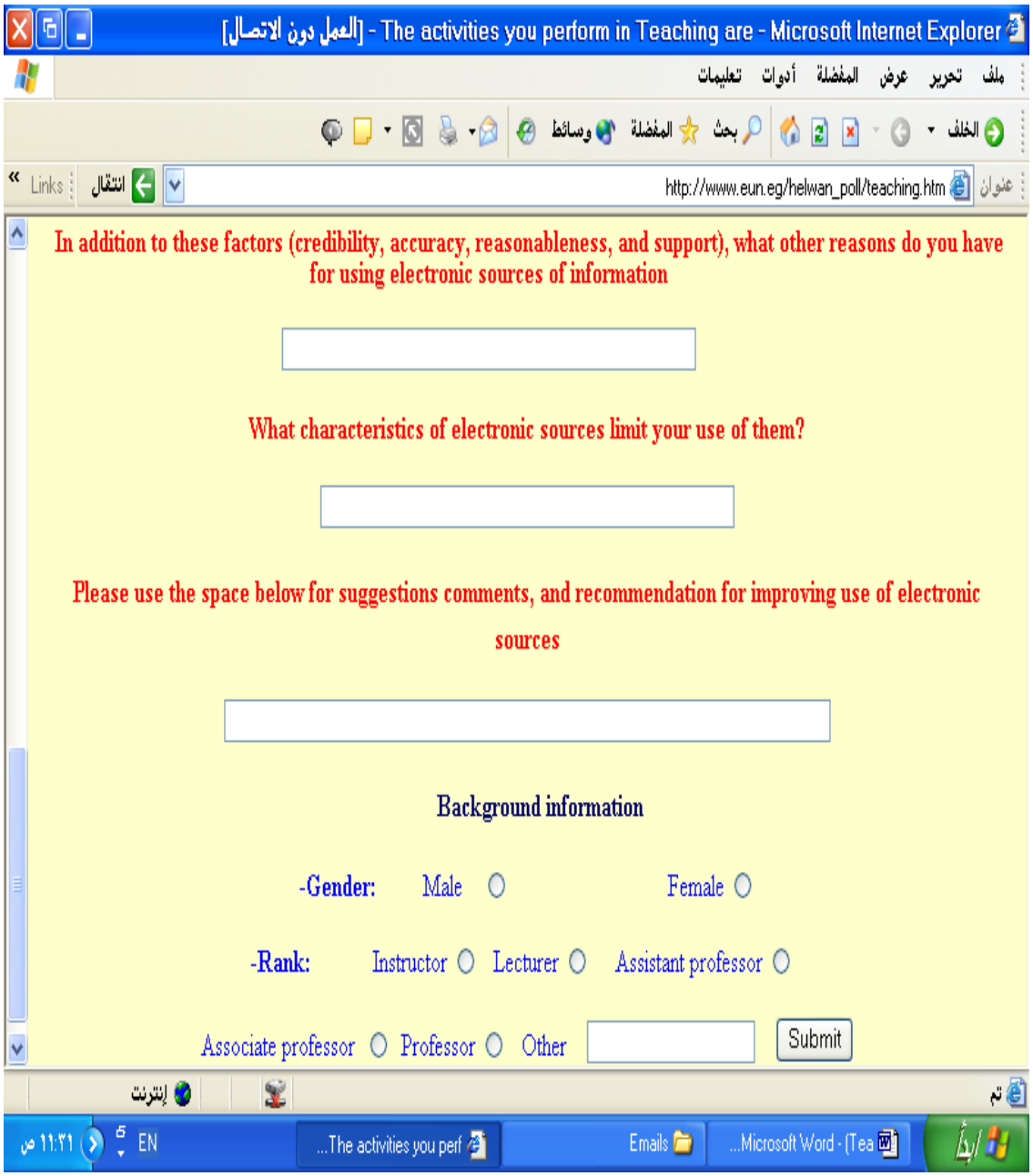
-Please use the space below for any suggestions comments, and recommendation for improving use of electronic sources

-Gender: Male ( ) Female ( )

-Rank: Instructor ( ) Lecturer ( ) Assistant professor ( ) Associate professor ( ) Professor ( ) Other---------- ( )







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