

# *Use and User Perception of Electronic Resources in the United Arab Emirates University (UAEU)*

AHMED ELHAFIZ IBRAHIM

United Arab Emirates University, Libraries Deanship, Al-Ain, UAE

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This study reports findings from a survey conducted to measure the use and perception of the United Arab Emirates University (UAEU) faculty members of electronic resources. Questionnaires were sent to a sample of 140 faculty members. Responses were received from 125 (89%) faculty mem-

bers. Analysis confirmed frequency of use of electronic resources was low. Reasons cited were lack of time because of the time needed to focus on teaching; lack of awareness to electronic resources provided by the library; ineffective communication channels, and language barrier.

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## *Background*

The United Arab Emirates University (UAEU) was established in 1976, becoming the first national university in the country.

The Libraries' Deanship is committed to providing access to electronic and print resources to support the research and curricula as expressed in its mission statement:

To provide for the University's faculty, students, and the community a comprehensive ranges of innovative information services and resources.

To achieve that mission, the Libraries' Deanship of UAEU has effectively and consciously utilized IT applications leading to the rise of a digital library within the entity of its conventional libraries.

Thus, library users are no longer obliged to visit the library at regular open hours to meet all their information needs. They may search the library online catalogue; use a subject guide or database to access a citation from the Internet or access a full text article from Web-based journals; they may browse an electronic journal; fill out an inter-library lending form; e-mail a reference question

via the ask-a-librarian service or borrow an e-book – all by remote access. The objectives of the study were:

- To assess the frequency of e-resources use by UAEU faculty;
- To examine the performance of UAEU Libraries' Deanship in satisfying faculty information needs via e-resources;
- To identify barriers that hinder use of e-resources.

## *Problem statement*

The Libraries' Deanship in the UAEU witnessed tremendous shifts in collections, services and access to resources since the mid-1990s. Computers and computer applications have been widely introduced, and an integrated library system (VTLS, and now migrating to Innovative Interfaces) has been installed. The Libraries' Deanship Web gateway (<http://www.libs.uaeu.ac.ae>) provides remote access to a tremendous wealth of e-resources. Among these are the following full text databases: Emerald, ScienceDirect, Academic Search Premier, United Nation Official Document System (ODS) etc., e-books collections in food systems, engineering, and philosophy via NetLibrary,

Ahmed Elhafiz Ibrahim (MLIS). United Arab Emirates University, Libraries Deanship, P.O. Box 1441, Al-Ain, UAE. Tel: 971-3-7043211. Fax: 971-3-7666975. E-mail: [ahmedi@uaeu.ac.ae](mailto:ahmedi@uaeu.ac.ae) / [harith@hotmail.com](mailto:harith@hotmail.com)

e-journals covering a variety of subjects, and major bibliographic databases like AGRICOLA and EcoNbase. Besides these, there are collections of Internet resources indexed by subjects.

Thus the Libraries of the UAEU have experienced unprecedented progress since the late 1990s from holding only traditional print materials to designing gateways to networked information. In fact, the dawn of a new era in library services and access to resources has risen in the UAEU in harmony with the worldwide information revolution in academia.

In a report on measuring the use of networked resources in American research libraries, issued by the Association of Research Libraries (ARL), it was stated that:

An ever-increasing portion of library collections dollars are [sic] committed to purchase of networked services. Yet relatively little is known about how these services are used, who uses them, and what the overall impact of these services is. (Shim et al. 2001, 5)

The situation of e-resources use and measures in the UAEU Libraries' Deanship is no exception.

The UAEU Libraries' Deanship had ongoing efforts to optimize the use of library resources including Web-based e-resources. It had introduced information literacy programs. Librarians conduct orientations for faculty and students regularly including bibliographic instruction classes at the beginning of every intake to new faculty members and freshmen. There has been no study conducted so far to measure the use of these e-resources in the UAEU Libraries' Deanship and to assess factors that may influence the usage of these resources.

Moreover, the cited literature reveals that the studies of use, user perception and user satisfaction with e-resources have been conducted in the West. However, universities in the Arab world and in the UAE lack systematic user-centred research. Therefore, an inquiry is deemed necessary to explore the frequency of use of Web-based e-resources in the UAEU and the barriers that influence the effective use of these vital resources.

### *Definitions*

Operational definitions of this study include:

- a. *E-resources* are defined as those electronic information resources and services that users access electronically

via a computing network from inside the library or remote to the library. (Shim et al. 2001)

- b. *Use of E-resources* is defined as searching, browsing, examining, and visiting an e-resource and/or service by a user.
- c. *Satisfaction* refers to the feeling of being pleased with results.
- d. *Barriers* are obstacles that hinder users' access and/or use of e-resources and/or services.

The study intends to assess frequency of use, satisfaction with the use, and barriers to use of e-resources by UAEU faculty as follows:

- *E-resources* include online databases, electronic (e-) journals, Electronic (e-) books, full text articles and Web sites.
- *E-services* include the online catalogue, electronic mail (Ask-a-Librarian), the online ILL form, and online reference books (e.g. dictionaries, encyclopaedias).

### *Literature review*

The literature of e-resources reports the following user-centred barriers to e-resources use: a lack of skills in how to use information sources, a lack of appropriate reward for electronic scholarly communication, a lack of consistent technical support and provision and a lack of time to be spent on searching for information (Tompsett and Alsop 1997; Macias-Chapula 1995; Ray and Day 1998). Borgman (1996) concludes that use of online e-resources and retrieval systems requires a basic knowledge of computing and searching skills.

In a study related to the types and frequencies of references to online sources, Harter and Kim (1996) found that the rate of e-resources use was extremely low, only 1.9% and 0.2% respectively, for the e-journals out of the total articles examined. In a similar study (Tonta 1995) reported that out of a total of 97 articles, only two contained direct references to networked information sources.

In a JSTOR survey, it was found that faculty members from humanities, economics and social sciences use online catalogues, full-text electronic journal databases and abstracting and indexing databases most frequently and they expect to use them more extensively in the future (Finholt and Brooks 1997).

Studies of e-resources reveal differences in use. Faculty members and other professionals in the field of science, math and medicine were early

adopters of electronic journals and other digital library resources and remain the heaviest and most enthusiastic users (Kidd 2002; Voorbij 1999; Hiller 2002; Rowley 2001; Dillon and Hahn 2002). Studies confirm that business school faculty members were early adopters (Tomney and Burton 1998) as well. They reported the highest use while Palmer and Sandler (2003) found economics faculty to be the most enthusiastic users of electronic journals. On the other hand, faculty members in history, education and the arts have been slower to adopt electronic journals.

### *Methods*

To assess the frequency of use of, satisfaction with, and barriers to the use of e-resources and services, a questionnaire instrument was designed based upon the *Questionnaire for User Interface Satisfaction* (QUIS) along with Likert's Five-point Scale. The Statistical Package for the Social Sciences (SPSS) was used to analyze and manipulate the collected data. For the convenience of faculty members in Arabic and Islamic studies, an Arabic translation of the original questionnaire was prepared, allowing the participants to choose the language they preferred.

Five faculty members in the UAEU, and one senior librarian at Zayed Central Library pre-tested the questionnaire. Based on their advice and suggestions, the questionnaire was revised to its final form.

Respondents completed the 27-item questionnaire; it included questions on demographic characteristics, computer skills, frequency of use, satisfaction with e-resources, performance of the library in satisfying faculty needs and barriers to use of e-resources (see the Appendix).

### *Procedures and participants*

The target population of this study constituted all UAEU full-time faculty members. The targeted colleges were Humanities and Social Sciences, Sciences, Education, Business & Economics, Engineering, Information Technology, Food Systems, Shariah & Law and Medicine and Health Sciences.

The 2001 Faculty Research Interests directory in the UAEU was used to identify the population of this study. According to that source the total population was 560 full-time faculty members. A

stratified random sample was drawn to represent not only the overall population but also the key subgroups, i.e. colleges, departments and disciplines. A 25% sample was drawn from each department. 140 questionnaires were sent to the faculty members. E-mail and phone calls were used to follow up with participants. The total number of responses was 125, with a response rate of 89%. Worth mentioning is that there were no responses received from the College of Medicine and the Department of Chemistry.

The questionnaire was self-administered. Questionnaires were either personally hand-delivered or sent electronically, based on pre-communication with faculty members to determine the preferred method of delivery.

### *Results*

#### *Respondents' profile*

All 125 respondents were faculty members in the UAEU. Most respondents were male, 115 or 92.7%. The age of 84.7% of the respondents was less than 50 years. Most of the respondents held Ph.D.s, only 10 (8%) of the respondents held the Masters and one held a Postgraduate Diploma.

Less than half of the respondents, 51 (40.8%), belong to the College of Humanities & Social Sciences, the largest college in the university. The remaining respondents were from the following colleges: 22 (17.6%) from Engineering and IT, 18 (14.4%) from Science, 16 (12.8%) from Education, 11 (8.8%) from Business & Economics, only 5 (4%) from Food Systems and at the lowest end, only 2 (1.4%) from Shariah & Law.

Most of the respondents 86 (69.4%) received their highest degree from institutions in the United States or Western Europe; only 37 (29.8%) had their highest degrees from the Arab World. The academic rank of over half of the respondents (64 or 51.2%) was assistant professor, nearly a quarter (30 or 24%) was associate professors, and 21 (16.8%) were professors.

The medium of instruction was English for 63 (50.4%) of the respondents; only 34 (27.2%) used Arabic and 27 (21.6%) of the respondents used both languages.

More than half of the respondents (59.2%) work in the UAEU on personal contract basis. Those who were seconded (contracts restricted to a set

Table 1: Usage of e-resources

**Descriptive Statistics**

	Mean
Frequency library website	2.60
Frequency Catalog Use	2.65
Frequency Bib. database Use	2.46
Frequency e-books Use	2.10
Frquency e-journals Use	2.70
Frequency Fulltext Articles Use	2.78
Frequency Online Reference works	2.86
Frequency online ILL Form Use	1.68

number of years per agreement between universities) were only 34 (27.2%), and there were 15 (12%) Emirati working permanently. The academic load for 63 (50.4%) of the respondents was between 10–12 hours a week, while 50 (40%) had a load of 13 or more hours a week. Respondents accessed the library’s e-resources more from their office 56.8% and less from home 50.4%.

*Frequency of use of e-resources*

Frequency of use is an important measurement regarding how e-resources contribute to the mission statement of the library and consequently to the institution’s effectiveness. Results revealed that respondents used e-resources for less than 50% of the time they spent on the library each term. Table 1 shows that the most used e-resources were online reference materials with a mean of 2.86, full-text articles at a mean of 2.78, e-journals at a mean of 2.70, the online catalogue at a mean of 2.65, with less usage reported for bibliographic

databases at a mean of 2.46, and e-books as the least used e-resource at a mean of 2.10.

Table 2 shows that the frequency of use of e-resources was higher in the College of Food Systems and the College of Science than other colleges. Respondents from the College of Business & Economics used e-resources more frequently than those in Humanities & Social Sciences. This finding matches results cited in the e-resources literature (Kidd 2002; Voorbij 1999; Hiller 2002; Rowley 2001; Dillon and Hahn 2002).

Surprisingly and inconsistent with earlier research findings, participants from the College of Engineering and Information Technology reported less usage of e-resources in the UAEU. That may be a result of the high academic load of more than 13 hours by 63.6% of the participants from the College of Engineering and IT. Also, some participants from College of Engineering commented that the library doesn’t subscribe to the full-text journals in the areas of their interests (e.g. IEEE Journals) with which they were familiar during their study.

*The value of e-resources in teaching and conducting academic research*

Most of the faculty members valued the importance of e-resources and services in teaching and research with a mean of more than 3.7.

*The satisfaction and performance of the library in satisfying faculty information needs via e-resources*

Most of the respondents were satisfied (57.6%) or somewhat satisfied (23.2%) with the e-resources

Table 2: Frequency of use of e-resources by college.

	College						
	H. & S.S.	Science	Education	Business & Econ.	Egin. & IT	Food Sys.	Law & Shariah
	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Frequency library website	2.74	2.93	2.25	2.90	2.09	3.00	2.50
Frequency Catalog Use	2.67	3.07	2.25	2.90	2.20	3.60	3.00
Frequency Bib. database Use	2.36	2.40	2.20	2.80	2.55	3.60	1.50
Frequency e-books Use	1.89	2.33	2.36	1.90	2.00	3.40	2.00
Frquency e-journals Use	2.34	3.63	2.67	3.00	2.45	3.80	2.00
Frequency Fulltext Articles Use	2.45	3.20	2.63	3.30	2.77	3.20	4.00
Frequency Online Reference works	2.73	3.20	2.94	2.50	2.64	4.00	4.00
Frequency online ILL Form Use	1.45	2.23	1.29	2.10	1.76	1.25	5.00

Table 3: Performance of library in satisfying faculty information needs via e-resources

	One-Sample Test		
	Test Value = 3		
	t	Mean	Sig. (2-tailed)
Adequacy of e-resources	9.166	3.70	.000
Adequacy of bibliographic instruction to use of e-resources	10.971	3.87	.000
Adequacy of training	3.604	3.31	.000

and services the Deanship provided. More than half of the respondents (56.0%) agreed to a certain extent that the library provided an adequate range of e-resources at a mean of (3.70) and that librarians offered bibliographic instruction at a rather adequate level with a mean of 3.87, but were rather less satisfied (3.31) by the training their library provided to enable faculty to use e-resources effectively. The latter finding triggers the need for more extensive and effective training to faculty members in the future to enhance their capabilities in fully utilizing these resources.

Overall respondents were rather satisfied with the e-resources the library provided ( $t = 3.65$ ,  $p < 0.05$ ). It seems there was no significant relation between faculty satisfaction with e-resources and the low use of e-resources in the UAEU. The performance of UAEU Libraries' Deanship to meet the information needs of the faculty from e-resources was satisfactory. The libraries provided adequate access to a range of e-resources ( $t = 3.70$ ,  $p < 0.05$ ), librarians offered an adequate level of bibliographic instruction and training that enabled faculty members to use the e-resources effectively ( $t = 3.87$ ,  $p < 0.05$ ) and ( $t = 3.31$ ,  $p < 0.05$ ) respectively. Table 3 shows that inadequate training and librarians' bibliographic instruction were not explicitly significant factors in the low use of e-resources yet there is a slight need for extensive training workshops for faculty.

### Usage and factors influencing use of e-resources

The following are the results of the study regarding usage patterns and factors that influence use of e-resources in the UAEU. As reported in the literature, among the factors that might inhibit use of e-resources is the irrelevancy of search re-

Table 4: Frequency of use of e-resources

	One-Sample Test		
	Test Value = 3		
	t	Mean	Sig. (2-tailed)
Frequency library website	-3.770	2.60	.000
Frequency Catalog Use	-3.170	2.65	.002
Frequency Bib. database Use	-4.560	2.46	.000
Frequency e-books Use	-7.853	2.10	.000
Frequency e-journals Use	-2.383	2.70	.019
Frequency Fulltext Articles Use	-1.808	2.78	.073
Frequency Online Reference works	-1.092	2.86	.277
Frequency online ILL Form Use	-12.436	1.68	.000

sults from databases. Likewise are the low quality and authentication of the content of e-resources, the usability of the library Web site and slow response time when using e-resources (Ray and Day 1998).

The results of this survey showed that the search results of the e-resources the respondents used were fairly relevant with a mean of 3.72. The library Web site interface usability was rather comfortable with a mean of 3.77. The quality of e-resources content was rather satisfactory with a mean of 3.55. Typical response time was somewhat fast with a mean of 3.25.

A t-test analysis was conducted to measure use of e-resources and detect factors that deter effective and frequent use. A criterion of less than 0.05 was used to determine the significance of use. Table 4 shows that frequency of use of e-resources was significantly low for most types of e-resources. The least frequently used e-resources were e-books ( $t = 2.10$ ,  $p < 0.05$ ), the online catalogue ( $t = 2.65$ ,  $p < 0.05$ ) and bibliographic databases ( $t = 2.60$ ,  $p < 0.05$ ). For comparison, online reference works ( $t = 2.86$ ,  $p < 0.05$ ), e-journals ( $t = 2.70$ ,  $p < 0.05$ ) and full-text articles ( $t = 2.78$ ,  $p < 0.05$ ) were found to be more popular, even though they still fell below the anticipated frequency.

### Computer knowledge

Computer skills and the attitudes of users towards computing are important factors towards use and non-use of e-resources cited in LIS literature (Borgman 1996; Tompsitt and Alsop 1997; Macias-Chapula 1995). Table 5 emphasizes that faculty

Table 5: Use of Web browsers & Microsoft

One-Sample Test

	Test Value = 3		
	t	Mean	Sig. (2-tailed)
Web browsers & Microsoft use	20.674	4.47	.000
Computer literacy	16.899	4.31	.000

members in the UAEU used Web browsers and Microsoft Office applications more frequently ( $t = 4.47, p < 0.05$ ), and they had positive attitudes towards the importance of computer literacy in the use of e-resources ( $t = 4.31, p < 0.05$ ). This explains that computer skills and computer literacy insignificantly influence the low use of e-resources in the UAEU. One can also attribute the high frequency of using Web and Microsoft software to the increased exposure of the UAE community to the Internet. A Human Rights Watch report showed the UAE was the most wired state in the Arab world with the highest number of Internet subscriptions (260,000 subscribers in 2002), according to UAE Telecommunication Company. This has positively influenced the public's computer knowledge, let alone an elite community such as the UAEU faculty. Moreover, the result also matches the UAEU vision that encourages faculty to extensively exploit state-of-the-art IT facilities in the university.

Table 6 shows that the search results of e-resources (e.g. online catalogue and databases) used by respondents were found to be rather relevant ( $t = 3.72, < p. 0.05$ ), the contents of those resources were of relatively good quality ( $t = 3.55, p < 0.05$ ), the interface usability of the library Web site was rather easy ( $t = 3.25, p < 0.05$ ) and the typical response time was reasonable ( $t = 3.25, p < 0.05$ ). This conclusion supports the hypothesis that relevancy of search result, usability of the library interface, access time, and quality of e-resources content insignificantly influenced the low use of e-resources in the UAEU.

The cross-tabulation shown in Table 7 reveals that faculty members whose medium of instruction was the English language visited the library Web gateway more frequently (50.9%) than their counterparts to whom Arabic was the medium of instruction (29.1%). Consequently they expected

Table 6: Barriers to use of e-resources

One-Sample Test

	Test Value = 3		
	t	Mean	Sig. (2-tailed)
Relevancy of search results	9.706	3.72	.000
Quality of e-resources	7.644	3.55	.000
Interface usability	10.187	3.77	.000
Typical access time	3.211	3.25	.002

Table 7: Teaching language and frequency of library Web site use.

Teaching language \* Frequency library Web site Crosstabulation

			Frequency library website		Total
			Less than 51%	51% or more	
Teaching language	Arabic	Count	24	6	30
		% of Total	20.7%	5.2%	25.9%
	English	Count	46	13	59
		% of Total	39.7%	11.2%	50.9%
	Arab&English	Count	21	6	27
		% of Total	18.1%	5.2%	23.3%
Total	Count	91	25	116	
	% of Total	78.4%	21.6%	100.0%	

Table 8: Frequency of visits to the library Web site.

Country of degree \* Frequency library Web site Crosstabulation

			Frequency library website		Total
			Less than 51%	51% or more	
Country of degree	Arab world	Count	28	6	34
		% of Total	23.9%	5.1%	29.1%
	West	Count	64	19	83
		% of Total	54.7%	16.2%	70.9%
Total	Count	92	25	117	
	% of Total	78.6%	21.4%	100.0%	

to use the e-resources available at the Web gateway more frequently than faculty who teach in the Arabic language. It seems that English language proficiency plays an influential role in this attitude. Interestingly, this pattern of e-resource usage coincides with that of printed materials in the UAEU Libraries. Annual statistics show that foreign materials (e.g. monographs and periodicals) report low usage due to the language barrier for a considerable proportion of the university community.

The cross-tabulation in Table 8 shows that faculty members awarded degrees in the West used the library Web site more frequently than their counterparts awarded degrees in the Arab world. This finding again supports the notion that language is a barrier to the use of e-resources in the UAEU to some extent.

## Conclusions

This study proved that the use by faculty members in the UAEU of e-resources was not at the anticipated level that would effectively enhance the learning and research process as stated in the mission statement of the Libraries' Deanship. Significant low usage was reported for e-books, bibliographic databases and e-journals. These attitudes might be a result of a lack of awareness about the e-resources provided by the library or due to ineffective channels of communication in campus as reported in earlier research. Some respondents have missing values in the question about frequency of use of e-resources; this might be explained as lack of awareness of the participants about the resources provided by the library. However, the latter result was consistent with finding of previous research (Tomsitt and Alsop 1997, Macias-Chapula 1995).

Results of this survey obviously ascertained the opinion that faculty members in the UAEU seem to be equipped with fairly good computer skills that enable them to search and utilize e-resources. It seems the possession of computer skills alone are not adequate for efficient use of e-resources, hence more organized training programs are needed to familiarize some of the faculty members with the e-resources, even though the results didn't explicitly show there was a severe lack of training or that librarians offered insufficient bibliographic instruction.

Furthermore, results of this study confirmed that neither irrelevancy of search results nor the quality and authentication of the content of the e-resources were explanations for the low use of e-resources. Apparently the study has also discarded the likelihood that slow response time, and difficult usability of the library Web site deterred the use of e-resources in the UAEU.

Studies conducted with regard to the use of e-resources emphasized the influence of language as a barrier in effective use of library resources (Macias-Chapula 1995). Consistent with that, it was found that the medium of e-resources being English was an obstacle to faculty members who had their degrees from the Arab World and conducted teaching and research in the Arabic language. They were less proficient in the English language, consequently the language barrier made them refrain from the use of e-resources. Like-

wise, faculty members instructed in Arabic language also reported low use since English was the main languages for most e-resources; such faculty members are expected to be unenthusiastic toward using the e-resources. The low circulation of foreign books compared with Arabic books of the Libraries' Deanship Annual Statistical Report supports this result. Thus, it is high time for Arabic electronic publishing to play an active role in documenting and providing online Web access to the vast array of Arabic literature.

The low use of e-resources in the UAEU may have a relationship with increasing academic teaching loads, since 90.4% of the respondents teach 10 or more than 12 hours a week. Such load may reduce the focus of faculty members on research.

This research did not support the prevailing notion that faculty members in the humanities and social sciences use e-resources less frequently than their counterparts in economics and engineering. There was no significant difference in usage across the colleges of the campus, with the College of Engineering having the least usage. The latter finding was interesting and opens a window for further research to clarify this peculiar situation.

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## References

- Borgman, C. L., S. G. Hirsh and J. Hiller. 1996. Re-thinking online monitoring methods for information retrieval systems: from search product to search process. *Journal of the American Society for Information Science* 47(7): 568-83.
- Calhoun, K. and Z. Koltay. 1999. *Library gateway focus group report*. URL: <http://www.library.cornell.edu/staffweb/GateEval/contents.html> [viewed February 22, 2004].
- Finholt, T. A. and J. A. M. Brooks. 1997. *Analysis of JSTOR: the Impact on Scholarly Practice of Access to On-line Journal Archives*. Conference on Scholarly Communication and Technology April 24-25, Emory University. URL: <http://www.arl.org/scomm/scat/finholt.html> [viewed Feb. 07, 2004].

- Hahn, S. E., C. Speier, J. Palmer, and D. Wren. 1999. Advantages and disadvantages of electronic journals: Business school faculty views. *Journal of Business and Finance Librarianship* 5(1): 19–31.
- Harter, S. P. and H. J. Kim. 1996. *Electronic journals and scholarly communication: A citation and reference study*. Midyear Meeting of the American Society for Information Science. San Diego. Information Research, 2 (1) URL: <http://informationr.net/ir/2-1/paper9a.html>. [viewed Feb. 07, 2004].
- Hiller, S. 2002. How different are they? A comparison by academic area of library use, priorities, and information needs at the University of Washington. *Issues in Science and Technology Librarianship* (Winter). URL: <http://www.istl.org/istl/02-winter/article1.html> [viewed February 22, 2004].
- Kidd, T. 2002. Electronic journal usage statistics in practice. *Serials* 15(1): 11–17.
- Macias-Chapula, C. 1995. Development of a soft systems model to identify information values: Impact and barriers in a health care information system. *Journal of Information Science* 21(4): 283–88.
- Palmer, J. P. and M. Sandler. 2003. What do faculty want? *Netconnect* (Winter): 26–28.
- Ray, K. and J. Day. 1998. Student attitudes towards electronic information resources. *Information Research* 4(2). URL: <http://informationr.net/ir/4-2/paper54.html> [viewed Feb. 07, 2004].
- Rowley, J. 2001. JISC user behaviour monitoring and evaluation framework. *Ariadne* 30. URL: <http://www.ariadne.ac.uk/issue30/jisc/intro.html> [viewed Feb. 07, 2004].
- Shim, W. J. et al. 2001. *Measure and statistics for research library networked services: Procedures and issues* (ARL E-Metrics Phase II Report). Washington, DC: Association of Research Libraries. URL: <http://www.arl.org/stats/newmeas/emetrics/phasetwo.pdf> [viewed February 20, 2004]
- Speier, C., J. Palmer, D. Wren and S. Hahn. 1999. Faculty perceptions of electronic journals as scholarly communication: A question of prestige and legitimacy. *Journal of the American Society for Information Science* 50(6): 537–43.
- Tomney, H. and P. F. Burton. 1998. Electronic journals: A study of usage and attitudes among academics. *Journal of Information Science* 24(6): 419–29.
- Tompsett, C. and G. Alsop. 1997. *A study of human communication issues in interactive scholarly electronic journals: Final report*. URL: <http://www.ukoln.ac.uk/services/elib/papers/tavistock/kingston/kingston.html> [viewed Feb. 07, 2004].
- Tonta, Y. 1995. *Scholarly communication and the use of networked information sources*. 61<sup>st</sup> IFLA General Conference Proceedings. New York. URL: <http://www.ifla.org/IV/ifla61/61-tony.htm> [viewed February 22, 2004].
- Voorbij, H. J. 1999. Searching scientific information on the Internet: A Dutch academic user survey. *Journal of the American Society for Information Science* 50 (7): 598–615.

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## Appendix

### Use of electronic library resources

This questionnaire is prepared to collect data about UAEU faculty perception to use of electronic resources.

*Instruction: Please tick the box next to correct answer. In case of queries contact: [ahmedi@uaeu.ac.ae](mailto:ahmedi@uaeu.ac.ae)*

#### I. Demographics

**1. What is your gender?**

Male

Female

**2. What is your age?**

Less than 30 years

Between 31–40

Between 41–50 years

51 years or more

**3. What is your highest degree?**

Postgraduate Diploma

Master's

Ph.D.

**4. Please indicate where you were awarded your highest degree?**

Arab world

United Kingdom

United States

Others, pls. specify \_\_\_\_\_

**5. What college do you belong to?**

Social Sciences & Humanities

Sciences

Medicine

Engineering & IT

Food Systems

Education

Business & Economics

**6. Please indicate your department affiliation**

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**7. Please indicate your academic rank**

Assistant professor

Associate professor

Professor

Others, Pls. specifies \_\_\_\_\_

**8. What is the teaching language in your Department?**

Arabic language

English language

Both

**9. What type of contract you have with the United Arab Emirates University?**

Personal contract

Seconded

Permanent

**10. How many hours do you often teach?**

Between 0–6 hours a week

More than 6 – 9

More than 9–12

More than 12

II. Computer knowledge

11. How extensively have you been using web browsers and Microsoft last year?

- Never                       Rarely                       Sometimes  
 Frequently                       Always

12. Computer literacy is important to use electronic resources.

- Strongly disagree                       Disagree  
 Neutral                       Agree  
 Strongly agree

III. Frequency of use of electronic resources

13. Where do you access libraries' electronic resources?

- From the library                       From the office  
 From home                       Others, Pls. specify \_\_\_\_\_

14. How much of a full term time do you use the following electronic resources?

	<5 %	6-25%	26-50%	51-75%	>75%
i) I visit the library website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) I search the online catalog	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) I search the databases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) I use e-books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v) I browse e- journals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vi) Access full text article	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vii) Online reference works	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
viii) Fill online ILL form	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. How do you rank the value of these electronic resources on conducting your research and teaching?

	Not very important	Not important	Somewhat important	<b>Important</b>	Very important
i) Online databases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Electronic journals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Electronic books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Online catalog	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v) Online reference works	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vi) Internet websites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vii) Electronic mails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Listserv, discussion groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
viii) Fill online ILL form	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

III. Satisfaction with electronic resources

16. Overall, to what extent are you satisfied with electronic resources your library provides?

- Very dissatisfied                       Dissatisfied                       Somewhat satisfied  
 Satisfied                                       Very satisfied

17. To what extent are you satisfied with the following electronic resources?

	Very dissatisfi ed	Dissatisfied	Somewha t satisfied	Satisfied	Very satisfied
i. Full text databases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Electronic journals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Electronic books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Web sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. To what extent are you satisfied with the following electronic services?

	Very dissatisfied	Dissatisfied	Somewhat satisfied	Satisfied	Very satisfied
v. Online catalog	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vi. Online databases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vii. Ask a-librarian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
viii. Listserv, discussion groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ix. Online ILL form	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IV. Performance of the library in satisfying users' information needs via electronic resources

19. The library provides adequate access to electronic resources.

- Strongly disagree                       Disagree  
 Neutral                                       Agree  
 Strongly agree

20. The librarians offer adequate bibliographic instructions and assistance enable me to use the electronic resources effectively

- Strongly disagree                       Disagree  
 Neutral                                       Agree  
 Strongly agree

21. The library provides adequate training on how to use electronic resources

- Strongly disagree                       Disagree  
 Neutral                                       Agree  
 Strongly agree

V. Ease of electronic resources use

22. How do you evaluate search results of electronic resources you have used (For example database, catalog)?

- Very irrelevant                       Irrelevant  
 Somewhat relevant                       Relevant  
 Very relevant

**23. How do you rate the quality of information you acquire from electronic resources?**

- Very poor quality       Poor quality       Somewhat high quality  
 High quality       Very high quality

**24. How do you rate the typical access time when you search an electronic resource?**

- Very slow       Slow       Somewhat fast  
 Fast       Very fast

**25. How do you rate the usability of the interface of the library web site?**

- Very difficult       Difficult       Somewhat easy  
 Easy       Very Easy

**26. Would you be willing to participate in a focus group session about points raised**

**in this survey?**

- Yes       No

**If yes please complete the following**

**Name** \_\_\_\_\_ **Tel.** \_\_\_\_\_ **E.mail.** \_\_\_\_\_

**27. Do you have additional comment?**

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**Thank you for you cooperation.**

**Ahmed Elhafiz Ibrahim.**

**E.mail: Ahmedi@uaeu.ac.ae.**

**Tel: 7043211**