The Role Of Digital Informatics In The Quality Of Scientific Research In In University Libraries: An Analytical Study Of Iraqi Libraries

Suad Mohammed Jasim

Ministry of higher education and scientific researches Baghdad university Al- khwarizmi college of engineering Communication engineering department Email: soaad. M @ kecbu. Uobaghdad .edu.iq

Abstract

The development that is taking place ,especially in what is known as these sciences and knowledge ,has facilitated the exchange and transmission of information in recent times ,which has become one of the main pillars of the development of societies ,which is indispensable in order to catch up with the advanced universities in advancing progress and achieving a positive and comprehensive development view in all fields and It is no secret for all the extent of the rapid and tremendous development in the amount of information and the speed of its circulation .For developments ,particularly the acquisition of modern knowledge in vast information .Therefore , there must be what is known as methods to control this huge amount of information and how to access the required information ,which is undoubtedly the basis for the development and progress of industry or craft or otherwise depends in its construction and development based on the quantity available From information in this field or industry and in the light of these developments comes the role of information technology in the operation and qualification of that role of information in the light of these developments and made it more access or able than paper archiving and also safer for information What is required for deliberation or knowledge and more in the most vulnerable to spatial space and this technology has different forms ,including the rules of the statements ,which are the subject of our study .This study reviews the role played by the rules of religion in public libraries as a source of information that allows a huge amount of data , particularly information and knowledge ,in a small and secure place of damage and research through what is known as a computer ,by calculating the importance of the rules of the data in making information available to the investors and the seriousness of their use in the public office

Keywords: Internet networks ,informatics ,databases-public libraries ,information exchange .

Introduction

Modern technologies, the development of educational cultural institutions and the increasing need of researchers and scholars required modern sources of information, which keep pace with developments in the areas of competence, bypassing the spatial and temporal barriers between the countries of the world in the new technological environment. Accordingly, libraries should develop the services they provide to support teachers in light of this challenge, and provide researchers with sources of information that will support scientific research and advance it to the highest levels (accuracy, speed, and required modernity).

Problem and importance of the paper:

The interest in information technology has increased in a very exciting way and how to take advantage of it in many and varied forms such as databases and communication networks, and looking at the availability of its requirements has become one of the basic things that should be taken into account and studied in a scientific and accurate manner. This importance does not come from a vacuum, but rather comes By knowing the true value of several concepts such as "the information age, knowledge society, information technology" and these concepts must be put in the right place, so that there is a working system for providing and retrieving information according to an integrated mechanism through which it is possible to know the impact of information technology on integrated organization and storage and programmed correctly to be used effectively and quickly. This system does not come except by knowing the role it has made available and which the latest technological technologies play in providing and storing information.

Objectives of the paper:

The research aims to identify:

- ❖ The concept of areas of cooperation and its relationship to the information network, as well as its relationship with information technology, its importance and impact on the development of science in the modern era.
- ❖ The role of databases in the circulation of information in university public libraries and the extent of their use by beneficiaries.
- ❖ The effect of using communication networks in the process of transferring and exchanging information in databases between users.

Limits of the paper (temporal, spatial and human):

- Beneficiaries (borrowers) of public library books and research in universities, institutes and colleges.
- Beneficiaries of borrowing through local communication and information networks for the university semester: 2020-2021.

- Designing a program for the public library databases in the Visual Basic programming language, which includes all the books available in the library and statistics on the number of users from the database, the date of entry to the database, and the number of books and topics downloaded from the library database from the beneficiaries.

Questions of the Study

The main question: The main question emerged and is the focus of the study:

The sub-questions emerged from the main question:

Q1. What is the role of digital informatics about the services provided by the university library?

Q2. What is the role of university majors in providing an effective role for digital informatics in university libraries?

Q3. What is the role of the research sample members about the degree of availability of the university library to the factors that encourage requesting the information service?

Q4. What is the role of the university level, such as making the university library available to the factors that encourage requesting information services?

Q5. What is the role of university specialization in enriching the informatics of libraries and developing scientific research and its quality as an analytical study?

Study terms:

~~scientific terms:~~ LAN (Local Area Networks, 8:2000) can be defined as one of the computer networks which is connected to each other by high speed communication channels and used by a large number of people in various places.

Procedural definitions: It is a set of computers connected to each other with a physical link in order to transfer and exchange data to and from the public library in universities, institutes and colleges, to get the available information.

Information technology: It is the method that leads the person to the desired results, that is, it is a means and not a result, and it is a way of thinking about the use of knowledge, information and skills in order to reach results to satisfy the human need and increase his capabilities. It is the equipment, machines, programs and plans used to communicate with others in order to obtain information in public libraries with the required speed and accuracy.

Information or informatics network: is the basic processing of data; It is also the data that has been processed for use, as it is a set of data that contains a meaning, and it is data that has been processed and took an understandable form, and not all data can be converted into procedural identification information: it is the process of processing a set of given data in order to benefit from it to achieve the desired results.

Database: It is a group of logical data elements linked to each other by a mathematical relationship, and the database consists of one or more tables. The table consists of one or more records, and the record consists of one or more fields, for the purpose of storing and retrieving data whenever the database user wants. Or it is a set of tables related to the books available in the public library that are linked to each other by one or more well-known database relationships. Literature review: The comprehensive change in the concept of work in university libraries, due to developments, especially modern technology in the field of information services, retrieval and dissemination, has become an indicator that has been achieved. On managing the efficiency of dealing with university libraries, and accordingly, new services and functions appeared, and modern technology data became (3) necessary alternatives to separate the work of libraries and raise the level of scientific performance, as the so-called ARPANET, which means the Advanced Research Administration Network (ARPANET), appeared. Advanced Research Project Administration Network).

This network was used by American universities, and it became suffering from congestion beyond its capacity, which led to the establishment of a new network called (MILNET) in order to serve military matters. The ARPANET network for non-military communications remained, while remaining connected to the Melnet network, and this led to the emergence of the so-called transmission and control protocols. this led to the spread of the network on a wide, and reinforced this with the release of browsers (Microsoft Netscape, Microsoft Netscape) The emergence of information networks in our time, which was a result of the developments that occurred in the field of electronic communication between electronic computers, which facilitated the process of exchanging and transferring information of all kinds and forms across countries of the world.

The first topic: the theoretical framework

The first axis: Domains of cooperation in University libraries
University libraries have a great importance in the educational process in university institutions, and this calls us to pay attention to them and develop them and to know the availability of total quality requirements in them because their quality and efficiency leads to contributing to raising the efficiency of the educational process and increasing knowledge and contributing to achieving part of the requirements of total quality in them and this comes from During its interaction with what is happening in the world of scientific and technological developments and trying to benefit from its data and secretions to develop and achieve the elements of total quality in it. The process of borrowing and downloading e-books has been developed based on computer networks, using e-learning and its technologies for the purpose of taking advantage of the advantages enjoyed by these technologies in order to develop and increase knowledge and raise the level of achievement and scientific thinking [5].

The achievement of many of the positives brings many benefits to both recipients and publishers, and plays a major role in changing the basic features in the use of the information network in collecting information. The use of the information network in education and cognitive

methods that are recognized at the present time lead to many advantages. Among the most prominent advantages of using the information and communication network in public libraries are the following:

1. It provides a rich and meaningful educational opportunity for the recipient.

2. The development of users' skills beyond just learning the content of the specialty.

3. It provides the user with the opportunity to learn and know at any time and any place without being limited to the reading room in the public library, and to adhere to the prescribed reading hours.

4. It gives a new role in the development of professional and academic skills.

5. Speeds up the process of responding to the information, as the time in which the beneficiary can obtain the information is short compared to the usual methods.

6. Changing the usual learning systems and methods, which stimulates perseverance and activity.

7. It makes borrowers get the opinions of scholars and researchers specialized in various fields on any topic they want to study.

8. The low cost of obtaining information compared to other means.

9. Ease of developing the content of existing curricula through the international information network 10. Make the recipient or beneficiary turn from a negative role in the educational process to a positive role and learn through self-direction.

11. It increases the level of cooperation between the beneficiary and the publisher, and between the beneficiaries among themselves.

12. It develops the spirit of initiative and broadens the horizon of thinking among the users of the electronic library, and increases their scientific and cultural achievements and the level of their academic achievement.

13. It helps the beneficiary to learn independently, keeping him away from others, and this keeps him away from negative competition and harassment.

14. You can solve some of the problems associated with the network with their colleagues by having flexibility in the time of communication.

 15. Enable network contacts to obtain the required information, no matter how different the computers and operating systems used are from the devices used in the transmission process. [2] Information technology continued to provide valuable opportunities for libraries; To serve its patrons according to their needs. However, their requirements for it at a time not so long ago, the library was the place where people went to read, borrow books, education and technological development, which allowed the libraries to become in the field of electronic distributors, and that was for the knowledge of those who requested it while at home or what the office knows or anywhere else where that reader is. And perhaps the Internet is really more than that any technology in the sense of providing other information, and information technology has enabled libraries so far to provide access to texts, images and audio and video recordings, stored locally or in remote places, and has enabled the transformation of printed or non-printed collections into forms Electronic mail can be sent to remote beneficiaries. [6]

In a world where the trend has become more towards visuals, and it has become necessary for libraries to develop their working methods to accommodate what is embodied in these changes. The emergence of information technology, which is computer technologies with communication and digital imaging.

The second axis: the role of information networks in university libraries:
What is important for modern libraries is to deal with electronic digital books, and they can achieve the maximum benefit from that by using and retrieving information, including the full text [7].

Since university libraries, which express their relationship to higher learning [8], have recently become oriented towards the necessity of what is known as making basic gaps. The gaps in information technology, [9] and the auction demand for improved services for their quality from stakeholders related to the library, and the demand to provide more in light of the limited resources available in libraries. All of this required restructuring, development and deception [10], placing greater pressures and obligations on library workers, and requiring changes in the roles they play [11]

There is no doubt that the use of information networks requires restructuring, restructuring and building library services throughout the university or institution, and the failure to develop and in line with modern trends leads to the services it provides becoming inappropriate to the needs of researchers, which can expose libraries University to obsolescence. [12]

Therefore, the process of restructuring is in fact consistent with the processes of organizational development where it means functional alignment with new challenges in the environment. Communication networks are one of the manifestations and tools of the information age, [13] it has to integrate the traditional means of knowledge management with strategic planning for what it aspires to, and to provide the appropriate features and benefit from the available technology, and above all encourage positive change in attitudes among library workers towards that, A balanced combination of information systems management and library education curricula may provide a positively oriented professional foundation for library building in the twenty-first century. Among the most prominent basic concepts related to information technology in libraries and university information centers are the following: [14]

a. The weight of information: Experience has proven that the lack of information and the weakness of information systems are the reasons for the low quality and level of access to services, and the utilization of resources by individuals and society in general, decision-making and management in general, [15] is a rational behavior that requires full or partial use of information Or not use it, and this means that the information is valuable because it raises the level of rationality of decision-making through the quality of the information used. [16]

Resource management systems and technical and administrative decision-making constitute the basis for information, the vital tools for diagnosing problems on which it is built and practiced. [17]

The process of meeting information needs is a complex process and requires a deep understanding of these needs. Because it is used to make a decision. In order for information to be usable, it must be of excellent quality, timely and complete, and this is the quality of information. [18]

The Internet becomes more exciting and interesting for the user or the beneficiary when it is integrated with the presentation of the knowledge material with ease and challenges the capabilities of the users in searching from the addresses of the required positions and effective communication with others. [19]

Informatics: is the science that studies the employment and processing of data, information and knowledge. Informatics is not computer science, but rather an application of computer science, and processing information electronically does not give it an additional value to it unless it is basically of a high level of quality. Good raw information takes great value if it is processed by electronic means.

b. Digital Library: A digital library is defined as: "a sub-system in the global information network, and the beneficiary can, through the terminals available in this type of library, access information sources (indexes) anywhere in the world.

This means that this information facility does not hold documents in the same way as a traditional library, but provides access to services, and provides access to full-text and not just metadata about them." [20]

c. Data quality: When the quality management system is implemented, what is known as data quality appeared, and what is meant by data quality: is the main uses of economic and social statistics produced by official statistical agencies and offices that require levels of quality that prevent the production of conflicting or uncoordinated statistics, or suffer from problems related to quality, which usually leads to a loss of confidence in the information produced for statistics. Since the Internet has become an effective means in the learning process, teachers have used it as a main source of information, as it represents a large encyclopedia of information for them, and through it students were able to participate in educational experiences rich in academic subjects by means that were not only possible, but rarely could be imagined without it [21]

(Damoense) asserts that there are many studies, which indicated the importance of employing educational technologies, comprising the Internet, to also integrate with the normal teaching and learning process, which migh lead to effective learning outcomes for students. [22]

Information

Facts

Symbols

(1) The concept of information in the field of computer

The concept of infrastructure of information technology: In its general concept, the infrastructure is all the means, equipment and constructions through which basic human needs can be secured. Roads, bridges and power stations can be considered through communication lines and other traditional examples of infrastructure in any country. In the field of information technology, the concept of basic builders included modern communications services, satellites, Internet networks, personal computers, information centers and libraries, as well as human resources and energies with expertise and efficiency in the fields of computers.

d. Electronic information resources: Electronic of resources information is one of the most prominent recent developments witnessed by libraries and information centers in recent decades, and it is defined as: "everything that is customary, whether it is from traditional information sources (paper and other than that paper) to electronically stored source.

On magnetic or laser media of all kinds, or they are electronically stored resources when they are produced by their publisher (authors and publishers) in database files with boxes, banks and information available to the beneficiary through what is known as Line-On, or inside the library through the compact disk system Rom-CD and others"

e. Electronic information: Electronic information is the services that characterize our current era and is based mainly on withdrawing balances to the beneficiary's side and directing it electronically to libraries, local and regional information centers and the world in light of recent developments. And it is characterized by the multiplicity of operation (system operable-inter) for a wide distribution of information patterns without the requirement to re-change the transmission medium, which allows the learned groups to communicate with each other by a common size [24].
The role of using the information technology in public libraries: The invention of printing had a significant impact on the human scientific inventory to a large degree, which cannot be compared

to what preceded it before this important event, which encouraged those interested in library science to establish classification systems and adopt scientific methods in indexing, extraction and discovery.

The researcher thinks that the rules for books are many books, whether medical, historical, Islamic, cultural or scientific, and their references differ from one university to another based on the modernity of informatics..

The third axis: the results and interpretation of the study

Application of the research: In the beginning, the application was carried out on the users of the first group that used the paper metaphor, and its results were analyzed. I consider this a basis for the implementation of the research. Then the local network was used to communicate with the library databases for the next three months for the first three months. Then the researcher herself, in light of the plans that were previously prepared in the program designed for the database of library boxes, collected the results and performed the necessary statistics. Statistical means were reached: the one-way analysis of variance, Pearson correlation coefficient (and the rupture coefficient and the Cro-Nach-Alpha equation) and the t-test (test) were used to perform the equivalence process and extract the validity and reliability of the results and to know the significance of the statistical differences between the application on borrowing the paper from the library and borrowing by Networks

The third topic: statistical analysis and results

The statistical methods used in the paper: To solve the paper data, the results were emptied into tables, according to the questionnaire phrases applied using the Statistical Package for Social Sciences (SPSS), and using appropriate tests, the sample was subjected to a normal distribution test, to see whether the data follow a normal distribution or not As listed in Table (1).

Table (1) Test for the normal distribution (skewness and flatness) for the resolution fields, and for the resolution as a whole

Domain of resolution	Domain	Arithmetic average	standard deviation	skewness	flatness
First	Information services	3.17	0.52	0.122	0.16-
Second The affecting factors In the information service	The first area: the accessibility of information service from an objective	2.42	0.56	-0.88	0.15

	scientific point of view				
	The third area: the physical accessibility of the information service	3.2	0.97	-1	0.66
	The third area: psychological access to information service	2.38	0.31	0.06	0.64-
	Fourth Domain: Ease of benefiting from the service	2.73	0.71	-0.14	0.77-
	Fifth Domain: The beneficiary's previous experience in dealing with the service	3.3	0.97	-1	0.65
	The paper resolution as a whole	2.77	0.3	-0.35	1.56

From reading Table (1), it becomes clear that the significance level of the distortion coefficient came within the normal value (-1, +1), and the flatness coefficient between (-3), and (+3) for each of the fields and at the level of the resolution as a whole. The use of parametric tests, and the following statistical methods were used:

The arithmetic mean was calculated as well as the relative weight. The degree of difficulties was also determined by the arithmetic mean score as follows:
It is from (1-2.33) with a low degree, from (2.34-3.67) with a medium degree, and from (3.68-5) with a high degree.

(Cronbach's Alpha):

Pearson Correlation Coefficient

Test (t) for differences between two independent samples:

Methodology of Paper:

Methodology of Paper: The researcher relied on the descriptive approach as a methodology.
The research community and its sample: The research community consists of Iraqi university colleges, as two applied colleges (the College of Engineering and the College of Science), and two theoretical colleges (the College of Education and the College of Arts) were chosen. In these faculties, as these students are among the most beneficiaries of university libraries. The number of students reached (16,009) male and female students, distributed to (14752) male and female students for the undergraduate level, and (1257) for postgraduate studies. A stratified random sample was selected with a percentage of (3%) from the university level, which amounted to (443) upon application, and (10%) of the postgraduate students, and it amounted to (125) male and female students upon application. After retrieving the questionnaires, (24) questionnaires not valid for statistical analysis were neglected, and the number of valid questionnaires for statistical analysis reached (544) male and female students. Table (2) indicates the distribution of the study sample according to the studied variables.

Table (2): The distribution of the research sample according to the study variables

variable	Gender		Academic Specialization		Educational level		Total
	Male	Female	Applied Colleges	Theoretical colleges	college leave	Postgraduate	
Number	122	422	144	400	479	65	544
Ratio%	22.4	77.6	%26.5	%73.5	%88.1	%11.9	%100

3.10. Study tools: To answer the study questions, the researcher prepared a questionnaire: she used previous studies to build it, and she also reviewed the educational literature in this field. The questionnaire contained two main areas, the first: information services; The number of its phrases (5), which are: from (1-5), and the second: areas related to the factors affecting the request for information service, namely: The first field: the possibility of accessing information service from an objective scientific point of view; The number of its phrases (5), namely: from (6-8), the second field: the ability to access information service from a physical point of view; The number of its phrases (5), namely: from (8-13), the third field: the possibility of accessing the information service from a psychological point of view; The number of its phrases (2), namely (15,14), the fourth field: ease of benefit from the service The number of its phrases (2), namely (17,16), the fifth field: the beneficiary's previous experience in dealing with the service; The number of its phrases (3), which are: from (18-20). The method of correction was adopted according to a five-

point scale for each of its paragraphs as follows: (always: grade 5 was given, often: grade was given 4, sometimes: grade was given 3, rarely grade was given: 2, never: grade was given 1).

The validity of the paper resolution: The validity was verified in two methods:

1- Apparent honesty: the researcher presented the study tools to a group of arbitrators, in the College of Education in Iraqi universities as a random sample, and specialists in this field, and their number reached (7), and they were asked to express their opinions on the items of the questionnaire, in terms of their relevance to the subject of the research, the clarity of the questions and clauses, and the integrity of the language. After reviewing the arbitrators' proposals, the amendments they referred to were made, as some clauses were deleted, and others were modified to become in their final form consisting of (20) phrases.

2- Structural honesty: The validity coefficients were calculated on an exploratory sample that consisted of (38) male and female students. Table (2) shows the correlation coefficient between the degree of each field of research and the overall degree. From it, we show that all correlation coefficients are statistically significant, and thus the fields of the resolution are valid for what they were designed to measure.

Table (3) states the Correlation coefficient between the degree of each field of research and the total score of the research questionnaire directed to the pilot sample

Domain of resolution	Domains	number of phrases	Pearson Correlation Coefficient	probability value
First	Information services	5	**0.689	0.000
Second	First area: the accessibility of information service from an objective scientific point of view	3	**0.69	0.000
	Third Domain: Access to the information service (in physical terms	5	**0.448	0.002
	Third Domain: Accessibility of information service (in psychological terms)	2	**0.848	0.019
	Fourth Domain: Ease of benefiting from the service	2	**0.447	0.002
	Fifth Domain: The beneficiary's previous	3	**0.683	0.000

	experience in dealing with the service			

Study resolution stability: The stability of the resolution was calculated using Cronbach Alpha and test-Retest methods on a pilot sample that consisted of (38) male and female students from outside the research sample. Its value was (0.92), at the level of the questionnaire as a whole, which indicates that the study tool has high stability, so that it can be applied to the study sample as a whole, and the results are shown in Table (3).

Table (4): shows the stability coefficient of the fields of the study tool by the methods of Alpha Crow-Nbach and the stability by repetition

Domain of resolution	Domain	number of paragraphs	Cronbach's alpha coefficient	persistence replay
First	Information services	5	0.687	0.686**
Second	First Domain: Access to information service (from an (objective scientific point of view	5	0.695	0.739**
	Third Domain: Access to the information service (in physical terms)	5	0.665	0.832**
	Third Domain: Accessibility of information service (in psychological terms)	2	0.811	0.92**
	Fourth Field: Ease of using the service	2	0.808	0.983**
	Fifth Field: Previous experience of the beneficiary in dealing with the service	3	0.685	0.683**
	The total degree of the resolution	22	0.841	0.92**

Table (5) Shows the level of university library provision of conditions and factors encouraging requesting information services in terms of ease of use

Number	phrases	Arithmetic average	standard deviation	relative weight	Availability degree of worker
1	The time of borrowing is inconsistent with the lecture time	2.47	0.68	45.74	medium

2	I get what I want at the right time	1.94	0.68	49.41	low

By reading it, it becomes clear that the degree of library availability of the factors encouraging the request for information services in terms of ease of use was low at the overall level, with mean (1.94) and (2.47), and relative weights (45.74%) and (49.41%), the phrase (time of Borrowing interferes with the time of lectures) to a moderate degree. This is due to the fact that there are two days of loan for each department in each university college. Sometimes the students' lecture schedule is compressed and sometimes the opposite. The phrase (the origin of what I want at an appropriate time for research) came to a low degree, due to the nature of the current research tasks at the university, which is characterized by the novelty of the information it requires compared to the oldness of university library resources.

Table (6) states the degree to which the university library provides the conditions and factors encouraging requesting the information service in terms of the beneficiary's previous experience in dealing with the service

Number	phrases	Arithmetic average	Standard deviation	relative weight	Availability degree of worker
1	The services provided by the college library are of good quality	1.93	0.66	35.04	Low
2	The college library provides its services quickly	1.92	0.67	38.38	Low
3	The college library is the first source for solving the academic problems that I face	4.08	1.26	81.95	High

By reading it, it is evident that the degree of availability of the library to the factors encouraging the request for the information service in terms of the previous experience of the beneficiary in dealing with the service was medium, with arithmetic averages ranging between (1.92) and (4.08), and relative weights (35.04%) and (81.95%), The two statements (the services provided by the college library are good and quality, the college library provides its services quickly) came to a low score. This is due to the fact that information services are limited to providing sources and ignoring the rest of the other qualitative services, and to the random arrangement of sources on shelves, especially returned sources, which makes the task of finding the reference almost impossible. The phrase (the college library is the first source for solving the academic problems that I face) came to a high degree, due to the university professors directing students to use the university library and making it the first place to ensure that there are sources in the library about the research tasks assigned to their students despite the low services it provides

and what it provides. Its availability is one of the encouraging factors for requesting information services. The following is the analysis of the paper's hypothesis:

First hypothesis: There is no any statistically significant difference at the significance level of 0.05 between the mean scores of the research sample members on the information services provided by the university library due to the gender variable. To detect the differences between the mean scores of students' answers about the degree of availability of information services in the university library due to the gender variable (males, females), the test (t) was employed for independent samples, and the results were included in Table (7).

Table (7) states the results of the test (t) for the differences between the answers of the sample members about the difficulties of informational research according to the variable of gender

Domain	Kind	Sample	Arithmetic average	Standard Deviants	(t) Calculated	Probability value (P)	Dicissoin
Information Services	Male	122	2.84	2.00	19.85	0.000	Significant
	Female	422	3.62	1.23			

from Table (7), it is observed that the probability value was smaller than the significance level (0.05) at (542) degrees of freedom and (95%) confidence level. Therefore, the hypothesis that the differences between the average opinions of males and females are statistically significant is accepted. This is due to the fact that female students use the university library more than male students and are more adaptable and satisfied with the services it provides, compared to male students who find the university library services few and weak.

Second hypothesis: There is no statistically significant difference at the significance level (0.05) between the mean scores of the research sample members on the information services provided by the university library due to the academic stage variable. To detect the differences between the mean scores of students' answers about the degree of availability of information services in the university library due to the variable of the educational stage (university, studies), the test (t) was employed for independent samples, and the results were included in Table (8).

Table (8) states the results of the test (t) of the differences between the answers of the sample members about the difficulties of informational research according to the variable of the educational stage

Domain	Stage	Sample	Arithmetic average	Standard Deviants	(t) Calculated	Probability value (P)	Decision
Information Services	college	479	1.82	0.37	-0.67	0.47	Insignificant
	Studies	65	1.86	0.41			

From Table (8), it is noted that the probability value was greater than the significance level (0.05) at (542) degrees of freedom and (95%) confidence level. Therefore, this means accepting the null hypothesis that the differences between the average opinions of undergraduate students are accepted, which means that the opinions of graduate students are not statistically significant. This may be due to the fact that the students using the two stages are looking forward to services that are actually more qualitative and useful additional information.

Third hypothesis: It states that there is no statistically significant difference at the significance level of 0.05 between the mean scores of the research sample members on information services, which are provided by the university library, which is attributed to the academic specialization variable. To confirm the validity of the third hypothesis of the study, and here it was necessary to reveal the differences between the average scores of students' answers about the degree of availability of information services in the university library, which is due to the variable of academic specialization (theoretical, applied). Table (9).

Table (9): Results of the test (t) for the differences between the answers of the sample members about the difficulties of informational research according to the variable of academic specialization

Domain	specialization	Sample	Arithmetic average	Standard Deviants	(t) Calculated	Probability value (P)	Decision
Information services	Applied	144	1.46	0.42	-16.81	0.000	Significant
	Theory	400	1.95	0.25			

From Table (9), it is observed that the probability value was smaller than the significance level (0.05) at (542) degrees of freedom and (95%) confidence level. Therefore, it accepts what is known as the hypothesis that the differences between the average opinions of theoretical college students and the opinions of college students, and it is applied, are statistically significant. This is due to the fact that students in applied faculties find the services provided by the library, which are not sufficient for the speed of developments in applied sciences from one moment to another, compared to theoretical sciences, which are also developing at a lesser degree of speed, and this makes information services very few for students in faculties. The applied study compared to students in theoretical colleges agrees with this result of the study (Al-Omran, 2010) and since the academic specialization affects the students' opinions about services, which are also provided by the university library.

Fourth hypothesis: According to the hypothesis, which is that there is no statistically significant difference at the significance level of 0.05 between the mean scores of the research sample members on what is known as the degree of availability of the university library to the factors encouraging the request for information services due to the variable also type. The researcher revealed the differences between the average scores of students' answers about the degree of library availability to the factors encouraging the request for information services due to the variable that

matters to gender (males, females). The test (t) was used for independent samples, and the results were also included in Table (10).

Table (10) states the results of the t-test of the differences between the answers of the sample members about the degree of availability of the university library to the factors encouraging requesting the information service due to the gender variable

Domain	specialization	Sample	Arithmetic average	Standard Deviants	(t) Calculated	Probability value (P)	Decision
Scientific factors	Male	122	2.70	0.84	18.77	0.000	Significant
	Female	422	1.64	1.20			
Physical factors	Male	122	2.95	0.35	-8.03	0.000	Significant
	Female	422	2.31	0.69			
psychological factors	Male	122	2.14	0.39	12.94	0.000	Significant
	Female	422	2.28	0.25			
Usability	Male	122	2.28	0.54	19.68	0.000	Significant
	Female	422	1.55	0.78			
Previous Experience	Male	122	2.77	0.68	17.32	0.000	Significant
	Female	422	1.53	0.99			
domains as a whole	Male	122	3.07	0.14	16.85	0.000	Significant
	Female	422	2.33	0.48			

Fifth hypothesis: There is no any statistically significant difference at the significance level of 0.05, between the mean scores of the research sample members, on the degree of availability of the university library to the factors encouraging the request for information services due to the variable of the academic stage. To detect the differences between the average scores of students' answers about the degree of library availability to the factors encouraging the request for information services due to the variable of the educational stage (university, studies), the test (t) was employed for independent samples, and the results have been included in Table (11).

Table (11): Results of the test (t) of the differences between the answers of the sample members about the degree of availability of the university library to the factors that encourage requesting the information service due to the academic stage variable

Domain	specialization	sample	Arithmetic average	Standard Deviants	(t) calculated	Probabiliy value (P)	Decision
Scientific factors	College	479	3.68	0.29	20.83	0.000	Significant
	Postgraduate	65	2.27	0.82			

domain		sample	Arithmetic average	Standard Deviants	t calculated	Probability Value (P)	Decision
Physical factors	College	479	2.68	0.25	-5.58	0.00	Significant
	Postgraduate	65	2.94	0.47			
psychological factors	College	479	2.50	0.00	15.03	0.00	Significant
	Postgraduate	65	2.06	0.38			
Usability	College	479	2.93	0.20	20.18	0.00	Significant
	Postgraduate	65	1.99	0.52			
Previous Experience	College	479	3.55	0.26	17.68	0.00	Significant
	Postgraduate	65	2.38	0.73			
domains as a whole	College	479	2.57	0.45	10.50	0.00	Significant
	Postgraduate	65	1.86	0.71			

from Table (11), It is observed that the probability value was smaller than the significance level (0.05) at the degrees of freedom (542) and the confidence level (95%). Therefore, it accepts the hypothesis which states that the differences between the average opinions of undergraduate students and the opinions of graduate students are statistically significant. This is due to the fact that the university library provides the same conditions for both, but the postgraduate students are more aware of the degree to which information services should be available in the university library, and they are more demanding and researching. The current study differs from all previous studies in studying the factors affecting the request for information services from the university library.

sixth hypothesis: There is no any statistically significant difference at the significance level of 0.05 between the mean scores of the research sample members about the degree of availability of the university library to the factors encouraging the request for information services due to the academic specialization variable. In order to detect the differences between the average scores of students' answers about the degree of library availability to the factors encouraging the request for information services due to the variable of study (applied colleges, theoretical colleges), the test (t) was employed for independent samples, The results have been included in Table (12).

Table (12): Results of the test (T) of the differences between the answers of the sample members about the degree of availability of the university library to the factors encouraging requesting the information service due to the academic specialization variable

domain	Academic specialization	sample	Arithmetic average	Standard Deviants	t calculated	Probability Value (P)	Decision

Scientific factors	Applied Colleges	144	3.63	0.29	20.83	0.000	Significant
	theoretical colleges	400	2.21	0.80			
physical factors	Applied Colleges	144	2.71	0.24	-5.58	0.831	Significant
	theoretical colleges	400	2.94	0.49			
psychological factors	Applied Colleges	144	2.50	0.00	15.03	0.006	Significant
	theoretical colleges	400	2.03	0.37			
Usability	Applied Colleges	144	2.87	0.24	20.18	0.411	insignificant
	theoretical colleges	400	1.96	0.52			
Previous Experience	Applied Colleges	144	3.46	0.31	20.68	0.426	insignificant
	theoretical colleges	400	2.38	0.74			
domains as a whole	Applied Colleges	144	3.03	0.15	18.12	0.523	insignificant
	theoretical colleges	400	2.30	0.48			

From Table (11), it is noted that the probability value was smaller than the significance level (0.05) at the degrees of freedom (542) and the confidence level (95%). Therefore, it accepts the hypothesis that the differences between the average opinions of undergraduate students and those of graduate students are statistically significant. This is due to the fact that the university library gives the same conditions for both, but the postgraduate students are more aware of the degree to which information services should be available in the university library, and they are more demanding and researching. The current study differs from all previous studies in studying the factors affecting the request for information services from the university library.

Discussing the results and conclusions:

The most important results were as follows:
- ❖ The use of local communication networks and local databases as one of the applications and techniques of electronic communication to help in the process of electronic borrowing from

the public library. We note that it has enabled the second group to obtain additional information, more explanatory explanations and a larger quantity of borrowed or downloaded books, and contributed to providing borrowers with an additional source of information that depends Modern technologies in education have enabled them to find the information they need, so they interact with it with desire and longing.

❖ Communication networks have helped individuals obtain this information, reduce the time needed to absorb it, and give them opportunities in addition to learning outside the regular lecture time in universities and institutes. As well as the presence of excitement, longing and diversity in the ways of presenting this information.

Second: Conclusions

From the results, we conclude the following:

1. The use of computer networks to borrow and carry books from within the departments and units without going to the public library has positively affected borrowers and subscribers to a greater degree than using them before using local networks to enter the public library.

2. There are clear differences in the hypotheses of the study in favor of informatics and information networks, which aim to pay attention to the role of digital informatics, which works to link information networks in libraries.

3. The use of database applications, communication networks and various technologies, including the computer and its accessories, to provide additional information and explanations to the users for the students about the material being studied in the belief lecture is a useful method in the learning process.

4. Various applications and programs related to databases, communication networks and various e-learning technologies can be used in the teaching process for its development, efficiency and ease.

Recommendations

The researcher reached the most important recommendations, which are:

1. Using computer networks and databases as one of the information technology techniques to obtain the required information quickly and interestingly, and the speed of carrying the required scientific material

2. It is preferred to use local communication networks, either between departments and units, to transfer and exchange data and information and process it.

3. The necessity of providing updated and special databases for university libraries that work on electronic research and keep pace with modern science.

4. Establishing a rotary specialized in the field of computer networks, databases, computer applications and its various technologies to train institutes and universities and students of institutes and universities on the use of preparing programs for linking databases with computer communication networks.

5. Conducting various researches and studies to show that the various applications and techniques of local communication networks and databases provide additional information and explanatory explanations for affiliates of institutes, universities and students in a number of subjects and stages of study.

6. Supporting the university library with qualitative information services (direct reference, ongoing briefing, selective broadcasting, training of beneficiaries).

7. The necessity of providing the university library with the most important conditions encouraging the request for the information service (scientific factors, physical factors, psychological factors, ease of benefiting from the service, the beneficiary's previous experience in dealing with the service)

References

[1] Donatti, Steve et al (2000). The Internet in that Curriculum, (in) Technology 2000 Website

[2] Al-Mousa, (2000) Abdullah. Effective use of communication services in education. Saudi Arabia, Muhammad bin Saud University,Titus, (1998). the Internet in the Physics Classroom, and Davidson College in North Carolina, U.S.A.

[3] Suleiman Saleh and Somaya Arafat (2006.) Educational TV and Future Prospects, Proceedings of the International Conference on Distance Education, Muscat University, May 27-29, Oman

[4] Al-Omran, Hamad (2010), "Informational behaviors among graduate students." Arab libraries and information magazine.

[5] The first scientific conference of Dhi Qar University, Iraq. University of Dhi Qar, 24-25 OctoberGraws(1999) ,Johan .An Evaluation of the Use Fulness of the Internet in the EFL Classroom .

[6] Kuhn, Thomas (2001) Internet Teaching: Introduction (in) EESE, Vol.5

[7] Titus, Aaron. (1998) the Internet in the Physics Classroom, and Davidson College in North Carolina, U.S.A.

[8] Al-Fotokh, Abdul Qadir and Abdul Azaz Al-Sultan. The Internet in Education: The Electronic School Project. The Arabian Gulf Message Journal, Volume 21, the Arab Bureau of Education for the Gulf States, Saudization, Al-Rad, 1999.

[9] Shaaban Khalfa. It is in the foundations of event publishing. - Cairo: Al-Arabi for Publishing and Distribution, 1992, p. 19.

[10] Dajani, Dua'a Jabr and Nader Atallah Wehbeh, "The difficulties that hinder the use of the Internet as an educational tool in Palestinian schools," The Learning Process in the Internet Age Conference, Palestine, An-Najah National University, March, 2001.

[11] Zan El-Din, Muhammad. E-Learning Competencies. Saudi Arabia, Jeddah, Khwarizm Publishing House, 2007.

[12] Suleiman Saleh and Somaya Arafat (2006.) Educational TV and Future Perspectives, Proceedings of the International Conference on Distance Education, Muscat University, May 27-29, Oman

[13] Abdel-Aty, Hussein Al-Batea Mohammed. A proposed program to train teaching assistants and assistant teachers at the Faculty of Education, Alexandria University, on some uses of the Internet according to their training needs. Egypt, Alexandria University, 2001 (unpublished master's thesis)

[14] Al-Omran, Hamad (2010), "Informational behaviors among graduate students". Journal of Arab Libraries and Information, 301-300

[15] The first scientific conference of Dhi Qar University, Iraq. University of Dhi Qar, November 24-25, 2004.

[16] Al-Mousa, Abdullah bin Abdul Aziz. Effective use of communication services in education. Saudi Arabia, Muhammad bin Saud University, 2000.

[17] Al-Yasiri, Arwa Issa, "The Culture of Scientific Information in the Media." The Arab Journal 3000. pp. 68-49. 2006, No. (4)

[18] Graws (1999), Johan. An Evaluation of the Use Fulness of the Internet in the EFL Classroom ,University of Nijmegen, (Unpublished Master's Thesis)

[19] Moras, Solange. Computer-Assisted Language Learning (CALL) and the Internet, Brazil, Cultra Inglesa De Sao Carlos , June , 2001

[20] Hubber and William Harriett G ., Applying the Unlimited Potential of the Internet in Teaching Middle School Science, U.S.A. University of North Carolina,1999.

[21] Kuhn, Thomas (2001) Internet Teaching: Introduction (in) EESE, Vol.5, Berlin.

[22] Titus, Aaron. (1998) the Internet in the Physics Classroom, and Davidson College in North Carolina, U.S.A.

[23] Hubber, Richard A. and William Harriett G. (1999) Applying the Unlimited Potential of that Internet in Teaching in the Middle School Science, U.S.A. University of North Carolina.

[24] Damoense, Maylene Y. (2003): Online Learning: Implications for Effective Learnning for Higher Education in South Africa, (in) Australian Journal of Educational Technology, Vol. 19, No.1. WWW.IVSL computing and internetworking willeam shaaown 2008