

## Virtual ( Electronic ) Reference Services In Academic Libraries

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### Abstract

This paper deals with the concept of electronic reference services in academic libraries , showing forms of communications , training needs for reference librarians and the role of the librarian in the new technological environment.

### Introduction:

Technology is developing at a very fast rate and what looks a myth a few years back is becoming a reality now . The largest single factor which caused the significant changes in library operations and services in this has century is undoubtedly the evolution of information technology. Technology has changed the way the libraries serve their users and this change will continue in the future. While continuing to provide many traditional information services, libraries are developing new skills and taking new roles that are necessary to support technology base services.

In libraries and information centers “reference service is an important personalized service. Traditionally, it is a one – to – one service with user and reference librarian. The user is helped by the variety of sources available to meet the information needs. But in the present time, facing the challenges of so called “electronic age” and being transformed by technology. So the advancement in information technology has brought out incredible changes in almost every aspect of information services

This paper deals with many primary aspects of VRS (virtual

reference service). Those include classification of these services, objectives, forms of communication, training needs in the use of new technology, the role of the reference librarian in the new environment. Finally there is the possibility of introducing the service in academic libraries in Iraq.

### Aims and objectives:

The primary objective of this study is to investigate and identify the current level of virtual reference services offered in libraries around the world, and the possibility of introducing these services in academic libraries in Iraq.

### Definitions

Virtual reference is an online reference service that enables library patrons to ask reference questions through a library’s web site. The user may be at home, in an office, at school, or in a library. Some virtual reference services also place answers to frequently asked questions (FAQS), selected reference tools, and access to selected databases on the web site.

Unlike traditional reference, virtual reference services allow patrons to submit questions and receive answers via the internet and other electronic means Berube (2003) shows that digital or virtual reference primarily refers to a network of

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expertise, intermediation and resources placed at the disposal of someone seeking answers in an online environment. Wasik ( 2003 ) defines 'digital reference' and ASKA services as internet – base question – and – answer services that connect users with experts in a variety of subject areas . In addition to answering questions, experts may also provide users with referrals to other online and print sources of information. Kaza states that the term 'virtual reference' , 'digital reference' , 'e – reference' , 'internet information services' , 'live reference' , and 'real – time service' are used interchangeably to describe reference service that utilize computer technology in some way .

### Objectives of VRS

VRS have the following objectives:

- To provide individual assistance and instruction.
- To provide and maintain an appropriate collection of reference resources , both print and electronic
- To assist users with locating the best source of information
- To help in marketing references and resources
- To serve as a public relations representative
- To help in online searching to help in professional activities for professional development and growth
- To help in referral process , in forwarding the enquiry or providing the user with live links to authoritative websites
- To educate users concerning resources and research techniques in order to help them to become information literate ( Maharana )

### Classification of Virtual Reference Services

The virtual reference service models can broadly be divided into three categories:

#### 1. Asynchronous Transaction

This category involves a time delay between the question and answer, such as with e – mail based, web form or Ask a service, virtual Reference Desk (VRD) service, Question Point, Online Path – finders etc.

#### 2. Synchronous Transactions

This category, on the other hand, takes place in ( real time ) with an immediate response to the query , such as in chat based services , video conferencing or web cam services , digital Reference Robots , Real time Reference Services ( Live Ref , 24/7 Ref ) , etc .

#### 3. Collaborative Networks

Many libraries and organizations have recognized the benefits of providing digital reference service through Collaborative services. Some regional library consortia are offering member libraries the opportunity to share reference questions with each other using the internet and other technologies. The Collaborative Reference Service (CDRS) operated by the Library of Congress, is an international network of libraries, consortia, museums, task a service, that uses a help desk system to route questions and to appropriate institutions based on member profile

**Forms of Communication:**

There are several forms of communications between a remote library patron and a reference librarian in an academic library:

**E – Mail reference service:**

E – Mail reference service refers to traditional reference service conducted through the medium of electronic mail messages exchanged between patron and librarian.

E – Mail reference service is currently used by a variety of patrons. They include faculty and students on campus, faculty and students who are not currently working in residence, and members of the local and global communities. Questions may be submitted at any time of day or night, whenever an information need occurs.

A comparison of E – mail and conventional (in person or by telephone) reference services reveals both differences and similarities. Both services require visible contact points, a link on the library web site or a reference desk (Lagace & McClennen, 1998) in either situation, patrons must state their need in the form of a question, or a series of questions. In general, E – mail reference queries tend to state information needs more clearly because the time required to write them encourages a better formulation of ideas (Bushallo – Wibur 1996)

The Communication which constitutes the question negotiation process can occur in both E – mail and conventional reference service. In the conventional reference interview, the librarian may ask one or more neutral questions and rely on the patron's verbal and nonverbal clues to facilitate question negotiation (Dervin, 1986)

This type of diagnosis of information needs is an interactive, holistic process during which the librarian's intuition may be involved

(Grover, 1995). E – mail reference librarians must, however, rely upon follow – up questions and answers which contain very little, if any, of the non – verbal communication which can be such an essential part of conventional service (Bushallo – Wibur, 1996). In the conventional reference interview at the point of which the librarian arrives at a prescription and treatment of the patron's information needs, the librarian may again have the advantage of verbal and non – verbal patron clues to evaluate the effectiveness of their service with e – mail reference service, the patron may be satisfied with the librarian's response, or may counter that response with another e – mail message unless patrons provide evaluative feedback in the form of another message, the e – mail reference librarian has to rely solely upon personal judgment to evaluate effectiveness of service. This service supplements the conventional one and it is especially useful to remote patrons and is becoming an integral part of distance education.

A web form is somewhat better than e – mail because it can be designed to elicit all of the needed information, including the all – important “needed by” information (Boss.)

Live, interactive chat was tried by many libraries to overcome the drawbacks of e – mail and web forms. However, chat software is designed for one – to – one conversations among friends, not for high – volume question – answering services that must be able to queue and route questions

Increasingly, libraries are turning to web contact center software. The software is designed for answering questions and providing interactive customer services. It queues and routes

web calls to the next available staff member , allows a staff member to push web pages to service users , supports the building and maintenance of knowledge bases and allows questions and answers to be captured for inclusion in a FAQ file . Many of the web call center products also include VOIP (voice over internet protocol) so that voice communications is possible.

A particularly attractive feature of some web contact center software is co – browsing. It enables a reference librarian and a patron to share the same web pages including online databases and other services that require authentication.

Among the most widely used web contact center software for libraries is Ask A Librarian from Tutor. com ( [www.tutor.com/ products/aal . aspx](http://www.tutor.com/products/aal.aspx) ) and VRL plus from Docutek ([www.docutek.com / products / vrplus / index / html](http://www.docutek.com/products/vrplus/index/html)). Tutor not only offers software, but also back – up online reference staffing

### **Training needs in the use of new technology:**

Reference librarians are confronted by a rapidly changing environment. There are three major aspects to this change: new technology, and the potential for new services which it brings; the demands and expectations of library users, and librarians' own changing expectations for education and training. These changes give rise to training needs which are met by libraries in a variety of ways (Cullen)

The information sources that reference librarians now deal with encompass print materials, CD ROM, online bibliographic databases in a range of formats; electronic journals, and digital texts supplied from a number of vendors or downloaded from the internet. Each of these formats requires both generic and

highly specific search skills and command of search languages .Mastery of these new technologies is thus accompanied by the need to adapt old skills to a new environment.

At the same time, library users are changing. In an academic environment, they come with new expectations of high quality services and a need to upgrade their own information retrieval skills on a regular basis.

The major challenges posted for librarians in the electronic reference environment include learning new web and electronic database resources expanding the reference process with customers and meeting higher expectations of customers (Roger, 1998)

He and Knee (1995) also recognize the need for constant transition between print and digital collections. They say it is important for electronic services librarians to be familiar with traditional as well as electronic reference sources. By learning traditional sources they will be able to recognize which internet sources will be available

From the experience of libraries in introducing technologies to provide reference and information services expressed by leading professionals in the field , a number of key areas can be identified which give rise to training needs . These can be grouped as follows: (Cullen,)

- Technical skills to manage a range of new technologies effectively , from PC – based LANS to electronic document delivery stem
- Higher level skills in information retrieval across a wide range of platforms (this may include language skills).
- The ability to search the web, familiarity with some of the most valuable resources available on the web, and the ability to evaluate

critically information found on the web.

- Knowledge of teaching principles and techniques necessary to train user's evaluation.
- an ability to effectively design and deliver new services such as electronic reference service (e-mail or web – based)

### **The role of the reference and the new technological environment**

The role of the reference librarian in academic libraries has undergone significant amount of change due to the advancements of electronic media.

The increased workload in general is an important example of how the role of reference librarians has been effected as well (Edwards,)

Reference librarians are training themselves to become better instructors in the area of electronic media due to the complexity of questions presented by students who use the sources. Many reference librarians feel that the development of skills associated with operating electronic media in the academic library, are an asset to their position. Users of the academic library have definitely benefited from the change in the role of the reference librarian (Edward, 2004)

Many reference librarians have found that working in this environment is very satisfying and that it has boosted their professional standing with their users and with other members of their communities. They answer a wide variety of questions faster and more easily than before. They participate as experts in complex decision making on computer systems and networking arrangements with administrative and governing officials in their institutions. Their instructional programs help users learn how to thrive in this information age. The

electronic environment also brings challenges to the reference librarians, especially the burden of gaining and maintaining an ever - widening range of skills and knowledge (Bopp, 2001)

### **The possibility of having Virtual Reference Service in academic libraries in Iraq:**

To begin with, there are some concrete factors that should be made available before thinking of launching this kind of service. These factors are electricity and communication. Advancement in these fields will pave the way for making use of all that the world has worked hard to achieve .Moreover

We need, basically, improvement in traditional reference services that are currently given in our libraries; we need to improve things related to libraries including acquisition of new sources, staffing, and above all the way officials look at librarianship, librarians and library services it means changing their attitude towards these matters.

## Conclusion

Virtual reference service is an online service that enables library patrons to ask reference questions through a library's web site. The user may be at home, in an office, at school, or in a library. Initially, the most common forms of communications between a remote library patron and a reference librarian are e – mail and online web forms. Live, interactive chat is tried by many libraries to overcome the drawback of e – mail and web forms. Increasingly, Libraries are turning to web contact center software. Among the most widely used web contact center software packages for libraries are Ask A Librarian from Tutor.com.

Reference librarians are confronted by a rapidly changing environment. Training needs programs are emphasized to cope with the new environment. The role of the reference librarian has undergone a significant amount of change due to the advancements of electronic media. The needs of patrons will increase as will the formats of electronic media they will use. For this reason, the role of the reference librarian in academic libraries will continue to experience changes for years to come.

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## الخدمات المرجعية الافتراضية (الإلكترونية) في المكتبات الجامعية

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### الملخص

يغطي البحث مفهوم الخدمة المرجعية الإلكترونية في المكتبات الجامعية في مختلف بلدان العالم، مع بيان أهداف وأشكال الاتصالات التي تقوم بها هذه الخدمة، ودور المرجعي في البيئة الإلكترونية الجديدة والحاجة إلى التدريب في هذا المجال.