Virtual Reference Service in Libraries of IIM in India: A User Survey

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ABSTRACT:

The paper highlights on Virtual Reference Service, how the new face of service is evolving as a natural solution to keep pace with the multifaceted technological environment. Virtual Reference Service is providing current trend of their service. The paper is highlighted on the role of Virtual Reference Service. It is specially focused on the user study in IIM Libraries in India.

Keywords: Reference Service, Virtual Reference Service, IIM, Academic Libraries, India.

INTRODUCTION

The primary aim of the library is to offer a variety of services to its clientele to meet their specific information requirements. Several techniques such as classification, cataloguing, shelving lists, OPAC, open access to its readers and similar other types of services are all indirect form of assistance to users to find their document in the library. One of the basic objectives of every library and information centre is to save the time of the user as well as to provide specific information as quickly as possible. The method used for the same involve personal efforts to bring together user and his document. Hence, this method of providing personal attention to readers in terms of meeting their specific needs is given the name 'Reference Service'[4].

The Reference service is one of the library's primary services besides acquisitions, classification, cataloguing and physical planning. This service provides personalized assistance to library users in accessing and using suitable information resources to meet the needs of reader.

Libraries and Information services have long been engaged in providing reference services to their users. of late, with introduction of Internet and digital libraries the nature of reference services has changed significantly. A number of digital

reference services (DRS) now available from library and non-library organisations.[6] DRS can be divided according to the type of technology used.[21] Because of its ease of use and universality.

Dr. S. R. Ranganathan stated in the present electronic and communication environment reference service is not only confined to the library service but also to remote users. Sometimes, it is termed as E-reference service, Digital Reference Service and Virtual Reference Service.[22] Its main objective is to provide pin-pointed, exhaustive, expeditious service to its information seekers whenever they have a query.

In the present era of Information and Communication Technology, the concept of library and its services has totally taken a new face. The World Wide Web provides information at users fingertips. The gap between information and user is minimizing day by day.

In the fast changing technological era, with the advent of internet as powerful medium to provide the information round the clock i.e. 24*7. The internet with its services like e-mail, www, bulletin board services have changed the notion of traditional library into virtual library and the traditional services are now called information services.[23] to meet the quick demand of the user, librarians maintain virtual collection and also access e resources and provide information in virtual mode. With the emergence of virtual library and influence of internet, the concept of traditional reference service has transformed into Virtual Reference Service.

To meet the information needs of the users in changing technological environment, Virtual Reference Service is a natural solution which is supposed to be an advancement of the traditional reference service.[24] Virtual Reference uses the internet to allow people to connect with a librarian. In the process of providing virtual reference service the reference librarian receives question via e-mail or web interface, identifies the query and then decides appropriate course of action. They analyses the request and gets the type of information required.

Libraries and their resources have partially moved to the virtual world of the Internet. As a result, library users can access the resources from outside the physical library.[26] In an effort to reach users accessing the library via their computers, many libraries and library consortia are extending their services to include virtual reference. Technology now allows users to submit their queries to the library at any time from any place in the world.

In the 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.[14]But in the present era, the library and information profession is 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.

It has been observed that many large and modern libraries in abroad and also in India have a general reference desk, full time reference librarians with subject specialists and off desk responsibilities.[15] This type of an environment need to be cultivated in academic libraries, especially in Indian Institutes of Management (IIMs) where the thrust is on imparting education and pursuing research and consultancy. Thus, with the advancement of changing technology, the mode of providing reference service in the academic libraries is gradually changing. It is now presented to the user in a new and more developed form that is "Virtual Reference Service", which is otherwise known as "Digital Reference Service".

Unlike traditional reference, virtual reference services allow patrons to submit questions and receive answers via the Internet and other electronic means. Digital Reference or Virtual Reference primarily refers to a network of expertise, intermediation and resources placed at the disposal of someone seeking answers in an online environment[1]. "Digital Reference and Ask a services are Internet-based 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"[27]. The Reference Service is the 'part of library administration that deals with the assistance given to readers for use of resources of the library'.

RERERENCE SERVICE

According to 'Ranganathan, right contact means, "contact between the right reader and the right book at the right time and in the right personal way." He is of the view that the establishment of such a contact is "the only available and effective method"[25].

Reference services also sometimes referred to as 'Reference and Information services' which means personal assistance provided to the users and potential users of

information. It is characterized by a high degree of interaction between staff members and individual users or specifically identified group of users or potential users[3]. For providing such personalized information service has remained the main aim of library and information profession. In another definition has defined it as 'that part of library administration which deals with the assistance given to readers in their use of resources of the library'[28].

VIRTUAL REFERENCE SERVICE (VRS)

Virtual reference is a service by which a library reference service is conducted online, and the reference transaction is a computer-mediated communication. It is the remote, computer-mediated delivery of reference information provided by library professionals to users who cannot access or do not want face-to-face communication. Virtual reference service is most often an extension of a library's existing reference service program[10].

Virtual Reference Service is also an Internet based reference service where a user can ask a question online, where the user and the librarian communicate in real time[2]. It uses computers and communication technology to provide reference service to users anytime and anywhere.

Virtual Reference Service is an online reference service that enables library patrons to ask reference questions through a library's website. The user may be at home, in 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 website[13]. The question answering service using Internet technology is the essential component, without which the use of the name "Virtual Reference" is misleading.

VRS is defined as the provision of real-time personal assistance to patrons via web- based interactive software. To meet the user at his or her "point of need" and to satisfy the patron's information need, the librarian can use a "Chat" component of the software to answer a fairly specific or simple question, possibly deliver slideshows, 'push' web sources to the patron, and provide online bibliographic instruction[8]. The "point of need" may happen when the library is closed, or when the user is unable to get to the library. This way, users can still be in contact with experienced reference librarians.

BENEFITS OF VIRTUAL REFERENCE SERVICE

Admittedly, the lack of time and physical cues can be considered drawbacks of virtual reference. However, it does provide benefits that other forms of reference lack:

- Reaches users in and out of libraries/social inclusion
- Invites new users into the library
- Provides better remote service for users-real information need met
- Adds online learning component - can walk users through finding the information themselves, as in face to face service
- Supports real-time immediate assistance, immediate gratification
- Extend library service hours
- Prepare student/user for making better use of physical repositories/archives, by confirming material, sending out finding aids, rules, regulations in advance
- Takes the library to the users

ELEMENTS OF VIRTUAL REFERENCE SERVICE

Virtual Reference Service incorporates the following basic elements[16]:

- The User
- The interface (web form; e- mail; chat; video etc.)
- Electronic resources (including electronic or CD –based resources; web resources; local digitized material etc.) as well as print resources
- The information professional

MODES OF VIRTUAL REFERENCE SERVICE

The Virtual Reference Service models can be broadly divided in to three categories. The following figure exhibits the various types of Virtual Reference Service currently in practice[17].
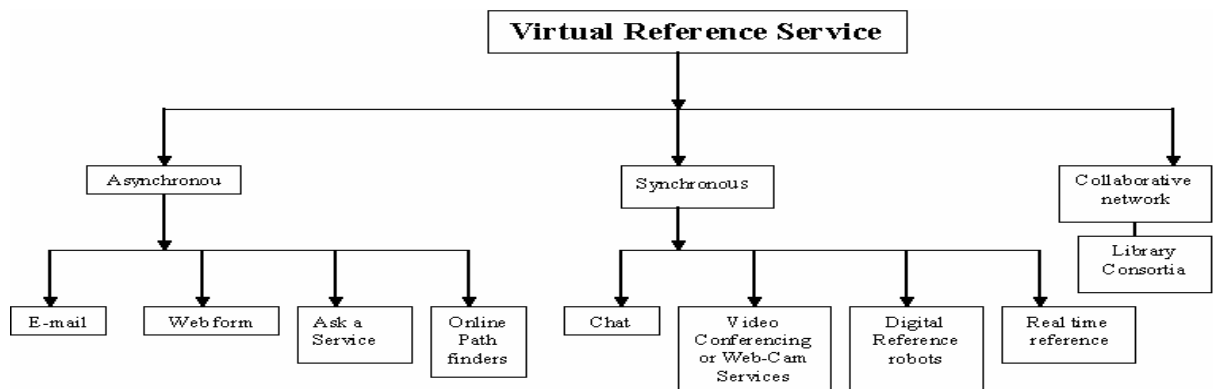
[Source: http://eprints.rclis.org/copyright (Last access on 27/6/2014)

Asynchronous Transaction

The Asynchronous transaction involves a time delay between the question and answer[18]. Following are the examples of asynchronous transaction.

- E-mail based,

- Web-form or Ask a service,

- Virtual Reference Desk (VRD) service,

- Question Point,

- Online Pathfinders, etc.

Synchronous Transactions

The synchronous transaction, on the other hand takes place in 'real time' with an immediate response to the query[7], the examples of synchronous transaction are

- Chat-based services,

- Video Conferencing or web cam services,

- Digital Reference Robots,

- Real-time Reference services (Live Ref, 24/7 Ref), etc.

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 Digital Reference Service (CDRS)[29], operated by the library of congress, is an international network of libraries, consortia, museums, Ask a services that uses a help desk system to route questions to appropriate institutions based on member profile.

INDIAN INSTITUTE OF MANAGEMENT (IIM)

The IIMs are a group of 12 public, autonomous institutes of management education in India. The establishment of IIMs was envisioned and initiated by Jawaharlal Nehru, the first Prime Minister of India, based on the recommendation of the Planning Commission. They were established with the objectives of providing quality management education. IIMs are registered as societies under the Indian Societies Registration Act. Each IIM is autonomous and exercises independent control over its day-to-day operations.

OBJECTIVE OF THE STUDY

The objectives of the present investigation can be summarized as follows:

1) To uncover the present status of Virtual Reference Service (VRS) being provided in the libraries under study.

2) To conduct users study of virtual reference service provided by IIM libraries in India.

RESEARCH METHODOLOGY

The present study is based on investigation and survey method.

1. IIM Libraries in India are selected for the study.

2. Checklist/ questionnaire were used for collecting pertinent data.

DATA ANALYSIS

The analysis of data is basically based on the research activities carried out through structured questionnaires covering different areas and most of the respondents belong to various levels. The data is analysed in view to the objectives mentioned in the study as follows:

**User Study of Virtual Reference Service of IIM institutions in India**

The user's study has been conducted in IIM libraries in India. Total 7 IIM libraries in India were identified for the users study.

The scheduled questionnaires were sent to IIM libraries in India. All together, 140 questionnaires were circulated to these Institutional users and out of which 97 responses were received which constitutes 69.28% in total.

Table No.1

Distribution of Questionnaires among the users of IIM Libraries in India

Sr. No.	Name of Institute	Questionnaire Distributed	Questionnaire Received
1	IIM Ahmedabad (IIMA)	20	17 (85%)
2	IIM Calcutta (IIMC)	20	15 (75%)
3	IIM Bangalore (IIMB)	20	16 (80%)
4	IIM Lucknow (IIML)	20	13 (65%)
5	IIM Kozhikode (IIMKZD)	20	12 (60%)
6	IIM Indore (IIMI)	20	13 (65%)
7	IIM Kashipur (IIMKSP)	20	11 (55%)
Total		**140**	**97**
Percentage		**100 %**	**69.28 %**

Graph No. 1
Questionnaire Distribution Chart
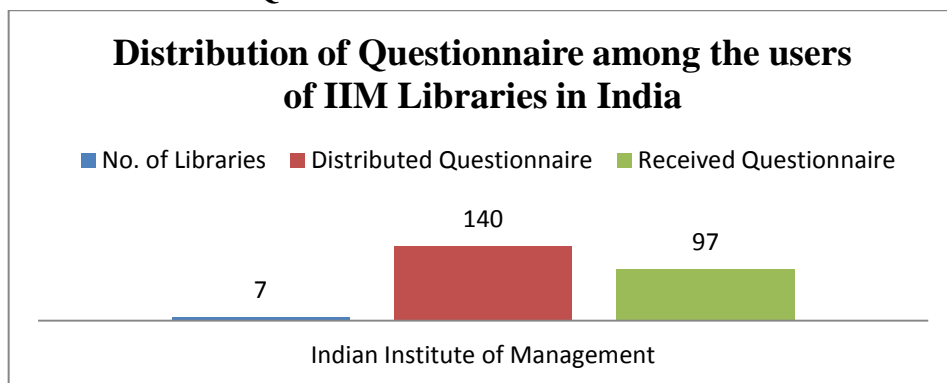
While analysing the above table no. 1 and graph no. 1 it is revealed that, A total of 140 questionnaires (20 questionnaire for each library were sent to 7 IIM libraries) 97 (69.28%) returned the questionnaire.

Table 2
Analysis of the main purpose of Accessing the Internet

Sr. No.	Name of Institute	Total Number of Users	Main Purpose of Accessing the Internet					
			Communication	Education	Viewing current news	Business	Entertainment	Research
1	IIMA	17	14 (82.35%)	15 (88.23%)	13 (76.47%)	11 (64.70%)	14 (82.35%)	13 (76.47%)
2	IIMC	15	13 (86.66%)	13 (86.66%)	12 (80%)	9 (60%)	11 (73.33%)	13 (86.66%)
3	IIMB	16	13 (81.25%)	14 (87.50%)	11 (68.75%)	10 (62.50%)	13 (81.25%)	13 (81.25%)
4	IIML	13	11 (84.61%)	11 (84.61%)	7 (53.84%)	6 (46.15%)	10 (76.92%)	12 (92.30%)
5	IIMKZD	12	10 (83.33%)	11 (91.66%)	11 (91.66%)	6 (50%)	10 (83.33%)	11 (91.66%)
6	IIMI	13	11 (84.61%)	12 (92.30%)	9 (69.23%)	7 (53.84%)	11 (84.61%)	10 (76.92%)
7	IIMKSP	11	10 (90.90%)	10 (90.90%)	9 (81.81%)	7 (63.63%)	9 (81.81%)	10 (90.90%)
Total		**97**	**82**	**86**	**72**	**56**	**78**	**82**
Percentage		**100 %**	**84.53 %**	**88.65 %**	**74.22 %**	**57.73 %**	**80.41 %**	**84.53 %**

An attempt has been made to know the purpose for the access of internet by the users. The internet offers a gateway to a myriad of online databases, library catalogues, collections, and software and documents achieves. Table 2 reveals that maximum number of the users 86 (88.65%) users accessing the internet for Education purpose, 82 (84.53%) users accessing internet for Communication and Research

purpose 78 (80.41%) users accessing internet for Entertainment purpose, 72 (74.22%) users internet accessing for Viewing current news, 56 (57.73%) users accessing internet for business purpose.

Table 3
Analysis of Importance of Computer Literacy in the usage of Electronic Resources/ Services

Sr. No.	Name of the Institute	Total No. of Students	User opinion about electronic resources/ services				
			Strongly agree	Agree	Somewhat agree	Disagree	Strongly disagree
1	IIMA	17	4 (23.52%)	8 (47.05%)	5 (29.41%)	-	-
2	IIMC	15	5 (33.33%)	7 (46.66%)	2 (13.33%)	1 (6.66%)	
3	IIMB	16	8 (50%)	5 (31.25%)	3 (18.75%)	-	
4	IIML	13	4 (30.76%)	5 (38.46%)	3 (23.07%)	1 (7.69%)	
5	IIMKZD	12	4 (33.33%)	5 (41.66%)	3 (25%)		
6	IIMI	13	5 (38.46%)	3 (23.07%)	5 (38.46%)		
7	IIMKSP	11	4 (36.36%)	7 (63.63%)	-	-	-
	Total	**97**	**34**	**40**	**21**	**2**	**-**
	Percentages	**(100%)**	**(35.05%)**	**(41.23%)**	**(21.64%)**	**(2.06%)**	**-**

Electronic resources are increasingly available on the internet or websites of the particular institutes thereby making it possible for students to access and use current and relevant literature for studies and research. Over the last decade, a significant transformation has been noticed in collection development policies and practices.Print medium is increasingly giving way to the electronic form of materials. Table 3 represents that 40 (41.23%) users were agreed that computer literacy is importance in the usage of electronic resources, 34 (35.05%) users are strongly agree that computer literacy is importance in the usage of electronic resources/ services, 21 (21.64%) users somewhat agree for computer literacy is importance in the usage of electronic resources/ services, 2 (2.06%) users disagree for the above mentioned statement.

Table 4
Awareness of Library Website

Sr. No.	Name of Institute	Awareness of library website		Total No. of Students
		Yes	**No**	
1	IIMA	13 (76.47%)	4 (23.52%)	17
2	IIMC	11 (73.33%)	4 (26.66%)	15
3	IIMB	13 (81.25%)	3 (18.75%)	16
4	IIML	11 (84.61%)	2 (15.38%)	13
5	IIMKZD	9 (75%)	3 (25%)	12
6	IIMI	11 (84.61%)	2 (15.38%)	13
7	IIMKSP	8 (72.72%)	3 (27.27%)	11
	Total	**76 (78.35%)**	**21 (21.64%)**	**97 (100%)**

Great library websites need to do many things well, including: provide a compelling user experience, effectively publish and provide access to content, promote library online and offline services and increase community engagement.Today's librarians truly understand the importance of usability and recognize the importance of making sure that library websites are easy to navigate, so users can find their way quickly to access e-resources.The table 4 found that 76 (78.35%) of users are aware about institutions library websites and only 21 (21.64%) of users are not aware about institution library website.

Table 5
Users Awareness about Virtual Reference Services

Sr. No.	Name of Institutes	Library offering VRS		Total
		Yes	**No**	
12	IIMA	13 (76.47%)	4 (23.52%)	17
13	IIMC	12 (80%)	3 (20%)	15
14	IIMB	13 (81.25%)	3 (18.75%)	16
15	IIML	11 (84.61%)	2 (15.38%)	13
16	IIMKZD	8 (66.66%)	4 (33.33%)	12
17	IIMI	11 (84.61%)	2 (15.38%)	13
18	IIMKSP	9 (81.81%)	2 (18.18%)	11
	Total	**77 (79.38%)**	**20 (20.61%)**	**97 (100%)**

The table 5 represents that, 77 (79.38%) of users are aware about their institutions library offering virtual reference services and only 20 (20.61%) of users are not aware about the institutions library offering VRS.

Table 6
Usability of the Virtual Reference Service

Sr. No.	Name of the Institute	Total No. of students use VRS	Rate the usability of the VRS				
			Very easy	Easy	Somewhat easy	Difficult	Very difficult
1	IIMA	13	3 (23.07%)	5 (38.46%)	3 (23.07%)	2 (15.38%)	-
2	IIMC	12	4 (33.33%)	6 (50%)	1 (8.33%)	1 (8.33%)	-
3	IIMB	13	6 (46.15%)	6 (46.15%)	1 (7.69%)	-	-
4	IIML	11	4 (36.36%)	4 (36.36%)	3 (27.27%)	-	-
5	IIMKZD	8	2 (25%)	3 (37.50%)	1 (12.50%)	1 (12.50%)	1 (12.50%)
6	IIMI	11	3 (27.27%)	4 (36.36%)	2 (18.18%)	1 (9.09%)	1 (9.09%)
7	IIMKSP	9	2 (22.22%)	3 (33.33%)	1 (11.11%)	1 (11.11%)	2 (22.22%)
Total		77 (100%)	24 (31.16%)	31 (40.25%)	12 (15.58%)	6 (7.79%)	4 (5.19%)

Table 6 shows that, 31 (40.25%) users rate that Easy, 24 (31.16%) users rate that very easy, 12 (15.58%) users rate that somewhat easy, 6 (7.79%) users rate that difficult and 4 (5.19%) users rate that very difficult usability of Virtual Reference Service.

Table 7

Offering sufficient information literacy skills programmes/ bibliographic instructions use electronic resources and services effectively

Sr. No.	Name of the Institute	Total No. of students use VRS	Users opinion about library sufficient information literacy programme			
			Strongly agree	**Agree**	**Somewhat agree**	**Disagree**
1	IIMA	13	5 (38.46%)	4 (30.76%)	3 (23.07%)	1 (7.69%)
2	IIMC	12	3 (25%)	4 (33.33%)	3 (25%)	2 (16.66%)
3	IIMB	13	4 (30.76%)	4 (30.76%)	4 (30.76%)	1 (7.69%)
4	IIML	11	4 (36.36%)	4 (36.36%)	2 (18.18%)	1 (9.09%)
5	IIMKZD	8	1 (12.50%)	3 (37.50%)	3 (37.50%)	1 (12.50%)
6	IIMI	11	3 (27.27%)	3 (27.27%)	4 (36.36%)	1 (9.09%)
7	IIMKSP	9	2 (22.22%)	2 (22.22%)	3 (33.33%)	2 (22.22%)
	Total	**77 (100%)**	**22 (28.57%)**	**24 (31.16%)**	**22 (28.57%)**	**9 (11.68%)**

From the above mentioned table 7, there are 24 (31.16%) users agree that library offer sufficient information literacy programme, 22 (28.57%) users are strongly agree/ somewhat agree that library offer sufficient information literacy skills programme, 9 (11.68%) users disagree that library offer sufficient information literacy programme.

Table 8

Overall Satisfaction of VRS provided by IIM Libraries

Sr. No.	Name of the Institute	Total No. of students use VRS	Overall Satisfaction with VRS provided by Library			
			Very satisfied	**Satisfied**	**Somewhat satisfied**	**Unsatisfied**
1	IIMA	13	3 (23.07%)	4 (30.76%)	4 (30.76%)	1 (7.69%)
2	IIMC	12	2 (16.66%)	4 (33.33%)	4 (33.33%)	2 (16.66%)
3	IIMB	13	3 (23.07%)	4 (30.76%)	5 (38.46%)	1 (7.69%)
4	IIML	11	2 (18.18%)	3 (27.27%)	5 (45.45%)	1 (9.09%)
5	IIMKZD	8	2 (25%)	4 (50%)	2 (25%)	-
6	IIMI	11	4 (36.36%)	4 (36.36%)	3 (27.27%)	-
7	IIMKSP	9	2 (22.22%)	4 (44.44%)	3 (33.33%)	1 (11.11%)
	Total	**77 (100%)**	**18 (27.05%)**	**27 (36.47%)**	**26 (33.76%)**	**6 (9.01%)**

The table 8 represents that overall satisfaction of Virtual Reference Service provided by IIM libraries. There are 27 (36.47%) users satisfied with VRS provide their library, 26 (33.76%) users somewhat satisfied with Virtual Reference Service provided

by the library, 18 (27.05%) users very satisfied with Virtual Reference Service provided their library and only 6 (9.01%) users unsatisfied for the same.

FINDINGS

- It is found that most of the users access internet for their Education, Communication and Research, Entertainment, Viewing current news and only Entertainment purpose, 56 (57.73%) users accessing internet for only business.

- It is observed that 40 (41.23%) users were agreed that computer literacy is importance in the usage of electronic resources, 34 (35.05%) users are strongly agree that computer literacy is importance in the usage of electronic resources/ services, 21 (21.64%) users somewhat agree for computer literacy is importance in the usage of electronic resources/ services, 2 (2.06%) users disagree for the above mentioned statement.

- It is found that most of the users are aware about their institutions library websites.

- It is observed that most of users are aware about their institutions library offering virtual reference service.

- It is observed that, 31 (40.25%) users rate that Easy, 24 (31.16%) users rate that very easy, 12 (15.58%) users rate that somewhat easy, 6 (7.79%) users rate that difficult and 4 (5.19%) users rate that very difficult usability of Virtual Reference Service.

- It is highlighted that, 24 (31.16%) users agree that library offer sufficient information literacy programme, 22 (28.57%) users are strongly agree/ somewhat agree that library offer sufficient information literacy skills programme, 9 (11.68%) users disagree that library offer sufficient information literacy programme.

- It is observed that, 27 (36.47%) users satisfied with VRS provide their library, 26 (33.76%) users somewhat satisfied with Virtual Reference Service provided by the library, 18 (27.05%) users very satisfied with Virtual Reference Service provided their library and only 6 (9.01%) users unsatisfied for the same.

CONCLUSION

Reference service initiated electronically often in real-time, where patrons employ computers or other Internet technology to communicate with reference staff, without being physically present. VRS are increasingly incorporating instruction

because of the growing need to teach patrons how to use the exploding electronic resources in libraries. Virtual reference is here to stay. As new technologies are developed the ways in which virtual reference is provided will continue to evolve. This study is an important first step towards better understanding how virtual/digital library services can be successfully integrated into existing library and information services.

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