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Jimson Napoleon Mariano

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To cite this article:

Mariano, M. P. (2024). Virtual Reference Services: From The Lens of Academic Librarians in Selected Higher Education Institutions in Isabela. *International Journal of Librarianship*, 9(3), 36-46. <https://doi.org/10.23974/ijol.2024.vol9.3.377>

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Virtual Reference Services: From The Lens of Academic Librarians in Selected Higher Education Institutions in Isabela

Jimson Napoleon Mariano

Makati City, Philippines

ABSTRACT

This study examined key findings relevant to library practitioners' experiences with virtual reference services, or VRS. It did this by examining skills, training experiences, perspectives, and challenges encountered during VRS implementation. Data was gathered through interviews with a group of library practitioners employed by academic libraries in the province of Isabela, Philippines, using a qualitative research methodology. The participants' training experiences and skill sets are restricted to limited virtual reference service training events as well as fundamental technical and communication abilities. The results of the study showed that participants had a positive opinion of virtual reference services' utility since they serve as a platform for communication that bridges the digital divide caused by physical distance. To help librarians adopt virtual reference services and maximize their anticipated benefits, specialized trainings are recommended. In order to meet the necessary operational needs for the effective delivery of virtual reference services, institutional support through sufficient funding is sought.

Keywords: Virtual Reference Services, Reference Services, Library Services, Academic Librarians

INTRODUCTION

The evolving information landscape, not excluding the onset of a pandemic that has impacted the delivery and exchange of information between libraries and its users has paved the way for libraries and library practitioners to explore innovative platforms and alternative modes of communication aside from the traditional reference service.

Virtual reference services are anchored from the traditional library reference services which involve a face-to-face interaction between the librarian and the user. However, the proliferation of emerging technologies have revolutionized the traditional approaches of providing reference services. Today's libraries have adopted an innovative approach called virtual reference services, otherwise known as digital reference services, which utilize technology through asynchronous or synchronous modes to communicate with users remotely (RUSA, 2010).

Sinhababu and Shiv (2021) averred that the implementation of virtual reference services are expected to enable patrons to become aware of the services and facilities of the library. With

the proliferation of innovative communication tools used in providing virtual reference services, librarians are expected to depict the indispensable role of the library.

Technological advancements and innovations have transformed traditional libraries to smart libraries. These innovative approaches encompass virtual reference services through instant messaging, electronic mail, self-check-in and checkout of books, availability of library guides, and websites with dynamic content (Asif & Singh, 2020).

The development of virtual reference services in Philippine libraries is considered far behind when weighed against neighboring countries. Tracing back to the 2000s, the utilization of electronic mail was regarded as one of the earliest tool used by several academic libraries to render virtual reference services. With the advent of emerging technologies like web chat applications and social media technology, several academic libraries in select higher education institutions in Metro Manila started offering virtual reference services using instant messaging applications and social networking sites to meet the growing and changing information-seeking landscape of library patrons (Eclevia & Abrigo, 2012).

The non-existence of similar studies in Northeastern Luzon pertinent to the librarians' experiences of virtual reference services prompted the researcher to conduct this study. Hence, the purpose of this study is to ascertain the experiences of library practitioners, exploring their skills, perceptions, and challenges encountered in the domain of virtual reference services.

Specifically, this study sought to answer the following research questions:

1. What is the profile of the participants in terms of work experience and educational background?
2. What are the virtual reference tools adopted by the library?
3. What are the reference inquiries received through virtual reference services?
4. What are the skills and training experiences of the participants related to virtual reference services?
5. What are the insights of the participants on the perceived usefulness of virtual reference services?
6. What are the challenges encountered by the respondents in the implementation virtual reference services?

LITERATURE REVIEW

In the 1920s, virtual reference services initially commenced with the integration of the telephone as a tool in answering questions. The 1960s saw the advent of emerging technologies like microfilm and microfiche, sound recordings and tapes. Numerous electronic resources such as full-text databases and electronic card catalogs has surfaced across libraries between the 1970s and 1980s (Grohs, Reed, & Allan, 2003).

The Electronic Access to Reference Service (EARS), enlisted in 1984 by the University of Maryland Health Services Library in Baltimore was regarded as one of the first virtual reference services tools in the United States (Singh, 2004).

Virtual reference services started with electronic mail or e-mail, which provides an asynchronous mode of interface between the reference librarian and library user on top of the usual operating hours of the library (Wassik, 1999). Virtual reference services during the new

millennium have incorporated chat services (Ellis & Francoeur, 2001), which provide real-time communication between the reference librarian and the library user.

De Leon and Viray (2022) explored the online reference service user experience of an academic library using qualitative content analysis of chat transcripts. The study revealed that a number of inquiries related to library services, policies, and technical troubleshooting. The study also reckoned the level of librarians' approachability in terms of tone, formality, and instructions given to patrons.

In a qualitative study conducted by Tsang and Chiu (2022) on the effectiveness of virtual reference services in academic libraries in Hong Kong, it was revealed that virtual reference services is central in student learning. Following a qualitative research approach based on the 5E Learning Model, the study showed that virtual reference services boost students' interest in learning, allowing them to utilize an array of learning resources, thereby giving them a good platform for efficient learning.

Adeoye et al. (2021) explored the readiness of libraries for digital reference services in tertiary institutions, it was revealed that there are librarians equipped with the requisite knowledge and practical skills to implement digital reference services. However, lack of policies and coordination with management has impinged on the facilitation of DRSs. School management and training play an important role in providing the necessary support in the overall implementation of digital reference services in academic libraries.

Panda (2021) asserted that libraries should instigate virtual reference services to strengthen the functions of traditional reference services. For virtual reference services to be successfully delivered, it is necessary for librarians to have a thorough understanding of its particulars and is bound to equip themselves with ample knowledge and practical skills.

In a study by Agim and Azolo (2021) on digital literacy and the job performance of library staff, it was found that librarians optimize a variety of tools in the facilitation of virtual reference services which include electronic mailing, mobile phone usage, internet surfing, computer operations, and use of social networking sites. Furthermore, the study also found that library staff acquired digital literacy skills through trial and error, support from colleagues, self-study using a user guide, in-house training, and participation in seminars and workshops.

Mwiinga et al. (2020) explored the adoption of digital reference services in selected academic libraries in Zambia using both quantitative and qualitative research methods. The results showed that the provision of digital reference services in Zambian university libraries is inferior with electronic mail as the most used tool, but library practitioners expressed their openness to accept technological development like the full implementation of virtual reference services in their respective libraries. Financial constraints and insufficient training were identified as hurdles preventing the implementation of virtual reference services.

In a study on the provision of digital reference services in selected Nigerian State University libraries, Ubogu (2020) opined that digital reference services have a positive impact on information service delivery to library patrons. Consideration of speed, patron interaction, and reducing barriers to interact with library users are central components to ensure sustainability in implementing digital reference services in academic libraries.

METHODOLOGY

The study used a qualitative research method. A computer-assisted qualitative data analysis software called "QDA Miner Lite" was employed for research questions 2 and 3, to provide a "Word Cloud". This is a data visualization technique used to present visual texts in different sizes based on the frequency of words or phrases lifted from the participants' responses.

Multistage coding was applied in research questions 4, 5, and 6. It encompassed two cycles of coding, an initial coding and in-depth coding commonly referred to as first cycle and second cycle methods (Saldana, 2009). The first cycle made use of open coding which is regarded as the initial stage of qualitative data analysis. It involved generating initial codes that capture the interesting ideas or concepts embedded within the collected data. The second cycle utilized the thematic analysis to further analyze initial data from the first cycle towards the formulation of emergent themes.

The study encompassed 13 library practitioners from 6 academic libraries in Isabela, Philippines. The study made use of semi-structured interviews to collect information. Interviews were conducted in-person and virtually. The research instrument that was used was an interview guide. It is divided into two sections, the first of which is devoted to the participants' profile, including their work experience and educational background. The interview questions in the second half focused on the participants' skills, training experiences, perceptions, and challenges they had when implementing virtual reference services.

FINDINGS

The profile of the participants in terms of work experience are varied, with the majority constituting 50% of the participants had obtained work experience ranging from 5 to 9 years. Most of the participants hold a Master's degree in the field of librarianship.

Virtual Reference Services Tools Adopted by the Library

The two most prominent virtual reference service tools adopted are Messenger and Facebook. Messenger is an instant messaging (IM) application while Facebook is a social networking site and both are developed by Meta Platforms. This is in consonance to the study of Eclevia and Abrigo (2012) pertinent to the evaluation of the virtual or digital reference services in selected Philippine academic libraries which asserted that instant messaging and Facebook were found to be the most useful VRS tools. The adoption and usage of the instant messaging show that it is one of the most convenient ways to foster communication between and among librarians and library users (Mawhinney, 2020).

Using QDA Miner Lite, a 'Word Cloud' was generated as shown in Figure 1. It is a data visualisation tool which generates a visual display of texts where words that are used more frequently appear bigger. Messenger and Facebook appear to have "more prominence in the representation", indicating that these are two of the most common VRS tools adopted by the participating libraries.



Figure 1. Virtual Reference Services Tools Adopted

Reference Inquiries through Virtual Reference Services

The general inquiries received through virtual reference service tools are mostly about the availability of reading materials like books, online databases and open access resources. The study revealed that most of the reference inquiries asked by users were specific search questions. The findings are coherent with the study conducted by Feldman (2018) who have traced that library patrons would generally inquire about a specific reading materials and guidelines on how to access databases and other information resources. The two most apparent reference inquiries received by the participating libraries via virtual reference service tools are specific search questions and in-depth research questions, evident with the bigger texts as shown in the 'Word Cloud' as illustrated in Figure 2.

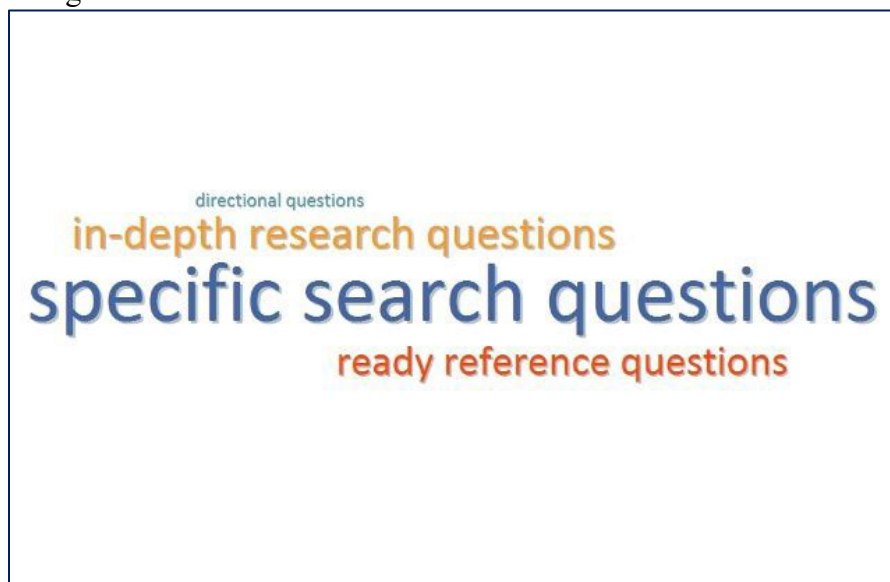


Figure 2. Reference Inquiries Received through VRS

Table 1 presents the generated codes and emergent themes specifically for research questions 4, 5, and 6. The themes were meticulously constructed by the researcher based on the multistage coding cycle and observed patterns.

Table 1. Codes and Emergent Themes

Research Questions	Codes	n	%	Emergent Themes
RQ 4: What are the skills and training experiences of the participants related to virtual reference services?	Communication Skills	10	76%	Theme 1: Communications and technical skills are requisite in the facilitation of VRS
	Technical Skills	13	100%	
	Internal and External Training	13	100%	Theme 2: Training events are central in honing skills and knowledge upgrade
RQ 5: What are the insights of the participants in terms of the perceived usefulness of virtual reference services?	Communication Interaction	13	100%	Theme 1: VRS strengthens the library's communication lines by breaking physical barriers
	Dissemination Circulation	10	76%	Theme 2: VRS is instrumental in disseminating information to users
	Promotions Marketing	12	92%	Theme 3: VRS creates a sphere of marketing channel to promote the library
RQ 6: What are the challenges encountered by the participants in the implementation virtual reference services?	Technological Infrastructure	11	84%	Theme 1: Response time is crucial to establish swift VRS transactions
	Response Time	8	61%	Theme 2: Technological infrastructure reinforces a functional VRS system

Skills and Training Experiences

The two emerging themes related to participant skills and training experiences are discussed in detail in the paragraphs that follow.

(a) *Communications and technical skills are requisite in the facilitation of VRS*

Table 1 illustrates that 10 participants, or 76% of the total, stated that they possessed the fundamental communication abilities required to offer virtual reference services. Every participant (100%) said they had the necessary technical skills to provide virtual reference services. The figures indicate that the majority of participants possess the necessary foundational abilities to provide virtual reference services. Librarians are expected to have both technical and communication abilities pertaining to information and communication technologies, or ICT. This is especially true for those who work directly with virtual reference services. Panda (2021) suggests that in order to enhance the capabilities of traditional reference services, libraries should implement virtual reference services. To ensure the successful implementation of virtual reference services, librarians must possess a comprehensive understanding of the service and be well-equipped with both communication and technical abilities.

(b) Training events are central in honing skills and knowledge upgrade

Table 1 makes clear that each of the 13 participants claimed to have taken part in a variety of internal and external training activities. The participants observed that while there is less particular training relevant to virtual reference services, they have had attended internal training like staff development programs offered by the institution. As it relates to the librarians who will provide these services, libraries must react to technological advancements like virtual reference services. Programs for internal training and development will encourage the acquisition of skills and a dedication to a customer-focused work environment (Ezejiolor, 2018).

Perceived Usefulness of Virtual Reference Services

Participants positively perceived virtual reference services. The following paragraphs present a discussion of the three emergent themes associated with the insights of the participants about the usefulness of virtual reference services.

(a) VRS strengthens the library's communication lines by breaking physical barriers

Table 1 reveals that all respondents (100%) thought that virtual reference services foster interaction between patrons and the library, breaking down physical barriers like distance to facilitate communication and allow the library to respond to patron requests and inquiries remotely. Virtual reference services had a desirable effect on information services in terms of communication and overcoming physical and geological barriers (Uzoigwe & Eze, 2018).

(b) VRS is instrumental in disseminating information to users

As shown in Table 1, 10 participants which constitutes 76% of the total, believed that virtual reference services enable the library to disseminate information to its community of users. Pertinent information are being circulated to users like library services, policies, facilities, available resources, and other notable developments about the library. This conforms to Omeluzor et al. (2022) which revealed that through virtual reference services, requisite information is disseminated to support the research needs of library patrons.

(c) *VRS creates a sphere of marketing channels to promote the library*

Table 1 shows that 12 participants, or 92% of the total, thought that virtual reference services functioned as a marketing platform to advertise library resources, raising user community awareness. Furthermore, social media platforms that offer virtual reference services give users access to a multitude of information on new advancements in libraries and schools. Social media is a salient tool for libraries to promote collection and services and shows a great deal of potential to reach library customers and to provide up-to-date information (Zhiwei & Muhammad, 2020).

Challenges in the Implementation of Virtual Reference Services

The subsequent paragraphs present a discussion of the two emergent themes reflective of the challenges encountered by the participants in the implementation of virtual reference services.

(a) *Technological infrastructure reinforces a functional VRS system*

Eleven participants, representing 84% of the total, noted that technological infrastructure is another challenge they had in the delivery of virtual reference services. Technological infrastructure is comprised of hardware and software tools like computers, wireless devices and internet connectivity which are all integral in the implementation of virtual reference services. This finding is in consonance with Ubogu (2020) which revealed that challenges faced in virtual reference services are associated with slow internet connection, and low bandwidth which forms the technological component and is deemed essential in the delivery of virtual reference services.

(b) *Response time is crucial to establish swift VRS transactions*

As shown in Table 1, eight participants, which constitutes 61% of the total, thought that response time is a challenge in the delivery of virtual reference services. This finding conforms to Younus and Nadeem (2021) which revealed that prompt response to users is a challenge in ensuring that virtual reference service remains a responsive tool in handling user inquiries and requests.

CONCLUSION AND RECOMMENDATION

Six academic libraries located in Isabela, Philippines offer virtual reference services using a variety of basic tools, the most obvious being social media and chat. The participants may carry out duties related to virtual reference services since they are equipped with requisite technical and communication skills. Virtual reference services receive less attention than other online library services when it comes to training possibilities. Since librarians are practitioners at the vanguard of technology innovation, it is inevitable that they will exhibit cutting-edge abilities; for this reason, more specialized training focused on virtual reference services are considered essential. Virtual reference services were perceived as an indispensable communication platform and are considered salient in academic libraries, providing access to a range of reading materials, and addressing the digital divide brought about by physical distance. The adoption of virtual reference

services had an affirmative impact in building the library's online presence and is imperative in promoting library collections and services.

Academic institutions should allocate a funding to meet the technological requirements and operational support needed to run virtual reference services. Libraries should create virtual reference policies and conduct orientation sessions which should clarify the parameters of the service, frequently asked questions, response time, and operational guidelines associated with the delivery and usage of virtual reference services. Future research on the benefits of introducing virtual reference services to enhance the use of library resources and user services is encouraged for librarians working in special, public, and school libraries.

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About the author

Jimson Napoleon Mariano is the Head Librarian of a notable membership Club in Makati City, Philippines. His research focuses on library innovations and customer relationship management. The 'Author' holds a professional license as librarian in the Philippines with 15 years of relevant work experience gained across academic, school, and special libraries.

Appendix

INTERVIEW GUIDE

This study examines virtual reference services at selected higher education institutions in Isabela, Philippines. The goal of the study is to ascertain the skills and training experiences, perceptions, and challenges faced by academic librarians in implementing virtual reference services.

Section A: Work Profile

1. How long have you been working in the library?
2. What is your highest educational attainment?

Section B: Experience with Virtual Reference Services

3. What VRS tools are being adopted by your library? (e.g. social media sites, websites, email, chat service, instant messaging)
4. What are the reference inquiries received through virtual reference services?
5. What are your skills and training experiences related to virtual reference services?
6. What are your insights on the perceived usefulness of virtual reference services? In your view, how do you feel about the library providing virtual reference services?
7. What are the challenges in the implementation of virtual reference services?