

UNDERSTANDING VIRTUAL REFERENCE SERVICE GUIDELINES: A ROADMAP FOR SUCCESSFUL IMPLEMENTATION

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Abstract Any service being offered by the libraries should have well-defined and documented service policy with clearly articulated guidelines. The requirement of such a comprehensive service guidelines become more crucial in case the service is comparatively newer and the professionals as-well-as the users are not accustomed with such kind of information service. Virtual Reference Service/ Digital Reference Service (VRS/DRS) is one such innovative service which calls for framing of such guidelines for providing effective VRS. This paper does the content analysis of the two very significant VRS guidelines stipulated by The International Federation of Library Associations and Institutions (IFLA) and Reference & User Services Association (RUSA) respectively. The paper attempts to analyse, synthesise and consolidate the major outcomes of these two guidelines and presents the lucid explanation of the same in coherent and cohesive manner. The discussion is structured aptly under 15 sections for easy adoption by the Indian libraries that are planning to launch VRS in future. A brief snapshot of growth of literature pertaining to the VRS/DRS guidelines has also been incorporated.

Keywords: Virtual Reference Service, Digital Reference Service, VRS, DRS, IFLA, RUSA

INTRODUCTION

VRS guidelines act as guiding parameters/principles for strategic planning in implementation and maintenance of virtual reference services. These guidelines are essential for libraries willing to initiate VRS as they get the “larger framework” and “authentic direction” for the same. Interested libraries are expected to adopt them as it will prove very helpful during implementation and emerging scenarios in the arena of VRS. VRS guidelines discussed in this paper aims to promote digital reference service by integrating and customizing VRS standards framed by IFLA, RUSA and a few other organizations/libraries. Inputs have also been taken from the literature reviewed pertaining to VRS practices adopted and experiences shared by various reference librarians. The 1st meeting of “IFLA’s Discussion Group (DG) on Reference” was held in 1998 with the objective to explore the impact of new technologies on the very nature of reference service and changing user-expectations”. The official “Standing Committee on Reference Work (SCRW)” was created by IFLA in the year 2002 to consider these issues. The VRS guidelines discussed in the paper are the result of rounds of meetings and workshops covering a span of several years. RUSA has

prepared the “Guidelines for Implementing and Maintaining Virtual Reference Services” which was originally prepared by the Emerging Technologies in Reference Section (MARS) and revised by the RUSA MARS/RSS Virtual Reference Committee (2009). In March 2010, the same were approved by the RUSA Board of Directors. The origin of the evolution of these guidelines can be traced back to the committee on the Bernie Sloan’s article, “Electronic reference services: Some suggested guidelines” published in the journal RUSA Quarterly (Reference and User Services) in 1998.

REVIEW OF LITERATURE

Azmi, Noorhidawati and Aspura (2017) in their joint work “Librarians’ behavioral performance on chat reference service in academic libraries: Perceived importance vs actual practices” made a comparison of perceived importance and the actual practice of VRS guidelines among librarians. RUSA’s guideline “Behavioural Performance of Reference and Information Service” formed the core of the study. The study employed a quantitative approach and survey method of research was administered to 92 librarians from six academic libraries in Malaysia which offer chat reference service to their users. It was observed that the librarians

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rated “perceived importance higher than actual practices” in majority of the cases. The authors opined that the difference between the librarian’s perception and actual implementation status of the RUSA guideline may help in identifying areas of improvement in VRS.

Schwartz (2014) in his article entitled “The Application of RUSA Standards to the Virtual Reference Interview” explained that the search for articles from online databases as well as scholarly journals and magazines began with the popularity of Internet in the late 1990s. The authors believed that users can put similar queries while seeking for information online as they used to pose with regard to consulting print information sources available with the library by visiting the reference desk in-person. The author noted that new technologies have enabled the users to seek assistance through e-mail or online-chat over the Internet. The author opined that for providing VRS, library need “new set of standards” in meeting the emerging scenario .

Burger, Park and Li (2010) “Application of Reference Guidelines for Assessing the Quality of the Internet Public Library’s Virtual Reference Services” This study aims to assess and evaluate the overall quality and effectiveness of the Internet Public Library’s (IPL) virtual reference services. Toward this end, IPL’s guidelines for answering user questions are used to assess the quality of reference service; a total of 528 IPL transcripts are examined to determine how well they conform to the IPL guidelines. The results of the study evince high compliance with IPL guidelines regarding responses to user questions. All six mandatory elements were used more than 90% of the time. This indicates that the IPL guidelines are effectively employed to ensure that IPL librarians adhere to reference procedures for providing quality service to users. The study results also indicate that librarians can effectively increase the socio-emotional content of the message while maintaining a high level of professionalism, thereby improving the overall experience for the user.

Hughes (2010) in the article titled “Adherence to RUSA’s Guidelines for Virtual Reference Services is Below Expected in Academic Libraries” undertook the qualitative evaluation and compliance measurement of the VRS quality being offered evaluated twenty academic libraries under study. For the measurement and evaluation, the Reference & User Services Association’s (RUSA’s) Guidelines for Virtual Reference & User Services. Qualitative research study was used.

It was revealed that 80% of the library’s websites were user-friendly with high usability. It was also found that 35% researches appreciated the librarian’s effort in using quality information sources for answering their queries while 25% were not satisfied on the adequacy of information used by

the professionals. Users, however, felt that their privacy was maintained during the chat. Explanation regarding utilization of resources was found of low quality by 15% of the respondents. Although 15% believed they received “superior instruction.” Feedback was not sought by 75% of the while in 50% of reference transactions additional information requiring subject specialization was not acquired. User were not suggested to make a visit to the library in 55% of transactions. According to the authors there were some room for improvement on the part of library staff during reference interaction. Only 30% of the library websites offered question-answers with their scope, and expected staff turnaround time. The author was of the view that adhering to the international guidelines will bring qualitative improvement in the virtual reference services.

Cogo (2009) in their article “Libraries Demonstrate Low Adherence to Virtual Reference Service Guidelines” evaluated the level to which virtual (asynchronous e-mail) reference services adhere to professional guidelines in 54 academic libraries in North America. A total of 324 queries were sent to the 54 libraries, with each library receiving six different types of requests from six different user names. Researchers developed two coding schemes for the guidelines for the RUSA and IFLA guidelines. For both the guidelines of RUSA and IFLA, low-adherence percentage was noted with institutional variations. Correlation between user satisfaction and adherence to these guidelines could not be established. The author concluded with the suggestions that higher levels of virtual reference service effectiveness could be achieved by automatically integrating some less observed behaviours (e.g., thank you notes) into replies sent to users and by increasing librarians’ awareness of professional guidelines through training and detailed institutional policies. One of the recommendations of the study was to conduct workshops for the reference staff for dealing with the diverse group of the users for maintaining uniformity of services.

Shachaf & Horowitz (2008) in their article entitled “Virtual reference service evaluation: Adherence to RUSA behavioral guidelines and IFLA digital reference guidelines” evaluated the level to which virtual reference services adhere to professional guidelines (RUSA behavioral guidelines and IFLA digital reference guidelines). The authors felt that such guidelines are rarely consulted for the VRS quality evaluation. To measure the level of adherence, 324 transactions from 54 libraries were compared as per the (IFLA) and the Reference and User Services Association (RUSA) of ALA. Findings of the study indicated that low-adherence to both IFLA and RUSA VRS guidelines. The authors believed that the study provides a systematic method as an empirical benchmark to analyse reference transactions and evaluate VRS from the lens of global and universal standards with useful implications for future research in this area.

Ronan, Reakes and Ochoa (2006) in their paper entitled “Application of Reference Guidelines in Chat Reference Interactions: A Study of Online Reference Skills” stated that Virtual reference guidelines have existed in one form or another for a number of years. This article details a field study of chat reference transactions recorded from a random sample of virtual reference services in academic libraries, public libraries, and regional library consortia in the United States. The authors examined the transactions and evaluated the reference interview for adherence to the best-known guidelines Reference and User Services Association Guidelines for Behavioural Performance of Reference and Information Service Providers guidelines. Initial findings indicated librarians often fail to incorporate the guidelines into chat reference interactions. The authors hoped that this study would result in a heightened awareness of the factors that can facilitate or impede positive reference transactions online.

DEFINITION

According to IFLA, following terms have been used interchangeably to describe reference services using “computer technology” and ICT:

- “virtual reference,”
- “digital reference,”
- “e-reference,”
- “Internet information services,”
- “live reference” and “real-time reference” (IFLA, 2002).

Joann M Wasik (2003) has defined VRS/DRS and Ask-A-services as Internet-based question-and-answer services that connect users with experts in a variety of subject areas. According to him in addition to answering questions, experts may also provide users with referrals to other online and print sources of information”. The RUSA guidelines (2010) has defined virtual reference as -

“the reference service initiated electronically where patrons employ computers or other technology to communicate with public services staff without being physically present. Communication channels used frequently in virtual reference include chat, video conferencing, Voice-over-IP, co-browsing, e-mail, and instant messaging”.

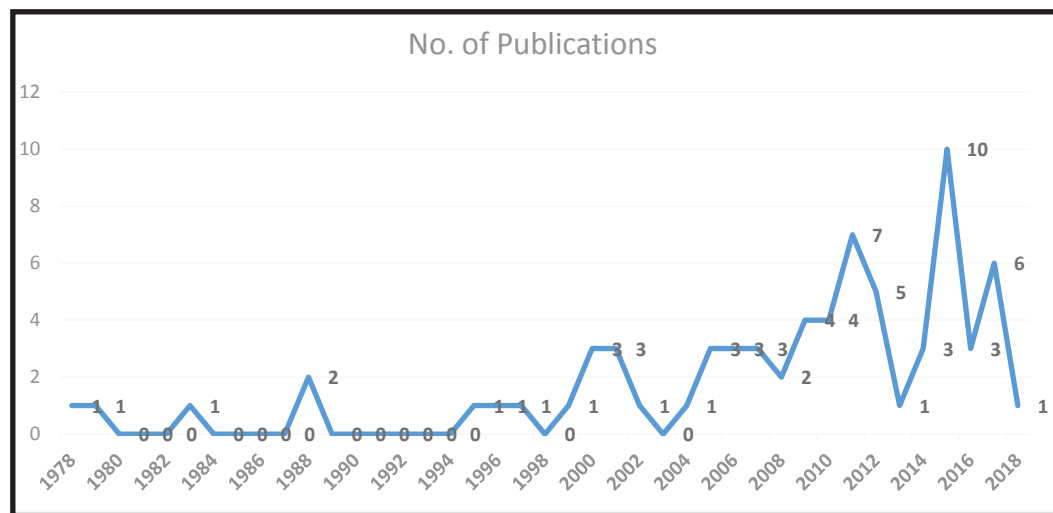


Fig. 1: Growth of Literature on VRS/DRS

The above figure/graph represents the publication trend on Virtual Reference Guidelines during the year 1978 to 2018. Before the year 2000 no such remarkable publication was noticed. From the year 2000, it is clearly visible that there was a smooth rise; however, in 2003 there was no publication on VRS guidelines. The highest (10) number of publications

on VRS/DRS guidelines was observed in the year 2015 followed by seven in the year 2011, 6 in 2015 and five in 2013. There were no publications in the year 1980-1982, in 1984-1987 and between 1990-1996. Therefore, it can be inferred that the IFLA and the ALA’s RUSA guidelines have encouraged rise in literature pertaining to VRS.

VRS: POLICY, PLANNING AND ADMINISTRATION

It is essential to study the currently implemented methods and techniques prior to launch VRS at any institutional library. It is important to examine the impact of VRS on library services before its implementation. This will help in identifying any change that may be required in the existing reference service system and make them suitable for VRS. The service provided to the extent should be on the basis of thoughtful planning, available financial resources and on the perceived user needs. For this libraries need to draft an initial action proposal along with identifying sources of funding. They should create best practices for providing an effective VRS. After successful implementation of the service it is essential to obtain user feedback for the betterment of the service. Library should expand the reach of the service to all users, including those with disabilities. It is also important to clearly state the scope of the service including the exclusion policy of the service. For example the libraries may mention “Due to time constraints, and the volume of questions the library receives, VRS cannot fax material to patrons, create bibliographies, conduct extensive research and renew materials via this service.” The significant components of VRS policy, planning and administration are discussed below:

Integration of Virtual Reference Service with Traditional Reference

- Need to decide feasible targets/goals for VRS.
- Prepare new and customized policies in alignment to the existing ones with effective integration.
- Treat VRS as a long-term commitment.
- VRS should not be considered as an ad-hoc or less important service, even during the launch of initial pilot stages.
- Integration of current desk-based reference with the VRS smoothly.
- Periodically review the re should be provision of referring a question to another reference librarian on the basis of their subject specialisation leading to a better handling and user satisfaction.
- Policies.
- Before establishing VRS, define and target primary clientele.
- Determine types of questions to be considered under VRS (factual or ready-reference questions).

Finances: VRS Costs

- There should be a long-term administrative commitment for facilitating adequate resources for VRS.
- Estimate initial expenditure including ICT infrastructure, commercial software, staff training, etc.
- VRS may be initiated as a pilot project with some financial assistance.
- Necessary budgetary allocation for staff, VRS tool/app, ICT infrastructure including Internet connectivity, adequate and suitable space.
- Pro-active marketing strategy.
- Assigning professionals for dedicated VRS may have impact on the overall library organisational structure calling for appropriate adjustments.
- Make the VRS cost the part of total library budget.

Infrastructure/Facilities

- Establish suitable workspace including furnishings, hardware, software, paper resources, high speed Internet access, and official email account.
- Consider using software with non-text options such as Voice-over-IP.
- Providing the facility of screen-readers for users having vision problem.
- Periodic software and hardware upgrade for maintaining efficacy.
- To include latest technological advancement.

Personnel Staffing

- Select committed library staff for providing most effective assistance through virtual reference on the basis of ability (computer skills and interpersonal communication skills), interest and availability.
- Distribution of VRS responsibilities among selected staff to make it available as per the service schedule without any interruption.
- Staff empowerment for knowledge, skill, aptitude (KSA) through training and workshops.
- Provide adequate training time and appropriate resources e.g. both print and e-resources including e-reference tools to enable staff to ensure effective service.
- Clearly define their specific responsibilities and assignments.
- Assess the availability of part time and full time professionals and monitor their workload distribution and scheduling.

- Create and maintain a centralized schedule for primary participants as well as relief and/or backup participants.
- Library professionals must be motivated and encouraged to participate in VRS.
- In case 24/7 VRS is not possible then it should be scheduled to best meet patrons' information needs and expectations.
- Identify technical support staff.
- Ensure compliance with publishers licensing agreements.
- Ensure maintenance of reference standards.
- Preserve and curate reference transactions for improvement and enriching the knowledge-base for future use.

Collection Development

- Library should consider online reference sources in its collection development policy (CDP).
- Subscribe adequate electronic reference sources to enable VRS librarian to provide effective service to the target audience.
- Explore publisher/vendor license off-site use of resources to serve patrons remotely.

Chat Guidelines

General Chat Guidelines

- Waiting period for a patron should be minimum and the reference library should respond as soon as the patron enters the chat queue.
- VRS staff should respond to the user queries in the order that they are received. Librarians may use their own judgement to respond to patrons waiting in a queue.
- The patron should be periodically reassured that they have not been disconnected while the staff is searching for fulfilling their information need.
- Frequently used URLs should be bookmarked and bookmark manager should be used for readily sharing any source.
- While communicating with the patron care must be taken regarding the appropriate use of spelling, grammar and capitalization.
- Build FAQ database for handling commonly asked questions which are repetitive in nature.
- Establish a consistent form of greeting or closure.
- If the session extends beyond a reasonable time limit and/or there is another patron in the queue, current

patron may be given information through email, e.g. "you will receive an email regarding your query soon"; "Kindly provide your email-id"

- If possible and staff feel comfortable, the second patron may be attended using a separate browser.
- The response should be well-structured having heading, conversation and closure. The heading should start with greeting the patron and with a generic notice of thanks for using the service. The reference librarian should refer directly to the subject of patron's inquiry by writing statements like "Information on _____ may be found _____", "To find out more about _____, we would recommend _____", etc.
- The reference librarian must cite the information sources used to fulfil the information need of the user fully in an appropriate citation style. Explain how the relevant information was found.
- Every conversation/interaction with the patron should end with librarian name (if desired), institution (in case of collaborative VRS) and any contact information. It may contain generic statements like -
- "We hope the information we've provided will assist you with your research";
- "I hope you find this information helpful";
- Assurance of committed assistance for future communications.
- For complete clarity and reduce ambiguity, "jargons, acronyms and abbreviations" should be avoided.
- The level of the inquiry should be kept in mind while responding to a query.
- Authentic and relevant information sources must be used and cross-checked to provide accurate responses. In case of e-resources only validated URLs should be shared.
- Care should be taken to use correct spellings in the written responses
- The librarian should add value to information through lucid explanations wherever possible.
- The librarian should recommend at least one relevant resource for every question.
- Develop policy defining acceptable/appropriate behaviour (a code of conduct). Send a warning message in case of inappropriate behaviour. Exclude repeat offenders from the service.

Guidelines for Chat Sessions

- Address the users with their names.
- Ask questions in between to clarify and better understand the information need.

- Encourage the patron to fully explain his/her query before responding.
- Use questions to refine the search query.
- Help patron framing the question in a precise manner.
- Maintain continuous flow of communication without a lengthy time-out.
- Explain search process to the patron
- Let the patron know the source of information.
- Provide complete reference to relevant printed sources via OPAC.
- Stipulate and follow users turn around policy (turnaround time is the maximum time the user is expected to wait for a reply/response).
- In dealing with answers requiring greater span of time, user may be guided with link to the item or resource via OPAC or database/website with the follow-up option via email.
- If a patron is referred to another professional for obtaining information, he/she should be helped regarding what to ask for.
- Use conversational tone (Type as you talk).
- Avoid yes/no responses as it discourages the patrons from asking questions.
- Highly technical terminologies and excessive jargons should be avoided.

Guidelines for Web Form

- Provide clear instructions for helping the users who wish to use the web form. Common fields of web form should be :
- Mandatory fields: Email address and Question Text
- Use of optional fields:
Name,
Department/Subject,
Phone Number,
Education Level, etc.
- Information type: Journal article, book chapter, book, etc
- Provide Links to relevant internal and external online resources including OPACs, Databases, Frequently Asked Questions (FAQs), Discovery tools, ILL, etc.
- Link to the VRS policy and service rules.
- Contact information of the reference staff with both physical location, timings and online contact options.

Interpersonal Communication

Adherence to standards is as important in VRS as it is in case of traditional reference services. However, the absence of a physically-present patron and the different modes of communication in VRS requires effective communication and interpersonal skills. Library professionals engaged in VRS should have essential skills to provide quality service just like in the case of face-to-face reference service. They must acknowledge receipt of patron question promptly and show professional courtesy & respect when answering questions. Reference staff is expected to provide the users accurate, complete and quality answers to fulfill their information need. The answers must match the level and scope of the question.

For successful VRS, reference librarians should adhere to can adhere to the RUSA guidelines including:

- “Professional Competencies for Reference and User Services Librarians”
- “Guidelines for Behavioral Performance of Reference and Information Services Professionals”

Thus, for an effective and successful VRS which has the capability to engage the users online, the librarians must demonstrate skills in the effective use of online communication.

Selection of Software

For selecting the VRS software the libraries should:

- Assess its compatibility with the existing system.
- Check whether the software meets the institution’s reference requirements
- Budgetary constraints regarding free Vs paid solution/ software.
- Engage staff having adequate ICT skills for their valuable contribution in the planning, software selection, and implementation. (In case the library decides to purchase commercial software). This will ensure the smooth implementation of the VRS.

Interface Design

The VRS interface and physical location should be designed in such a way to facilitate easy, quick and convenient access to resources and support. It should be capable of handling maximum number of user, irrespective of language, technical capability & physical impediments.

- Describe the scope of the VRS the library intends to offer.

- Design user friendly interface and easy navigation with subject approach to information.
- Consistent and uniform library website structure and design facilitating easy navigation.
- Library web pages should have a link to the library's home page and position/place the VRS hyperlink consistently on all library web pages.
- Use icons and images appropriately to get the attention of the users. Avoid filling the page with long blocks of text.

User Privacy & Confidentiality and Legal Issues

- Maintain patron anonymity by removal of personal information and patron identifiers (anonymized data) from which individuals could not be identified.
- For protecting the patrons' privacy and confidentiality, libraries should remove patrons' personal identifiers including name, e-mail, etc., from the transaction records (communication between patrons and library staff), transcripts database generated by the VRS software and FAQs based on them.
- User information captured by the system (transaction log) should be used for statistical evaluation and producing usage statistics.
- It will also help in training purposes, publicizing the service and for improving the effectiveness of VRS.
- Reference transcript-retention privacy policies accessible to the users. The library should mention privacy statement, disclaimer, etc.
- Awareness and strict adherence to publisher copyright and licensing agreements (for print and electronic resources) including their implications for consortia.

Training: Key Skills

Identify key persons for staff training, orientation and professional development according to a pre-decided schedule. The training components should include skills like multi-tasking, clear communication, professionalism, commitment, effective database and online searching by practising good search strategies, reference interviewing, knowledge of reference sources and familiarity with VRS software selected etc. The VRS team should be trained to respond to maximum number of user queries and they should be encouraged to share their experiences and new developments in the field of VRS. Imparting training is important to compensate for lack of face to face communication. For the successful adoption and optimum

use of the service the users must be imparted training to make them aware of the service and the methods and techniques involved for availing the same. This will ensure an early and wider acceptance of the VRS initiative. VRS should be promoted during information literacy programmes (ILPs) conducted by the library to sensitize the users about the importance and benefits of VRS and how to avail the service. Offer initial and on-going training to help staff learn and retain acceptable/appropriate patrons' online behaviours.

Marketing and Promotion

- Develop and implement a VRS marketing plan for pre decided target audience.
- Establish a budget for marketing along with encouraging word-of-mouth promotion which is very effective yet it costs nothing.
- Choose a logo/name for branding of the service and to seek users' attention.
- Publicize through local newspapers, library newsletter/ brochure, community radio station, etc for quick and wider adoption of the service.
- Post announcements to relevant institutional online discussion groups/forums.
- Use social media like Facebook and Whatsapp
- Periodic evaluation of the marketing plan and identifying new ways for the promotion for reaching new audiences, and for publicizing new developments.

Evaluation, Assessment and User Feedback

- Regular feedback should be obtained from the staff and users for evaluating the effectiveness and efficiency of the VRS. This will help in ensuring a high-quality service.
- Analyse service activity and usage statistics from transaction records and transcripts database.
- To know and understand the problems and difficulties faced by the users and library staff engaged in providing VRS, the library should conduct surveys of both patrons' and obtain staff feedback.
- VRS evaluation should be treated at par with library's overall and regular evaluation. Improvement of the service can be achieved through job enrichment & job rotation, modifying service parameters and user & staff training based upon evaluation and assessment results.
- Evaluate technical and policy issues.
- User satisfaction should be assessed for VRS as compared to the face-to-face reference interview.

- To assess the success and user adoption of VRS, it should be compared with Traditional Reference Service (TRS) involving desk-based face-to-face communication.

Parameters of Service

- The Level and scope of service clearly specified to communicate the service mission and goals.
- Level of service make the users aware of the service scope (covered) and limitations (not covered).
- Scope will specify the patron population the service will serve.
- Decision regarding inclusion of document delivery service will be a part of VRS.
- Clearly specify the time dedicated to single reference transaction for both patrons and staff.
- For synchronous VRS, indicate the staff availability schedule.
- For asynchronous VRS, indicate how frequently queries will be checked or minimum time lag for an initial response.
- During the live service unavailability users must be guided to asynchronous forms of reference (email, web-form, etc.)
- Establish a maintenance process and schedule.

Collaborative VRS

Libraries may pool their resources to extend their hours of VRS across multiple libraries through a distributed staffing structure. Sharing of knowledge, skill and expertise will not only help in cost savings but also improve the effectiveness and quality of the service. To establish collaborative/cooperative VRS at local and regional level libraries must determine the feasibility and viability of the same through pooling of resources. Collaborative or co-operative VRS include working with the software vendor in case a commercial solution is being used to provide the same. Online reference tools and e-resources enable libraries to share their resources with other participating libraries thus offering a greater range of services and expertise. For an effective collaborative VRS, the participating libraries should

- Establish a common vision, and guidelines (practice and procedures), accountability for the services.
- Brainstorm and identify issues and challenges including interoperability of software platforms

- Adopt fair-use clause for sharing resources while adhering to copyright law, licensing agreements, liability, etc.
- Understanding clearly the expectations for participating libraries.
- Ensure central administration and coordination for scheduling of libraries' contributions to the service.
- Identify key contact person(s) from each participating library and assign well defined responsibilities to him/her.
- Define procedures for communications between and among participating libraries.
- Participating libraries must commit to a prescribed minimum level of service and specific blocks of time (apart from routine forwarding of queries whenever required).
- Dedicated minimum number of service hours for synchronous VRS. Service hours may be decided on the basis of user population, staff strength, budget, and service scope.
- Participating libraries must monitor and handle incoming reference queries received through asynchronous mode like web form and email in a committed manner on an on-going basis.
- Prepare and maintain a common web page containing detailed information about collections focusing on discipline of each participating libraries so that it becomes easy and simple for reference staff to work in collaborative environment.
- Establish priority regarding preference being given to own patron over partner libraries' patron i.e. service will be provided on a first-come-first-served basis.
- Establish transparent policies and guidelines for using licensed online e-resources by the users of participating libraries in case of collaborative VRS.
- User privacy and confidentiality must be maintained in collaborative VRS involving multiple -library environment.
- Evolve a mechanism for remote patron authentication of partnering libraries.
- Inform the patron in case his/her query is forwarded to consortial partners.

CONCLUSION

Virtual reference (synchronous and asynchronous) should be treated as an extension of or as a part of the libraries' existing reference services. Although staffing models and location of the service may be different from face-to-

face or in-person reference services (traditional reference service), libraries must give equal importance to the VRS. For an effective, successful and sustainable VRS, the library should constitute a planning team involving representative members of the administration. The VRS planning team will share the responsibility of the crucial aspects including training, implementation, and promotion of virtual reference services. The selection of suitable VRS tool/app or software will also be one of the tasks entrusted upon the planning team. The team may involve representative members of the target audience in planning and promotion of virtual reference. Appropriate staffing models must be adopted to implement VRS depending upon the size, available HR, user population and need. Library should give adequate emphasis on online reference sources for providing effective and authoritative VRS.

REFERENCES

- Azmi, N. M., Noorhidawati, A., & Yanti Idaya Aspura, M. K. (2017). Librarians' behavioral performance on chat reference service in academic libraries: Perceived importance vs actual practices. *Malaysian Journal of Library & Information Science*, 22(3), 19-33. doi:10.22452/mjlis.vol22no3.2
- Burger, A., Jung-ran, P., & Guisu, L. (2010). Application of Reference Guidelines for Assessing the Quality of the Internet Public Library's Virtual Reference Services. *Internet Reference Services Quarterly*, 15(4), 209-226. doi:10.1080/10875301.2010.526479
- Cogo, E. (2009). Libraries Demonstrate Low Adherence to Virtual Reference Service Guidelines. *Evidence Based Library & Information Practice*, 4(2), 152-154.
- Guidelines for Cooperative Reference Services. (2007). *Reference & User Services Quarterly*, 47(1), 97-100.
- Guidelines for Implementing and Maintaining Virtual Reference Services. (2010). *Reference & User Services Quarterly*, 50(1), 92-96.
- Hughes, A. M. (2010). Adherence to RUSA's guidelines for virtual reference services is below expected in academic libraries. *Evidence Based Library & Information Practice*, 5(4), 105-107.
- International Federation of Library Associations (2005). *IFLA digital reference guidelines*. Retrieved April 30, 2018 from <https://www.ifla.org/files/assets/reference-and-information-services/publications/ifla-digital-reference-guidelines-en.pdf>
- Jones, M. F. (2004). Internet Reference Services for Distance Education: Guidelines Comparison and Implementation. *Internet Reference Services Quarterly*, 9(3/4), 19-32. doi:10.1300/JI36v09n03_03
- Markgren, S. (2006). RUSA Professional Tools: Guidelines for Implementing and Maintaining Virtual Reference Services. *Public Services Quarterly*, 2(2/3), 193-194.
- Reference and User Services Association (2006). *Guidelines for Cooperative Reference Services*. Retrieved September 20, 2005 from <http://www.ala.org/rusa/resources/guidelines/guidelinescooperative>
- Reference and User Services Association, American Library Association (2013). *Guidelines for Behavioral Performance of Reference and Information Service Providers*. Retrieved April 30, 2018 from <http://www.ala.org/rusa/resources/guidelines/professional>
- Reference and User Services Association, American Library Association (2017). *Professional Competencies for Reference and User Services Librarians*. Retrieved April 30, 2018 from <http://www.ala.org/rusa/resources/guidelines/professional>
- Ronan, J., Reakes, P., & Ochoa, M. (2006). Application of Reference Guidelines in Chat Reference Interactions: A Study of Online Reference Skills. *College & Undergraduate Libraries*, 13(4), 3-23. doi:10.1300/J106v13n04-02
- Schwartz, H. R., & Trott, B. (2014). The Application of RUSA Standards to the Virtual Reference Interview. *Reference & User Services Quarterly*, 54(1), 8-11.
- Shachaf, P., & Horowitz, S. M. (2008). Virtual reference service evaluation: Adherence to RUSA behavioral guidelines and IFLA digital reference guidelines. *Library & Information Science Research (07408188)*, 30(2), 122-137. doi:10.1016/j.lisr.2007.12.002
- Trott, B., & Schwartz, H. R. (2014). The Application of RUSA Standards to the Virtual Reference Interview. *Reference & User Services Quarterly*, 54(1), 8-11. Retrieved from <https://doi.org/10.5860/rusq.54n1.8>