Subject: Library and Information Science

Production of Courseware
e-Content for Post Graduate Courses

Paper No : 04 Information Sources, Systems and Services

Module   : 18 Reference Interview and Search Techniques

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Module 18: Reference Interview and Search Techniques

I. Objectives

After studying the module the learner will be able to:

- Conduct a successful reference interview;
- Categorize the types of queries received from the users;
- Know basic search techniques to find answers to these queries;
- Search information sources to find answers; and
- Provide requisite answers or information sources to user's satisfaction.

II. Learning Outcome

After studying the module you will be able to learn that reference interview is a conversation between a user, who is in need of information and the librarian who assists in finding the required information. You will also be able to conduct a successful reference interview; categorize the types of queries received from the users and know basic search techniques to find answers to these queries. You will be capable of understanding that user's satisfaction should always be kept in mind while conducting reference interview or searching to find the answer. For this, librarian should be receptive and cordial, search information sources with or for the user and provide the requisite sources.

III. Module Structure

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1. Introduction

Reference interview is a conversation between a user who is in need of information and a librarian who assists in finding the required information. Reference interview may be conducted in person, i.e., face-to-face, by telephone, or electronically such as e-mail, live chat, instant messaging (IM) or other electronic means as requested by the user.

Reference interview, in fact is an intermediate step between the library users' query and ideal resources which provide answers to the query. Reference interview helps to know the query thoroughly, the purpose for which information is needed, background of the user, what information user has already collected and the type and amount of information required.

Although librarians should learn the elements of good reference interview, they must recognize the fact that these steps may require to be modified to match each situation. According to Cassell and Hiremath, "The reference interview is more an art than science. It is an ever changing practice that requires responsiveness to the context rather than the application of predetermined set of skills".

In the subsequent sections you will learn how to conduct a reference interview and basic search techniques that provide answers to users' queries.

2. Reference Interview: Definition

Online Dictionary of Library and Information Science defines reference interview as "The interpersonal communication that occurs between a reference librarian and a library user to determine the person's specific information need(s), which may turn out to be different than the reference question initially posed. Because patrons are often reticent, especially in face-to-face interaction, patience and tact may be required on the part of the librarian. A reference interview may occur in person, by telephone, or electronically (usually via e-mail) at the request by the user."

A well trained reference librarian sometimes initiates communication if a hesitant user appears to be in need of information. When a librarian approaches the user and enquires if the user needs any help, instead of user coming to the reference desk, the service is called 'Roving Reference'. The roving reference also initiates reference interview.

3. Reference Interview: Conducted in Person

The reference interview is the most important aspect of the reference process. The reference interview determines what a library user needs. Conducting a successful interview is a skill that requires understanding and practice. There are six stages of reference interview and each stage is equally important. These stages are as follows:

- **Stage 1:** Establishing Rapport with the User
- **Stage 2:** Discussing and Clarifying the Question
- **Stage 3:** Developing Strategy for Successful Search

- **Stage 4:** Finding the Information and evaluating it
- **Stage 5:** Follow up
- **Stage 6:** Ending the Interview

The above six stages are explained below:

Stage 1: Establishing Rapport with the User

To establish rapport with the users, a reference librarian should possess certain identifiable attributes. Reference and User Services Association (RUSA) guidelines for Behavioural Performance of Reference and Information Service Providers, list these attributes in five areas, viz. approachability, interest, listening/inquiring, searching and follow-up. According to these guidelines, the reference librarian should be approachable, show keen interest in users' queries, should have good communication skills to keep users engaged during reference interview, be efficient in searching and must follow up to find out if users' queries have been answered fully or not and suggest possible alternatives.

To be approachable, librarian should be visible at the point of users' needs. He/she should not pretend to be busy, when user approaches him/her. He should be poised, acknowledge user's presence, and make user feel comfortable by greeting and talk to the user in friendly manner. Such gestures help the librarian to establish rapport with the user, put the user at ease and make him/her feel that help is available here.

Stage 2: Discussing and Clarifying the Question

Once a dialog has started, the librarian should interact with the user and clarify the question posed by the user. First and foremost activity is to repeat the question to ensure that the question posed by the user is the same as understood by the librarian. Then the reason for which information is sought and what user has already done about it is to be enquired. Depending upon user's response, the search strategy can be worked out. It is often observed that the first question by the user does not describe what the user really wants. Here, the librarian must ask open ended questions so that the user comes out with specific answers, instead of 'yes' or 'no'. Ohio Online Reference Excellence (ORE) on the Web Online Tutorial lists, some of the open ended questions as follows:

- Please tell me more about your topic.
- What additional information you can you give me?
- How much information do need?
- Please tell me more about sources you may use for your assignment.

Open ended questions give users a chance to express their information requirements in their own words. Librarian should continue with clarifying questions until it becomes clear what user really wants. At times, librarian has to rephrase the question to ensure that he/she has really understood the question.

Here knowing user's background is equally important, because the question posed may be the same, but the sources to be searched may be different for different category of users. For example, if a user wants information on 'Blood Cancer', then information required by a student, a professional, a researcher, a patient or parents of a patient will be different. A student may need information for a project work, for which an encyclopaedia article or book may serve the purpose. A professional, i.e., a doctor may need this information for the treatment of his patients, and then a database such as PubMed may have to be searched. Researcher may be requiring information for latest articles on the subject for further research and then databases, such as MEDLINE or PubMed may have to be searched to provide required information. Parents or patient may require information on how to cope up with the problem, for which, a booklet from the health services department may serve the purpose.

Stage 3: Developing Strategy for Successful Search

Once the subject requirements of the user are clear, the librarian constitutes the search terms and identifies most appropriate sources for the user. If the query is about a specialized subject area with which librarian is not very much familiar, then there is no harm in seeking clarification from the user and consulting a subject dictionary or encyclopaedia to get clear idea of subject and its terminology. During the process of selecting search terms and identifying appropriate sources, the librarian should be in communication with the user to ensure that the librarian is proceeding in the right direction.

Stage 4: Finding and Evaluating the Information

The next step is searching and locating the information. During the search process, the librarian should be in touch with the user to show the search results and find out if these are meeting his information requirements. This process should continue till user gets the required information or has resources to examine. In case, user is not very much familiar with the use of identified resources, appropriate instructions should be provided to the user in the use of those resources. At the same time, attention should be paid to the quality of information by selecting high quality sources. This can be done by using guidelines for the selection of reference material itself. Once answer to the question is located, explain the user search strategy followed, names of the sources used to find the answer, so that user can learn to find answers to similar questions on his/her own in future. Also enquire from the user if additional information is required. This will encourage the user to state what more information he/she needs.

Stage 5: Follow-Up

Follow-up in the reference interview is essential, as it helps to know, whether information requirements of the user have been met or not. If user query has not been answered to user's satisfaction, then revise the search terms or try other sources. Work with the user to narrow or broaden the topic, when too much or too little information is identified. In case sources as well as experts are not available in the library, refer the user to other sources or institutions as deemed essential. Do not end the reference interview abruptly. It is librarian's responsibility to find out if user is satisfied with the search results and if not, then referring him to other sources, experts or

institutions. Overall purpose of the follow-up is to ensure that good service is provided by the library and user is motivated to come back again when in need.

Stage 6: Closing the Interview

Close the interview on a positive note. In case further information is required by the user, the librarian should give him/her specific time frame to contact. In case of referral, the librarian should take an appointment with the concerned institution or experts and inform the user accordingly. For this librarian should take the name and contact details of the user and give the user his/her name and contact details.

4. Reference Interview: Conducted Remotely

Modern libraries use electronic means to provide reference assistance. Answering questions by e-mail, chat, Instant Messaging (IM) and Text Messaging (SMS) are not much different from answering questions in person. The only difference is that the librarian cannot judge, whether he/she is communicating well with the user or not as users' facial expressions are not seen.

Reference service by e-mail has been offered by the libraries since mid-1990s. In service by e-mail, reference interview is in the form of a well-designed form, which user has to fill to provide essential details of the query. As all the essential details are with the librarian, it becomes easy to search and provide answers. Although, e-mail reference is slow, it is advantageous for the librarian, as it gives him/her more time to research and provide better response.

Reference interview in Chat, IM, and SMS reference is conducted in real time. Here, immediate response is required to be provided to the user. As short messages are exchanged to and forth, librarian should immediately greet the user and acknowledge the receipt of the question. Then enquire the purpose for which information is needed. Rephrase the question to ensure that the question asked is understood. Once the query is clear, the librarian should provide the answer.

It has been observed that the kind of questions handled by this mode is usually of ready reference type, or others requiring short answers. Specific search and research type of queries cannot be handled by this mode. As questions and answers are short, the librarian may not have contact information for the follow-up. It is, therefore, recommended that the librarian should try to get e-mail address of the user, if they want to do the follow-up or encourage the users to come to the library.

5. Basic Search Techniques

Based on the type of question, the search strategy can be worked out. Time required in searching and finding the answer also varies with the type of question. In simple terms, the search is an effort to translate the user's query into keywords as acceptable by given reference sources, and finding the answer.

The search process may be outlined in this way:

- The query is first analyzed and clarified via the reference interview. From this, one determines the type of question asked, the parameters to be established (that is the purpose, scope, time span, amount of material, level of material, etc.), and the source(s) or system(s) where the necessary information is likely to be found.

- In case of a majority of ready-reference type of queries, some reference source usually is available, the source is then consulted and answer is given.

- In case of search & research type queries (and more difficult ready-reference questions), it is necessary to consider numerous sources & possibilities (Katz, William. A.).

5.1 Type of Reference Questions

Most of the reference questions received by the libraries can be broadly categorized into five types, viz. directional type; procedural type (questions pertaining to resources, rules and regulations of the library);ready reference type; specific search type; and research type. These are discussed below:

5.1.1 Directional Type

Directional types of questions are received from the library users who visit the library for the first time. Such users need directional guidance about the general layout of the library such as, where current issues and back issues of the periodicals are kept, where the reference collection or text books are kept, or where is the card catalogue or OPAC for searching library holdings, etc. Such directional types of queries do not require any search. On an average, a library receives about 10% of directional type of queries.

5.1.2 Procedural Type

Questions pertaining to the rules and regulations of the library for members, policies and procedures within the library, or holding information, etc. are procedural type of queries and do not require any search. About 10% of the questions received by a library are of procedural type of queries.

5.1.3 Ready Reference Type

Ready reference types of questions are fact finding questions which require a single uncomplicated straight forward answer. These questions are about finding quick facts about dates, persons, places, and statistics and like. There are questions like - What is the capital of Zimbabwe? Who was the first president of America? When will the next solar eclipse occur? What is the per capita income of India? How many newspapers are published in India? These types of questions come under ready reference type of queries. The answers can be located in standard reference books like dictionaries, encyclopaedias, ready reference sources, etc. The time required to answer such questions ranges from 2 to 10 minutes. It is observed that, on an average, a library receives about 30-40% queries as ready reference type questions which can be answered from ready reference sources. The actual percentage may vary with the size and type of library.

5.1.4 Specific Search and Research Type

The queries like 'I have to write a paper on breeding and rearing of race horses. Where can I find the information? I have to make a comparative study of socialism and communism, where can I find the information?' are specific search type questions, which require searching the literature for specific topic. Whereas, research types of queries are from the researchers or professionals, who require in-depth information on particular topic relating to research, or for solving research problem, etc. Such queries require in-depth searching of formal as well as informal sources of information to find answers.

5.2 Search Process

The queries relating to specific search and research type including more difficult ready reference type require searching in secondary tools like bibliographies, indexes, catalogues and databases to find the requisite sources containing the answer. Here the actual search strategy, as well as possible sources, has to be worked out. Time taken to answer these questions also varies depending upon the type of questions asked. Information may have to be searched in diverse sources including informal sources to provide answer to the satisfaction of the user.

In case of specific search type of queries, the answers are likely to be available in books, journals, etc. on the specific subject or topic. For this, library catalogue, bibliographies, indexes etc. are searched to find books or other material on the subject. Here librarian must determine the likely subject headings, keywords, etc. which are most appropriate for the search. Depending upon the number of items retrieved, the librarian may have to broaden the search, narrow the search or carry out more specific searches to find the required material containing the answer. During the search process, it is advisable to show the search results to the user, so that only relevant material is selected and noted down. Once the search process is complete and the relevant references are noted down, the next step is to locate the material in the library and deliver it to the user for perusal.

Research types of queries require searching for the micro documents like periodical articles, conference papers, etc. for finding the answer. For this normally bibliographic databases are searched.

5.2.1 Searching Online Databases

Presently most of the databases are in electronic form and are available on the Web for searching online. Steps involved in searching electronic databases varies from database to database, because each database system has its own custom–built interface that allows specific type of search with specific search operators and specific search commands. Most of the online search service providers offer free training modules, which provide step-by-step instructions to search the database and retrieve required information. In addition, there are some basic steps a librarian must know for conducting computer based search. These steps are as follows:

- **Step 1:** Registration with Internet Service Provider.
- **Step 2:** Registration with Database Search Service Provider.

- **Step 3:** Access Internet and Log on to the Database Search Service Provider.
- **Step 4:** Select the Appropriate Database.
- **Step 5:** Formulate the Search Expression.
- **Step 6:** Search and Examine the Search Results.
- **Step 7:** Reformulate Search Expression, if Required.
- **Step 8:** Select and Save or Print the Retrieved Relevant Records.

These above steps are explained further:

Step 1: Registration with Internet Service Provider

To search online databases, the library requires Internet connection. To get Internet connection one has to register with Internet Service Providers (ISPs), like BSNL, MTNL or others. These ISPs offer internet related services from Dial-up Internet access to Broad-band Access Services. The charges for Internet connection vary with the type of connection required. Once registered, the library gets a User ID and password to access the Internet.

Step 2: Registration with the Online Search Service Provider

In addition to Internet connection, one needs to register with online search service provider, which provides access to databases for searching. Online search service provider may be a vendor or an aggregator like EBSCO, ProQuest, Emerald or others, which provide access to a number of bibliographic or full-text databases from different publishers, or a publisher providing internet access to its own databases for online searching like H.W. Wilson, CAS, etc. On registration with online search service provider, the library gets a User ID and password. Online registration is also possible. These days most of the academic and research libraries form a consortia to access these databases through license agreement with the vendor, thereby reducing the overall cost of accessing, searching and downloading the data.

Step 3: Log on to the Online Search Service Provider

This is usually done through the Web interface of online search service provider. At this stage one should know the web address of the search service provider. For example, for EBSCO it is (http://www.ebsco.com/). To access and search the database one has to enter user ID and password. Most of the vendors offer online registration as well.

Step 4: Select the Appropriate Database

Next step is to select the appropriate database to search. Most of the online search service providers allow users to browse through their database categories to select the appropriate database(s). The Aggregator like EBSCO makes available full text and bibliographic databases according to user category and institutions like sources for college and university level, hospitals and medical institutions, government institutions, corporations, schools and public libraries. EBSCO provides access to 370 full-text and bibliographic databases, over 515,000 e-books and management services for 360,000 e-journals,e-journal packages and print journals. This

information helps the searcher to select appropriate database(s) to search. EBSCO also provides linkages from bibliographic references to full text-journal articles.

Step 5: Formulate the Search Expression

This step requires selection of appropriate terms or phrases for searching the database. This is normally done during the reference interview. In computer based search, the user is asked to fill a form in which search question is stated. User is asked to write a paragraph on the search topic, give purpose of the search and list one or two references, and names of important people and institutions in the field. All this information helps to know the exact information requirements of the user and helps in selection of suitable keyword(s) for searching the database. Then keywords and synonyms for searching are listed. Many bibliographic databases have their own specialized vocabulary (thesaurus) for searching the database. The thesaurus is usually available online and one can select appropriate terms and phrases from this for searching the database. At the same time one should have the knowledge of nature, content, and structure of database, fields that are searchable, what search facilities are available, such as word search or phrase search, and what appropriate operators are there. The search operators and syntax for formulating the search expression vary from one database to other database. Once search expression is formulated then actual online search is conducted.

Step 6: Search and Examine the Search Results

When the search string is entered into the system, the database starts displaying the results. The searcher/information professional should check the results in user's presence to ensure that only relevant references are selected from the displayed list. If user is satisfied with the results, then the list is printed and given to the user. If linkages are available from bibliographical references to full-text journal articles, then relevant articles should be printed online and given to the user.

Step 7: Reformulate Search Expression, if Required

If user is not satisfied with the search results, the searcher/information professional should reformulate search statement. Online search is usually a repetitive process, where user conducts several searches, compares the results and modifies the search statement or conducts a new search in order to get best results. One can combine keywords using Boolean Search operators, viz. AND, OR, NOT. 'AND' operator narrows the results to records that contain both the search terms, e.g., Education and Distance Education. 'OR' operator retrieves the items that contain either search term, e.g., education, or Distance Education or both Education and Distance Education. Use of 'OR' operator usually retrieves more records. 'NOT' operator eliminates unwanted terms.

Step 8: Select, Save and Print Relevant Records

When search results are found to be satisfactory to the user, the relevant records should be printed and given to the user. If linkages are available from bibliographical references to full-text journal articles, then relevant articles should be printed online and given to the user.

The most common complaint of the end user is that in online searches too much irrelevant references are retrieved. Users are basically satisfied with a few highly relevant citations rather than all the citations pertaining to the question. In one of the studies, it was found that users prefer fast and convenient way to retrieve a few good articles rather than all the articles in the database. When asked to evaluate one system, 45 percent of the users felt that there were too many irrelevant references. (Wilson 1978). It is, therefore, suggested that there should be more detailed interaction with the user and the searcher/information professional to get the exact information requirements of the user before the search process begins.

6. Types of Answers

Answers provided to the users' queries may be in different forms. Answer may be in the form of complete data or information, as normally provided in case of ready reference types of questions; or in the form of sources like books, articles, journals, etc. containing the answer, as provided in case of specific search type of questions; or in the form of bibliographical references to the sources containing answer, as provided in response to research type of questions.

According to Cassel and Hiremath, answers provided to the user can be of different types and provide various levels of utility for the user. For example, an answer may be elementary, skilled or value-added. Though all answers are helpful to the user, value added answers provide highest level of utility for the user and saves the time of the user.

Value addition can be done by providing original sources, instead of providing only bibliographical references to these sources. When there are several relevant sources to the question, then librarian can point out which ones are most suitable to begin with as they contain the most relevant information and are from the reputed publishers. Similarly, librarian can explain to the user about the suitability of a particular web site or a database for search.

When value addition is not possible due to time constraints, the librarian can provide skilled answers. To provide skilled answers, the right sources are located, sifted and judged so that only the best sources are selected for research consumption. In chat reference too, the skilled answers would provide professional weighting of resources. For example, a question was asked about Turner syndrome. The librarian was able to locate two authoritative web sites. One was the acclaimed Merck Manual and the other was a special-interest national organization, the Turner Syndrome Society. The user wrote back to say that he or she was confused because the occurrence rates listed in the two sites were variant. Here, was the librarian's assured answer. "That's tough call; they both are reputable sites. While Merck is a reference book, the site for Turner Syndrome Society may be more in touch with the actual statistics, because they deal exclusively with the condition." (Guruzenda, 2005).

When right sources are not available in the library to provide the answers, then librarian should refer the user to other special libraries, experts or institutions. For this, keeping the contact details of medical, legal, business or other libraries is essential, so that the users may be directed to other libraries when required.

Kwon and Gregory (2007) in chat reference service, surveyed whether users would be more satisfied if RUSA guidelines were used. In their study, they found that following five behaviours were strongest predictors of user satisfaction:

- Receptive and cordial listening;
- Searching information sources with or for the patrons;
- Providing information sources;
- Asking patrons whether the question was answered completely; and
- Asking patrons to return when they need further assistance.

7. Summary

Reference interview is a conversation between a user, who is in need of information and the librarian who assists in finding the required information. Reference interview helps to know the query thoroughly, the purpose for which information is required and how much information is required, timeframe within which information is required, background of the user and what information user has already collected. Based on the type of question, the search strategy can be worked out. Answering directional and procedural types of questions do not require searching to provide answers. Ready reference types of questions require searching in standard reference books and answers can be provided within five to ten minutes. Specific search and research types of questions require searching in secondary tools like bibliographies, catalogues, indexes and databases. User's satisfaction should always be kept in mind while conducting reference interview or searching to find the answer. For this, librarian should be receptive and cordial, search information sources with or for the user, provide the requisite sources, enquire from the user if he / she is satisfied with the answer and encourage the user to come back again if in need.

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