Using simulated reference questions and a search exercise in a standardized list of subject headings, this test assesses several major skills of reference librarians: question analysis, selection of appropriate source, actual use of the source, and selection of appropriate subject terms. It also provides a means of determining the attitudes of reference librarians toward problem-solving, direct and indirect reference work, and instructional and informational modes of service. The introduction includes guidelines for interpreting test results. Two references are cited. (Author/FM)
DIAGNOSTIC INSTRUMENT FOR ASSESSING THE SKILLS AND ATTITUDES OF REFERENCE LIBRARIANS

Marilyn Domas White

College of Library and Information Services
University of Maryland
College Park, Maryland 20742

April, 1981
ABSTRACT

DIAGNOSTIC INSTRUMENT FOR ASSESSING THE SKILLS AND ATTITUDES OF REFERENCE LIBRARIANS

The test developed in this paper assesses several major skills of reference librarians: question analysis, selection of appropriate source, and actual use of the source, including selection of appropriate subject terms, through simulated reference questions and a search exercise in a standardized list of subject headings. It also provides a means of determining the attitudes of reference librarians toward problem-solving, direct and indirect reference work, and instructional and informational modes of service. The test has been used with foreign librarians employed in U. S. Information Agency libraries in Europe, the Middle East, and North Africa, and with library school students at the University of Maryland, where it is used to evaluate students seeking to waive the basic reference course because of previous related course work or experience.

- Marilyn Domas White
College of Library and Information Services
University of Maryland
College Park, Maryland 20742
INTRODUCTION

This diagnostic instrument is a modification of a test developed to assess the skills and attitudes of participants in the U. S. Information Agency Training Program for European Librarians, Catholic University of America, 1977. It has been used for a similar workshop given in 1978 for librarians in the Agency's libraries in the Near East and North Africa and to assess students seeking waiver of the basic reference course at the University of Maryland, College of Library and Information Services.

The following is a brief outline of the instrument, which is included in Appendix A:

Section 1. Simulated reference questions
Section 2. Identifying relevant subject headings
Section 3. Attitudes toward direct and indirect reference service
Section 4. Attitudes toward instructional and informational reference service
Section 5. Attitudes toward problem-solving

Time for completion ranges from 1½ to 3½ hours, with the difference due primarily to speed in completing Section 1. The respondent must have access to a reference collection likely to contain the reference sources listed in the key to Section 1 (Appendix B). Sections 2 through 5 are self-contained.
The test does not assess online searching skills. The USIA librarians did not have these skills, and students waiving the basic course at Maryland are urged to take a course which incorporates the use of online systems if they do not already have these skills.

GUIDELINES FOR INTERPRETING RESULTS

Reference Skills

Section 1 contains fourteen questions designed to test the respondent's knowledge of search heuristics likely to be developed during a basic reference course or through reference experience. These include, for example, identifying a recent book by reference to the subject, updating a biographical entry, reading a statistical table. All of the answers can be located in reference sources usually contained in a medium-sized public library or in an undergraduate academic library collection. A key is included in Appendix B for these questions, indicating one or several sources of the correct answer.

In assessing this portion of the test, answers which do not match the key should be checked for accuracy. Two scores should be determined: percentage correct responses of all possible responses, based on fourteen questions, counting the parts of questions separately; and time per correct answer. The latter is computed by dividing the total time required to answer the questions, rounded to the nearest 15-minute interval, by the number of correct answers.

To allow for variations in response caused by collection quality, the directions ask the respondent to include search strategy development for questions which could not be answered. Included in the strategy is identification of the generic tool, with its qualifiers, which should
logically contain the answer. In Question 2, for example, the strategy should indicate "a map of Illinois with counties and county seats, likely to be found in a U.S. atlas. The examiner can judge the effectiveness and logic of the search strategy. If the test collection is unknown, the examiner may provide the respondent after the test with a list of sources containing the answers and ask him to identify those in the test collection. This information, together with strategy, allows the examiner to attribute the reason for performance failure to collection quality, knowledge of the collection, or use of sources.

The second segment evaluates the librarian's ability to select useful subject headings from the Library of Congress! Subject Headings and to modify a search using standardized subject terminology. This exercise provides a basis for assessing the librarian's skill at conducting subject searches in a card catalog since this system is used widely to provide subject access to books and other library materials.

The specific objectives of the four questions in this section are to evaluate the respondent's ability to interpret:
- a scope note, explaining coverage of a particular term
- a see also reference to a related subject heading
- subdivisions of subject headings, i.e. hierarchical arrangement, and form subheadings
- a see reference from an entry term to the standard term

The score is the number of correct answers, and should be accompanied by a diagnosis of the reasons for error, based on the objectives indicated.
Attitudes Toward Reference Work

Sections 3 through 5 assess attitudes which affect job performance in reference. Section 3 assesses the preference for direct or indirect reference work. Direct reference involves direct personal contact with the user, usually by answering reference questions at a reference desk or through bibliographic instruction; indirect is supportive of this direct contact, frequently through bibliographic activities, but involves little personal interaction with the user. In this section, Questions 1, 5, and 7 relate to direct service; 2, 3, 4, 6, 8, and 9 to indirect service. Ideally it should be some blending of the two groups, but an obvious preference for indirect reference service may suggest an inability to work well with the public.

Section 4 asks the respondent to indicate his preference for teaching the user how to find the information or actually providing the information. The latter is more closely aligned with special reference service, the former with public or academic library service. There is some indication that librarians who feel inadequate for one reason or another in dealing with a patron are likely to prefer an instructional approach, but this is not the only reason for this preference, and it may simply reflect a philosophical orientation to a librarian's role. Many librarians philosophically view themselves as teachers and the library as an institution for self-education and thus espouse the instructional mode of service.

The last section incorporates an instrument to assess attitudes toward problem-solving devised by Carey (1958). The emphasis in this instrument is on attitudes, not on capability; however, the scale derived
from this instrument has predictive validity in that the scores have a positive relationship to performance in experimental problem-solving situations. The scale is not included in Appendix A, but is reprinted in: Marvin E. Shaw and Jack M. Wright; Scales for Measurement of Attitudes (New York: McGraw Hill, 1967), pp. 268-70.

To score this section, "response alternatives for positive statements should be weighted from 5 (strongly agree or almost always) to 1 (strongly disagree or almost never). Weights for negative items (Questions 9, 14, 15, 18) should be reversed. A person's score is the sum of the weighted alternatives he endorses. High scores indicate a positive attitude toward problem-solving situations and demands" (Shaw and Wright, 1967). The mean score for females is 57.61, for males 62.12. Respondents scoring high on this section should function effectively in the problem-solving aspect of reference.
FOOTNOTES

1The author was Coordinator of Curriculum and Instruction for the 1977 training program, Project Director for the 1978 program.

Appendix A

DIAGNOSTIC INSTRUMENT FOR ASSESSING THE SKILLS AND ATTITUDES OF REFERENCE LIBRARIANS

This diagnostic instrument is designed to provide information about your skills in and attitudes toward reference work. You should work alone, and follow the directions given for each section. Time to be allocated for completion of each section is indicated with each section. The order may be shifted at the examiner’s discretion. Please read the directions for each section completely before starting each section.

Section 1. SIMULATED REFERENCE QUESTIONS (3 hour maximum)

Directions: Approach all questions as though they were actual questions and locate an appropriate response. You may consult any source except another person. For all questions, provide a brief citation to the actual source of the answer, including the entry under which it was located. Example: Dict. of Am. Biog., v. V, p. 170, under Adams, H. B. For the asterisked questions, also provide the answer briefly.

If you cannot locate the answer, please do the following:

- list the first three sources you tried, including the entry.

  Example: Current Biog., 1956, under Smith, D. G.; Who’s Who in America, 1957, under Smith, David; Ency. Brit., under Smith, David G.

- then, describe the kind of reference work in which you think you could find the answer, including appropriate qualifiers.

  Example: A retrospective biographical source covering American statesmen with name access

IMPORTANT -- Please note the time it takes you to complete this segment of the test and indicate it at the end of the questions. You may not take longer than three hours.
Questions:

* 1) Is Irving Berlin still alive?

* 2) What is the county seat of Knox County, Illinois?

* 3) Churchill first used the term Iron Curtain in a speech he made in the U. S. When and where did he make this speech?

* 4) Can you locate a copy of it for me? (Bibliographically, not physically)

* 5) I know that the Secret Service has responsibility for providing bodyguards for certain public officials and their families under law. Who falls under their protection. I do not need specific names-titles or relationships will be sufficient.

* 6) Elihu Root was a noted Republican Senator in the early part of the 20th century. What was his position regarding the League of Nations when American membership was being discussed in Congress?

* 7) How many American married women with children under school age were employed in 1977?

* 8) I need a bibliographic citation to the hearings on the effectiveness of federal bank regulation that were held in Congress in Spring, 1976. They related to the Franklin National Bank failure.

* 9) What was the name of the black woman singer who sang at President Lyndon Johnson's funeral?

* 10) What newspaper in St. Louis has the largest circulation?
11) During his first term of office, President Nixon encountered major difficulties in securing senatorial approval of his appointees to the Supreme Court. Justice Rehnquist was approved in 1971, but only after critical scrutiny. What were the major objections to him?

* 12) How did Senator Proxmire vote on his confirmation?

* 13) I need the author and title of a fairly recent (i.e., published between 1978 and 1981) book about Newfields, the planned community in Ohio.

14) Where can I find a picture of the Picasso sculpture he donated to the city of Chicago, the rust-colored one that is in the plaza of the Chicago Civic Center?

Time for completion (Be specific):
Section 2: IDENTIFYING RELEVANT SUBJECT HEADINGS (15 minutes)

Directions: Attached is a page of subject headings from the Library of Congress Subject Headings (8th ed.). Using the entries on this page, select the subject heading you would search under first to locate the following books in your catalog. (Remember your entry should always be the most specific possible.)

1) A book on British civil service policies about the hiring of nationals in India in the nineteenth century:

2) A book on the sociology of the bureaucracy which analyzes several government agencies:

3) A handbook on how to get minority groups to apply for civil service jobs:

4) How can I broaden my search in no. 3 if there are no books under that subject heading?

What kind of irrelevant material would I get with this approach?
Section 3: ATTITUDES TOWARD DIRECT AND INDIRECT REFERENCE SERVICE

Directions: The questions in this section will involve your making judgments about the tasks described below. They are tasks performed normally in reference departments. Please read them carefully and, if necessary, refer back to them when responding to the questions.

1) Finding a factual answer for a patron
2) Writing an administrative report on reference services
3) Developing a referral file
4) Evaluating a portion of the library's reference collection
5) Explaining to a user how to use a particular reference tool
6) Preparing a selection policy for reference materials in a subject area
7) Giving a talk to a group on reference materials in the library's collection
8) Coordinating some aspect of reference work with another library
9) Compiling a bibliography which requires judgment about the quality of works included

1) Which task would you most prefer doing? _____
   1.1) Why?
   1.2) Which would be your second choice? _____

2) Which you least prefer doing? _____
   2.1) Why?

3) Which of the tasks do you consider most professional? _____
   3.1) Why?
   3.2) Which would you consider the second most professional task? _____

4) Which task do you consider the least professional? _____
   4.1) Why
Section 4: ATTITUDES TOWARD INSTRUCTIONAL/INFORMATIONAL REFERENCE SERVICE

Directions: The following two paragraphs describe different approaches to reference work. Read them carefully and answer the following questions in relation to them. The numbers within each paragraph refer to the specific thought preceding them. Please disregard them in your initial reading; they will be referred to in a question.

A) I generally prefer to provide the information itself rather than go through the process of telling the user how to find it. (1) Often the question-answering process is considerably quicker when I do it. (2) And I am a little wary of providing the user with the limited knowledge about sources I can give him in a brief encounter; he may feel that all of his future questions can be answered through the same strategy when another would be more appropriate. (3) Also, I am not sure how important it is that he know how to find the information. After all, it is the information itself which is more important, not knowing how to find it. (4)

B) I would prefer to introduce someone to the appropriate information source and teach him how to use it rather than provide the answer for him. (1) I feel that the patron benefits more from finding the information himself rather than its being provided by the librarian. (2) Particularly in the case of people involved in formal course work, finding information is simply an extension of the coursework. The librarian should interfere in the process only to the point of showing the student where to find it and explaining how to use a reference book. (3) Even if providing instruction is more time-consuming in the short-run, in the long-run the patron will make fewer demands on the reference librarian because his own skill in using reference materials will increase. (4) Developing self-sufficiency in using the library should be the goal of every library user. (5)

Other considerations over which you have no control, such as time constraints and institutional policies, influence your behavior in responding to a question. Please disregard these, however, in answering the following questions since the objective is to develop an accurate picture of your philosophy of reference service.

1) You may disagree with individual sentences in each paragraph, but considering each paragraph as a whole, which more accurately reflects your own philosophy of reference services?

If you are not in complete agreement with the paragraph you selected, which of the sentences or groups of sentences did you disagree with? (Please note that the sentences are numbered with the number following each sentence. Respond by indicating the specific number of the sentence or sentences.)

(1.1) Why?
2) You may allow for variations in your approach depending on the situation. Would your position shift if you felt the person were not really certain about what he wanted, even after some negotiation of the reference query?  Yes ___  No ___

3) IF YOU SELECTED PARAGRAPH A, would your position shift toward instruction if the request were generated as a result of formal coursework? Yes ___  No ___
Appendix B

KEY TO SECTION 1, SIMULATED REFERENCE QUESTIONS, AND
SECTION 2, IDENTIFYING RELEVANT SUBJECT HEADINGS

Section 1. SIMULATED REFERENCE QUESTIONS

   Note: The correct answer should indicate updating a standard source. Best answer would include the most current news magazine and perhaps the daily newspaper beyond its coverage. A reasonably good answer would include the New York Times Index or Facts on File. If Berlin dies, he should be replaced by a person who would require the same strategy.


4) Speech Index, 4th ed., p. 147, under Churchill, Sir W. L. S. Sinews of Peace (Speech at Fulton, Missouri). The "Iron Curtain Has Descended" is the same as the Sinews of Peace speech. Six citations are given.


6) DAB, v. XI, part 2, Supplement 2 to December 31, 1940, under Root, Elihu. Article begins on p. 577; actual answer is on p. 581, 1st column, 1st paragraph.

7) Statistical Abstract, 1977, Table 659, p. 405, located through index under the entry: Employment, Women. According to this table, which presents data as of March, 1977, 4,435,000 women, at least 16 years old married with husband present and with children under six, were employed in 1977. An additional 366,000 women, with same qualifications but separated from their husbands, were employed in 1977. The correct answer is either the first figure with all qualifications or the sum of the two figures, again with all qualifications. Divorced women should not be included; and the figures must be in thousands, which is indicated in a table note.


10) According to the 1979 Ayer's Directory of Publications, pp. 508-09 under Missouri--St. Louis, then under newspapers' names: p. 508, Globe Democrat, if daily circulation is the criterion; p. 509, if Sunday circulation is criterion, the Post Dispatch. Answer varies so basis for selection should be given.

11) Congressional Quarterly Almanac, v. 27 (1971), located in the Index under Rehnquist--Supreme Court confirmation, pp. 851-59. Major objections are listed on p. 852 under "Other Reactions."


Section 2. IDENTIFYING RELEVANT SUBJECT HEADINGS.

1) Civil Service--Great Britain--Colonies--India

2) Bureaucracy

3) Civil Service Recruiting--Handbooks

4) Several approaches could be used to broaden the search:
   Recruiting of Employees -- would eliminate the Civil Service aspect and include employees in the private sector
   Civil Service Positions -- may describe the kinds of positions available; recruiting could be treated as a related topic in a book with this subject heading
   Civil Service -- very broad approach. This term is likely to be given to books dealing generally with Civil Service; any reference to recruiting of minority groups is likely to be minimal unless the book deals generally with the Civil Service-related problems of minority groups.