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The Good, the Bad, but Mostly the Ugly

Adherence to RUSA Guidelines during Encounters with Inappropriate Behavior Online

Using a scoring rubric based on RUSA's "Guidelines for Behavioral Performance of Reference and Information Service Providers" (RUSA Guidelines), librarians' performance in 106 chat reference transcripts in which a patron was determined to be acting inappropriately were compared to 90 randomly chosen transcripts from the same time period in which no inappropriate behavior was identified. Librarians serving appropriately behaving patrons scored significantly better on two of five major dimensions of the RUSA Guidelines. Recommendations for librarians serving inappropriately behaving patrons and for improving the two affected dimensions are given.

t is possible that library patrons have always misbehaved. From disruptions to damaged property, librarians have for decades sought to cope with the occasional patron who becomes rude, abusive, destructive, or irrational. As library collections and services have changed in format and availability, patron misbehavior has changed. From the tearing of pages to the systematic downloading of journal issues, from loud conversations to prank virtual reference calls, new behaviors necessitate new standards for professional conduct.

While most professional standards

are not directed solely at preventing or mitigating inappropriate behavior, it is certainly incumbent upon librarians to follow guidelines of professional conduct in such situations. One of the most cited is RUSA's "Guidelines for Behavioral Performance of Reference and Information Service Providers" (RUSA Guidelines), originally published in 1996 and revised in 2004 to be applicable to remote forms of reference, such as e-mail and chat services. 1 These guidelines continue to be widely accepted and referenced in professional literature. While adherence to these guidelines cannot prevent or mitigate all encounters with inappropriately behaving patrons (nor was it explicitly intended to), it can perhaps achieve success in some cases. The RUSA Guidelines themselves recognize that "the positive or negative behavior of the reference staff member (as observed by the patron) becomes a significant factor in perceived success or failure." Librarians providing chat reference would best serve their patrons by being aware of and practicing the RUSA Guidelines as much as possible.

This study examines librarians' adherence to the RUSA Guidelines when dealing with patrons behaving appropriately as compared with librarians serving patrons displaying some level of

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inappropriate behavior, as determined in a previous study.² The study seeks to determine if adherence to RUSA Guidelines definitions of positive behavior helps mitigate rude or inappropriate patron behavior in chat reference, or if other recommendations are necessary. The intent is to help shape librarians' concept of what positive behavior is in online reference environments, particularly chat reference.

LITERATURE REVIEW

This literature review focuses on providing an overview of recent assessments of virtual reference services. Virtual reference assessment literature tends to gravitate toward one of the following camps: (1) description of institutions' innovative applications of virtual reference assessment; (2) identification of patron and service demographics; (3) comparison with regular reference; or (4) virtual reference transcript analysis. Examples of recent literature describing applications of virtual reference assessment include descriptions of the use of virtual reference assessment data as part of the budget cycle, descriptions of virtual reference assessment at an integrated academic and public library, or specific training strategies developed after as a result of identified training gaps.3

A recent notable example of patron and service demographics analysis is Houlson, McCready, and Pfahl's work at the University of Minnesota-Twin City campus.4 Such analysis also could focus on specific populations, such as Walter and Mediavilla's description of the differences between teen and adult communication skills or Shachaf and Snyder's analysis of differing user needs for racially diverse populations.5 Fennewald's analysis of the different types of questions asked by virtual and in-person users and Moyo's analysis of the rate and nature of instruction in virtual and in-person transactions are examples of literature that compares virtual reference with regular reference.6 Examples of transcript analysis include Pomerantz, Luo, and McClure's description of evaluating North Carolina's NCKnows transcripts and Lee's comparison of Australian e-mail and chat reference transcripts.⁷

Recent transcript analysis literature includes a few articles that specifically used the RUSA Guidelines as part of the analysis. Ward's account describes use of the searching section of the RUSA Guidelines to develop criteria that was used in evaluating the completeness of seventy-two University of Illinois reference transactions.8 Zhuo, Love, Norwood, and Massia describe the use of modified RUSA Guidelines to assess one hundred instant message transactions at Central Missouri State University.9 Ronan, Reakes, and Ochoa report on using the RUSA Guidelines to evaluate the reference interview of fifty reference transactions from a random sample of virtual reference services across the United States. 10 Perhaps most pertinent to this study is the work conducted by Kwon and Gregory, as well as that by Shachaf and Horowitz, which correlate various dimensions in the RUSA Guidelines to patron satisfaction.11

None of the literature, however, specifically applies adherence to the RUSA Guidelines to situations where patrons behave inappropriately.

ASKCOLORADO AND **INAPPROPRIATE USE**

All transcripts evaluated in this study were provided by AskColorado, a statewide virtual reference service that at the time of the study was maintained by service from thirty-nine public library systems, twelve college and university libraries, eleven school districts, and six specialized libraries.¹² The service averaged four thousand questions per month in 2007, more than doubling the monthly averages since its inception in September 2003.¹³ Approximately 350 librarians staffed the service, usually between 2 and 8 simultaneously.14

Evaluating the quality of AskColorado's virtual reference service has been a concern since it began. It was recognized at inception that reference librarians encounter extra challenges during a chat reference transaction that

may not be as apparent in face-to-face transactions. Many times in a solely text-based environment, absence of body language and gestures make it harder to understand the information need of a patron. Marie Radford, a preeminent scholar in virtual reference communication, indicates that more research needs to be completed to understand, improve, and evaluate the quality of a virtual reference transaction.15

To evaluate service, AskColorado's Quality Assurance and Evaluation subcommittee (QA&E) was convened. This subcommittee reviews AskColorado chat transcripts monthly and recommends best practices to improve the quality of the service. While evaluating the chat transcripts, QA&E focuses on two major components: quality of response and quality of interaction. 16 The authors of this article were members of QA&E and involved in evaluating chat transcripts for several years.

At the request of AskColorado's coordinator, QA&E undertook a study in 2006 to identify the prevalence of inappropriate use of the service. The study identified eighty-nine transcripts from 2003 and 2004 that contained offensive, rude, or irrational patron behavior. These transcripts were 8.7 percent and 5.3 percent of the samplings from each year, respectively, leading the committee to conclude that inappropriate use was minimal and perhaps decreasing.17

An unpublished follow-up study of 2005 transcripts identified another seventy-five inappropriate transcripts, 10.2 percent of the sampling. This possible increase in the prevalence of inappropriate behavior led the committee to desire further study, specifically an analysis of librarian behavior in these transactions, the purpose being to identify ways in which the inappropriate behavior of patrons might be prevented or mitigated by the behavior of the librarians.

THE RUSA GUIDELINES

The RUSA Guidelines were chosen as the instrument by which librarians' performance could be measured in this study. They comprise five broad dimensions divided by subordinate measures. Each category includes three subcategories specific to librarian—patron interaction settings: general, in-person, and remote. The remote subcategory focuses on reference encounters by chat, e-mail, or telephone.

A brief summary of the RUSA Guidelines and how they were applied to this study follows. Appendix A provides our adaptation of the RUSA Guidelines to create an instrument with which to evaluate transcripts.

1. Approachability: "In order to have a successful reference transaction, patrons must be able to identify that a reference librarian is available to provide assistance and also must feel comfortable in going to that person for help."

Approachability in this study was determined by the time elapsed between a patron's log-in to AskColorado and a librarian's response, and by the tone of the librarian's greeting, a function of RUSA Guidelines 1.2 and 1.5.

2. *Interest*: "A successful librarian must demonstrate a high degree of interest in the reference transaction."

Interest in this study was determined by both quantitative measures of "word contact" (how frequently librarians sent messages) and qualitatively (how explicitly librarians indicated interest in working with the patron). RUSA Guideline 2.6 was evaluated with these two approaches and aggregated to determine a score for interest.

3. Listening/Inquiring: "Strong listening and questioning skills are necessary for a positive interaction."

This area was one of the largest included in this study, incorporating primarily ordinal scales for 3.1 and 3.3–10.

4. *Searching*: "The search process is the portion of the transaction in which behavior and accuracy intersect."

Searching was another significant area applied to this study, using a combination of two-point and ordinal scales for most of the 4.0 subordinate areas.

5. Follow-up: "The librarian is responsible for determining if the patrons are satisfied with the results of the search."

Follow-up was determined in this study as an aggregate score of two-point scales for 5.1, 5.2, 5.4, 5.5, 5.7, 5.8, and 5.9 (remote).

Though not all RUSA Guidelines could be applied to this study, the authors felt a majority of them were applied in a sufficiently complex way to analyze librarians' performance in each of the five broad areas.

METHOD

Because no standard instrument by which behavior can be evaluated against the RUSA Guidelines exists, the authors developed one (see appendix A). Only RUSA Guidelines that were reasonably observable in chat transcripts were used, and each of the five major categories functioned as an aggregate score of all its subordinate measures. This method was used so that a macro-level analysis would be possible.

Models for using the RUSA Guidelines to evaluate transcripts have since been designed, but at the time of the genesis of the study there was only one.¹⁸ Most of the rubrics developed for this purpose employ chiefly twopoint scales, where the coder simply assessed whether or not a guideline was observed, and the analysis centers on the prevalence of behaviors observed in the transcripts. The instrument in this study employed both two-point and ordinal scales, where the coders decided to what extent the behavior was observed on a 0–5 point scale in all measures that lend themselves to the method, and yes-or-no scales in those that did not. The authors believed this would result in a finer instrument, perhaps measuring the librarians' performance more thoroughly.

But the finer instrument also was more complicated. The scale underwent three major revisions before the three coders tested it using three randomly selected transcripts. The results found that the three coders disagreed on sixteen of the thirty-two measures, and on six of them disagreed quite starkly. The authors felt the instrument needed to be refined and that inter-rater reliability statistics should be used to test it. Two additional revisions to the instrument were made, focusing on the six measures wherein there was most disagreement. In addition to many changes in language and definition, measure 3.2 was changed from a twopoint scale to a nominal scale measure. After these changes were made, the original three transcripts and an additional three were used to test the instrument again, so more than 5 percent of the sampling would undergo inter-rater reliability testing.

The results of these six transcripts achieved what Fliess termed a "fair" level of agreement between two pairs of coders (Cohen's kappa = 0.49 in both pairs) and "good" agreement in one (kappa = 0.65). There is no consensus on a minimal level of agreement in most if not all disciplines, but these numbers do fall below the kappa score of 0.787 in the Shachaf and Horowitz study. Partly because of this nontrivial level of disagreement between the coders, the normality of the distribution in the data cannot be assumed, and the data are treated as ordinal rather than ratio-level. The statistical analysis used to compare the data sets was then a nonparametric Kolmogorov-Smirnov test for two unrelated samples.20

Once the instrument was finalized, 106 transcripts from the previous studies were identified as having significant enough conversation and length to be appropriate for in-depth analysis of be-

havior, and another 90 transcripts from the same time period were chosen as a control group. Each coder was assigned approximately one-third of both the test and control groups, and the transcripts were scored independently using the instrument. Analysis enabled comparison of all thirty-two measures, as well as the five larger dimensions that included subordinate levels.

RESULTS

As has been demonstrated in other studies, these data show a relatively low level of adherence to the RUSA Guidelines.²¹ Of the five major aggregate categories, librarians serving both appropriately and inappropriately behaving patrons scored in the average range (between 3 and 4) on four dimensions, and librarians serving inappropriately behaving patrons scored below average on the "searching" dimension (4.0).

Comparing grouped median scores for those dimensions for which an ordinal scale was used, as well as the five broad areas, which are aggregates of all subordinate categories, shows that of these thirteen areas, librarians serving appropriately behaving patrons scored better on nine. The four in which librarians serving inappropriately behaving patrons scored better were 2.0, 2.6 (qualitative and quantitative), and 4.9.

The differences between these medians for most dimensions, using the Kolmogorov-Smirnov test, were not significant (see table 1).

Of those that did show significant differences (3.0, 3.1, 4.0, 4.5, and 4.9), librarians serving appropriately behaving patrons scored better in listening (3.0), cordiality (3.1), searching (4.0), and explaining how to use sources (4.5). Interestingly, librarians serving inappropriately behaving patrons scored better on 4.9: offering pointers to patrons.

DISCUSSION

Although adherence to the RUSA Guidelines was only average for both groups of librarians, the fact that scores for librarians serving appropriately behaving patrons were significantly better than those serving inappropriately behaving patrons in listening/inquiring (3.0) and searching (4.0) is encouraging. This result could be interpreted as meaning that adherence to the RUSA Guidelines related to listening and searching yields an effective virtual reference transaction. However, it also could mean that the librarian serving the appropriately behaving patron is simply more likely to have an opportunity to conduct a successful reference interview and embark on a satisfactory search strategy. In Sample Transcript A (figure 1), the only communication that the librarian shares with the patron is a canned message from the service and the forwarding of two webpages. It should be emphasized that while the 3.0 category is titled "Listening/Inquiring," a large part of the category is communication skills. Not surprisingly, this impersonal transcript devolved into an inappropriate transcript. However, this transcript is complicated by the fact that the librarian does not appear in the transcript until four minutes have passed for the patron. It is possible that the librarian felt rushed and thought that the best strategy for dealing with the patron was

RUSA Guideline	1.0	1.2	1.5	2.0	2.6 (quan)	2.6 (qual)	3.0	3.1	4.0	4.2	4.5	4.9	5.0
Inappropriat	:e				-	-							
n=*	107	107	107	107	107	105	107	107	107	48	16	91	33
Grouped Median	3.51	4.44	3.20	3.17	4.56	2.38	3.26	3.18	2.39	3.03	2.25	4.61	4.52
Range	4	4	4	3	4	4	4	4	4	4	3	4	4
Appropriate													
n=*	81	81	81	81	81	81	81	81	81	69	36	67	53
Grouped Median	3.68	4.53	3.49	3.11	4.54	2.36	3.63	3.42	3.11	3.53	2.93	3.81	4.84
Range	3	4	3	4	3	4	3	3	4	4	3	3	4
Kolmogorov- Smirnov Z	.717	.646	1.343	.606	.297	.541	1.525	1.462	2.212	1.277	1.364	1.812	.959
Sig. (2-tailed)	.683	.798	.054	.857	1.000	.931	0.019**	0.028**	0.000**	.077	0.049**	0.003**	.316

^{*} n varies because scorings of n/a are excluded from the analysis

^{**}Significant at a 95 percent confidence interval

to merely send information as quickly as possible, rather than taking time for personal interaction. If the librarian had the opportunity to enter the interaction earlier, perhaps there would have been more positive communication from the librarian.

In Sample Transcript B (figure 2), the librarian is more effective at communicating with the patron. However, no information is ever shared with the patron. It is difficult to tell from a mere examination of the transcript whether this is because the librarian lacks knowledge of sources for this information or whether it is merely a fact that he or she has not had enough time to conduct a search. This study does not attempt to suggest a causal relationship between effective communication and searching by the librarian and appropriate behavior by the patron. However, the significant difference for listening (3.0), cordiality (3.1), searching (4.0), and explaining how to use sources (4.5) shows that there may be some type of connection between appropriate behavior and librarian application of these RUSA Guidelines.

Conversely, it appears that this study found adherence to the RUSA Guidelines on approachability (1.0), expressing interest (2.0), and followup (5.0) is inconsequential with respect to serving inappropriately behaving patrons. This result, to some extent, corroborates other findings. Kwon and Gregory, for instance, found that adherence to guidelines on welcoming, interest, and inquiring did not correlate to patron satisfaction.22 But Kwon and Gregory did find that using a patron's name is related to satisfaction, whereas this study did not specifically consider the use of a patron's name. Kwon and Gregory also separated listening from inquiring and found that listening was in fact correlated to satisfaction.²³ Because adherence to the RUSA Guidelines is only partially helpful in satisfying patrons-and serving them even when they misbehave—perhaps speaks to the ineffectiveness of the guidelines in virtual settings. Indeed, Shachaf and Horowitz found that overall adherence to both RUSA's and the International

Time Stamp	Patron/Librarian	Text of Comment
11:08:32	Patron	Why do they call a baby llama a cria?
11:09:28	Patron	hello
11:10:36	Patron	?
11:11:42	Patron	Hello?
11:12:44	Librarian	Welcome to AskColorado. I'm looking at your question now; it will be just a moment. You will have access to a transcript at the end of this session.
11:13:00	Librarian	(Item sent: Ask Jeeves)
11:13:27	Librarian	(Item sent: Ask Jeeves frame)

Note: transcript has been modified to protect the privacy of the patron and librarian.

Figure 1. Sample Transcript A

Time Stamp	Patron/Librarian	Text of comment
10:42:47	Patron	What is the average temperature in Bolivia?
10:43:22	Patron	Are you still there
10:43:57	Librarian	Yes.
10:44:15	Librarian	Still looking
10:44:33	Librarian	Sorry. Forgot to let you know I was working on it.
10:44:51	Patron	ОК
10:45:45	Patron	Sometime today would be nice
10:55:50	Patron	Sorry I have anger problems
10:56:45	Patron	Hurry up
10:57:05	Patron	Please answer it.

[Note: transcript has been modified to protect the privacy of the patron and librarian]

Figure 2. Sample Transcript B

Federation of Library Association's corresponding reference guidelines did not significantly correlate to patron satisfaction.²⁴

Perhaps these initial studies, then, suggest two major implications for librarians practicing virtual reference and bodies that provide behavioral guidelines on that practice: (1) adherence to guidelines needs to be improved in virtual settings, especially with respect to conducting reference interviews and successful search strategies; and (2) the guidelines themselves are not well defined in some places and should be improved. If following guidelines does not assist librarians in satisfying patrons

or in mitigating (or at least coping with) inappropriate behavior online, perhaps the guidelines need improvement.

The RUSA Guidelines that may need the most improvement lie in the outset of the interaction—approachability (1.0) in this study and welcoming in the Kwon and Gregory study—and in expressing interest (2.0). The RUSA Guidelines provide very detailed instructions on expressing interest in face-to-face settings (maintaining and reestablishing eye contact during the transaction), and though they also provide corollaries for virtual reference services (maintaining and reestablishing "word contact" with the patron), it

could be that more specificity is necessary in this emerging form of service. Questions that arise from this example, and possible future research, would include: How often should word contact be initiated? What sort of language is most effective? How can a librarian compensate for the lack of nonverbal queues in virtual environments? Research is emerging that could inform such specificity, such as Radford's promising work on interpersonal communication in chat reference.25 Understanding greeting and closing rituals, relational facilitators, nonverbal communication in verbal environments. and other factors is critical to providing good service online and to writing guidelines for it.

CONCLUSION

In addition to the communication strategies mentioned above, other additional research also could be done to improve our online interactions with patrons. Though librarians are trained in what a reference interview is and how to locate information for patrons, we also need to learn how to do a better job of translating those skills to the online environment. Research should continue in this venue as well. Perhaps there are strategies that we can modify from the corporate world, and perhaps the advent of affordable new technologies will make these transactions easier or more effective. Indeed, perhaps there are even differences between effective practices for different types of virtual reference transactions. The best practice for a chat reference transaction may not be the same as the best practice for an instant message or e-mail reference transaction, and research to identify the nuances between these types of interactions would be valuable.

This study provides no causal understanding of how librarians' adherence to guidelines relates to inappropriate patron behavior: There is nothing definitive in these data to understand if the librarian's action, or inaction, leads to frustration on the part of the patron, or if the behavior of the patron causes the librarian to disengage from the in-

teraction. But this study does show that there are areas of professional behavior that are either not well followed by librarians in these transactions or are poorly defined in professional guidelines. Regardless of the behavior of the patron, the librarian is expected to uphold the standards of the profession. Whether those standards have been adequately adapted to virtual environments is a matter for further research and discussion.

As Lee suggests, virtual librarians easily run the risk of "sounding like we are playing '20 questions'" when they conduct reference interviews.26 And when patron behavior becomes trying, librarians face even greater challenges in achieving meaningful communication and in creating successful reference transactions. This study, especially when compared to studies on satisfaction in virtual reference, suggests that to assist virtual librarians in achieving meaningful communication, RUSA's Management of Reference Services Committee (MARS) should consider modifying the RUSA Guidelines to provide additional guidance for librarians in remote reference contexts. The areas needing more specificity lie in the dimensions of being approachable, (1.0), expressing interest (2.0), and, to a lesser extent, how to follow-up (5.0).

As the MARS Digital Reference Guidelines ad hoc committee attests in its "Guidelines for Implementing and Maintaining Virtual Reference Services" that "the absence of a physically present patron and the different modes of communication may call for additional skills, effort, or training to provide quality service on par with face-to-face reference services."27 This document, however, references the RUSA Guidelines as the behavioral standard to meet in virtual reference, a standard that is centered primarily on face-to-face reference with virtual reference included in brief addenda. The proliferation and importance of virtual reference services may have reached a point where these addenda no longer suffice, and specific behavioral guidelines for virtual reference may be necessary.

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APPENDIX A. DEFINITIONS OF RUSA GUIDELINE MEASURES AND DESCRIPTIONS

1.0 Approachability

- 5 = Excellent Approachability Librarian scores a 5 on 1.2 and 1.5
- 4 = Good ApproachabilityAverage score of 1.2 and 1.5 is ≥ 4
- 3 = Average Approachability Average is ≥ 3
- 2 = Below AverageAverage is ≥ 2
- 1 = Poor Average is < 2
- 1.2 Is poised and ready to engage approaching patrons.
 - 5 = Very ready to engage

Time between connection message ("Someone will be with you as soon as possible") and message of librarian joining ("A library staff member is coming online") is less than one minute.

4 = Ready to engage

Time between connection message and message of librarian joining is between one and two minutes.

3 = Average

Time between connection message and message of librarian joining is between two and three minutes.

2 = Not ready to engage

Time between connection message and message of librarian joining is between three and five minutes.

1 = Discourages engagement

Time between connection message and message of librarian joining is more than five minutes or never occurs.

- 1.5 Acknowledges patrons through the use of a friendly greeting to initiate conversation.
 - 5 = Very approachable

Librarian makes every effort to personalize the greeting, may introduce themselves, and offer help or comment on their willingness to provide help. ("Hi Sarah! Welcome to AskCO. My name is Jack and I work at the prestigious CU–Boulder. How can I help you today?")

4 = Approachable

Librarian personalizes greeting, but may not introduce

themselves or offer help. ("Hi Sarah. Welcome to AskCO.")

3 = Average

Librarian offers an impersonal, generic greeting. ("Welcome to AskCO.")

2 = Not approachable

Librarian offers no greeting but immediately initiates reference interview. ("What's your question?")

1 = Avoiding

Librarian overtly denies assistance, no matter how justified the reason. ("It looks like you've logged in as a class," "I've already told you that this question is too involved for this service.")

2.0 Interest

- 5 = Very high interest demonstrated Average of 2.6 QUAL and 2.6 QUAN is 5.
- 4 = High interest demonstrated Average of 2.6 is ≥ 4 .
- 3 = Interest demonstrated Average of 2.6 is \geq 3.
- 2 = Displays no interest in the interaction Average of 2.6 is \geq 2.
- 1 = Displays disinterest in the interaction Average of 2.6 is < 2.
- 2.6 QUAN Maintains or reestablishes "word contact" with the patron in text-based environments by sending written or prepared prompts, etc., to convey interest in the patron's question.
 - 5 = Librarian averages one message per ≤ 90 seconds Total time of transaction per number of messages sent by librarian
 - 4 = Librarian averages one message per ≤ 180 seconds
 - 3 = Librarian averages one message per ≤ 270 seconds
 - 2 = Librarian averages one message per ≤ 360 seconds
 - 1 = Librarian averages one message per > 360 seconds
- 2.6 QUAL Maintains or reestablishes "word contact" with the patron in text-based environments by sending written or prepared prompts, etc., to convey interest in the patron's question.
 - 5 = Very high interest expressed
 - Librarian makes their interest in the information need explicitly apparent with a degree of enthusiasm. Librarian expresses keen interest in topic by personalizing response and making a special effort to relate to the patron. ("Wow, that's an interesting question!" "What a great question!" "I can really understand your need for this information," "Jayati, I'm a business reference librarian, and your interest in leadership temperament at S&P 500 companies seems really unique. Let's see what we can find on that.")
 - 4 = High interest expressed Librarian expresses interest in topic by personalizing response. ("Hmmm . . . interesting," "You know, I'd like

to know the answer to that too.")

3 = Interest expressed

Librarian briefly expresses interest in topic. Indication of interest may be implied, rather than explicit. Expression of interest may seem impersonal or generic. ("Wow," "Yes, I see what you mean.")

- 2 = Expresses no interest in the interaction Librarian expresses no interest in the information
- 1 = Expresses disinterest in the interaction Librarian explicitly rejects the validity of the information need. ("This service is for real information needs," "This service is not meant for that type of question," "There's nothing online that would answer a question like that. I'd suggest you change your topic/consult a librarian.")

3.0 Listening/Inquiring

- 5 = Very good listening/inquiring ≥8 listening/inquiring behaviors are either Y or N/A, and the score for 3.1 is ≥4
- 4 = Good listening/inquiring ≥7 listening/inquiring behaviors are either Y or N/A, and the score for 3.1 is ≥ 4
- 3 = Average listening/inquiring ≥5 listening/inquiring behaviors are either Y or N/A, and the score for 3.1 is ≥ 3
- 2 = Below average listening/inquiring ≥3 listening/inquiring behaviors are either Y or N/A, and the score for 3.1 is ≥ 2
- 1 = Poor listening/inquiring <3 listening/inquiring behaviors are either Y or N/A, and the score for 3.1 is < 2
- 3.1 Communicates in a receptive, cordial, and encouraging manner
 - 5 = Superior communication skills Librarian's communication is warm and welcoming. Librarian shows superior communication skill, with communication that is clearly receptive, cordial, and encouraging.
 - 4 = Above average communication skills Librarian's communication is above average in conveyance of a receptive, cordial, encouraging environment.
 - 3 = Average communication skill Librarian's communication is receptive, cordial, and encouraging.
 - 2 = Below average communication skills Librarian's communication is less than effective at conveying a receptive, cordial, and encouraging environment. Librarian may seem distant or somewhat unwelcoming.
 - 1 = Inadequate communication skills Librarian's communication is ineffective in conveying a receptive, cordial, and encouraging environment.

Indeed, communication may discourage such an environment.

3.2 Uses a tone of voice and/or written language appropriate to the nature of the transaction.

Y= Observed

The formality and presentation of the librarian's language matches the patron's needs.

N= Not observed

Librarian's tone language does not match the audience.

NA = Not applicable

Transaction is too brief to assess librarian's language or tone.

3.3 Allows the patrons to state fully their information need in their own words before responding.

Y= Observed

The patron's request is fully stated.

N= Not observed

Librarian's comments prevent patron from fully stating information need in own words

NA = Not applicable

The transaction does not intimate whether or not the patron fully expressed their need.

3.4 Identifies the goals or objectives of the user's research, when appropriate.

Y= Observed

Goals or objective of user's research are identified.

N= Not observed

Librarian fails to ask about the impetus for the need in an interview wherein such information would be helpful.

NA = Not applicable

The goals and objectives to the user's research are inconsequential to successful transaction.

3.5 Rephrases the question or request and asks for confirmation to ensure that it is understood.

Y= Observed

Librarian repeats or paraphrases the question as they understand it, or the patron confirms that the librarian understands the information need.

N= Not observed

No attempt is made by the librarian to clarify the patron's question.

NA = Not applicable

Question is simply understood and there is no need to repeat it, or inappropriate behavior, technical difficulties, or other occurrences prevent confirmation.

3.6 Seeks to clarify confusing terminology and avoids excessive jargon.

Y= Observed

Librarian clarifies any confusing words and avoids

use of jargon (catalog, citation, reference, circulation, etc.).

N= Not observed

Transcript includes some words that may be confusing to patron. Librarian makes no attempt to clarify terms.

NA = Not applicable

Transcript does not include confusing terms; language may be easily understood by patron.

3.7 Uses open-ended questioning techniques

Y= Observed

Librarian solicits explanations from the patron using open-ended questions. ("Can you tell me a little bit more about your question?" "Can you tell me why you need this information?")

N= Not observed

Librarian uses no open-ended questions where it might have been appropriate.

NA = Not applicable

Open-ended questions are not necessary in this reference interview. Inappropriate behavior, technical difficulties, or other occurrences prevent open-ended questions.

3.8 Uses closed and/or clarifying questions to refine the search query.

Y= Observed

Librarian provides possible answers to their questions. ("Is this for homework or for personal reasons?" "When you say 'cougars,' do you mean mountain lions or panthers?" "When you say 'greatest quarterback of all-time,' do you mean John Elway or Roger Staubach?" ;-).)

N= Not observed

Librarian does not seek to clarify questions when it might have been appropriate.

NA = Not applicable

Patron's information need is evident; there is no need for clarifying or closed questions. Inappropriate behavior, technical difficulties, or other occurrences prevent closed questions.

3.9 Maintains objectivity and does not interject value judgments about subject matter or the nature of the question into the transaction.

Y= Observed

Librarian makes no subjective or personal comments on the nature of the question.

N= Not observed

Librarian makes subjective or personal comments on the nature of the question.

NA = Not applicable

No determination can be made (transaction is too short). Inappropriate behavior, technical difficulties, or other occurrences prevent analysis of librarian's objectivity.

3.10 Uses reference interviews or Web forms to gather as much information as possible without compromising user privacy.

Y= Observed

Reference interview or Web forms are used to gather patron information without compromising user privacy. ("Jack, I see that you're a student at CU-Boulder. Would you like to check for books that might be at the Norlin Library?")

N= Not observed

Librarian neglects opportunity to gather patron information, or librarian compromises user privacy.

NA = Not applicable

Patron information is not necessary for successful transaction. Inappropriate behavior, technical difficulties, or other occurrences prevent gathering of patron information.

4.0 Searching

5 = Excellent Searching

Librarian's scores average 5 for the three scales (4.2, 4.5, 4.9), and at least 6 of the others are either Y or N/A.

4 = Good Searching

Librarian's scores average ≥ 4 for the scales, and at least 5 of the others are Y or N/A

3 = Average Searching

Librarian's scores average ≥ 3 for the scales, and at least 4 are Y or N/A

2 = Below Average Searching

Librarian's scores average ≥ 2 for the scales, and at least 3 are Y or N/A

1 = Poor searching

Librarians' scores average < 2 for the scales, and < 3 are Y or N/A

4.1 Finds out what patrons have already tried, and encourages patrons to contribute ideas.

Y= Observed

Librarian asks where the patron has already looked and engages the patron in helping to locate information. ("So that I don't duplicate your work, could you tell me where you've already looked?" "Jack, I don't know much about macrobiotics, can you tell me a little about this concept?")

N= Not observed

No inquiry into patron's previous research or knowledge is made.

NA = Not applicable

Patron's previous research strategy is evident from initial information provided. Session terminates before librarian may make inquiries.

- 4.2 Constructs a competent and complete search strategy.
 - 5 = Very effective search strategy

Librarian's search strategy effectively includes all aspects

of patron's information needs. It is likely to produce highly relevant results.

4 = Effective search strategy

Librarian's search strategy addresses most of the patron's information needs. It is likely to produce many relevant results.

3 = Adequate

Librarian's search strategy addresses some of the patron's information needs. Search strategy may overlook some effective techniques or resources. It produces some results.

2 = Inadequate search strategy

Librarian's search strategy neglects a significant component of the patron's information needs. Key search techniques or resources are likely to be missing.

1 = Very inadequate search strategy

Librarian's search strategy does not address patron's information needs.

4.3 Explains the search strategy and sequence to the patrons, as well as the sources to be used.

Y= Observed

Librarian describes search strategy and sources.

N= Not observed

Librarian does not describe search strategy and

NA = Not applicable

Question does not require a search strategy, or transaction ends before librarian can share this information.

4.4 Attempts to conduct the search within the patrons' allotted timeframe.

Y= Observed

Librarian locates desired information during the reference transaction, or patron is satisfied with librarian's suggestion for an alternate time frame.

N= Not observed

Librarian does not find information within the transaction and does not propose an alternative to the patron's original time frame.

NA = Not applicable

Technical difficulties prohibit conclusion of search. Inappropriate behavior precludes completion of search.

- 4.5 Explains how to use sources when appropriate.
 - 5 = Very complete explanation of resources Clear explanation of how to use the resources. It is likely that the user could locate information independently in the future.
 - 4 = Complete explanation of resources Solid explanation provided, but lacks richness or details.
 - 3 = Adequate

Resources (names or URLs) given with some explanation or pointers.

2 = Inadequate explanation of resources
Only cursory reference to resources, minimal explanation or pointers.

1 = Very inadequate explanation of resources No explanations are offered. It is doubtful that the user could independently locate this information again.

N/A = No explanation was needed or was appropriate. An N/A rating is excluded from the 4.0 calculation.

4.6 Works with the patrons to narrow or broaden the topic when too little or too much information is identified.

Y= Observed

Librarian engages the patron in narrowing or broadening the topic. ("Jayati, I see that you're looking for information about biology. Can you help me identify a specific topic in biology that you need?")

N= Not observed

Librarian does not use search results to suggest a topic be altered when it might have been appropriate.

NA = Not applicable

There is no need for the topic to be altered.

4.7 Asks the patrons if additional information is needed after an initial result is found.

Y= Observed

Librarian assesses patron satisfaction with results. ("Jack, does this information answer your question?")

N= Not observed

Librarian does not assess patron satisfaction with results

NA = Not applicable

Session ends before patron receives information

4.8 Recognizes when to refer patrons to a more appropriate guide, database, library, librarian, or other resource.

Y= Observed

Librarian refers patrons to appropriate resource.

N= Not observed

Librarian does not refer patrons to an appropriate, available resource.

NA = Not applicable

A referral is not appropriate for this question.

- 4.9 Offers pointers, detailed search paths (including complete URLs), and names of resources used to find the answer so that patrons can learn to answer similar questions on their own
 - 5 = Very comprehensive explanation of resources Names of resources and URLs provided. Clear explanation of how to use the resources. It is likely that the user could locate information independently in the future.
 - 4 = Complete explanation of resources
 Names of resources and URLs provided. Some

explanation provided, but may lack detail.

- 3 = Adequate explanation of resources Resources (names or URLs) given, but minimal or no explanation or pointers.
- 2 = Substandard introduction to resources Some resources given, but other obvious resources are not provided.
- 1 = Inadequate introduction to resources
 No explanations or resources are offered. It is doubtful that the user could independently locate this information again.

N/A = No pointers, etc. are needed. An N/A rating is excluded from the 4.0 calculation.

4.11 Uses appropriate technology (such as co-browsing, scanning, faxing, etc.) to help guide patrons through library resources, when possible.

Y= Observed

Appropriate technology is used to guide patron. ("Jack, I'm going to show you how I found this information. Are you able to see the screen that I sent you?" "Jayati, since you're having trouble viewing it online, would you like me to fax you a copy of that business form?")

N= Not observed

No evidence of technology being used to guide the patron.

NA = Not applicable

Question may be effectively answered without any use of technology. Session ends before librarian has opportunity to share information with technology.

5.0 Follow-up

5 = Excellent follow-up

> 7 scales are either Y or N/A

4 = Good follow-up

> 6 scales are either Y or N/A

3 = Average follow-up

> 5 scales are either Y or N/A

2 = Below average follow-up

> 4 scales are either Y or N/A

1 = Poor follow-up

< 4 scales are either Y or N/A

5.1 Asks patrons if their questions have been completely answered.

Y= Observed

Librarian asks if question has been completely answered. ("Does this give you the information that you need for your project?")

N= Not observed

No inquiry of question completion is made.

NA = Not applicable

Transaction ends prematurely. Patron provides other evidence that information is sufficient for his or her needs. ("Thanks. This is exactly what I need.")

5.2 Encourages the patrons to return if they have further questions.

Y= Observed

Librarian invites patron to return with other questions.

N= Not observed

No encouragement to return to the service is proffered.

NA = Not applicable

Transaction ends before librarian has an opportunity to offer this invitation.

5.4 Consults other librarians or experts in the field when additional subject expertise is needed.

Y= Observed

Librarian contacts an information expert to assist with the question. ("Jack, I'm going to call someone at the University of Denver's Law Library to make sure that they will be open during the holidays.")

N= Not observed

No consultation with outside sources is made.

NA = Not applicable

Transaction does not require outside expertise, or transaction concludes prematurely.

5.5 Makes patrons aware of other appropriate reference services (e.g., e-mail).

Y= Observed

Librarian suggests that information could be provided by e-mail, phone, or other appropriate medium. ("Jayati, I know that you have to go soon. Would you like me to keep looking for information and e-mail you what I find?")

N= Not observed

No mention of other appropriate reference services is made.

NA = Not applicable

No other reference service is appropriate or transaction ends before librarian has opportunity to provide this option.

5.7 Refers the patrons to other sources or institutions when the query cannot be answered to the satisfaction of the patron.

Y= Observed

Librarian refers the patron to other information sources.

N= Not observed

No referral to other information sources is made. Patron might benefit from this option.

NA = Not applicable

No referral is needed or transaction ends before librarian can provide this option.

5.8 Facilitates the process of referring patrons to another library or information agency.

Y= Observed

Librarian provides relevant contact information for referral.

N= Not observed

No contact information is provided.

NA = Not applicable

A referral is not appropriate for this transaction. Transaction ends before librarian has opportunity to provide this option.

5.9 Takes care not to end the reference interview prematurely.

Y= Observed

Librarian asks specific questions to make sure that patron's information needs are understood.

N= Not observed

No additional questions are asked of patron.

NA = Not applicable

Patron's information needs are clearly understood from the initial information provided by the patron.

5.9r Suggests that the patrons visit or call the library when appropriate.

Y= Observed

Librarian encourages patron to visit or call the physical library and provides relevant contact info.

N= Not observed

No mention of physical library. Patron might benefit from this option.

NA = Not applicable

Physical library doesn't seem appropriate for this reference transaction. Transaction ends before librarian has opportunity to provide this option.