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Bridging the digital divide:
libraries providing access for all?
Mystery shoppers test the reference service in a public library.
Reasons, methods and results.

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Abstract
The reference service is becoming a marketing tool for libraries which should be used, verified and improved. One way to evaluate this service is the method of “mystery shopping”, which allows to test the quality of the reference service and in particular the quality of interaction at the service desk. The results show the need for quality improvements. Quality can be improved for example by providing training to enhance communication skills, by rearranging the service desks and by developing quality standards for the reference service. It is essential to evaluate after a certain period of time to what extent these activities have improved quality. A German city library had already implemented measures of this kind to enhance the quality of its reference service. In 2009, they delegated Prof. Ingeborg Simon to accomplish this second evaluation of the library’s reference service with a team of five students from Stuttgart Media University’s master’s program of library and information management.

The paper explains the evaluation method of “mystery shopping” in detail and reflects the experiences gained during its implementation. Emphasis is placed on outlining the method and its great potential to enhance the quality of reference services.

Reasons - Why should we evaluate the reference service?
Ten years ago while visiting the United States of America, some of the libraries – very new modern libraries - were rather empty. There were a lot of reference desks – but the reference librarians were sitting there rather lonesome. This wasn’t just the case in public libraries; statistics of research libraries have shown this tendency for the last 10 years (Tennant, 2000). Librarians explain this situation with the keen competition from the internet. Therefore librarians demanded to find ways to stop this development – in order to survive.

The reference service is one field where librarians can stop this development. As people believe they are able to get most of their needed information via “Google”, librarians have to convince them of the advantage of the research done by librarians and of the results received by library professionals. And facing the fact that more and more publications are digital and can be achieved by remote access, the reference service should be one of the essential reasons why people contact the librarians.

This means that librarians should do their best to improve this service continuously. But first we needed to know what exactly should be improved – and this can be learned by evaluating the reference service.
Evaluation methods
For evaluating the reference service in libraries, one could apply a combination of different research methods.
First of all there is a method which had been published by two Canadian colleagues in 1994 (Dewdney & Ross, 1994). They sent LIS-students into libraries to test the reference service as mystery shoppers.
After the test, they should rate the reference situation on a seven-point scale with the criteria -3 to +3 and 0 as mean value for the five categories friendliness of the librarian, the extent to which the librarian understood the question, the helpfulness of the answer, the satisfaction with the answer and the patrons willingness to return to the same librarian.

<table>
<thead>
<tr>
<th>1. How friendly was the librarian?</th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>+1</th>
<th>+2</th>
<th>+3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. To which extent did the librarian understand your request?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. To which extent was the answer helpful?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. To which extent did you feel satisfied with the situation at the reference desk in general?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. To which extent are you willing to return to the same librarian?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>

Table 1: Scale out of the questionnaire

The criteria “friendliness” encompasses the communicative competence of the librarian whereas the extent to which the request has been understood is an indicator for the librarian’s competence of interacting, listening and inquiring during the reference interview. The helpfulness of an answer has to be estimated individually by the mystery shopper. An answer could already be helpful if the patron has the feeling that he took a step forward towards a good result. The criteria “satisfaction” focuses on the satisfaction with the situation at the reference desk in general, including e.g. the atmosphere and the extent of the focus on the patron during the interview. The willingness to return to the same librarian is a measure of the patrons satisfaction in general and consequentially is an overall assessment correlating to the previous criteria.

Furthermore, the students had to write a two-page-account of their visit and describe everything they noticed, felt and thought at the reference desk. This account had to be summarized into two lists: What were the helpful facts and what were the non-helpful facts? These could be facts concerning the spatial matters of the library as well as facts concerning the interaction and behaviour of the librarian.
Through this method, different kinds of results were achieved: quantitative results of the rating on the scale, qualitative results confirming the ratings and concrete hints referring to improvements.
But this method isn’t feasible enough for indicating all relevant aspects. Detailed results with regard to possible failings were necessary. Suitable criteria for testing the reference services could be taken out of the „Guidelines for Behavioral Performance of Reference and Information Service Providers“ of the American Library Association (ALA, 2004).

1 in the following under the designation: ALA-Guidelines
The guidelines describe criteria for the quality of the reference services in the five main phases of the reference situation: the approachability of the library and the reference desk, the interest of the librarian, the process of listening, inquiring and searching during the reference interview and finally the follow up at the end of the reference interview. For each phase, preferable patterns of the librarian are described, which could be transformed into questions for a questionnaire. There were 27 questions altogether, which the test-persons had to answer with „yes” or „no“.

Below, you find some examples:

- **Approachability**: Does the librarian acknowledge patrons through the use of a friendly greeting to initiate conversation?
- **Interest**: Do you have the feeling that the librarian takes his/her time in order to give a satisfying answer?
- **Listening/Inquiring**: Does he/she ask you questions in order to specify your need?
- **Searching**: Does he/she explain to you what sources he/she is using for research?
- **Follow-up**: Does he/she inquire whether the answer was helpful?

What are the advantages of this combination of different methods?

First of all, you can evaluate the reference service from the patrons’ viewpoint: Patrons can observe and rate these issues. Additionally, the focus of these methods is on the quality of the interaction as pre-condition for a satisfying outcome/result for the user. Therefore these methods are focusing on all criteria which influence the quality of this interaction.

This qualitative research approach provides comprehensive statistical data but also allows gathering a wealth of practical hints how to improve the reference service. Based on these results, specific measure can be taken to sustainably improve the reference service, within the library’s quality management.

**Realisation of the evaluation**

**General conditions**

One and a half years ago this library asked us to evaluate the reference service. Five years ago there had been a first evaluation and now they wanted to see, whether they succeeded any improvements since then. Because of that, the realisation of the method took place as a project of five students of Library and Information Science at Stuttgart Media University.

The students organized the whole project, compiled all material like the questionnaires and additional manuals and analyzed data. Receiving as many results as possible for a reliable database, the project team in Stuttgart worked together with 20 students of Library and Information Science from another university. They supported us by testing the reference services as mystery shoppers so that we got representative results. In preparation for their tests, they were instructed for the several steps of the evaluation and got a checklist with hints to which they had to pay attention during the tests.

The entire project in 2009 took a period of four months; out of these, we evaluated the reference services for three weeks nearly every day. For one evaluated reference situation, you can estimate about one hour, including the test at the reference desk, writing the two-page-account and judging the evaluation by questionnaire. In summary, we achieved a database of results out of 78 tests.

In the context of the current evaluation, we combined all described methods and evaluated by judging the reference situation with a questionnaire including a rating on a scale and by writing a two-page-account and lists with helpful and non-helpful facts. For improving the quality of the reference services in the evaluated library, we worked out some recommendations in regard to the results.
**Results**

**Rating on a scale**

In 2004 during the evaluation of the reference service, the reference desks only were evaluated by a seven-point scale. By using the same scale for the evaluation in 2009, a comparison of the results was possible. Detailed results are outlined in table 2.

<table>
<thead>
<tr>
<th>Results of the information desk</th>
<th>2004</th>
<th>2009</th>
<th>increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>friendliness</td>
<td>80 %</td>
<td>89 %</td>
<td>+ 9 %</td>
</tr>
<tr>
<td>comprehensibility</td>
<td>82 %</td>
<td>86 %</td>
<td>+ 4 %</td>
</tr>
<tr>
<td>helpfulness</td>
<td>75 %</td>
<td>77 %</td>
<td>+ 2 %</td>
</tr>
<tr>
<td>satisfaction</td>
<td>72 %</td>
<td>81 %</td>
<td>+ 9 %</td>
</tr>
<tr>
<td>willingness to return</td>
<td>71 %</td>
<td>87 %</td>
<td>+ 16 %</td>
</tr>
</tbody>
</table>

Table 2: Comparison of the results

The results reveal that there is a considerable increase in all categories. Reasons for the lowest increase of only 2% for the helpfulness of the answer and 4% for the extent to which the librarian understood the request may be the fact that there was mainly no reference interview. Performing an elaborate reference interview could contribute to helpful information by clarifying the patrons request. However, to a greater extent of 9%, patrons are satisfied with the situation at the reference desk and 16% of the patrons are even willing to return to the same librarian.

**Questionnaire**

By judging the reference situation with a questionnaire additionally, more detailed and interesting quantitative results could be achieved. The results showed that the reference interview started well by welcoming the patron in a friendly way and showing serious interest for the patron’s request. But for the following part of the reference situation when the face-to-face interview takes place, different results could be achieved. Table 3 shows the results of some selected questions from the questionnaire concerning the face-to-face-part of the reference situation.

<table>
<thead>
<tr>
<th>Process of listening/inquiring</th>
<th>positive</th>
<th>negative</th>
</tr>
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<tbody>
<tr>
<td>The librarian identifies the goals or objectives of the patron’s research, when appropriate.</td>
<td>21%</td>
<td>79%</td>
</tr>
<tr>
<td>The librarian rephrases the question or request and asks for confirmation to ensure that it is understood.</td>
<td>41%</td>
<td>59%</td>
</tr>
<tr>
<td>Process of searching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The librarian finds out what patrons have already tried, and encourages patrons to contribute ideas.</td>
<td>13%</td>
<td>87%</td>
</tr>
<tr>
<td>The librarian explains the sources to be used.</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>The librarian explains the search strategy and sequence to the patrons.</td>
<td>38%</td>
<td>62%</td>
</tr>
<tr>
<td>The librarian asks the patrons if additional information is needed after an initial result is found.</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Follow up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The librarian encourages the patrons to return if they have further questions.</td>
<td>40%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Table 3: Results for examples of questions out of the questionnaire
During the reference situation, especially the process of listening to an inquiry, the process of searching and the follow up at the end of the reference situation were the most important steps for achieving a high quality and successful result for the patron. It has to be pointed out strongly that the results of this part of the questionnaire were mainly negative: There was actually no or only a fragmentary reference interview. The librarian didn’t specify the patrons request by asking clarifying questions, the patrons didn’t get involved into the searching process and there was no follow up which encouraged the patron to return if there were further questions. In summary, the librarian didn’t interact to a large extent with the patron during the reference situation. This is a central point to be improved in future, because performing an elaborate reference interview contributes to a better understanding of the patrons request and to satisfactory information.

It was very interesting, that in contrast to many of the results of the questionnaires, the rating on the scale achieved very positive results. This can be traced back to the fact that the rating on a scale evaluated the reference situation in general and not only the several steps of the face-to-face-interaction during the reference interview. The results show that the behaviour of the librarian, his/her friendliness and his/her efforts in satisfying the patron are very important for feeling comfortable and returning to the same librarian although the information might not have been very helpful.

**Two-page accounts**

After each test, the test-person formulated a detailed two-page experience account in which they described what was seen, thought, said or done and also what the librarian said and did. These quotations of the written accounts give some insight about what the mystery shoppers noticed:

&lsquo;The librarian was very friendly and looked me in the eye while talking. The librarian was honestly trying to help me to get a meaningful result.&rsquo;

&lsquo;There was no real information interview, there was no further inquiry, and the librarian didn’t ask me if I was satisfied with the information. He/she didn’t ask where I had already searched and didn’t offer to return if I had further questions.&rsquo;

&lsquo;It was annoying just sitting there and not knowing what the librarian actually did.’

&lsquo;Unfortunately, the perfect finish is missing, e.g. questions about satisfaction with the information or results, and there was no encouragement that I could come again for further information.’

The experience reports serve as a complement to the quantitative results of the questionnaire and therefore support them. Furthermore, the reports show that there was evidence of the need for improvements.

**Lists**

Additionally to the written accounts, every student had to write down helpful and non-helpful facts during the test. Some examples of the most frequently mentioned facts will be explained:

First of all, it is seen as very helpful when the librarian explains what he or she is doing during the search. This simple fact helps a lot in making the patron feel involved in the search process. If the librarian tries different ways of searching, e.g. different search terms, this is
also seen as helpful. Another helpful fact is, when the librarian tries or at least mentions other possibilities, for instance the state library’s online catalogue, which corresponds to the already mentioned two facts: involving the patron in the search process. A helpful fact, which rather belongs to the subject area of "service" is, when the librarian offers to reserve required books or other media when they are not available at the moment. Finally, a fact belonging to "interaction and behaviour of the librarian" is holding eye contact during the reference process instead of continually looking onto the monitor screen. This makes the patron feel welcome and gives him or her the impression that the librarian is aware of the person in front and concentrating on the patron’s concern.

According to the first helpful facts mentioned above, a superficial search using for example only one search term is very often seen as not helpful. Also not helpful is the fact that the librarian does not even search in the catalogue and only mentions one title from memory which seems to fit. When no other possibilities, for example other online catalogues, are tried out, this is seen as not helpful as well. In contrast, a new aspect is offering no written information. Written information is very helpful for the patron, for example to find the required book in the library or to pick up the search enquiry few days later. It makes the patron feel successful ("hold something in hands") and it is therefore considered as not helpful when the patron has to leave the reference desk without any tangible result. Another not helpful fact belongs to "interaction and behaviour of the librarian": A rushing librarian who makes the patron feel not welcome and disturbing. This is also a very serious fact, because then the patron will probably not return to this librarian or even to the library. Corresponding to that, not helpful is when the librarian only vaguely describes where to find the required media in the library.

To sum up, the lists with helpful and non-helpful facts help to gain a quick overview of the most important user friendly services and interaction on the one hand and on the other hand of the most serious problems - it is a summary in key words of the two-page accounts.

Recommendations
According to the testing results, a list of recommendations has been worked out for the public library to improve its reference service systematically. Some of the recommendations may appear quite self-evident, but the results show that it is inevitable to renew quality standards and appropriate patterns regularly.

Approachability / Interest

One of the most important issues for a highly qualitative reference service is to make a patron feel welcome when she/he appears at the reference desk. The testing results revealed that in several cases the patrons weren’t sure if they had the right to ask the reference librarian for help because the librarian was occupied with their work at the computer. That is why the project-team recommends, according to the ALA-Guidelines, that the reference librarian
- should stop all marginal activities immediately when a patron appears at the reference area. In this case, the patron without a doubt notices that it’s the reference librarian’s main task to turn to the patron’s needs.
- should encourage timid or hesitating patrons to ask for reference by having a friendly and welcoming appearance and by establishing initial eye contact.

In some cases, several patrons were waiting for a reference while the librarian already was occupied helping a patron with a request. To avoid the waiting patrons feeling ignored or not taken seriously, the project-team recommends to the public library, that the reference librarian has to make the patrons feel recognized by establishing eye contact, nodding, or saying e.g. something like „One moment please. In a few minutes I’ll attend to you“.
Inquiring / Searching

When it comes to a reference situation, it’s very important that the patron is involved into the whole searching process. Because of the involvement, on the one hand the patron feels like he/she is taken seriously with her/his request. On the other hand, the chance that the request will be answered correctly and completely, rises.

The testing results revealed, that in several cases patrons weren’t able to follow the librarians steps of searching because the librarian just worked with the computer without commenting on his/her acts. Furthermore several requests weren’t answered completely or adequately, because the librarians didn’t try to specify the requests.

For this case, the project-team recommends according to the ALA-guidelines to concentrate during the reference situation on the constant involvement of the patron into the whole searching process. This can be realized by

- **asking clarifying questions at the beginning** to get the request, which is often expressed in a very general way, more specific. E.g. the reference librarian could ask questions like „Can you give me more details, please?“, „Where did you already look for information?“, „What do you need the information for?“. Such questions help the librarian with finding the correct and adequate answers to the patron’s request.

- After having specified the request, the librarian should **repeat the request in his own words („paraphrasing“)** and ask the patron for confirm in order to make sure that the request has been understood correctly.

- During the searching-process the reference librarian should **explain all steps of searching** to the patron.

- To make it easier for the patron to understand what the librarian is doing, the **monitor screen should be turned towards the patron** so that she/he is able to follow the searching steps.

- **Handing out some written information material** to the patron is another possibility to help the patron with handling the received information. The librarian could e.g. note down a relevant signature, a URL or the information in which shelve the wanted category can be found.

- When the reference librarian is explaining his searching-strategy, he/she should try to **clarify terms**, which could be confusing for the patron. In addition to that, he/she should **avoid using excessive jargon**.

The project-team recognized during its tests, that in several cases only the online-catalogue was used as information source for all kinds of requests. That’s why a further recommendation is, to use not just the online-catalogue but **all kinds of information resources that are available in the library** and that could be relevant for answering the request like e.g. specific databases.

Follow-up

During the tests there often was the problem that an answer for the request was found, but it wasn’t exactly the information, the patron had expected to get from the librarian. In these cases, the patrons couldn’t be helped completely.

That’s why the project-team recommends to the public library according to the ALA-Guidelines, that the reference librarian has to **make sure, that the patron is satisfied** with the received information and that the request has been answered completely. In addition to that the reference librarian always should **encourage the patron to return**, if there should be any further questions.
Effects

Which effects does such an evaluation have - or in other words: Which consequences can follow from an evaluation of the reference service?

First of all, the library can offer trainings for the library staff, especially the reference librarians. Such a training can for example focus on how a reference interview should be performed. This does not only mean to give an answer to the patrons’ request. A reference interview consists of different phases, for instance demanding if the question is well understood, paraphrasing the question in your own words to get the meaning or involving the patron into the search process by showing him or her the monitor screen and keep ensuring that subject area and search terms are correct. Also, mimic and gestures are very important as well as the librarian’s interaction during the reference interview because a friendly and polite interaction makes the patron feel welcome and taken seriously.

Another effect can be to offer workshops for the library staff. There, quality standards for the reference service can be developed together. It should definitely be more successful if the librarians develop those standards together rather than the management is telling the librarians what they should do. Quality standards can be developed in different subject areas, for example interaction towards the patron, interaction and service during the reference interview or the interaction among colleagues. To illustrate this, a quality standard can for example be "We encounter the patron in a friendly and polite way." Possible behaviour can be offering a seat, smiling and holding eye contact. Every librarian has to decide on his or her own how he or she wants to interact. But all librarians should feel committed to the standard and make sure they all interact in a similar way.

Furthermore, the reference service can be reorganized. The evaluation shows very clearly where there is a lack. For instance, the library can change the location of the reference desks to provide a better access. New desks can be purchased where it is possible for the patron to sit down, or the organisation of the reference service can be changed, e.g. by developing a new roster.

Additionally, the methods and results of the evaluation can be published either in the library for patrons and staff or in professional journals. It is of course a good promotion for the library when colleagues and patrons see that this library offers a reference service of high quality which is ensured through an evaluation.

Finally, the results can be compared with those of other libraries or those of former evaluations. If a library evaluates the reference service periodically, you can clearly see the effects of measurements for example of implemented quality standards and discover where there are still problems or any lack.

Conclusion

In summary, the project was very successful - for the library on the one hand and for the team on the other hand.

The library gained evaluation results which could not be achieved without the cooperation with a university.

Based on these results, they learned that developing quality standards is quite a necessary measure but the regular evaluation of the implementation of these standards is essential. As a result, the library could improve the quality of their reference services.

During the project, we could see the positive effects of quality standards, which have been developed after the evaluation in 2004. The results were very gratifying. From that, we learned how important - periodical - evaluations of the reference service are.
During the tests and actually during the whole project, we saw the reference service from the patron’s viewpoint. This was surely a valuable experience for our prospective work routine. Of course, we also learned a lot about method skills, teamwork and project management. Finally, we got to know the relevance of a reference service of high quality - especially nowadays when it is becoming more and more important that patrons find their way to the library instead of using the internet for a superficial and probably not very high quality search. The face-to-face interaction gaining importance hopefully attracts patrons to the library.

We were supported very well by the whole library staff. It was surprising and we were very pleased that the librarians were so open to listen to our results, even the negative ones. Furthermore, they accepted our recommendations and were thankful for our work. We highly appreciate their trust and the willingness to be evaluated.

References

