Focusing on Improvement:
Developing and Implementing
Assessment for Reference
Interactions, Research
Consultations, Searching
Services, and Library Classes

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The Strauss Health Sciences Library is a hub of academic study and research, located on the University of Colorado Anschutz Medical Campus. The primary users served by this institution are students, faculty, and hospital personnel. Retired health sciences faculty, as well as employees and volunteers of affiliate institutions are also served as primary users.

The Education and Reference department manages several patron service points including Classes, Consultations, and Online Reference Transactions. Historically the department collected assessment data in the form of patron usage statistics.

Cecelia, a fellow, and Sam, a graduate assistant, joined the department in 2019. The expansion of the department allowed time/energy to be devoted to creating a more robust assessment plan, which had been a goal of the department for a long time-mention strategic plan.
Our Reasoning

“Librarians are doing ourselves a disservice by not providing data that show how we support meaningful use and demonstrate how library resources and services contribute to the institutional mission”


The Strauss health sciences library strategic plan includes focusing on patron services assessment. Based upon a thorough literature review, librarians determined that including user feedback in assessment service analysis would allow the department to make data-driven improvements to the services. The department decided to develop and roll out assessment instruments/surveys for all three services with Implementation beginning January 2020.

Prior to creating an assessment tool, the department must understand what questions they are hoping to answer. Cecelia/Sam began the assessment development process by creating objectives/goals they wanted the assessment tool to address. They are:

- Use of time
- Question answered / Learning goals met
- Appropriate referral

Upon talking to the searching team, we determined that the systematic review service is not considered an education service point. So we decided to omit the service from our instructional assessment project.

Next step, turn the jargon-heavy goals into user-friendly, measurable, survey Q’s.
**Survey Structure**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Consultation</th>
<th>Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-Service Assessment Q1</td>
<td>Cross-Service Assessment Q1</td>
<td>Cross-Service Assessment Q1</td>
</tr>
<tr>
<td>Cross-Service Assessment Q2</td>
<td>Cross-Service Assessment Q2</td>
<td>Cross-Service Assessment Q2</td>
</tr>
<tr>
<td>Cross-Service Assessment Q3</td>
<td>Cross-Service Assessment Q3</td>
<td>Cross-Service Assessment Q3</td>
</tr>
<tr>
<td>Reference-Specific Assessment Q1</td>
<td>Consultation-Specific Assessment Q1</td>
<td>Teaching-Specific Assessment Q1</td>
</tr>
<tr>
<td>Reference-Specific Assessment Q2</td>
<td>Consultation-Specific Assessment Q2</td>
<td>Teaching-Specific Assessment Q2</td>
</tr>
<tr>
<td>Reference/Consultation Specific Question</td>
<td>Reference/Consultation Specific Question</td>
<td>Teaching-Specific Assessment Q3</td>
</tr>
<tr>
<td>Text Entry Question</td>
<td>Text Entry Question</td>
<td>Text Entry Question</td>
</tr>
</tbody>
</table>

Blue Q’s: Cross-Service Assessment. Allows department to directly compare and contrast patron generated data between service points
Green Q’s: Department-developed Q’s specific to reference
Orange Q’s: Department-developed Q’s specific to Consultations
Purple Q’s: Department-developed Q’s specific to classes/teaching
Black Q’s: Department-developed Q’s generated to compare reference with consultations
Red Q’s: Free Text Response fields common across all services
Survey goals became standardized questions across service points
Ed/Ref librarians brainstormed with us to create the standardized and service specific questions. They let us know what information they wanted collected.

- **Use of time**
  - Working with a librarian was a good use of my time

- **Question answered / Learning goals met**
  - During my ______ the librarian provided useful information

- **Appropriate referral**
  - If I have additional questions, I know where to get help.
    - Compare across service points using three standardized questions, as well as having service specific questions
I think we should go into detail about what questions we asked and why for each survey. This is something we have not done in any of our other presentations.
Reference Service

This reference session made me aware of different kinds of information sources.

Reference | Recommendation | Ranking
--- | --- | ---
N/A | N/A | N/A

Working with the librarian was a normal use of my time.

During my consultation, the librarian provided useful information.

I have additional questions, I know where to get help.

I can now solve the problem, I had previously contacted the library for help with it.

Did your reference contact the library for help with it?

What was the purpose of meeting with a librarian today?

- Endnote research
- Research for a class project
- Overview of library resources
- Develop a researchable topic
- Bibliometrics
- Other (please specify)

I found the pace of the session was too fast.

Did you encounter a similar problem in your future? You were equipped to answer the question yourself and were equipped to answer the question.

The Entry Option: What else would you like to share about this interaction?

The Entry Option: What are you going to share about this interaction?

The Entry Option: What library program provides materials or services in the future, what might it be?

The Entry Option: How might this session be improved?
## Consultations

I met with ______________ (drop down list of librarians)

What was the purpose of meeting with a librarian today (check all that apply)?
- EndNote Help/Troubleshooting
- Research for a class project
- Overview of Library resources
- Develop a researchable topic
- Bioinformatics
- Other (please specify)

<table>
<thead>
<tr>
<th>Reference</th>
<th>Consultation</th>
<th>Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>met with ____ (drop down list)</td>
<td>attended ____ (drop down list of names)</td>
</tr>
<tr>
<td>Working with librarian was a good use of my time</td>
<td>Working with a librarian was a good use of my time</td>
<td>Working with a librarian was a good use of my time</td>
</tr>
<tr>
<td>During my consultation, the librarian provided useful information</td>
<td>During my consultation, the librarian provided useful information</td>
<td>During my consultation, the librarian provided useful information</td>
</tr>
<tr>
<td>I have additional questions, I know where to get help.</td>
<td>I have additional questions, I know where to get help.</td>
<td>I have additional questions, I know where to get help.</td>
</tr>
<tr>
<td>I can now solve the problem I initially contacted the library for help with.</td>
<td>I can now solve the problem I initially contacted the library for help with.</td>
<td>I can now solve the problem I initially contacted the library for help with.</td>
</tr>
</tbody>
</table>
| This reference session made me aware of different kinds of information sources (HINT: N/A option included) | What was the purpose of meeting with a librarian today (check all that apply)?
  - EndNote Help/Troubleshooting
  - Research for a class project
  - Overview of Library resources
  - Develop a researchable topic
  - Bioinformatics
  - Other (please specify) |
| If encountered a similar problem in the future, I would be able to answer it on my own or be able to ask a question to move towards a solution (HINT) | Before taking this course, I had no knowledge of the class library, was (beginner—expert proficiency level?) |
| Test Entry Option: What else would you like to share about this interaction? | Test Entry Option: What else would you like to share about this interaction? |
| Test Entry Option: If you had the opportunity to attend the class library, what would you do? | Test Entry Option: If you had the opportunity to attend the class library, what would you do? |
| Test Entry Option: How could this course be improved? | Test Entry Option: How could this course be improved? |
### Classes

I attended ______________________ (drop down list of class names)

How likely are you to recommend this class? (to a colleague, peer, student, or instructor, etc.)

I found the pace of the class (too slow, just right, too fast)

Before taking this class, my knowledge of the class topic was: (beginner to expert grading scale)

After taking this class, my knowledge of the class topic was: (beginner to expert grading scale)

<table>
<thead>
<tr>
<th>Reference</th>
<th>Facilitation</th>
<th>Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>start with (drop down list)</td>
<td>attended (drop down list of names)</td>
</tr>
<tr>
<td>Working with a librarian was a good use of my time</td>
<td>Working with a librarian was a good use of my time</td>
<td>Working with a librarian was a good use of my time</td>
</tr>
<tr>
<td>Going to reference sections, the librarian provided useful information</td>
<td>During my research, the librarian provided useful information</td>
<td>During my research, the librarian provided useful information</td>
</tr>
<tr>
<td>I have additional questions, I know where to get help</td>
<td>I have additional questions, I know where to get help</td>
<td>I have additional questions, I know where to get help</td>
</tr>
<tr>
<td>I can now solve the problem I initially contacted the reference for help with.</td>
<td>I can now solve the problem I initially contacted the reference for help with.</td>
<td>How likely are you to recommend this class to a colleague, peer, student, or instructor, etc.</td>
</tr>
<tr>
<td>This reference session made me aware of different kinds of <strong>Library Resources</strong></td>
<td>What was the purpose of meeting with a librarian today? (If any of these apply, check all that apply)</td>
<td>I found the pace of the class (too slow, just right, too fast)</td>
</tr>
<tr>
<td><strong>Library Resources</strong>:</td>
<td><strong>Research resources</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Overview of Library resources</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Develop a researchable topic</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Biographies</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other (specify)</td>
<td></td>
</tr>
</tbody>
</table>

If encountered a similar problem in the future, I was prepared to answer it myself. I have the tools to reach towards a solution. (Learnt)

Before taking this class, my knowledge of the class topic was: (beginner to expert grading scale)

Test Entry Option: What else would you like to share about this lesson? Would you like to share about this lesson?

After taking this class, my knowledge of the class topic was: (beginner to expert grading scale)

Test Entry Option: If your library provided additional learning in the future, what would it be? What would you like to share about this lesson?
### Free Text Responses

<table>
<thead>
<tr>
<th>Reference</th>
<th>Consultations</th>
<th>Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>What else would you like to share about this interaction?</td>
<td>What else would you like to share about this interaction?</td>
<td>If Strauss Library provided additional training in the future, what might it be? How could this course be improved?</td>
</tr>
</tbody>
</table>
Ease for librarians to integrate: automatic follow-up email for those who attend consultations, embedded link for reference responses, and simple class implementation

Print out handouts on how to access Bit.ly and used bit.ly to shorten the link

All data collected in LibWizard and LibCal used to send out automated emails to patrons
Handout for in-person classes

Shortened link for ease of access
Handout for in-person, some also had QR codes
Link shared in virtual
I don’t have anything else to say aside from what is written on the slide.
Overall Survey Numbers

<table>
<thead>
<tr>
<th>Category</th>
<th>Responses</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultations</td>
<td>79</td>
<td>46.90%</td>
</tr>
<tr>
<td>Teaching</td>
<td>279</td>
<td>35.75%</td>
</tr>
<tr>
<td>Reference</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

People getting verbal reminder for consultations and teaching, reference survey link is just in the footer of the reference response.

Mention this is a “snapshot in time” to give viewers an understanding of our typical response rate and what they might expect if implementing something similar.
Data from the classes survey has given us evidence that students are learning the material they are hoping to when registering for library classes.

0-10 scale. Ave pre-class rating 3, Ave post-class rating, 6. Average change in score is 3 points which is statistically significant.

From a student’s perception of their own learning, the EdRef department is effectively teaching course material!
Obstacles and Lessons Learned

Better way of gathering patron responses: verbal reminders during patron interactions
Self-selection bias: since the survey was not required, there is an element of self-selection bias included in our results. We cannot assume that the feedback we received is representative of the "average" patron.
COVID-19 Adaptations

- All library instruction moved online
- Provided newly online class instructors with tips on sharing the survey link
- Marked all classes after campus shutdown as online for data analysis

Lucky to already have some online instructors who could mention how they advertise the survey
We had a question asking if the class was online or in-person (for the few classes that were) removed the question and marked all online for analysis
"Working with a Librarian was a good use of my time"

Data shows there is not a significant difference between online and in-person class surveys

Our quality of service has not gone down because COVID-19 pushed all classes online

We felt fortunate to have this survey set up before the pandemic, because our department could use survey data to demonstrate to library administration that our services had not declined when we transferred to all online library classes. Especially because we had limited time to transfer our classes to the online platform. We were able to boost morale for library instructors with this information during work from home.
Conclusion and Best Practices

- Longitudinal implementation
  - survey data will become more valuable as time passes
- Create a passive workflow
  - embed surveys into automated emails.
  - Require instructors mention survey at the end of each lesson and save 2-3 minutes of class time for survey completion.
  - Consider writing code to analyze the survey results in a quick and systematic manner.
  - Assign a project manager to field all questions
- Be open to revision
  - Ex: COVID-19 adjustments
- Department buy-in
  - Frequent check-ins
  - Solicit advice from colleagues

Regularly updated the department and sought out advice for survey questions and implementation, this helped get departmental buy-in
Value continue long beyond my position as the 2nd year NLM Fellow/Sam’s assistantship
Return on investment for CU – lasting program for the library