The Library Assessment Cookbook

edited by Aaron W. Dobbs
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Acknowledgements

Chef Aaron would like to thank this cookbook’s 122 recipe chefs for their eighty assessment recipes. Without these sous chefs, this cookbook could not have happened.

Thanks also are due to the original ACRL Cookbook Chefs, Chef Ryan L. Sittler and Chef Doug Cook for their initial cookbook, The Library Instruction Cookbook. I have improved my instruction due to that cookbook, and without that example the idea for this cookbook would not have occurred to me.

Thank you to Kathryn Deiss, now retired from ACRL, who continually encouraged me to send her the proposal for this cookbook. Thanks also to Erin Nevius, Dawn Mueller, and Stephen Wagner at ACRL for their tireless work formatting the manuscript into this finished book (and catching the errors and inconsistencies I missed).

Thanks, again, to my wonderful sous chefs for their recipes and especially for their creativity, flexibility, and patience as my editorial process was knocked awry and met with impediments across the eighteen months from the call for proposal to actual publication. Your humor, understanding, and commiseration have been much appreciated.

I would also like to thank my wife, Julie, and daughters, Natasha and Alena, for their patience and understanding over the last year and half as I wrestled these eighty recipes into this cookbook. I did not expect a two- to three-page recipe to require almost the same amount of contact hours as a fifteen- to twenty-page book chapter.

Thanks are also due to Remy and Chef Gusteau in Ratatouille for their incurable sunny optimism and positive regard for life and cooking.

If you are inspired by a recipe in this cookbook, please take the time to email the recipe chef(s) and let them know!
PREFACE
Every good cookbook is based on successes achieved after trial and error and trying again. The inspiration for this cookbook is *The Library Instruction Cookbook*, edited by Ryan L. Sittler and Douglas Cook, which presents great practical approaches to library instruction.

“Anyone can cook!”
~Chef Gusteau, *Ratatouille*

*The Library Assessment Cookbook* follows this prior work with practical approaches to assessing library services and resources. Similar to Ryan and Doug’s, this cookbook originally aimed to provide about fifty delicious and easy-to-digest recipes for assessing library services and resources, but recipe chefs outdid themselves with more than 140 excellent recipe proposals, eighty of which are presented here.

Are you assessing your library services or resources? If you’re just getting started, this cookbook is for you. If you’ve done a fair bit of assessment already, take a look through and see how these assessment chefs have seasoned their reports. If you are already a master assessment chef, take a look and compare your creations to those offered here for possible additional adaptation.

“If you don’t follow your dream, who will?”
~Emeril Lagasse

Every library tracks some kind of use data. If you’re not sure about what you could do with the data you already have, skim through and find recipes to help decide what to cook up with what’s already on the pantry shelves.

Assessment is fundamental to positioning your library within your organization. Try out a few of the following recipes to run past your colleagues to see how they taste. Once you’ve adapted things to local tastes, build a tasty meal for your institutional “steakholders” to enjoy!

Assessment, like cooking, is something of an art with a creative dash of qualitative and quantitative data crunching for texture and flavor. Combining complimentary dishes into tasty meals leads to good reviews and repeat customers. Assessment examines how what the library provides impacts and/or is perceived by users and guides strategic planning discussions and development of future services or resources.

Assessment can be a challenging meal to cook. Make sure to try several recipes and season to taste as you adapt to your institutional palate.

Feel free to email your recipe chefs with questions about their recipes. We look forward to reading your write-ups describing your successful assessments!

Your Cookbook Editor Chef,

Aaron W. Dobbs
Shippsensburg PA, 2017
aaron@thelibrarian.org
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Kitchen Prep:
Getting Ready for Library Assessment

By having the best ingredients and the right equipment, you are setting yourself up for success with any assessment recipe. This recipe will help you establish promising practices for a sustainable, library-wide assessment program.

Emily Guhde, Georgetown University, emily.guhde@georgetown.edu

NUTRITION INFORMATION
This recipe will help you get started with library assessment activities. Instead of leaping right into surveys and evaluations, spend a little time to get your assessment kitchen ready.

COOKING TIME
Approximately half an academic year to build the foundation of a library assessment program.

COOKING TECHNIQUE
Communicating with colleagues (mostly listening) and collaborative planning.

INGREDIENTS
• Recent reports, presentations, or data files from your library’s strategic planning and assessment activities
• Notebook and pen

PREPARATION
STEP #1: Take Stock of Your Pantry
Understanding the library’s goals and priorities will help you plan assessment projects that support long-term strategic directions and meet immediate organizational needs. Absorb what you can from your library’s website and internal documents, but also set aside time to meet with departments across the library and listen to their ideas for library assessment. Explore how the library’s assessment activities fold into the broader context of your institution. Introduce yourself to other assessment professionals on campus.

STEP #2: Check the Expiration Date
Letting perfectly good data go to waste can be expensive, but it is avoidable if you plan ahead. Before you begin gathering data, identify how you intend to use it. A good project plan will include details about how the resulting information will support decision-making or move an initiative forward.

Storing your data in the right place can also prolong its shelf life. If your library does not have a system for sharing data sets and assessment reports, consider making it one of your first projects.

STEP #3: Use High-Quality Ingredients
The Joy of Cooking says that a fresh strawberry pie is only as good as the berries you start with (p. 878). Likewise, the quality of your data is everything for a reliable analysis, so take time to create a lightweight data management plan for each assessment project. At a minimum, you should document the source of your data, the person responsible for reporting it, where it will be stored, and if you processed, cleaned, or modified the data.

Step #4: Beware of “Must-Have” Kitchen Gadgets
For better or worse, library assessment is trendy right now, and vendors are paying attention. We have many services and software products to choose from that claim to make assessment easier. But it is more important to build your assessment kitchen within the parameters of your library’s goals and budget.

Before investing in a specific assessment tool or software program, take the product for a test drive and see if it can handle the type of analysis, data visualization, and data sharing that you want to achieve.

STEP #5: Embrace Creativity in the Kitchen
Even the best recipe sometimes needs a little improvisation. A recipe is a record of what
worked in someone else’s kitchen, but if your oven runs hot or your pan isn’t the right size, you’ll need to adjust the recipe to succeed.

Likewise, when you choose an assessment recipe, always keep your local context in mind. What worked at another institution might need some adjustments to work at your library.

**Step #6: Presentation is Everything**
Sharing your experience with colleagues is an important part of the assessment process. Disseminating results among your co-workers contributes to transparency and data-driven library operations. Getting feedback from other professionals is critical to improving the recipe for next time.

**Step #7: Don’t Go Crazy**
I’ve never read this advice in a cookbook, but it seems like an appropriate ending for this recipe. “Don’t go crazy” is my holiday-hosting mantra, and its purpose is to remind me that no matter what happens in the kitchen, we’ll either get a good meal or a good story, and it’s usually best if we get both. All the planning in the world cannot avoid the occasional mishap, but if you ask for help when you need it and keep your eyes on the prize, you’ll make it to the table without too much damage.

Preparing your assessment kitchen isn’t about having complete control. It’s about planning ahead so that when chaos inevitably strikes, you’ll be ready to calm the frenzy. Don’t give up and storm out of the kitchen. Part of being an assessment librarian is setting a positive tone for the use of data within the library. Keep the momentum for assessment strong by setting realistic expectations for what you can accomplish. Focus on getting good data, and a good story will follow.

**REFERENCES**
Creating a Statistics Report Using Ingredients Already in the Library

Every library collects data. The raw data can be combined and organized into a report that can be used by library managers to make data-driven decisions based on what is and is not working in the library.

Judy Geczi, Saint Louis University, geczije@slu.edu

had seven members that collectively spent 100+ hours creating this report.

COOKING TECHNIQUE
Assessment Instrument used to collect data for decision making.

INGREDIENTS
• Raw data gathered from throughout the library
• Excel spreadsheet
• Library Assessment Committee with ideally two members from each department within the library

PREPARATION
The Library Assessment Committee members should have an enthusiasm for numbers. Combinations of librarians and staff work very well for this project. Experience with Excel is not needed.

Interview library managers to find out what data is currently collected by the library.

THE ASSESSMENT
Organize data the library currently collects and put into categories:
Collections, Expenditures, Facilities, Services (instruction, reference, circulation), Staff and/or Technology.

Decide if data is needed that is not currently collected so that all areas of the library are represented in the final report
• Examine if data can be created using existing information
• Figure out how the committee can collect new data
• Decide who will be involved in the evaluation process to ensure you are getting the data you need

Ensure the accuracy of data that will be used in report
• Not all data is reliable
• Spend time analyzing data
• Find the original source of the data to help verify its accuracy

Create charts and graphs with the data
• Graph the data several different ways using Excel, such as pie charts, line graphs, or bar graphs.
• Check if multiple data sets can be combined on one graph
• Decide if the data is still relevant once it is graphed

NUTRITION INFORMATION
The statistics report will provide statistics, charts, and/or graphs that can provide immediate, useable information at a glance for both strategic planning and general operations. There are very few “words” in the report as it is mostly visual representations of data. Graph types can include pie charts, bar graphs, line graphs, or any visual picture that may accurately represent the data. This is where you can get creative. Additionally, a Library Fact Sheet page can be used for data that is “one-shot” in nature or when a graph is not feasible.

DIETARY STANDARDS
Assessment of Performance Indicators across the entire ACRL Standards for Libraries in Higher Education can be addressed, depending on available data.

COOKING TIME
This large-scale project will take several months to complete. The amount of time spent will vary, depending on the number of committee members working on the project and the amount of data collected by a library that needs to be reviewed. Webster University’s Library Assessment Committee
Section 1. Data Preparation for Assessment

- Determine if any data is missing
- Use Google Analytics to create graphs with information about the library website

Decide on charts/graphs to use for final report
- Ensure that all areas of the library are represented
- Remove graphs that are extraneous
- Keep in mind the audience and how the report will be used. Decide which graphs are relevant to that audience

Organize charts
- Decide on order of charts so that they best tell the library’s story
- Bring charts into Word to create the final report
- Create a “one-shot” page or Library Fact Sheet that contains data that is relevant but does not need to be looked at over time, such as the number of group study rooms in the library
- Create title page, table of contents, and acknowledgments page
- Add page numbering

Create Statistics Report

ALLERGY WARNING
The first year the report is created is labor intensive because all graphs are new. If the statistics report will be produced yearly, pages can be updated with the current year’s numbers, which will be a simpler process than the initial report.

Provide links to tutorials that explain graphing in Excel for those who are new to Excel or need a refresher.

CHEF’S NOTE
If you decide to produce the statistics report on a yearly basis, the report content will likely change from year to year as it mirrors changes within your organization and library. There may be a need for additions, modifications, or deletions of report pages, due to a new type of data collected or removing data that is no longer gathered or relevant. This evolution is a normal part of the process as you analyze both existing and new data, and extract useful information to report.
Using Student GPA to Show the “Nutritional Value” of a Library Service

Students can interact, or not interact, with their campus library in a variety of ways and through a variety of services—circulation, interlibrary loan, instruction, using our physical spaces, accessing electronic materials, to name a few. Comparing the GPA of library users to non-users is a valuable assessment strategy for demonstrating the value-added impact or “nutritional value” of library services on our users.

Mitchell Scott, University of Wisconsin–Milwaukee, scot66@uwm.edu

NUTRITION INFORMATION
This assessment is based on a study that investigated interlibrary loan (ILL) use and non-use over a two-year period. Combining student use data for a library service with GPA and basic demographic data for those users, such as year in school and major or academic program, can provide clear correlational ties of a library service to greater student academic achievement. This recipe could be recreated at your institution to demonstrate the possible impact of traditional library services (circulation, ILL, instruction), library collections, or other library services, where student use or attendance can be tracked and the data can be harvested.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.5; Principle 5, Indicator 5.4; and Principle 9, Indicator 9.3

COOKING TIME
GPA studies can be designed as shorter assessments that focus on use over the course of a semester or academic year, or can be longitudinal and study the effect of use over a longer period of time.

The greater the time frame, the greater a case can be made for a library service having a demonstrative and consistent impact over time.

TECHNIQUE
The Microsoft Excel pivot table function is enough to manipulate the data and calculate mean GPA, but any statistical analysis software will do.

INGREDIENTS
- Anonymized student user ID numbers (or other student identifier): This will be your match point and how you’ll easily link to GPA as well as other library service points (circulation, ILL, attending an instruction session, etc.)
- GPA and student demographic data for both users and non-users: Once the student ID numbers have been collected, these will be mixed or combined with student demographic data and student GPA. At the minimum, student demographic data should include academic program or major and the student’s year in school

PREPARATION
Cross-institutional partnership: Your local institutional researcher will take your library users and use data and combine them with GPA and student demographic data.

Institutional Review Board (IRB) approval: This might be necessary at your institution as you will be dealing with student data.

THE ASSESSMENT
Data collection and collocation
Harvest patron and use data for the service or services that you have identified.
- Consider all of your use variables: Are there elements of the library service use that you will want to code or include in your initial data extraction? Including quantity of use or other variables that exist within the service allow for an expansion beyond just a simple evaluation of binary use versus non-use
- Pass anonymized data off to your institutional researcher
Section 1. Data Preparation for Assessment

Analysis

• Determine the mean GPA of all library users and non-users
• Evaluate mean GPA alongside student demographic data
This data will allow you to take the temperature of the service and how the GPA of users may differ by academic level or academic program.

Be ready to pivot your research question and consider other variables. The original study focused only on ILL use versus non-use, but by pivoting and looking at ILL articles users the study was able to demonstrate a real value-added impact of ILL to its users.

ALLERGY WARNINGS
GPA assessment can be tricky. Sometimes the GPA differences between users and non-users can be minimal or insignificant and, therefore, it might be difficult to correlate use to academic impact. Again, be prepared to shift your research question.

Correlation versus causation: Studies like this will largely be uncovering correlational effect rather than causational. If you strike gold and uncover causation, that is even better. But when talking about your final findings, it important to keep this in mind.

CHEF’S NOTE
It is vital to paint the picture for library stakeholders of how local library services impact local users. Find opportunities across campus to share your findings and spread the message of measurable library impact on academic achievement.

REFERENCES
Boiling Down Qualitative Data to Build Personas that Inform Spaces, Services, and Technologies

Personas are archetypes of user needs, wants, goals, and desires that allow for empathetic design of virtual and physical spaces and services. Commonly created using assumption-based methods, this recipe focuses on in-person interview analysis.

Monena Hall, Montgomery-Floyd Regional Library System, mhall@mfrl.org; Maurini Strub, University of Louisville, maurini.strub@louisville.edu

NUTRITION INFORMATION
Personas have been used by libraries as part of their website redesign. Examples of libraries creating personas to support their website redesign and plan for services include Cornell in 2007, North Carolina State University in 2010, and University of Washington in 2014.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 2, Indicator 2.5; Principle 6, Indicator 6.5; and Principle 7, Indicator 7.5

COOKING TIME
15 hours preparation; 1 hour per interview; 3–6 hours per transcription; 10 hours for persona making.

COOKING TECHNIQUE
• Interviews
• Affinity diagraming
• Writing

INGREDIENTS
• Interview protocol
• Marketing tools

PREPARATION
Assemble Your Project Team
3 or 4 people interested in ethnographic studies with strong listening and pattern-recognition skills.

Design Your Interview Questions
What do you want to learn about your users? Let this shape your interview questions.

Develop an interview protocol—the script of what you’ll say before and after your interview, a summary of the informed consent, and a prompt for the interviewer to collect the informed consent.

Apply for IRB Approval
Human Subjects Protection training is usually required.

When submitting your IRB protocol, you may need to include all project documents for review.

Recruiting the Participants
Create a website that can host participant-related documents in a common location, including the Informed Consent, Interview Sign-up, and Demographic Data form.

Use web-based scheduling software so participants can easily find and reserve times to be interviewed.

Incentivize your audience. Library promotional items, such as mugs filled with teabags and candy, can eliminate the tax hurdles of gift cards or cash.

Create recruiting materials for digital signage, flyers, and table tents, and the copy that will go in campus communications. Be sure to mention your incentive.

Post invitations in campus-wide communications and in digital and physical spaces around campus (not just the library!). Ask library liaisons to send requests to their faculty and students.
THE ASSESSMENT

Conducting the Interviews
Use a recording device or program to record interviews. Free iPad applications, like Voice Record Pro, allow recordings to be edited, saved as .mp3, and sent to cloud-based storage systems.

Run each interview protocol with two interviewers—one person conducts the interview and the second takes notes about body language and notes salient moments.

Analyzing the Interview
Transcribe the interviews and, as a team, identify insights about each interview, including the user’s attitudes, goals, and frustrations. Each new insight goes on a new Post-it Note. Indicate which user provided the insight.

Find a large blank wall or whiteboard for your project team to analyze your interview transcripts.

Group similarly themed notes together. Avoid matching by keyword or by user, which can conceal patterns. Cluster similar insights near each other to help themes emerge.

For each grouping, write a new note (in first person) that summarizes the group of Post-it Notes, e.g. I have trouble with..., or I really love when....

As a group, come up with thematic names, e.g. “persistent searcher,” for the clusters of groupings.

Creating a Composite Archetype
Using your affinity diagram findings, fill in the details about the person you are creating. Is it student or faculty? How do they use the library? What activities are they involved with? These details make your archetype more believable and easier to relate to.

Packaging for Storytelling
Give your personas a face and a name to help your stakeholders connect to the personas. Demographic information for each persona should reflect your campus and the people interviewed.

ALLERGY WARNINGS

Time Commitment
Human subjects training can take a few hours per team member. Plan ahead.

CHEF’S NOTES

Time Commitment
Analyzing the data also requires a group commitment. Working in two- to three-hour blocks of time allows the group to become immersed in the data.

Data Analysis
Although qualitative data analysis software allows you to electronically organize your data, affinity diagramming allows for full immersion by building a wall-sized hierarchical grouping of interview notes. This will highlight common issues, themes, the scope of problems, and needs. Being well-grounded in your data will help you build a better archetype.

RESOURCES


“Stocking the Larder”:
Recruiting for Focus Groups and Other Small Group Assessments

Having the volunteers you need at hand can make focus groups and small group assessments so much easier to “bake.”

Carol Mollman, Washington University in St. Louis, mollman@wustl.edu

INGREDIENTS
The respondent pool spreadsheet should track the following information:
• Name
• Email
• Category: Faculty, Grad student, Undergrad, Other
• School affiliation
• Date added to pool
• Contact dates and outcomes
• Exit date (up to two years or earlier, if requested)

PREPARATION
Design the Volunteer Pool to meet future needs of your library. This will require a good grasp on what kind of users we might need for future focus groups and other small group assessments. We used the following steps to come up with the scope and definition of pool members:

We reviewed focus group and usability activities from the past several years and identified upcoming projects as we mapped out target user groups. Our resulting categories included faculty, graduate, and undergraduate students, with further segmentation by school affiliation.

A strategy was developed for “feeding the pool.” User-facing library staff members were asked to participate in brainstorming. The results:
• A question was added to the Service Quality Survey inviting participation in focus groups
• At Faculty and Graduate Student Orientation sessions, we added a question to the simple exit survey. We are also looking at Library instruction classes with exit surveys as another broad source of undergraduate volunteers
• A form was created for volunteers on LibGuides. (This netted very few, but we figured we ought to cover the bases)

THE ASSESSMENT
The administration of the pool is fairly simple. Access to the pool is through the library’s Assessment Team, which functions as the coaching/support point. Here’s how it generally works:
A librarian might be interested in exploring a topic such as graduate students concerns about access to online resources.

The pool administrator releases names in an Excel spreadsheet to the librarian managing the project. We generally release about two to three times the number of names needed to fill a session. This is where the care in choosing the “main ingredients” pays off. Depending on the project, we can fine-tune the list to focus on faculty or students in a particular area, such as the Humanities.

It is the responsibility of the project manager to contact the volunteers. If they need help, the Assessment Team works with them to develop the invitation.

The project manager uses the Excel list to track the responses. To make it easier, we include columns to cover the levels of participation. All they need to do is check:
- Did the invitee respond (Y/N)?
- If yes, did they show up?
- If no, did they ask to be removed from the list?

At the end of the project, the Excel spreadsheet is returned and the Volunteer Pool Master List is updated.

**ALLERGY WARNINGS**

Maintenance is not time-intensive, but it does take attention. The quality of the pool deteriorates if it is not regularly maintained.

While no one has ever opted out of our system, we offer the option on each invitation. It's an important courtesy, so that we aren't perceived as spamming the participants.

**CHEF’S NOTE**

We have found that the volunteer pool is only one way to source our sessions. We often use a hybrid approach, using a combination of the following sources:

- If the subject matter is very specific or constrained to a particular program, we often approach faculty or the dean of the discipline to identify individuals whom we could ask to participate.

- Posting flyers in the libraries and on various spots across campus.

- Using student workers, especially in situations (like determining use of space) where pro-library bias is not important to the session outcomes.

- We ask for participants “on the fly” in our foyer, coffee shop, or dining halls. This is particularly useful for filling in a session that is running soon.
Making Project Management Planning and Assessment Planning a Piece of Cake

Bring assessment, user experience, and project management planning together to benefit library patrons.

Susan Payne, Johns Hopkins University, susan.payne@jhu.edu

INGREDIENTS

Sprinkle in questions. When given a new project or initiative, ask questions to clarify scope and stakeholder requirements.

Season with data. Find the right data for your project. If you do not have data, how can you get it? Analyze data so that it can guide projects and actions.

Mix in your library’s values. Projects often result in recommendations, results, or findings. Tie recommendations to important values for library staff or patrons.

THE ASSESSMENT

We used informal methods for feedback, including surveys (such as SurveyMonkey), a one-minute survey (a two-question email), and gathering feedback from key stakeholders. In the future, we will include additional assessment and metrics to help build a library dashboard in support of strategic initiatives and key library activities.

At the close of each project, we assess its success by traditional project management measures and by looking at how well we satisfied user requirements to satisfying library patrons’ and other stakeholders’ needs.

ALLERGY WARNING

Library investigators often want to contribute positively to organizational decisions, strategic initiatives, and projects. Regardless of your position in the library, you can create and inspire change in your organization by influencing senior leaders. Often, ideas and plans must be sold at various levels to gain support or funding.

CHEF’S NOTE

Each member of the AUX group made a variety of substantial contributions during a six-month period. Creating criteria for projects that we undertake will be important as the group matures and develops capacity, skills, and expertise.

NUTRITION INFORMATION

After championing project management in the library for a year, we proposed creating a group that would help grow user experience, assessment, and project management in the library. Members of the Assessment & User Experience (AUX) group have managed projects related to assessment and user experience.

DIETARY STANDARDS

ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicators 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7; Principle 6, Indicators 6.1, 6.8

COOKING TIME

Planning and assessment time will vary depending on the complexity of the project.

COOKING TECHNIQUE

A six-month action plan for the new group has helped build capacity and infrastructure—including hiring a User Experience librarian, creating usable office space for three staff, and creating a strategic direction with actionable items in each focus area of assessment, user experience, and project management.

<table>
<thead>
<tr>
<th>AUX Projects &amp; Services</th>
<th>Staff A</th>
<th>Staff B</th>
<th>Staff C</th>
<th>Staff D</th>
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<tr>
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<tr>
<td>Staff Contributions</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

DIETARY STANDARDS

ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicators 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7; Principle 6, Indicators 6.1, 6.8

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<td>n/a</td>
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<tr>
<td>Staff Contributions</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Professional Development Assessment Paella

Create a successful professional development program. Assess all aspects of a program to maximize its impact on librarians’ professional development and fully demonstrate its value to librarians and library administration.

Catherine Sassen, University of North Texas, Catherine.Sassen@unt.edu; Karen Harker, University of North Texas, Karen.Harker@unt.edu; Erin O’Toole, University of North Texas, Erin.OToole@unt.edu

NUTRITION INFORMATION
The goal of this recipe is to blend assessment into a professional development program for librarians. Carole Bland and her co-authors (2009, 37–44) noted that administrative support and assessment are crucial parts of a professional development program. Assessment results can be used to justify the program to the library administration, continuously improve the program, and provide information about the program’s benefits to current and potential participants.

COOKING TIME
8–16 hours of work to analyze data and write annual report.

COOKING TECHNIQUE
- Online surveys
- Analysis of scholarly activities reported on librarians’ curriculum vitae (CVs)

INGREDIENTS
- Online surveys
- Librarians’ CVs
- Attendance lists

PREPARATION
- Construct online surveys and attendance lists.
- Obtain Institutional Review Board approval for assessment through an expedited process, if planning to share results.

THE ASSESSMENT
1. At the beginning of the academic year, survey the librarians about their interest in professional development topics. Use the results to plan program sessions.
2. Record the librarians’ attendance at professional development sessions.
3. After each professional development session, survey the librarians who attended about the quality and relevance.
4. Survey participants in peer review services regarding the quality and satisfaction.
5. Evaluate CVs of librarians regarding the nature and extent of scholarly activities during the academic year.

ALLERGY WARNINGS
When assessing professional development events, manuscript critiques, and presentation rehearsals, it is important to recruit survey respondents as soon as possible after the event concludes. Respondents are less likely to respond to surveys that are not administered in a timely manner.

CHEF’S NOTE
Present the annual report of assessments to the library administration to gain respect and support for the professional development program.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 8, Indicators 8.3, 8.4

Allow one year to collect data on the attendance and feedback of the program activities.

Allow one year to collect feedback from participants in peer review of presentations and writing.

Allow up to two years to assess the effect of the programs on the scholarly activities.
SESSION SURVEY RESULTS

<table>
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<th>FY16</th>
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<tbody>
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<td>12.7</td>
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<tr>
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<td>8.5</td>
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</table>

Scores*

<table>
<thead>
<tr>
<th></th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
</tr>
</thead>
<tbody>
<tr>
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<td>6.1</td>
</tr>
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<td>New2</td>
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<td>5.6</td>
</tr>
<tr>
<td>Change3</td>
<td>5.8</td>
<td>5.4</td>
<td>5.9</td>
</tr>
</tbody>
</table>

1 Average responses to the questions:

1 Beneficial score: “How beneficial was this to your scholarly, professional or service activities do you feel this session was?” Scale: 0=not beneficial; 8=could not succeed without

2 New score: “How much of the information presented in this session was new to you?” Scale: 0=none of it; 8=all of it

3 Change score: “How much will the information presented in this session change what you do?” Scale: 0=no change at all; 8=changes what I do completely
# Section 2.

## Traditional and Online Collections Assessment

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*Paula Barnett-Ellis and Charlcie Pettway Vann* |
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Creating a Framework for Comprehensive Collection Assessment

This recipe outlines the objectives, project management framework, and deliverables created by the University of Connecticut’s Electronic Resource Services Unit to enable a comprehensive review and assessment of the library’s e-resources.

Galadriel Chilton, Ivy Plus Libraries, galadriel.chilton@yale.edu

The E-Resources Services Unit used Scrum to keep the project on task and gain aptitude at breaking each element of the project into reasonable, doable tasks. Scrum simplified time prediction for various tasks, tracked time expended on the project, and distributed tasks equitably, all of which increased team members’ morale. In addition, using this methodology strengthened the project’s deliverables.

INGREDIENTS

Glossary of Terms
To ensure that collection reviewers understand common descriptive terms and that such terms are used consistently, develop and distribute a glossary of e-resource terms.

Journal Package Overview Guide
A master list of all journal packages that includes applicable information such as: Publisher/Provider, Package Name, Annual Cost, Sum of Most Recent Full Calendar Year of Usage for all Journals in Package (e.g., JR1), Cost Per Use, Usage Notes, Approximate Number of Titles Accessible, Current Subscription Type (e.g., All or Nothing Package or Title by Title Package), Access Model, Perpetual Access, Consortia, Annual % Increase/Price Cap, License Expiration, Required Notification Period for Cancellation, Transfer/New Title Options/Title Swaps, Cancellation Allowance, Payee/Coast Share, and Notes.

Resource Profiles
For our comprehensive review, we developed fifty-three resource profiles: one for each journal package that listed all individual journals in a package, one for databases, and one for individual journal subscriptions.

Ingredients for each resource profile varied depending on the resource type. For example: resource name, past and current cost, annual percent increase, usage from the most recent calendar year, cost per use, perpetual access, consortia acquisition if applicable, license expiration, notification period for cancelation, payee, cost share, list price, alternate access (e.g., aggregate databases), and overlap analysis. Journal package resource profiles included all elements from the Journal Package Overview Guide plus subscribed titles and usage by title.

THE ASSESSMENT
Cooks are library staff with access to and familiarity with data used in the resource
profiles as well as Microsoft Excel and Access skills.

Using the Scrum project management framework, develop a glossary of terms pertinent to the e-resource collections being reviewed, a journal package overview guide, and a resource profile document (e.g., Excel file) that includes a list of resources and appropriate ingredients for databases, individually subscribed journals, and journal packages.

For journal packages, we imported usage reports, entitlement lists, and prices lists into Access and then merged data based on ISSN into a single query. The container or format for each deliverable is determined by an assessment of skill sets and tools readily available (e.g., Excel, Access, etc.), ease of user, and end user needs.

ALLERGY WARNINGS
Data preparation (e.g., usage reports with print ISSNs and entitlement lists with eISSNs) is very time-consuming, but necessary in order to merge usage, entitlement, and price lists into one file.

When creating an Access query, it is necessary to adjust the join properties between tables so that all data is included from a list, even if there is not an ISSN match in one of the other lists. Also, usage reports often list usage for unsubscribed titles due to trials, open access, etc.

CHEF’S NOTE
Data for each resource are often in various disparate sources. Developing this framework is extremely time-intensive; however, the resulting deliverables enable a library to systematically and holistically review and assess their collections.

RESOURCES

Exploratory Collection Assessment: 
The Subject Snapshot

This recipe will help you assess a single-subject collection from multiple angles for a snapshot, birds-eye view of your holdings.

Madeline Kelly, George Mason University, mkelly25@gmu.edu

NUTRITION INFORMATION
This recipe was developed as a manageable way to assess library collections comprehensively. The approach, which is applied to a single subject area at a time, can be used to satisfy any assessment goal and incorporates a diverse portfolio of collection assessment tools.

The use of multiple tools mitigates the need for perfect data from any one metric; assessors can “triangulate” the results. Further, the multi-tool approach allows library staff to adjust the extent to which a subject area is assessed by adding or removing tools. In turn, the single-subject approach allows for each assessment to be customized to the needs of the project at hand; it also allows a library to complete an assessment in relatively little time, with relatively little manpower. It is a flexible, pragmatic, scalable approach to systematic collection assessment.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicators 1.1, 1.4; Principle 5, Indicator 5.1, 5.3; and Principle 7, Indicators 7.3, 7.6, 7.7

COOKING TIME
1–2 months

Recipe yields one concise subject assessment, hundreds of actionable data points, and dozens of potential analysis projects (optional).

COOKING TECHNIQUE
Citation analysis, usage data analysis, user feedback, list checking, counting, and comparison to external benchmarks.

INGREDIENTS
• 15 hours per week or more (or less)
• 1 assessment advocate
• 1 adventurous subject librarian
• Dedicated funding (optional)
• Assorted assessment tools (see Chef’s Note)

PREPARATION
Set your parameters
Meet with library administrators to identify institutional goals and priority subject areas.

Determine which collection metrics align best with institutional goals. (See Chef’s Note for guidance.) If possible, identify a mix of quantitative, qualitative, internal, and external data.

Choose your subject area (ideally based on institutional priorities)
Meet with stakeholders. Leverage group expertise to identify appropriate call number ranges and classifications. Identify peer libraries, if necessary.

Finalize list of tools and metrics. Ensure a mix of tools for holistic data.

THE ASSESSMENT
Collect the data
Follow the procedures for each tool and document them as you go.

Organize the data
As you collect the data, save files using a standardized convention (e.g., BIOL-usage, BIOL-survey-results, etc.).

Consider pasting key data, analysis, and findings into a single, central document for ease of review.

Prepare the final report
Identify findings that will be of most interest to stakeholders. Keep in mind that
Section 2. Traditional and Online Collections Assessment

administrators may have different interests than the subject librarian; two versions of the report may be needed.

Consider including the goals of the assessment on the first page, along with overview information about the subject area assessed (curriculum, call number ranges used, peer institutions, etc.).

List out key results with notes explaining what the data means.

Look for opportunities to display results graphically.

Share the report with stakeholders; discuss the results and answer questions. Revise as needed to better convey the information.

**Take action**

Use the results to make a handful of recommendations for action—both specific recommendations to the subject librarian and general recommendations to library administration. These should echo the goals of the assessment.

**Evaluate the recipe**

Evaluate the process. What worked well? What proved burdensome, challenging, or useless? Revise the procedures to reflect lessons learned.

Repeat the assessment process on a second subject area, as desired.

**ALLERGY WARNINGS**

This recipe will be different at every institution, perhaps for every subject assessed. Be sure to set your parameters and prepare the final report with care to ensure a good fit.

**CHEF’S NOTE**

There are many assessment tools and metrics to choose from:

**Citation analysis**

Analyze monographs, journals, or local research to discover what format, language, or age of material is preferred by researchers, and to generate lists of core publications.

**External standards**

Look at peer holdings, accreditation standards, or other external measures (like WorldCat or HathiTrust) to see how your collection compares in size, age, subject, and uniqueness.

The process can be automated using tools like OCLC’s Collection Evaluation or Sustainable Collection Services’ GreenGlass; or it can be done manually.

**Usage data**

Look at figures for e-resource usage, circulation, and Inter-Library Loan to see what is—or isn’t—getting used, and where there’s added demand.

**User feedback**

Survey your users or conduct focus groups to learn how patrons see your collections and to identify preferences for format, language, and location.

Identify areas that need development, weeding, or better marketing.

**Counting**

Examine the size of your collections or their growth rate, age, uniqueness, etc.

**Analyze collection depth**

Compare areas of depth or high growth to institutional priorities; double-check alignment of reality with expectation.

**List-checking**

Compare holdings to authoritative lists, like Choice’s Outstanding Academic Titles and Choice/Bowker’s Resources for College Libraries, to identify gaps and/or areas of strength; or use reputable bibliographies from subject experts.

Combine lists and conduct a Brief Test of Collection Strength to determine the approximate level of your collections.

**FURTHER READING**

Bowker Book Analysis System: http://www.bbanalysis.com/


**Brief Test of Collection Strength**

**Modified Brief Test**

**Holistic Collection Assessment**

Recipe for Collection Assessment:
Mixing Together Key Ingredients to Make a Roux

Houston Cole Library collection assessments give an overall quantitative review of a specific collection and its strengths and weaknesses. These numbers, along with narrative sections, help to justify expenditures, enhance the university’s curriculum, help with collection development and management, and support program accreditation.

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NUTRITION INFORMATION
Collection assessments are conducted at the Houston Cole Library to ensure that current programs are supported adequately and to find out if materials are needed for newly added programs.


For a lighter collection assessment, eliminate unnecessary text and fold in numbers using the short form. An example may be seen here: http://www.jsu.edu/library/docs/assessments/Auxiliary Sciences Short Form.docx

DIETARY STANDARDS
ACRL Standards for Proficiencies for Assessment Librarians and Coordinators Standard 3, Assessment Methods and Strategies, 3.1, 3.2, 3.3, 3.4

COOKING TIME
Subject specialists usually have an academic year to prepare collection assessments. A shorter timeframe may be necessary if information is needed for program reaccreditation reports or new programs. Assessments are conducted approximately every five years.

COOKING TECHNIQUE
Chefs are the subject librarians, who prepare assessment reports using either a detailed long method with conspectus worksheets or a short method with more statistics and less narrative.

INGREDIENTS
• Relevant bibliographies for checking
• Lists of recommended books or journals in professional journals
• Electronic resources, such as Doody’s Core Titles in the Health Sciences or database subject lists

INGREDIENTS NOTES
Assessment reports on various Library of Congress subjects have the same basic structure, with some differences to fit subjects. A condensed form is conducted for subject areas that do not have degree programs.

THE ASSESSMENT
• Assemble ingredients with the assistance of the technical services and acquisition departments in preparing needed data
• Check bibliographies
• Compile numbers in conspectus call number ranges, using the appropriate method for your integrated library system

Basic Structure of Assessments
An introduction outlines the current collection level. This is based on collecting and acquisition activity and how well a collection can support academic degree programs.

The holdings section lists the current number of titles in relevant Library of Congress subject headings.

Electronic services access is provided by a list of periodical databases in the specific subjects of each assessment, as well as...
listing general databases, such as *Academic Search Premier*, that provides coverage. Links to relevant subject guides are listed as well.

An estimate of online periodical access is included from our e-resource access and management service.

Supplemental support lists Library of Congress subjects in related subject collections that are helpful to scholars, along with their holdings.

Expenditures for periodicals and monographs are listed for the five fiscal years since the last assessment.

A summary outlines changes as well as strengths and weaknesses of the periodical and monograph collections. Additionally, it offers collection development and maintenance recommendations, such as making additional purchases in a specific area or weeding outdated sections.

Checklists are presented with the numbers of library holdings compared to subjects listed in the bibliography, with the percent held calculated.

For examples see: [http://www.jsu.edu/library/information/collection_assessments.html](http://www.jsu.edu/library/information/collection_assessments.html)

**ALLERGY WARNINGS**

It is becoming difficult to find current subject bibliographies, so librarians have to look for resources that will fit their recipes.

Collection assessment guidelines rapidly become outdated as collections and material formats change.

**CHEF’S NOTE**

Assessments are prepared for administrative staff in the Houston Cole Library (HCL), for departments and/or colleges appropriate to the recipes, and for university administration.

Following approval from the Library’s Collection Management and Development Group, the assessments are served to the Web for public access.
Potluck Surprise: Assessing Donated Materials

Balance the need to provide and preserve unique physical items with the financial and spatial demands of information technology. Simultaneously juggle financial resources, physical space, and public demand while preserving and maintaining the history and identity of an organization and community.

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NUTRITION INFORMATION
Libraries, on occasion, receive donations that either address a subject area with a growing demand or entail unique items (e.g., newspaper articles, photographs) that address an area such as local history or local genealogy. Donations like these help libraries save money on purchasing new materials in subject areas with a growing demand and house and preserve materials of different formats on the community’s local history. Some factors under consideration include the condition of the items and (if necessary) which preservation and conservation techniques should be implemented.

DIETARY STANDARDS

Collections

ACRL Guidelines on the Selection and Transfer of Materials from General Collections to Special Collections Standard One: 1.0; Standard Two: 2.0; Standard Three: 3.0; 3.1; 3.2; 3.3; 3.4; 3.5; 3.6; Standard Four: 4.0; 4.1; 4.2; 4.3; 4.4; 4.5 Standard Five: 5.0 (optional); Standard Six: 6.0 (optional)

Preservation

ACRL Competencies for Special Collection Professionals (Part III D)

RUSA Guidelines for Preservation, Conservation, and Restoration of Local History and Local Genealogical Materials Standard Two, 2.1.2, 2.1.4, 2.3.2, 2.3.3, 2.5.1, 2.5.2; and Standard Three, 3.1, 3.2

COOKING TIME
Approximately one to two weeks for books, two to four weeks for ephemera, newsprint, or photographs from assessment to preservation

COOKING TECHNIQUE
Carefully observe date, content, and physical characteristics of items.

Handle rare and fragile items while wearing archival gloves.

Consult with proper liaison (e.g., departmental staff, faculty) if necessary.

INGREDIENTS

• Computers, copiers, other A/V equipment, if available (e.g., microfilm/microfiche machines)
• Archival gloves, sheet protectors, binders
• Other office supplies (e.g., scissors, pens, pencils)

THE ASSESSMENT
Collecting and organizing donated materials by such areas as subject and date

Sorting by primary and related subject matter (if applicable) to determine applicability to overall body of collection

Durability, extent of damage (if applicable) to materials, composition of materials (dependent on age and/or publication date of items)

Supplies necessary for preserving library materials

Adequate number of staff in liaison departments to handle each step of the process before items can be (officially) made available to the public
Adequate space and conditions (e.g., physical space, climate regulation) for storage of original materials.

**ALLERGY WARNINGS**
Carefully handle rare and fragile materials. If one is allergic to dust and those chemicals found in dated technology (e.g., old newsprint, microfiche), take proper precautions (e.g., wear gloves, mask).

If labeling directly on materials, do not use markers or pens that are not specifically for archival purposes.

Patience and close attention to detail are absolutely necessary when directly handling rare, dated, and fragile materials.

**CHEF’S NOTE**
The trend toward building digital collections in the area of preservation to reach beyond the library while maintaining a physical copy of historical documents is not without its challenges. One challenge is the simultaneous escalation of costs for both technological and preservation/archival supplies and, because of this, some libraries do not have the resources necessary to hire those with the skills necessary to perform such detailed and time-consuming work. Internships and volunteer programs have helped to overcome the financial divide, but those who are recruiting volunteers and interns need to carefully evaluate volunteers and interns for the skill set necessary to perform tasks in this area. Also, interns and volunteers need to have the knowledge, skills, and interest—as well as the patience—necessary to successfully complete these projects. Since this trend will only become all too common as libraries go into the future weighing user demand versus availability of space versus financial constraints, communication between and collaboration with both the collection assessment and the preservation departments is crucial for achieving the desired outcome for both staff and the library users.
Using Required Readings from Course Syllabi to Show Library Value and Assess the Collection

Analyze course syllabi to inform future collection development and acquisition decisions in support of curriculum needs and save students money.

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NUTRITION INFORMATION
When called on to demonstrate their value, academic libraries can use approaches such as citation analysis and return on investment studies. Many of these focus on the research aspect of academia but often miss the value of the teaching and learning components.

Readings found in course syllabi are an overlooked source of data that can be used to help fill in this gap and establish not only impact on teaching and learning but also student cost-savings benefits.

This recipe presents an approach for analyzing course syllabi that involves comparing readings to library holdings and gathering publisher cost information. The final product consists of a list of journal and monograph titles not held by the library that can be used as a discussion point for collection development decisions.

More important, it provides a figure representing the cost savings that a student receives based on access to course readings provided by the library through its collections. These data points can be used to show the library’s direct impact on student learning.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 5, Indicators 5.1, 5.2, 5.5; Principle 7, Indicator 7.4

COOKING TIME
Cooking time for collection analysis will vary based on the number of course readings, but estimate 30–60 minutes per 100 readings.

Cooking time for cost-saving analysis will vary based on the number of course readings, but estimate 2.5 to 5 hours per 100 readings.

INGREDIENTS
- Course syllabi
- Computer
- Spreadsheet software
- Suggested/recommended readings optional (garnish)

PREPARATION
Determine the course(s) to be analyzed. If they’re available in a central location, download the course syllabi for these courses. Otherwise, request the syllabi from faculty.

For those journals held by the library, navigate to the article on the publisher’s site and note in the spreadsheet the cost of purchasing the article from the publisher.

For those books held by the library, navigate to the book on Amazon’s site and note in the spreadsheet the cost of the book.

Once all of the cost data have been gathered, add up both the article and book cost data for the course to determine the total cost savings per student in the course.

THE ASSESSMENT

Collection analysis
Review syllabi for required readings and add them to a spreadsheet.

Compare book readings to holdings in the library catalog and note in the spreadsheet whether they are held by the library.

Compare journal readings to holdings in the library catalog and/or link resolver and note in the spreadsheet whether they are held by the library.

Cost savings analysis
For those journals held by the library, navigate to the article on the publisher’s site and note in the spreadsheet the cost of purchasing the article from the publisher.

For those books held by the library, navigate to the book on Amazon’s site and note in the spreadsheet the cost of the book.

Once all of the cost data have been gathered, add up both the article and book cost data for the course to determine the total cost savings per student in the course.
Students may obtain course material from any number of other sources including, but not limited to, other students, authors, faculty, and the internet. Many journal articles and some books are freely available online, legally or not, and these items can affect the cost savings calculation. To factor these free resources in, add an additional column to the spreadsheet and search the internet for the readings, noting in this new column those that are freely available. Then, when calculating the total cost savings, do not include the free content.

**ALLERGY WARNINGS**
Prep time is highly dependent on the availability of course syllabi. If gathered in a central location, this can be completed in a matter of minutes. Otherwise, it can take days or weeks, depending on the responsiveness of faculty.

When searching for journal article costs, make sure to use a computer that is not authenticated on your network so that you’re able to find the true cost of the article.

**CHEF’S NOTE**
It is suggested that Amazon be used over the publisher’s site as the source for book costs for a couple of reasons: students are likely to search Amazon for books they need to purchase; and depending on the age of the book, it may be out of print and no longer available through the publisher’s site but it is likely to be available through Amazon.
MAPing Collection Use: Using Massive Analysis Projects for Collections Analysis

Assessing resources that are similar in size, scope, coverage, and typical user population. While this recipe was first used at an academic institution, it could be adapted for public, state, school, or special libraries.

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NUTRITION INFORMATION
In spring 2014 at the University of Connecticut (UConn), a six-member working group completed a massive analysis of Scopus, Web of Science, and Google Scholar. The goal was to use many different quantitative data sources and qualitative data to create a comprehensive narrative of how the scholarly community used Scopus, Web of Science, and Google Scholar, why they were using each resource, and which resource features were most important.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 4, Indicator 4.4; Principle 5, Indicator 5.1

COOKING TIME
Approximately 200 hours

COOKING TECHNIQUE
Analysis of multiple sources of qualitative and quantitative data to determine what each data source suggested about the use of Google Scholar, Scopus, and Web of Science by users. Then we compared and contrasted data to determine overall trends of resource preference and usage patterns.

INGREDIENTS
• A literature review for each resource
• COUNTER usage reports
• ILL requests
• EZ Proxy logins
• Coverage title lists
• Database A–Z list click-throughs
• Open URL referring source (e.g., SFX, Serials Solutions, etc.)
• User survey
• Environmental scan of access at peer organizations
• Platform functional comparison (e.g., 10 citation test)
• Usage reports for specific resource functionality

Ingredient Notes
For usage statistics and cost-per-use calculations, we used search and session reports as well as the cost for three calendar years. When it comes to ILL requests, we used reports from ILLiad for three years that showed the number of requests submitted by faculty or graduate students for citations from Scopus, Web of Science, Google Scholar, and PubMed. The EZ Proxy log yielded off-campus logins to Web of Science and Scopus by status and department. We downloaded coverage lists for Scopus and Web of Science, imported them into MS Access, and ran queries based on ISSN to compare coverage. Our home-grown database A–Z list enabled us to capture click-throughs from our database A–Z list. Open URL referring source reports showed the number of times an Open URL link was clicked from Web of Science, Scopus, or Google Scholar.

For qualitative data, subject librarians sent the following questions to department heads, department faculty, and graduate students in their subject areas:
• Do you regularly make use of either Scopus, Web of Science, or Google Scholar?
• Which resource do you use most often?
• In the resource most frequently used, how do you use the search functionality compared to the analysis features? (Please consider frequency of use, importance to you, etc.)
If you use more than one of these tools, why do you use more than one? What features do not overlap?

The environmental scan of peer organizations included a review of Scopus and Web of Science access via US News and World Report’s 2014 “Top 25 Public Universities” and UConn’s Peer Institutions according to UConn’s Office of Institutional Research. For the functionality test, we generated a list of ten citations representing a range of years and disciplines to search in each platform to compare functionality. Elsevier and Thomson Reuters provided non-COUNTER usage reports by usage type (e.g., analysis usage).

PREPARATION
Determine two or more resources that are similar in their scale and scope. Based on the resources being assessed, select the ingredients, collect data, and then compare and contrast results to reach a conclusion.

THE ASSESSMENT
Chefs include library staff who work with the primary audience that use the two resources being assessed (e.g., subject department). Chefs also include library staff with access to, and familiarity with, the ingredients used as well as having Excel and Access skills.

Before proceeding with the assessment, cooks should check with their library administration and, if an academic institution, their IRB office, to review policies and procedures around collecting and using information from the user community.

Next, develop your organization-specific ingredients list along with colleagues/departments (e.g., IT) that will need to help you retrieve data, and set timeframes for obtaining each data set. Next, determine which cook will be responsible for obtaining and analyzing each ingredient and writing the summary of findings for each. (See ingredient notes for ideas of how to analyze ingredients.) For quantitative data, we aimed to collect the same three consecutive years of data from each ingredient.

To prepare the report of findings, write an introduction describing the environment, circumstances, scale, and scope of the Massive Analysis Project.

For each data set, write a narrative summary describing how the data was collected, limitations of the data (e.g., EZ Proxy logs reveal usage off campus only), the results of the analysis for what the data reveals, and compare the data for each of the two resources. For example, how does the cost-per-session/search for one resource compare to the other?

Additionally, create a chart, graph, or other data visualization to accompany the narrative for each set of data (e.g., cost-per-search/per session, ILL requests originating from each resource, etc.).

Next, look for trends across ingredients: Where do comparisons of different ingredients show similar or disparate results?

Write a conclusion with recommendations and the pros and cons of each recommendation (e.g., keeping both resources, canceling both resources, keeping just one of the resources).

The final report should include an executive summary of methods and findings, an introduction, methods, a description and analysis of each ingredient and data source, limitations of the analysis, recommendations, a conclusion, and sources cited.

ALLERGY WARNING
Some ingredients may not be available for all resources being assessed. Also, data gathering and analysis will take a substantial amount of time. The Massive Analysis of Scopus, Web of Science, and Google Scholar took over 200 hours of staff time—including the group’s seven meetings. (Most of our work was completed outside of meeting times.)

If sharing the results of the assessment in a public forum, be cautious of how cost/cost-per-use data is displayed. You may wish to scrub data points so that subscription costs cannot be calculated from information presented. At a minimum, check your library’s policies and practices about publically sharing costs for e-resources, and check the resources’ license agreements to ensure...
that sharing data does not breech the organization’s contract with the information provider.

**CHEF’S NOTE**
Chefs for this recipe should include representatives of library staff familiar with all aspects of resource usage. Our working group included: the head of e-resources, one subject librarian from Sciences and one from Social Sciences and Arts & Humanities, and librarians from UConn Health and UConn.

This Massive Analysis Project yielded a sixty-three-page report of findings. Having the massive amounts of data behind the group’s recommendations was essential not only for decision-making but also to engage with, and respond to, our community. The methods used in the project are a recipe for collection assessment using qualitative and quantitative data to evaluate e-resource functionality and user preferences.

Future applications and variations would be less time intensive. Depending on the resource(s) evaluated, the recipe’s ingredients could be scaled down from a multiple course meal to an entrée, side dish, or appetizer.
Using Baskets and a Rubric to Assess Online Resources in the “Messy Middle”

Moving beyond easy “keep or cancel” decisions can be difficult. This multi-attribute rubric, when used to evaluate and compare e-resources within categories or “baskets,” gives librarians a holistic tool to assess all online resources. It is particularly valuable when faced with tough decisions about renewing or cancelling subscriptions.

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2 hours for stakeholder consultations and editing
1 hour per online product to fill in rubric details
1 hour to discuss side-by-side comparisons of products within categories or “baskets”

COOKING TECHNIQUE
• Knowledgeable liaison, assessment and/or collections staff to fill in rubric (this work may be shared among two or more individuals but can be done separately)
• Group discussion of results
• Stakeholder consultations
• Evidence-based recommendations or decisions

INGREDIENTS
• Assessment rubric; season to taste. Rubric attributes should evolve and change over time.

PREPARATION
Identify themed “baskets” of like resources that would be useful to assess together (e.g., full-text journals, video streaming packages, abstracting and indexing tools, eBook subscription packages, aggregate databases, reference tools, specialized tools such as data banks, news services, or business databases); decide which specific products to focus on for the rubric.

Librarians with responsibilities for different sections of the rubric (i.e., collections, assessment, e-resources) fill in the various parts and distribute to colleagues.

THE ASSESSMENT
1. As a group, discuss the evidence identified in the rubric.
2. Proceeding basket-by-basket, compare and contrast like products within the context of your overall collections strategy and other factors, such as budget constraints, emerging institutional initiatives or other specific contextual factors.

ALLERGY WARNINGS
Take care when sharing the rubric with those outside the library; while it can be reassuring...
to know that the library is following a rigorous assessment process, details can be subject to misinterpretation and should always be presented in context.

**CHEF’S NOTE**

Using the rubric to compare e-resources within categories or “baskets” began in 2012, and has been used to guide decisions in a climate of constrained finances ever since. This approach helps all librarians on our team to understand our broader e-resource context, not just liaison-specific responsibilities. It has also helped build confidence within our academic community that our library collections decisions are grounded in a holistic analysis of evidence.

Use of our rubric helps us stay true to our collections principles by articulating the value of more qualitative criteria, such as sustainable pricing models, good platform interface design, limited use of digital rights management (DRM), and favorable access terms.

**SAMPLE RUBRIC ELEMENTS**

- product type
- start and renewal dates
- current and projected costs
- total full-text articles accessed previous year and two years ago
- average cost per access (each year)
- average cost per full-text journal
- subject coverage notes
- perpetual access terms
- CLOCKSS and/or Portico presence
- indexed in discovery layer
- publisher relations
- title list quality
- COUNTER compliance
- interface usability
- platform stability
- consortium friendly
- resource sharing terms
- access terms
- back file investment
- content availability
- program accreditation
- sustainable pricing model
- company stability
- MARC record quality
- renewal notes

An example of a completed rubric can be found at http://libguides.viu.ca/assessment/rubric
Annual Database (or General Resource) Evaluation

Steward your collection dollars most efficiently via monthly review committee evaluation. Rest easy, knowing that ongoing assessment is being conducted to reap the highest ROI from collection dollars.

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NUTRITION INFORMATION
Most libraries do not have unlimited funds to buy new resources and have difficulty maintaining current resources. This recipe will instruct on how to best “swap out” resources and the evaluation required to do so.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 5, Indicators 5.1, 5.2, 5.5; and Principle 7, Indicator 7.4

COOKING TIME
Both Tech and Public Services staff will spend about five hours monthly on their committee tasks. The review committee should hold monthly, hour-long meetings.

COOKING TECHNIQUE
Quantitative and qualitative data analysis

INGREDIENTS

Staff: E-resources Librarian, Technical Services staff, Public Services liaisons/librarians/reference staff members, and Public Services staff

Data: Collected by Tech Services staff and responsible Public Services staff

Renewal calendar: Based on invoice dates or license renewal dates

Resource data:
- Cost, usage statistics, and calculated cost per use. This data can be gathered from the library’s ILS Acquisition module, Electronic Resource Management System (ERM), or vendor administrative modules
- Locally defined qualitative metrics of value, such as audience and related curriculum
- Locally defined guidelines for collection development, including deal breakers, such as high cost per use and lack of buy in from constituents
- Resource details, such as content, coverage, comparable products, and relevant technology aspects
- Resource history: How did the library come to subscribe to this resource? What staff or user group initiated the interest?
- Equipment/Supplies:
- Resource Evaluation Form
- Repository for Forms; could be a website or local storage
- Review Committee comprised of appropriate staff members

PREPARATION
Once initial data collection tasks are established alongside the renewal calendar, all involved staff should be able to balance about five to ten resources being evaluated per month.
- Tech Services tasks: gather and compute data, distribute evaluation forms, answer any Public Services staff questions, prepare relevant data to be presented at review committee, and maintain a website or local storage (where all staff members, including those not on the review committee, can go to review decisions made by the committee).
- Public Services tasks: gather and evaluate data, fill out evaluation forms, conduct user group interactions, and prepare relevant data to be presented at review committee.

THE ASSESSMENT
Resources are assigned for evaluation to relevant Public Service staff based on the renewal calendar. Tech Services staff complete much of the initial data crunching.

Public Services staff then follows up with user groups to gather feedback and otherwise evaluate the resource on several different
Section 2. Traditional and Online Collections Assessment

Factors. Factors include: cost, content, usage, course/program relevancy, peer institution holdings, usability, professional reviews of resource, and devoted constituents (faculty, students, areas of study).

Data calculated and collected is input into the evaluation form to be discussed at review committee. The review form is then updated with final decisions after the monthly review committee meeting to be kept for historical record.

**ALLERGY WARNINGS**

Cost per use (CPU) or other similar metrics should be considered loosely. Record views, result clicks, and searches should be used interchangeably when calculating CPU to provide the clearest representation of usage for a particular resource.

However, CPU should also be taken with a grain of salt; qualitative metrics should be evaluated equally with any quantitative metrics.

**CHEF’S NOTES**

Libraries should consider “swapping” resources wherever possible. Comparable content may be found at a better value with enough research. If given the option and presentation, many departments are willing to work with the library to cancel existing resources to gain additional new resources.

Anecdotal evidence should be scrutinized carefully; faculty feedback can be biased. Also, assumptions from library staff members are not always correct. Low usage may indicate a need for additional promotion.
Harvested IR Metadata Gumbo

This recipe provides librarians with a way to assess whether integrating metadata records for institutional repository content into a discovery tool increases usage and visibility. Usage statistics from several sources are gathered and compared.

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NUTRITION INFORMATION
This recipe is suitable for libraries with both an institutional repository and a discovery tool seeking to maximize the visibility of resources within the repository, and meet the ACRL Standards below. Harvests of metadata for IR content will have been selected for inclusion among the electronic resources that are searchable through the discovery tool, allowing users to discover locally created digital resources alongside corresponding physical items.

Retrospectively digitized theses and dissertations offered a good test case and were among the first resources added to the metadata gumbo.

Librarians customized metadata feeds to the discovery tool to include controlled terms and keywords in separate fields. Once those items proved searchable in the web-scale tool, other item types, such as archival materials, artwork, music scores, and faculty works, were added to the harvested series.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 4, Indicators 4.2, 4.4; Principle 5, Indicator 5.3

COOKING TIME
2 hours; allow 1 semester of prep time

COOKING TECHNIQUE
Gather usage statistics and slice and dice into digestible morsels for comparison. Though this is an ongoing project of adding, testing, and collecting usage information, an initial assessment may be conducted after several months of data are available.

INGREDIENTS
• Metadata records for institutional repository content integrated within a discovery tool
• Usage statistics gathered from the tool; ideally, these will be COUNTER compliant

PREPARATION
• Create consistent metadata within the institutional repository
• Select content types or series of records for inclusion in a discovery tool
• Contact the vendors of your institutional repository platform and discovery system to set up the harvesting process and ensure interoperability

ASSESSMENT STEPS
Consider what types of content are included in the repository. Is it mainly campus records, theses and dissertations, archival images, or a mixture? The completeness and formatting of metadata for these items will have an impact on how successful the integration and subsequent evaluation will be.

Determine which portions or content types from your repository should be made discoverable in the discovery tool. You may decide to include all content or only selections.

If possible, gather usage statistics prior to the implementation. Those statistics will be valuable for comparison later.

Test the results by searching in the discovery tool. Are the items discoverable and accessible? Do records display correctly? Are there any issues?

Gather usage statistics for the content you’ve made discoverable and compare them to previous usage.

Compare usage statistics among the institutional repository, your web scale tool, and any other usage tools your library employs to assess impact.
ALLERGY WARNINGS
Consistent metadata in the IR records is essential. Consider what the repository’s default delimiter is for keywords and controlled terms. Commas, for example, are problematic in records that include Library of Congress subject headings.

Reports from different vendors may not tabulate usage similarly. Match the terms as closely as possible to assess impact.

Linking issues may arise between the institutional repository and the discovery tool. Review the uniformity of the metadata and the OpenURL or linking tool your library uses.

Consider beginning with a small collection of items. For implementation, testing, and assessment purposes, it is much easier to manage a limited number of items.

CHEF’S NOTE
Consider the skill sets available within your library and from vendors, particularly related to metadata and harvesting. You may need to alter some aspects of the metadata for optimal results. Work with your repository platform vendor to make needed adjustments to fields, as well as which metadata elements are exposed for harvesting. Be patient as uploads and updates may not display immediately. Testing searchability after vendors have made updates and uploads can be time consuming, but accuracy is essential for successful discoverability.
Fad Food or Family Tradition?:
Assessing Digital Projects for Long-Term Value

Digital projects often begin as an experiment without a clear idea of the long-term value to users. This recipe assists digital project managers in assessing the projects in their care and communicating to administrators which are “fad food” that should be discontinued and which are part of a library family tradition of delicious digital content.

Allison Ringness, Kansas State University Libraries, alringness@icloud.com

NUTRITION INFORMATION
In 2015, the Digital Initiatives Librarian at Kansas State University Libraries began the process of assessing the Libraries’ menu of digital projects. The first project assessed was the Kansas Aerial Photography Initiative (KAPI), which began in 2007 without a target audience or clear service goals. The project website allows users to request images from the Libraries’ collection of more than 65,000 Kansas aerial photos and links to select photos stored in the university repository. It was impossible to determine whether the KAPI had nutritional value for its target audience and to justify to library administrators staff time spent cooking the project.

DIETARY STANDARDS ADDRESSED
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.4; Principle 5, Indicators 5.1, 5.3; Principle 7, Indicators 7.3, 7.6, 7.8, 7.9

COOKING TIME
20 hours or more, depending on volume of data gathered, number of visualizations, and number of interviews

COOKING TECHNIQUE
An informal fusion of quantitative and qualitative data delivered in bite-size portions.

INGREDIENTS
- A project that has not been assessed
- Data collected from
  » Reference statistics
  » Library assessments such as LibQual
  » Web analytics such as Google Analytics
  » Requests to use digital files associated with the project
  » Feedback submitted through website feedback form
- Spreadsheet software
- Subject specialists
- Visualization software

PREPARATION
- Interview staff familiar with the project to learn project history
- Gather data from a variety of sources to identify user characteristics and measure how intensively the project is used
- Clean data
  » Identify and remove anomalous usage data, such as visits to the project website from library programmers testing functionality
- Create visualizations of data
  » Location of users and most requested photos lent themselves to maps
  » Percent academic users was best represented by graphs
- Use visualizations to assess usage
  » You have fad food when the project does not serve an information need or serve a community outside the library’s target audience
  » You have a family tradition when the project serves a real information need of the library’s target audience

THE ASSESSMENT
- In lieu of a target audience for the project, identify the mission and target audience of the library’s digital program or the library itself
- Conduct open-ended interviews with subject specialists about how materials associated with the project meet the needs of researchers
- Code qualitative data
- Clean data
  » Identify and remove anomalous usage data, such as visits to the project website from library programmers testing functionality
- Create visualizations of data
  » Location of users and most requested photos lent themselves to maps
  » Percent academic users was best represented by graphs
- Use visualizations to assess usage
  » You have fad food when the project does not serve an information need or serve a community outside the library’s target audience
  » You have a family tradition when the project serves a real information need of the library’s target audience
Section 2. Traditional and Online Collections Assessment

- Present final report to library administrators
  » Report contains summary of findings, visualizations, and recommendations based on findings
- Implement findings

**ALLERGY WARNINGS**
- Be ready to play with your data sources
  » Google Analytics measures change frequently and without warning; check definitions to ensure you are measuring what you think you’re measuring
  » Know how reference data is recorded. In reference stats, questions related to KAPI were sometimes coded as “maps” instead of “aerial photos”
- Be prepared to learn you’re serving fad food and make changes to digital projects that will benefit users
  » We learned KAPI was fad food in that a large proportion of users served are outside the Libraries’ target audience
    - As a result, we stopped loading storage-intensive photos in the university IR
    - Administration requested a second assessment before implementation of more dramatic recommended changes

**CHEF’S NOTE**
- Seeing the challenges faced by creating project goals after the fact spurred us to require a target audience and clear project goals in all new project proposals
- For this assessment, there was not enough time to coordinate interviews with Geography faculty, so the Data Librarian (a GIS specialist) and KAPI manager (a cartographer) were interviewed about the needs of geography, cartography, and GIS researchers
- Two keys to successful assessment
  » Feedback from researchers about their information needs
  » Data visualizations are powerful tools for drawing conclusions from data and presenting results to administrators
Rendering Repositories:
Taking out the Fat and Getting to the Impact

Surveying users about your digital collections can tell librarians and administration how collections contribute to institutional goals. This type of assessment could be replicated for almost any collection, not just for institutional repositories.

Sian Brannon, University of North Texas, sian.brannon@unt.edu; Laura Waugh, Texas Digital Library, l.waugh@austin.utexas.edu

INGREDIENTS
• Digital collections/scholarly repository
• Survey
• Data analysis
• Reporting

PREPARATION
Look at what others in the field have done. Determine how to get email distribution lists for faculty, staff, and students.

THE ASSESSMENT
Decide on specific research questions, such as: Is there a relationship between perceived value and awareness of these resources by UNT faculty, staff, and graduate students?

Create operational definitions for terms. Generic constructs such as awareness, contributions, and use will need to be defined so that analysis is conducted consistently.

Determine what demographic information you need to collect: UNT collected role, degree level, major, department, job title, gender, and age.

Develop survey based on research questions. A copy of UNT's survey is available here: http://digital.library.unt.edu/ark:/67531/metadc307537/

Use cognitive interviewing to refine survey questions. Administering a draft survey to a small group and receiving feedback will help you clarify questions and make sure things flow correctly.

Get Institutional Review Board permission to conduct the survey.

Launch the survey for a period of at least three weeks, but not more than three months. Send reminders either manually or automatically through your survey software.

Compile descriptive statistics based on demographics and simple results.

Conduct inferential analysis with odds ratios and logistical regression. If you do not possess these skills, someone on your campus does! Try a math lab, statistics professor, or office for faculty success.

Deduce the impact of your collections.

Use statistical analysis to answer your research questions. Use results in reports to administration. Demonstrate the value and use of your repositories by faculty, staff, and students.
Section 2. Traditional and Online Collections Assessment

ALLERGY WARNINGS
Be aware of all of the reliability and validity issues that go along with survey research.

Consider focusing your first assessment of this type on one specific collection, not the entire digital library.

CHEF’S NOTE
Our findings were that an increase in awareness of the UNT Libraries’ digital repositories was statistically associated with a greater likelihood of multiple types of use and contributions back to digital repositories. Also, our graduate students were more likely to be aware of and use the UNT Libraries’ digital repositories than our faculty or staff. We intend to repeat this assessment every 3–4 years as a longitudinal study to see how perceived values change.

RELATED RESOURCES


Flavoring Your E-Resources Collection:
The Spice Rack Assessment

Regularly reviewing your spice rack of e-resources is the best way to ensure the library is wisely spending its money on resources students and faculty need. The following recipe provides steps in effective e-resource collection assessment.

Amanda Binder, UNC Charlotte, abinder3@uncc.edu; Elizabeth Siler, UNC Charlotte, esiler3@uncc.edu

RUSA Guidelines
- Liaison Work in Managing Collections and Services: 6.2, 6.3
- Introduction of Electronic Information Resources to Users: 6.1, 6.3, 6.4

COOKING TIME
2–3 semesters and can serve one department or many

COOKING TECHNIQUE
Usage data collection and analysis, presentations, and discussion

INGREDIENTS
- Collections or E-Resources Librarian
- Library Liaison
- Usage data
- Data analysis tools and software
- Assessment plan
- Promotion plan
- Presentations and discussions

PREPARATION
- Determine goals
- List resources to analyze based on department(s)
- Select audience
- Create survey/focus group questions

THE ASSESSMENT
1. Collect usage data from multiple sources: COUNTER, Vendor-Supplied Data (3 years) LibAnalytics or Google Analytics (1–3 months).
2. Organize a focus group or design a survey for departmental faculty to complete regarding their value and knowledge of subject-specific library e-resources.
3. The Library Liaison(s) should work together with the Collection Development Department to analyze the data. Identify underutilized resources from the usage data and resources of interest to faculty.

Resource Intervention
- Present the findings to the department and suggest next steps for learning more about resources that are both underutilized and of interest to faculty.
- Highlight specific resources at departmental faculty gatherings.
- Create assignments with faculty using underutilized resources.

Final Tasting
- Review usage of the promoted resources and determine if resources should stay on the spices rack or be tossed in the

NUTRITION INFORMATION
Newly added but sometimes lost and forgotten e-resources have little chance to survive the annual chopping block without proper assessment and regular promotion.

If we think of e-resources as a collection of spices, then each spice has its own value, but some spices are more often used than others simply because they are more familiar. What happens to the other spices in the spice shelf or drawer? They get pushed back and hidden from plain sight and are rarely used. And when it comes time to moving or making space for new spices, the old ones are tossed.

Master Chef Librarians can help faculty think of assignments or in-class activities that will help students both explore the resource and answer questions relating to the course. These tailored assignments help students experience the value of a resource, which is essential to increasing their use and demonstrating their importance to the library collection.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 5, Indicators 5.1, 5.2, 5.5; Principle 7. Indicator 7.4

If we think of e-resources as a collection of spices, then each spice has its own value, but some spices are more often used than others simply because they are more familiar. What happens to the other spices in the spice shelf or drawer? They get pushed back and hidden from plain sight and are rarely used. And when it comes time to moving or making space for new spices, the old ones are tossed.

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DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 5, Indicators 5.1, 5.2, 5.5; Principle 7. Indicator 7.4
trash to make room for other spices.

- Review the original intent for purchasing the resource, and review the other resources you have to determine if the subject matter is covered. If not, review possible replacements or make the determination that content is no longer relevant to the learning and research needs of the campus.

ALLERGY WARNINGS
- Usage data can be limited and flawed, depending on how it is reported and collected by vendors. To create an accurate picture of the value of a particular resource, use several methodologies.
- Be transparent about the e-resources collection decision-making process. If a department agrees that there is not sufficient need for a particular resource, will the money from that resource be reallocated to a resource decided by the department? If the answer is no, be prepared to explain how cooperation in this process is a demonstration of good will toward the library and the university that could be helpful to them in the future.
- If you plan to publish your results, you will need to submit an IRB application to your institution before beginning the assessment. This type of collection is usually covered by the expedited process and should not affect your timeline.

CHEF’S NOTE
Consider other subject areas before making final decisions about resources. Encourage other liaisons to follow the recipe if they have an interest in retaining access.
Open Access Citation Analysis

As Open Access publication becomes more and more prevalent, libraries need to find ways to evaluate the use of these resources in scholarly products. This recipe will describe some basic methods for analyzing these citations.

Emily Raymond, Eastfield College, EmilyRaymond@dcccd.edu; Heather Scalf, UT Arlington Libraries, scalf@uta.edu

NUTRITION INFORMATION
This recipe is well suited for the beginner and may be used to do a citation analysis of faculty or student research using Open Access (OA) publications. Broadly described, these are resources with unrestricted access and unrestricted reuse. While there are actually several combinations of those two features in most Open Access publications, a complete lack of restriction is the end goal. This recipe is designed to assist in the analysis of citations in faculty publications so that we can identify which Open Access resources are being used as sources and which are being used as publication sources, and then determine if there is a correlation between scholarly communication outreach and marketing and usage of Open Access research resources in local publications. This will allow libraries to determine if there is a measurable impact based upon our work in marketing these resources.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 4, Indicators 4.1, 4.2; and Principle 5, Indicators 5.2, 5.5

COOKING TIME
2 hours per article with 20–25 citations

INGREDIENTS
• Web browser
• List of faculty
• Microsoft Word

PREPARATION
Obtain the curriculum vitae of faculty member(s) in a given discipline.

THE ASSESSMENT
1. Save a working copy of the CV in Word, then begin to review it. Remove any non-periodical items (e.g., CDs, books, etc.), as well as articles that say anything other than “published.”
2. Create a table in Word with the remaining citation data, using Insert => Table => Convert Text to Table.
3. Add a column to the left labeled Type and mark all of the faculty-authored publications as “Product.” Add an additional column to the right labeled “OA?” Ensure that all columns are properly labeled in the table; e.g., Article Title, Journal Title, etc.
4. Review the list of citations for each article and add them to the table, adding “Source” as the Type.
5. Search online, using Google Scholar, for each article from the CV, noting in the table whether or not it is OA. (Additional note: Another data point related to the type of OA could also be added; i.e., Green or Gold)
6. Repeat Steps 2–3 for each article citation listed.
7. When all articles have been reviewed for an individual scholar, repeat Steps 1–6 for each faculty member in the discipline, as desired.
8. Determine the percentage of OA citations based upon a sample population of faculty members.
9. Repeat this analysis at specified intervals to determine if there are any changes in this percentage.

ALLERGY WARNINGS
It may be unclear whether or not an article is OA. If you are unsure, try these tips:
• Look in the “About” section on the publication’s website
• Look at the publication’s profile in SHERPA/RoMEO (http://www.sherpa.ac.uk/romeo/)
Section 2. Traditional and Online Collections Assessment

• Attempt to access the article from an IP address that does not have access to library resources

Article and publication titles may be different or abbreviated on the CV.

Your library may not have access to all articles or publications listed.

Older articles (pre-2000) are not likely to be OA.

Older OA articles (pre-2000) may be difficult to locate online.

CHEF’S NOTE
As the climate of scholarly communication continues to change in the university environment, this analysis could also contribute to the ongoing faculty dialogue about the types of publication that are expected in order for a faculty member to receive tenure. Promotion and tenure committees at many universities have their own standard for what may be considered as a worthy venue for scholarly publication. New forms of scholarship can be just as rigorous as many of these, and also allow reuse and new learning to happen much more quickly than in the past.
Tower Cakes for Ranking Subscription Resources

An evidence-based decision-making tool that helps ensure quality collections by allowing librarians to determine which subscriptions are the most cost-efficient.

Karen Harker, University of North Texas, Karen.Harker@unt.edu; Todd Enoch, University of North Texas, Todd.Enoch@unt.edu; Laurel Crawford, University of North Texas, Laurel.Crawford@unt.edu

INGREDIENTS
- Microsoft Excel
- Usage data (COUNTER-compliant, if possible)
- Cost data for each subscription
- Ratings or rankings by librarians or other stakeholders

PREPARATION
Usage, cost, and cost-per-use data are all used (rather than only cost-per-use) in order to adjust for extremes. A resource may have high usage and low cost-per-use, but still be so costly as to be utterly unaffordable to the library. This is often the case with “Big Deals” or large packages.

Worksheet 1: Usage Data
A. Gather data for the last three years
B. Select the best measure of usage for that resource (e.g., “Abstracts viewed” for A&I databases; F/T Downloads for ejournals, etc.)
C. Record the total for each of the three years
D. Calculate the three-year average
E. Calculate the percent change from last three years (Optional: provides insight into trends in usage)

Worksheet 2: Cost Data
- Repeat steps A–E
- Use three-year average costs

Worksheet 3: Cost-Per-Use
- Repeat steps A–E
- Use three-year averages

Worksheet 4: Ratings
- Gather ratings by librarians or other stakeholders (optional, but recommended)
- Use a rating scale of 5–7 options or a sliding scale
- If rating scale is fewer than 5, use the mode or the median, NOT the average
- If rating scale is fewer than 4, use the mode only

THE ASSESSMENT
- Combine data into spreadsheets by similar content type
- Generate percentile ranks for each of the four criteria: usage, cost, CPU, and ratings. Use the Excel “PERCENTRANK.INC” function

NOTE: For usage and possibly ratings, higher is better; whereas, for cost and CPU (and possibly ratings), lower is better. Choose ONE direction on which decisions...
Section 2. Traditional and Online Collections Assessment

are based (e.g., higher) and then reverse the percentile rank of the measure that is the opposite (e.g., CPU and cost) by subtracting the rank from 1 (e.g., if column D is for the [CPU Rank], column E is “=1-[CPU Rank]”).

- Average the percentile ranks for each criterion for an overall score. Weight certain rank-scores to emphasize their importance (optional)
- Use conditional formatting based on benchmarks (optional). Benchmarks for success can be set to reflect goals appropriate to your situation

ALLERGY WARNINGS

- Decide how to handle resources for which usage statistics and/or cost data are not available (e.g. use “0”).
- There is no one right answer
- Reverse-rank the criteria to indicate when lower is better
- Look for outliers; these might skew the results

CHEF’S NOTE

The results clearly show the worst- and best-performing resources that require less consideration, while also providing the evidence needed to evaluate the more mediocre resources more carefully. The scores can be used to

- create annual reports
- make decisions for budget shortfalls
- identify marginal resources
- evaluate journal or ebook packages.

Power users, such as Collection Development and Assessment Librarians or people skilled in using Excel formulas and formatted tables, are the recommended audience for this recipe.

<table>
<thead>
<tr>
<th>Title</th>
<th>Liaison Ratings Composite Percentile Rank Reversed</th>
<th>Inflation Score Percentile Rank Reversed</th>
<th>CPU Percentile Rank Reversed Percentile</th>
<th>Composite Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference 55</td>
<td>0.88</td>
<td>0.74</td>
<td>0.84</td>
<td>0.82</td>
</tr>
<tr>
<td>Database 59</td>
<td>0.52</td>
<td>0.72</td>
<td>0.93</td>
<td>0.72</td>
</tr>
<tr>
<td>Reference 56</td>
<td>0.88</td>
<td>0.37</td>
<td>0.89</td>
<td>0.71</td>
</tr>
<tr>
<td>Database 45</td>
<td>0.9</td>
<td>0.41</td>
<td>0.74</td>
<td>0.68</td>
</tr>
<tr>
<td>E-Journal 16</td>
<td>0.47</td>
<td>0.57</td>
<td>1.00</td>
<td>0.68</td>
</tr>
<tr>
<td>Reference 52</td>
<td>0.88</td>
<td>0.23</td>
<td>0.80</td>
<td>0.64</td>
</tr>
<tr>
<td>Reference 13</td>
<td>0.33</td>
<td>0.71</td>
<td>0.85</td>
<td>0.63</td>
</tr>
<tr>
<td>Reference 40</td>
<td>0.79</td>
<td>0.7</td>
<td>0.27</td>
<td>0.59</td>
</tr>
<tr>
<td>Reference 50</td>
<td>0.79</td>
<td>0.9</td>
<td>0.00</td>
<td>0.56</td>
</tr>
</tbody>
</table>

FIGURE 1. SAMPLE COMPOSITE RATINGS TABLE
Section 3.

Instruction Programs Assessment

49 Measuring the Ingredients of a Good Bibliography: A Recipe for Citation Analysis
Karen Kohn and Larissa Gordon

51 Open-Faced Formative Assessment
Gina Calia-Lotz

53 Cooking with Information Resources in the Online Kitchen
Beate Gersch and Joseph A. Salem, Jr.

55 Lazy Susan: A Continuous Improvement Cycle of Learning and Assessment
Joy Oehlers

57 Information Literacy Assessment Entrée: Using a Reflective Essay to Assess Course Learning Outcomes
Stephanie Alexander, Tom Bickley, Gr Keer, Aline Soules, and Diana K. Wakimoto

59 PROTEIN (Peer Review of Teaching: Evaluative Instruction Networks) Supplements for Librarians
Jason Vance

61 The Library Rally
Michelle J. Gibeault

63 Rubrics as a Method for Assessing & Improving Library Instruction
Megan Hodge, Laura Gariepy, and Jenny Stout

65 Slow-Cooked Rubric: Designing and Using a Rubric to Assess Undergraduate Final Papers
Eleanor Johnson and Katie Bishop

67 Cooking up Rubrics to Assess Student Learning
Marjorie Leta

70 How Much Do Good Cooking Methods Affect the Quality of the Meal?
Christy Fic and Kirk Moll

72 Library Tour Taste Test
Nancy Noe

74 Word Soup: Using Word Clouds to Assess the One-Minute Paper
Maria Barefoot

76 Creating Connoisseurs: Assessing Students’ Ability to Evaluate Websites
Mandi Smith, Jason Smith, Cathy Blackman, and Wensheng Wang

78 Assessment Layer Cake
Patricia J. Mileham and Kimberly J. Whalen
Measuring the Ingredients of a Good Bibliography:

A Recipe for Citation Analysis

Examine student bibliographies to discover patterns in what users are citing, evaluate the effectiveness of instruction, learn about subject-specific information needs, and make instructional and collection development changes.

Karen Kohn, Temple University, karen.kohn@temple.edu; Larissa Gordon, Arcadia University, gordonl@arcadia.edu

**NUTRITION INFORMATION**

Citation analysis can help you both assess information literacy instruction and improve collection development. Looking at both at the same time can bring together different constituencies in the library. Sharing data with faculty can also open a discussion that can build relationships.

**INGREDIENTS**

- Microsoft Excel (or Access)
- Student bibliographies

**PREPARATION**

Determine whose bibliographies you are going to use, based on both the goal of your project and which faculty are willing to collaborate. We describe here a hypothetical project that uses bibliographies from first-year seminars. The goals are to assess the library’s instruction efforts and the suitability of the collection for first-year students’ research needs.

Once you collect student papers, remove the names of students to anonymize the data, and give each paper a number. Think about what you want to know and what data fields you’ll need to answer your questions. In the example, we are trying to figure out whether we have the resources students cite, whether classes that receive instruction end up citing more library resources than websites, and whether instruction in how to find a specific kind of resource (e.g., books or journals) is associated with more students citing that resource type. We are also interested in which journals are cited the most.

**THE ASSESSMENT**

Make a table in Excel (see figure 1), with each citation as a row. Each row in the table should be unique.

In a separate table, calculate percentages based on your data. For example, what percentage of citations in course FYS101.2 were to books versus websites? How does this compare to FYS101.3, which did not receive instruction on searching the catalog?

Your interpretations of the data will depend on the students’ information literacy skills. The top-cited journals may or may not be the most important in the field. Having a high percentage of cited items available in the library might mean that you are meeting students’ needs or that they are limiting themselves to what is easily available.

Include faculty in discussions of the data. Faculty can tell you whether students were citing what they should, so you’ll know if the most-cited works are actually important to the field.

After analysis and talking with faculty, decide what changes to make. If faculty agree the journals students cited are important, you...
might start subscribing to the most-cited journals. If students still do not cite books even after being shown how to find them, perhaps professors can require a certain number of citations to books. Faculty may be more likely to change their teaching if some of the conclusions have come from them. Finally, try to get bibliographies from the same classes next year so you can see if your changes made a difference.

**CHEF’S NOTE**
Some other questions you can answer using citation analysis are: Are the journals they are using peer-reviewed? Does the library have the majority of materials that students cite? What authors are cited repeatedly? Are students using older books and journals?

**REFERENCES**

**ALLERGY WARNING**
You may want to look at a sample, e.g., every fourth student, rather than every bibliography. Check frequently to make sure you are inputting information consistently (for example: typing “and” versus “&”). Even small variations can throw off your analysis. It is also a good idea to keep track of which students are citing what, so you can see if one or two people are skewing the averages.

### FIGURE 1. EXAMPLE OF DATA TABLE

<table>
<thead>
<tr>
<th>Year</th>
<th>Resource Type</th>
<th>Do we have it?</th>
<th>Course</th>
<th>Instruction: catalog</th>
<th>Instruction: databases</th>
<th>Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Journal</td>
<td>Library</td>
<td>FY101.2</td>
<td>no</td>
<td>yes</td>
<td>1</td>
</tr>
<tr>
<td>2010</td>
<td>Journal</td>
<td>Library</td>
<td>FYS101.2</td>
<td>no</td>
<td>yes</td>
<td>1</td>
</tr>
<tr>
<td>2015</td>
<td>Website</td>
<td>Web</td>
<td>FYS101.3</td>
<td>yes</td>
<td>yes</td>
<td>2</td>
</tr>
<tr>
<td>2010</td>
<td>Book</td>
<td>ILL</td>
<td>FYS101.3</td>
<td>yes</td>
<td>yes</td>
<td>2</td>
</tr>
</tbody>
</table>
Open-Faced Formative Assessment

This recipe will help you to use open-ended responses from library instruction quizzes or surveys to conduct meaningful, qualitative, formative assessment by connecting these comments with specific learning objectives, standards, or other benchmarks.

Gina Calia-Lotz, Harford Community College, gcalialotz@harford.edu

NUTRITION INFORMATION
This assessment method can be especially useful for determining what students are truly getting out of your instruction. Having students respond to questions using their own vocabulary can reveal how they have processed and summarized the information from instruction in ways that may not be apparent from multiple choice responses.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.5; Principle 3, Indicator 3.3

COOKING TIME
A full assessment, including “closing the loop” (repeating the assessment after making changes to instruction), will take at least two semesters. The amount of time needed to tally results will depend on the number of student responses received.

COOKING TECHNIQUE
Open-ended quiz/survey responses

INGREDIENTS
• Online or paper survey or quiz
• Tally sheet used to record and categorize student responses
• Charting tool, such as Microsoft Excel

PREPARATION
Decide what you’d like to find out about your instruction. To get the most out of the results, use classes for which the learning objectives and lesson activities are the same or very similar, and for which you will have a significant number of student responses.

Create a quiz or survey asking at least one open-ended question pertaining to student learning. Examples: “Name two things that you have learned from this instruction session” or “Name one thing about which you are still unclear.” Set up easy access to the quiz or survey to ensure that most students will complete it before the end of class.

ASSESSMENT STEPS
1. After conducting library instruction sessions, have students complete the survey or quiz you have prepared.
2. After all instructions sessions are complete, compile and categorize the student responses by categories. These categories can be created organically based on whatever responses are received (for example: “Databases,” “Evaluating Sources,” “Citations,” etc.) or could be based on student learning outcomes or information literacy concepts, such as those specified in the ACRL Framework for Information Literacy for Higher Education.
3. Calculate percentages of responses in each category. Use a charting tool, such as the one provided in Microsoft Excel, to assist you in creating a visual representation of these results.
4. Based on results, make changes to your lessons accordingly. Consider targeting one particular category for which responses show a lack of student understanding. For example, if you were categorizing student responses based on the ACRL Framework, you might find that few student responses indicated that they had learned concepts or skills pertaining to “Research as Inquiry.” Design learning activities that will better incorporate this concept into your lessons. Document changes made to the lessons.
5. In a subsequent semester, teach the new lesson and administer the same open-ended questions. Compile responses again to see if the changes you made were effective in increasing students’ learning. Also note if responses in some
categories have changed or if new categories arise. This will effectively “close the loop” on your assessment, demonstrating that you took action based on assessment results, then evaluated whether or not the actions you took had any effect on student responses.

**ALLERGY WARNINGS**

Be sure to allow enough time for students to complete the whole quiz or survey so that they will be more likely to answer the open-ended questions thoroughly; this is key for receiving the most meaningful data. You might want to keep any additional, multiple choice questions to a minimum or ask the open-ended questions first.

Analyzing open-ended responses is subjective and open to interpretation, especially if more than one person takes on the task of compiling responses. Try to be as consistent as possible in the ways in which you analyze student responses. If more than one person is analyzing results, you might want to develop a rubric or guidelines for how to categorize responses.

**CHEF’S NOTE**

This method is a simple way to use qualitative assessment results in a more quantifiable way. You can customize this method to assess other things besides instruction, such as customer satisfaction or use of facilities. Keep in mind that, when repeating an assessment after having made changes, there are other factors that may influence changes in student responses, including changes to the student populations themselves. Do not feel like you have to take all of those factors into account; this is not meant to be a scientific investigation, but the results can be useful enough for your own purposes as a means of formative assessment of your library instruction or other library services.
Cooking with Information Resources in the Online Kitchen

This recipe serves up a hearty serving of outcomes-based assessment of student learning in embedded librarian programs. Committed cooks are needed to ensure success at every step of this recipe.

Beate Gersch, The University of Akron, bgersch@uakron.edu; Joseph A. Salem, Jr., The Pennsylvania State University, jsalem@psu.edu

NUTRITION INFORMATION
This recipe was developed in response to the university's accrediting body requiring demonstration of outcomes assessment. The goal was to gauge and subsequently improve the information literacy of students enrolled in general education courses. The information literacy outcomes within the selected courses focused on keyword identification, selection of assignment-appropriate library resources, and evaluation of information resources.

The recipe served two courses with similar information literacy learning outcomes, but slightly different assignments. Free-range learning ingredients worked well, as they can be adapted for the local instruction program needs. Learning objects and assignments were embedded into the learning management system, and the librarian was made available as an embedded resource in the course. The successful integration of the librarian into the menu depended on the disposition and technical skills of the many cooks in the kitchen, namely the course instructors.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicators 1.1, 1.2, 1.3, 1.4; Principle 3, Indicators 3.1, 3.2, 3.3, 3.4; Principle 4, Indicators 4.1, 4.3; Principle 5, Indicator 5.1, 5.2, 5.3

ACRL Framework for Information Literacy for Higher Education (2016) Authority is Constructed and Contextual; Searching as Strategic Exploration

COOKING TIME
Online embedded instructional content development, 2 weeks; assignment development, 2 weeks; rubric development, 1 week; instructor orientation, 1 hour; rubric norming, 1 hour; individual scoring, 2 hours; reporting results, 2 hours

MAIN COOKING TECHNIQUE
Establish learning outcomes, develop assignment to demonstrate student performance of learning outcomes, develop a rubric to assess, establish a method to gather student work, norm the rubric, assess student work.

MAIN INGREDIENTS
• Assignment
• Course instructors
• Students
• Subject librarian
• Access to learning management system (LMS)
• Instructional content/intervention
• Assessment rubric
• Assessors

PREPARATION
For best results, communicate early and often with the course coordinator and department chair. A healthy dose of existing research on the benefits of this meal, a strategy for success, and a good spoonful of enthusiasm help to ensure the support of these vital gatekeepers to getting instructors on board and identifying participating classes or sections. Be sure your kitchen team includes experts with diverse specialties, such as information literacy instruction, disciplinary knowledge, and instructional technology to create appropriate assignments for assessment and to ensure data collection in the LMS.

THE ASSESSMENT
Create an annotated bibliography (or similar) assignment in collaboration with the course coordinator or instructor(s). This should include examples and be written in a language that is at the appropriate level for students. It should also include links to resources, such as databases, online guides, and tutorials. However, the assignment should NOT include the assessment rubric.
Create an assessment rubric based on the wording and expectations of the assignment.

Create one or more assignment modules in LMS, including:
- tutorials
- links to library resources, including library research or course guides, databases, etc.
- worksheets to guide students in strategic identification of topic-relevant keywords
- worksheets to guide students in the strategic identification and searching of assignment-appropriate databases
- evaluation tools (e.g., CRAAP test) to guide students in the critical evaluation of information resources
- links to examples of annotated bibliography (or similar) assignments

**Sampling a Taste**
Librarian(s) collect a small sample of student assignments through the LMS and assess them according to a rubric, which includes the assessment categories identified in the assignment.

Following a norming session to ensure intercoder reliability, a larger sample (depending on university policies, assessment resources, etc.) is assessed.

**CHEF’S NOTE**
Since the information literacy learning outcomes were the only outcomes being assessed through this project, the rubric-based assessors were all library faculty as they had the best opportunity to evaluate appropriately.

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**ALLERGY WARNINGS**
The embedded model relies on good partnerships among various campus departments.

First-time assessment may result in suboptimal results but should be shared and used for program improvement.

Course value for assignments is key for student motivation.
Lazy Susan:  
*A Continuous Improvement Cycle of Learning and Assessment*

Lazy Susan is a metaphor to model a culture of continuous improvement, keeping student learning as the focus of the assessment processes, serving up improvements, and ensuring a meaningful learning experience for students.

Joy Oehlers, Kapiolani Community College, joy.oehlers@hawaii.edu

**NUTRITION INFORMATION**  
The purpose of this holistic planning cycle is to ensure that we continuously strive to improve student learning by providing meaningful learning experiences. This is the real reason why we collect data outputs, measure data outcomes, evaluate learning outcomes, and write assessment reports.

Share with subject instructors and use the data for continuous improve.

**DIETARY STANDARDS**  
ACRL *Standards for Libraries in Higher Education* (2011) Principle 3, Indicators 3.2, 3.3, 3.4

**COOKING TIME**  
For every hour of instruction for 20 students, spend an hour gathering the ingredients and 2 hours on assessment. For example, assessing a Works Cited requires less cooking time compared to assessing students’ papers.

**MAIN INGREDIENTS**  
Gather course learning outcomes for all classes; include classes that participate in library sessions and potential classes. Start on a small scale by working with a few targeted programs.

Identify course outcomes that are similar to library learning outcomes. Look for complementing outcomes or outcomes that the library can support.

Use a grid table to map information literacy activities with library learning outcomes and targeted courses. Use the table to identify overlaps and gaps to ensure that students in a program do not experience the same library activity twice and that core classes in a program are attending information literacy sessions (see Figure 1 or http://bit.ly/sломapping for details).

Contact subject instructors and provide links showcasing library classes, library research guides, resources that match their programs, and to discuss how library classes fit their course outcomes. Better still, get department chairs to forward your promotional materials to the faculty.

**PREPARATION**  
Collaborate with instructors to design or choose from a menu of content, delivery, and assessment tasks. Provide a range of lesson plans, flipped content, classroom activities, reflection opportunities, and assessment methods. Agree on shared learning outcomes and set targets for the library session.

**THE ASSESSMENT**  
Provide formative feedback during library activity or hands-on session.

Provide summative feedback and suggestions for improvement to students who submit their annotated bibliographies or library tasks. Students appreciate written feedback after completing library worksheets.


Collect a randomized sampling of the task sheets. Use a rubric to assess outcomes (http://bit.ly/myrubric). Use rubric norming to ensure aggregated results are consistent and valid as a benchmark for future goals. Norming develops shared understanding of what is being assessed and increases identification of areas in the rubric that may need improvement.

ALLERGY WARNING

Turn the Lazy Susan a full circle to sample the different dishes for a complete experience (see http://bit.ly/lzysusan). Then refine the process, select what works, and improve on the course of action.

Note:
I - Introduced; R - Reinforced

Based on KCC Library Instruction SLO http://bit.ly/kcclibraryslo

<table>
<thead>
<tr>
<th></th>
<th>SLO1: Students will be able to access needed information</th>
<th>SLO2: Students will be able to evaluate information and its sources critically</th>
<th>SLO3: Students will be able to acknowledge sources</th>
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</thead>
<tbody>
<tr>
<td><strong>General ability in accessing information</strong></td>
<td>A. Gain familiarity with the library</td>
<td>B. Access appropriate sources for specific needs</td>
<td>C. Use Hawai‘i Voyager to find books</td>
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<td>FYE NSO</td>
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<td>I</td>
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<tr>
<td>ANTH 151</td>
<td>I Research articles &amp; books</td>
<td>I Ebrary, Voyager</td>
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<tr>
<td>ENG 22</td>
<td>I Databases</td>
<td>I</td>
<td>I I</td>
</tr>
</tbody>
</table>

**FIGURE 1. MAPPING INFORMATION LITERACY ACTIVITIES WITH LIBRARY LEARNING OUTCOMES AND TARGETED COURSES.**
Information Literacy Assessment Entrée: 
*Using a Reflective Essay to Assess Course Learning Outcomes*

Conduct ongoing, manageable, and effective assessment of an information literacy for-credit course or one-time instruction sessions. Student self-evaluation essays are assessed via a rubric after group norming.

*Stephanie Alexander, California State University, East Bay, stephanie.alexander@csueastbay.edu; Tom Bickley, California State University, East Bay, tom.bickley@csueastbay.edu; Gr Keer, California State University, East Bay, gr.keer@csueastbay.edu; Aline Soules, California State University, East Bay, aline.soules@csueastbay.edu; Diana K. Wakimoto, California State University, East Bay, diana.wakimoto@csueastbay.edu*

**NUTRITION INFORMATION**
Suitable for term-long information literacy courses or one-time instruction sessions, using a final student signature assignment (e.g., self-reflective essay covering each student learning outcome or session-specific assignment).

At term end, reviewers evaluate one of five student learning outcomes on a rotational basis that enables faculty to focus fully on the improvement of a single outcome through a review of data and subsequent discussion.

**DIETARY STANDARDS**
*ACRL Standards for Libraries in Higher Education* (2011) Principle 1, Indicators 1.1, 1.2, 1.3, 1.4; Principle 2, Indicators 2.1, 2.2, 2.3, 2.4; Principle 3, Indicators 3.1, 3.2, 3.3, 3.4; Principle 4, Indicators 4.1, 4.3; Principle 5, Indicators 5.1, 5.2, 5.3

*ACRL Framework for Information Literacy for Higher Education: Authority is Constructed and Contextual; Information Creation as a Process; Information Has Value; Research as Inquiry; Scholarship as Conversation; and Searching as Strategic Exploration*

**COOKING TIME**
Norming session, 2 hours; assignment assessment, 1–3 hours total per reviewer

**COOKING TECHNIQUE**
Norming; essay assessment via rubric

**INGREDIENTS**
- Student learning outcomes
- Essay assessment rubric
- Random number generation
- Statistically significant sample of essays
- Google form (option 1)
- Student self-reflective essays
- Norming techniques
- 3–4 reviewers

**PREPARATION**
Faculty establishes a signature assignment (e.g., self-reflective essay), which all students complete, creates an evaluation rubric, and explains and clarifies to students the purpose and requirements of the assignment, discussing how the assignment supports their learning. For one-time sessions, students write one-minute papers on a specific learning outcome for that session.

Completed essays from all sections of a credit course or one-time instruction session are collected and identifying information removed.

A statistically significant sample is selected using the random number generator to determine the first essay to select (e.g., the thirty-ninth in the stack) and the interval between essays (e.g., every fourteenth). The number of selected assignments should be large enough to be statistically-valid for the population.

Three or four reviewers participate in a norming session to facilitate discussion and resolution of disagreements in using the rubric before the assessment begins.

**ESSAY ASSESSMENT SESSION**
1. Distributed assessment
2. Face-to-Face (F2F) assessment
Sample essays are numbered and distributed among reviewers (1) or reviewers gather for an F2F review session (2).

(1) Independently, reviewers apply the rubric to the anonymized sample and submit a score for each assignment via a Google Form.

Two reviewers determine the final score. For each assignment, the random number generator determines which score will be applied, mimicking round-robin F2F assessment with random assignment.

A matching score is assigned. If there is no match, a third number is drawn randomly and a matching score assigned. If there is still no match, reviewers meet to discuss/determine a final score (rare, if norming is done correctly).

(2) If F2F, a matching score is assigned. If there is no match, a third reader assesses the essay and a matching score assigned. If there is no agreement, a discussion determines the final score.

(1 and 2). All scores are tallied to determine the percentage of essays for each score.

A cohort of reviewers must be willing to spend time on the assessment process at the end of each term.

**CHEF’S NOTE**
This recipe can be replicated in any-sized library and adapted to credit- or non-credit-bearing courses, stand-alone or team-taught courses, courses that are part of an overall instruction program, or one-time sessions.

**RESOURCES**
Essay assessment rubric: https://goo.gl/LjuqMO.
Random number generation: https://www.random.org/.

**ALLERGY WARNINGS**
This plan requires “buy in” by all instructors, achieved through discussion of rubric development, grading policy of the self-evaluation essay in relation to course grade, and academic freedom.
PROTEIN (Peer Review of Teaching: Evaluative Instruction Networks) Supplements for Librarians

Boost the effectiveness of your library instruction by implementing a formative peer review of teaching model for librarians.

Jason Vance, Middle Tennessee State University, Jason.Vance@mtsu.edu

NUTRITION INFORMATION

Peer Review of Teaching ( PROT) is a standard assessment tool in higher education teaching that has been adapted for use by academic librarians (Alabi and Weare, 2014). While the idea of having colleagues observe their teaching can cause some instructors anxiety and stress, the rewards can be considerable for both the teacher and the observer when the process is structured in a non-threatening, constructive way. The following method was adapted from Oregon State University (Middleton, 2002), and can provide instruction librarians with a methodology for facilitating meaningful conversations about teaching.

DIETARY STANDARDS

ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.5; Principle 3, Indicator 3.3, 3.4, 3.5; Principle 7, Indicator 7.8; Principle 8, Indicator 8.3

COOKING TIME

- Total cooking time: ~2 hours (depending on the class length)
- 15 minutes preparation (pre-observation conversation)
- 60–90 minutes cooking (class observation)
- 15 minutes clean-up (post-observation conversation)
- 30 minutes cooling (self-reflection)

COOKING TECHNIQUE

Conversation, observation, reflective writing, and more conversation.

MAIN INGREDIENTS

- Teaching librarian
- Observation worksheet
- Observer (librarian or a non-library peer)

PREPARATION

A teaching librarian should invite a peer of his or her choosing to observe and provide feedback on an upcoming library instruction class session. Prior to the class meeting, the librarians will meet briefly to discuss the teaching librarian’s goals, student learning outcomes, and expectations for the class. The teaching librarian should identify specific areas on which he or she would like feedback. For example: “I am specifically interested in how engaged the students are in the classroom.”

THE ASSESSMENT ACTIVITY

Class Observation

The peer observer will sit quietly and make notes on the teaching librarian’s class. Many PROT models use a worksheet to guide this note-taking. My library used a worksheet to categorize notes under the headings: Presentation Skills, Clarity of Information, Content, Relationship with Students, and Relationship with Classroom Instructor. There was also space on the worksheet for general observations.

Post Observation Conversation (Debrief)

The worksheet can also be a useful tool to guide the teaching librarian’s self-assessment before having the post-observation conversation with the observer.

Self-Reflection

After having a post-observation conversation, the teaching librarian should write a brief self-reflective report on what he or she learned from the process. In my library, this self-reflective document is private unless the author chooses to share it. No supervisors or evaluative bodies review the results of the PROT process, thus reinforcing its nature as a constructive (and not evaluative) form of teaching assessment.

ALLERGY WARNINGS

Always alert the class’s regular instructor in
Section 3. Instruction Programs Assessment

advance that you are inviting a peer observer to sit in on the class. Most professors are familiar with this process, but it is a necessary courtesy to explain the unfamiliar person sitting quietly in the back taking notes during their class.

Recognize that everyone has a bad class from time-to-time. Observers should begin their debrief conversations by asking the teaching librarian, “How do you think the class went today?”

Observers should be constructive in their feedback. Stir in some compliments about what worked well in the class in addition to any suggestions for improvement.

CHEF’S NOTE
While this PROT process was initially implemented to give librarians feedback on their teaching, each of the peer observers noted a second unintended benefit. Participants reported that they learned a lot by watching their colleagues teach, and planned to incorporate some of the observed teaching methods in their own library instruction classes. By making this an optional assessment exercise, librarians were able to choose their level of involvement with the project. All worksheets and reflective narratives were kept by the teaching librarian and did not become part of their official performance reviews unless they chose to include them.

REFERENCES

The Library Rally
Gather course instructor feedback for one-shot library sessions taught using an active and collaborative learning model.

*Michelle J. Gibeault, University of Arkansas, gibeault@uark.edu*

**NUTRITION INFORMATION**
Course instructors are a teaching librarian’s closest partners. This assessment focuses on gathering their responses to the most critical questions anonymously and offers the opportunity to include additional written feedback. If you’re not doing any assessment presently, this might be a good method to get responses in a quantifiable format, and it creates a medium for fellow educators to offer suggestions for improvement.

**COOKING TECHNIQUE**
The Qualtrics survey tool is used to conduct this assessment, but other methods and tools should work, too. A four-part questionnaire is distributed to the course instructors. The questions in the Sample Survey are both formative (measuring perceived values about the library instruction program) and summative (measuring perceived values about student learning).

**INGREDIENTS**
If you plan to distribute the assessment via email, keeping a file containing those addresses is key.

See the Sample Email below for a request for participation.

**PREPARATION**
IRB approval may be necessary; it was in the case of this trial.

**THE ASSESSMENT**
After the requested research instruction sessions have been taught, distribute the survey link via email. If you are sending one email to all course instructors, you may choose to request that an individual associated with the relevant academic department send the email on your behalf; this way, participants may be more comfortable offering honest feedback.

Waiting until the end of the semester allows the instructors to deliberate on the cumulative effects of research instruction over the course of the semester, but has the disadvantage that instructors may feel less compelled to participate since the email invitation arrives at one of their busiest times.

The Qualtrics tool has a variety of affordances that do the response analysis for you. The “Reports” feature includes the capacity to quickly generate summaries of responses with customizable visualizations (no training in statistics is necessary!). Be advised that you may continue to distribute the same survey each semester in order to gather results longitudinally.

**ALLERGY WARNINGS**
Although participation is anonymous, if the invitation is sent via the library or teaching librarian, participation in the assessment may be more prone to reflect response biases. It is for this reason that asking non-library, academic departments to distribute the invitations may benefit the quality of results.

**CHEF’S NOTE**
This assessment developed because many
of the questions in former library instruction surveys were tied to assessing the outcomes and quality of lectures. Also, low response rates might have been attributable to a much more numerous set of questions. The promise of a short survey seems to attract a high response rate (in the range of 30 percent). The option to leave verbal feedback typically yields responses from about half of respondents.

Questions are tied to the broadest goals of the session. The literature of one-shots confirms that most students will forget the details. For that reason, the learning goals which this assessment strives to measure are not focused on details. Instead, they measure the instructor’s sense of student engagement during activities and their perceptions of whether the session was successful for heightening awareness of research assistance services and credible resource selection.

SAMPLE EMAIL
One Minute for Library Instruction Feedback, Please

Dear Educator,

You are invited to participate in the Library Rally Assessment. The purpose of this study is to evaluate your perception of delivered library instruction methods. You were selected because your class participated in library instruction this semester.

If you decide to participate, please complete the following survey. Your completion of this survey indicates your consent to participate in this research study. It will take about one minute. No benefits accrue to you for answering the survey, but your responses will be used to evaluate and improve library instruction sessions. Any discomfort or inconvenience to you is not expected to be any greater than anything you encounter in everyday life. Data will be collected using the Internet; no guarantees can be made regarding the interception of data sent via the Internet by any third party. Confidentiality will be maintained to the degree permitted by the technology used. Your anonymous survey link is:

http://uark.qualtrics.com/

SAMPLE SURVEY
Survey questions

1. After participating in library instruction, I feel that my students are now more informed about their options for assistance from the library when they encounter a research problem or question.
   - Agree
   - Neutral
   - Disagree
   - N/A

2. I feel that my students are better prepared to choose credible information resources after having participated in library instruction.
   - Agree
   - Neutral
   - Disagree
   - N/A

3. Will you schedule library instruction again?
   - Yes
   - No

4. The “Library Rally,” a problem-based, active learning approach to introducing library resources, was tested this semester. As part of an activity, students were encouraged to compete in pairs to explore a few research challenges. Please address the following question:

I feel that most students were engaged while participating in the Library Rally and, at a minimum, learned that academic research is challenging.
   - Agree
   - Neutral
   - Disagree
   - N/A

5. (Optional) Anything else you would like to add?
Rubrics as a Method for Assessing & Improving Library Instruction

Like soba noodles, salad greens, or extra-firm tofu, a good rubric can be the foundation of a healthy assessment meal! A single rubric can be adapted and modified to assess information literacy in a variety of instructional environments. Start with the basics and add your own spices to suit your library’s instruction program.

Megan Hodge, Virginia Commonwealth University, mlhodge@vcu.edu; Laura Gariepy, Virginia Commonwealth University, lwgariepy@vcu.edu; Jenny Stout, Virginia Commonwealth University, jastout@vcu.edu

NUTRITION INFORMATION
Efficient assessment of course-integrated instruction is problematic for librarians, as course-integrated (one-shot) instruction by its nature is limited in time. This model provides a method for assessing one-shot instruction that not only works within the confines of a fifty-minute class, but is scalable regardless of class time or size. Because of its use of a grading rubric, this model is also useful for courses in which librarians teach numerous sections each semester (such as freshman-level English).

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicators 1.1, 1.2, 1.3, 1.4; Principle 3, Indicators 3.1, 3.2, 3.3, 3.4; Principle 5, Indicator 5.1, 5.2, 5.3

ACRL Framework for Information Literacy for Higher Education (2016) Information Has Value; Research as Inquiry; Searching as Strategic Exploration

Locally developed learning outcomes may also apply

COOKING TIME
Depending on intended scope, cooking time could take between weeks and months from start to finish.

COOKING TECHNIQUE
Assessment instrument and rubric

INGREDIENTS
- A learning exercise that captures evidence of student learning for each of the session’s learning outcomes
- A rubric to measure mastery of each learning objective; see Sample Rubric below

PREPARATION
1. Librarians collaborate with faculty to determine what the instruction session’s learning objectives will be. It is important that the learning objectives be measurable. For example, “the student will understand truncation” is too vague; how will “understanding” be assessed? “The student will correctly truncate all words in their search query that should be truncated,” on the other hand, provides the specificity and measurability that will be important when developing the rubric.
2. Develop a learning exercise that addresses each learning outcome and that can be used to guide student learning while in class.
3. Use the learning exercise to develop a rubric for scoring. Given the subjective nature of the data to be collected, a rubric is essential for this assessment in order to ensure consistent scoring across subjects and evaluators. Without such a rubric, evaluators may find their standards changing during the scoring process, or evaluators may have different ideas as to what warrants a given score. Please refer to the references for resources on developing rubrics.

ASSESSMENT STEPS
1. Teach the class, using the learning exercise.
2. Collect a sample of completed learning exercises (worksheets). Collect and scan all worksheets, return them within a business day to the professor, and use a random number generator to select three worksheets from each class to score.
Section 3. Instruction Programs Assessment

3. Complete a norming process if there are multiple evaluators. Each evaluator scores a limited number of worksheets other than those selected for the evaluation sample; any score differences are discussed and resolved. Rubric modifications and clarifications are made as needed before "official" scoring begins.

4. Assess the sample of learning exercises.

5. Learn from the data and make necessary changes to instructional methods.

6. Repeat. This assessment can be used iteratively to improve instruction over time.

ALLERGY WARNINGS

If a team of librarians teaches the class to be assessed, bear in mind that librarians may use different techniques to teach the same concepts, which could result in score variances.

CHEF’S NOTE

This model could easily be adapted for use in most instructional environments: one-shot instruction, embedded instruction, or in credit-bearing courses. Its usefulness is not limited to higher education but could be applied wherever instruction takes place, including other types of libraries.

This model could also be used to gauge the effectiveness of one instructional technique over another.

REFERENCES


<table>
<thead>
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<th>SAMPLE RUBRIC</th>
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</thead>
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<tr>
<td><strong>Criterion/Learning Outcome</strong></td>
</tr>
<tr>
<td><strong>A: Student states research topic.</strong></td>
</tr>
<tr>
<td><strong>B: Student identifies key words/phrases from research question.</strong></td>
</tr>
<tr>
<td><strong>C: Student generates similar key words/phrases for each key concept that will enhance search strategy.</strong></td>
</tr>
<tr>
<td><strong>D: Student cites scholarly sources relevant to research topic.</strong></td>
</tr>
</tbody>
</table>
Slow-Cooked Rubric:
Designing and Using a Rubric to Assess Undergraduate Final Papers

This assessment works well as a comprehensive way to assess student work in an introductory undergraduate class. While time-consuming, it is rewarding to have a clear picture of students’ outputs and to collaborate with faculty.

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NUTRITION INFORMATION
We used a rubric to assess the final papers in an undergraduate English Composition class. We were interested in assessing students’ abilities to access, evaluate, synthesize, and cite information. To judge this, we developed a rubric that rated these four areas as exemplary, developing, or beginning, and rated a selection of between twenty-six and forty-seven papers each semester for three different semesters. This has been a helpful exercise to judge the skill level of students, learn where to direct our instruction efforts, and build communication and collaboration with the English Department.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 2, Indicator 2.3; Principle 3, Indicator 3.2, 3.3; Principle 5, Indicator 5.3

ACRL Framework for Information Literacy for Higher Education (2016) Authority is Constructed and Contextual; Information Has Value; and Searching as Strategic Exploration

COOKING TIME
Total cooking time is variable depending on number of papers and raters. In our experience, each paper takes 15–30 minutes to rate.

COOKING TECHNIQUE
Rubrics

INGREDIENTS
• A rubric
• A small team of willing librarians to rate papers
• A large source of undergraduates receiving library instruction
• Student final papers
• A cooperative group of faculty to supply the papers

PREPARATION
Identify a course that regularly schedules information literacy instruction sessions. Meet with faculty to get buy-in for the assessment. Develop a rubric with faculty representatives (or adapt/use a preexisting rubric that meets your needs).

THE ASSESSMENT
Collect student final papers from faculty
When working with multiple faculty, identify a liaison who will collect student papers from faculty, either hard copy or electronic, and will send them to you.

Distribute papers to raters
We used a shared cloud-based folder to access the papers.

Norm the rubric as a group
Plan an initial meeting where you will rate at least three papers together.

At this point, raters will notice discrepancies in their scoring. Discuss the components of the rubric and edit it to cut down on ambiguous language or other design issues that are causing inconsistencies.

After any rubric edits, raters will have to re-score the previously scored papers.

Schedule multiple meetings with raters
During these meetings, discuss papers rated individually and rate papers as a group.

Continue to evaluate the validity of your rubric until it fully meets your needs.

Determine how many additional papers to score between meetings. We found three
to five papers between discussions was manageable and helped us to increase our inter-rater reliability.

**Test for inter-rater reliability**
SPSS software or free tools on the Internet will help in evaluating inter-rater reliability. One suggested site is [http://dfreelon.org/utils/recalfront/](http://dfreelon.org/utils/recalfront/).

You must determine how important inter-rater reliability is to your assessment project and decide on a testing method accordingly. Each method has various degrees of rigor. Testing for percent agreement is easiest but least rigorous. Testing using a method like Krippendorff’s alpha is most rigorous but requires using more advanced statistical tools.

**Analyze the complete set of scores against your instruction goals**
Set a baseline for acceptable scoring rates. For example, aim for 75 percent of the total papers to score higher than the lowest performance level.

If baseline goals are realistic but are not being reached, use your data to advocate for changes in your instruction program.

Once you have met your stated goals, look for ways to continue to improve scores and raise your baseline.

**ALLERGY WARNINGS**
For this assessment to work, you need to have faculty buy-in so they will send you their students’ final papers. You also will need to devote a large amount of staff time to rating the papers.

**CHEF’S NOTES**
While time-consuming, this project is worthwhile. Reading actual student papers was an eye-opening experience for us, and we got a real sense of students’ ability to apply information literacy concepts to a research project. In addition, we were able to use our results to advocate for updated teaching methods, encourage reluctant faculty to sign up for the instruction program, and foster stronger relationships with the English faculty.
Cooking up Rubrics to Assess Student Learning

This recipe will show you how to cook up rubrics to assess student learning of information literacy concepts in library instruction.

Marjorie Leta, Mesa Community College marjorie.leta@mesacc.edu

INGREDIENTS
- Learning outcomes
- Learning objects: course research assignments, including bibliographies, oral presentations, posters, etc.
- Lesson plan with activities to reinforce your learning outcomes

PREPARATION
Meet with the course instructor to discuss assignment specifics and learning outcomes. Obtain a current copy of the actual research assignment given to students. Once you have a thorough understanding of the course research assignment, have identified the learning outcomes, and created a lesson plan, it's time to create your rubric.

Rubrics contain two essential ingredients: scoring levels and the criteria being assessed.

Scoring levels. Most rubrics use three to five scoring levels to measure student performance of each criterion. When choosing the scoring level scale and headers, keep it understandable and simple. The purpose is to assess not grade students. Stick to a basic point scale (1–5) to make data collection easy.

Criteria. Being very specific and detailed on each criteria scoring level will make application of the rubric virtually effortless. The criteria you are assessing should align to your learning outcomes. Create criteria descriptions that are specific and detailed for each scoring level. Include a quality component and, if applicable, a quantity within your criteria descriptions.

Analyzing the data and closing the loop
Once you’ve applied the rubric to student learning objects and collected your data, analyze the results. Look for patterns indicating where students struggle or master content. Close the loop and use the data to identify areas for improvement and alter teaching strategies for future instruction. Share results with the course instructor and students. Results can be aggregated to the institution level to validate the contribution of librarians in overall student success.

Example rubric (see figure 1)
After a set of library instruction sessions, a rubric was applied to annotated bibliographies to assess the following learning outcomes:

- Critically evaluate information sources for authority, reliability, and relevance.
- Retrieve persuasive articles from library databases.
- Create MLA-formatted citations.
Organize an MLA-formatted annotated bibliography.

**Analyzing the data**
After applying the rubric, learning gaps were identified, including incomplete evaluations and improper use of MLA guidelines in citations and annotated bibliography format. It was apparent that students used library databases as their primary resource to retrieve persuasive articles.

**Closing the loop**
Future lesson plans were altered for mastery of the learning outcomes. A “what’s wrong with this annotated bibliography” activity was created to help students recognize the components of a properly formatted annotated bibliography. Students engaged in a “citation matching game” to reinforce proper MLA-formatted citations. Library instruction sessions were increased from two to three sessions for additional classroom time to focus on evaluating sources.

**ALLERGY WARNINGS**
When using course assignments for assessment, be mindful of the assignment specifics provided to the students. If directions are ambiguous or confusing, this

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**FIGURE 1: EXAMPLE RUBRIC**

<table>
<thead>
<tr>
<th>Annotated Bibliography Rubric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exemplary</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td><strong>Overall Format</strong></td>
</tr>
<tr>
<td><strong>Citation Format</strong></td>
</tr>
<tr>
<td><strong>Source Selection</strong></td>
</tr>
<tr>
<td><strong>Source Evaluation</strong></td>
</tr>
<tr>
<td><strong>Total Score:</strong></td>
</tr>
</tbody>
</table>

---

68
can greatly impact student performance on their final work.

**CHEF’S NOTES**
Choose a course instructor that is open to collaboration and sharing. This process can be mutually beneficial in improving course assignments and student learning of information literacy concepts.

**BIBLIOGRAPHY**

How Much Do Good Cooking Methods Affect the Quality of the Meal?

Assess the role played by different forms of library instruction in influencing first-year students’ selection of authoritative sources.

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**NUTRITION INFORMATION**

Analyze the works-cited lists of first-year students in multiple sections of an introductory speech class to determine the effectiveness of face-to-face library instruction compared to online instruction tutorials.

Measuring the effectiveness of library instruction can be challenging. Online information literacy tutorials can be used in place of, or in conjunction with, in-person bibliographic instruction. This recipe is intended to help librarians influence the quality of source selection by first-year students in four different introductory speech classes: Section A received no library assistance; Section B took the online tutorial only; Section C received in-person instruction only; and Section D took the tutorial and received two sessions of in-person instruction.

**DIETARY STANDARDS**

ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicators 1.1, 1.5, 1.7; Principle 2, Indicator 2.4; Principle 3, Indicators 3.1, 3.2, 3.3, 3.4; Principle 7, Indicator 7.7

ACRL Framework for Information Literacy for Higher Education (2016) Frames: Authority is Constructed and Contextual; Information Has Value; Scholarship as Conversation

**COOKING TIME**

9 hours to review 929 citations of 164 students

**COOKING TECHNIQUE**

Rubric-based analysis of student-cited sources, categorized by source type and medium

**INGREDIENTS**

- Online information literacy tutorial
- 4 classroom instructors who teach different sections of the same course
- Source rubric
- Students’ works-cited lists

**THE ASSESSMENT**

1. Provide library instruction and/or the online information literacy tutorial to designated classes, create a rubric to tally source types, and gather works-cited lists from each course instructor
2. Recruit four professors to participate in the study: a control group (Class A) will receive no library instruction; Class B will receive the online information literacy tutorial; Class C will receive an in-person instruction session; and Class D will receive the online tutorial and two sessions of in-person library instruction
3. Gather students’ works-cited lists for a particular speech assignment from each professor
4. Classify each citation according to a rubric that groups the items by source type (i.e., newspapers, journal articles, websites) and by source “origin” (web search, library database, print, other). Also categorize the websites by categories (i.e., advocacy organizations, research groups, government organizations)
5. Calculate results to determine the percentage of sources students found through a web search versus from library databases for each class
6. Calculate the percentage of academic sources (newspapers, new services, magazines, journals, reference works, books and ebooks, and research reports) for each class

**ALLERGY WARNINGS**

Students’ citations can be difficult to categorize if they are not properly cited.
Without consistency across four different instructors’ assignments, it is hard to measure source quality factors other than authority.

**CHEF’S NOTE**
After completing the assessment method, we found that the most striking results came from Class A, where students found 98 percent of their sources through a web search and none of their sources from library databases. Students in Class C found 27 percent of their sources from library databases, while students in Class D used library databases for 59 percent of their sources. Unfortunately, we were able to get data from only a small number of participants in Class B. Therefore, we are not including those results in this study. The overall academic appropriateness of the sources students cited increased steadily with more library instruction. Academic sources (newspapers, new services, magazines, journals, reference works, books and ebooks, and research reports) accounted for 32 percent of the sources in students receiving no library instruction (Class A), 45 percent of the sources with instruction only (Class C), and 69 percent of sources in the instruction plus tutorial group (Class D).

Strong faculty relationships will affect the success of this recipe. Instructors open to library assistance and willing to share their students’ works-cited lists with librarians make this recipe possible. Once the recipe is complete, results can be shared with the instructors and their department to inform faculty decisions regarding how to incorporate information literacy into the curriculum. The results will also help librarians prioritize their resources to focus on the instruction activities that proved most effective.
Library Tour Taste Test

Two assessments evaluate a student-centered orientation tour and a classroom exercise that requires group presentations, including the use of visuals. One assessment allows the librarian and instructor to evaluate the student presentations, while the other assessment allows students to reflect on their own understanding and learning.

Nancy Noe, Auburn University Libraries, noenanc@auburn.edu

NUTRITION INFORMATION
In order to assess how well students complete a group presentation assignment, which also includes the use of visuals (photographs), two formal assessments are created: one for the librarian and instructor and another for students. The librarian and instructor assess the overall group presentations, making note of the level of information presented, as well as evaluating the relevance of the visuals selected. Students complete a brief written reflection on what they learned from their own group presentation as well as what they learned from the other groups. In addition to improving student learning, assessments are shared with instructors, and the librarian uses results to tailor a follow-up informational email to students after class.

DIETARY STANDARDS
ACRL Framework for Information Literacy for Higher Education Authority is Constructed and Contextual; Information Creation as a Process; Information Has Value; Research as Inquiry; Scholarship as Conversation; and Searching as Strategic Exploration

COOKING TIME
Librarian/instructor complete the assessment during group presentation; student reflection requires 5 minutes at the end of class

COOKING TECHNIQUE
A rubric for librarian/instructor; survey questionnaire for students

INGREDIENTS
• 1 copy of rubric for librarian
• 1 copy of rubric for instructor
• Copy of survey for each student*

*Substitution: online form

PREPARATION
• Prepare rubric and survey.
• Share rubric with instructor prior to class.

ASSESSMENT STEPS
1. While waiting for class to begin, review the rubric with the instructor. The rubric assesses whether or not all group members presented, what information was presented, the level of detail provided, and if the visuals presented were thoughtful and representative
2. As class begins, inform students that they will be filling out a survey at the end of class, which will be shared with their instructor
3. The librarian and instructor take notes on the rubric and score each group as they present
4. After all groups have presented, distribute the survey or link students to the online form. The survey asks students to note where their group visited, what was the most useful thing they learned from their group presentation and why, to list two other things from other group presentations that they thought they would be most useful and why, and if there was anything they would like to know about the library which was not covered

ALLERGY WARNINGS
Be careful, instructors routinely score their students higher on the rubric than librarians, valuing style over content.

Students often need extra encouragement to complete the “why” portion of the survey.

Librarians need to multitask, coaching students and answering any questions that may arise during group presentations, all while completing the rubric.

CHEF’S NOTE
Having instructors complete the rubric during
the session allows them to be more invested and engaged during the class. They play a more active role during group presentations and feel empowered to encourage students to offer more information and to think more critically about what they have discovered during the class.

Knowing that they will also be accountable for feedback, students pay more attention to other group presentations.

This is an assessment of a library tour/orientation exercise that has student groups visit various service points within the library, engage with representative materials they find at each point, and then share their findings with their classmates. Results indicate which service point students think will be most useful to them, providing evidence of value added and suggesting return on investment. In addition, knowing which service points are highly regarded allows those areas to consider ways in which to improve upon their success. The identification of service points which students do not feel are beneficial allows for further discussion regarding promotion and marketing.
Word Soup: Using Word Clouds to Assess the One-Minute Paper

Simmering one semester of open-ended responses into a larger picture of library instruction.

Maria Barefoot, Indiana University of Pennsylvania, barefoot@iup.edu

NUTRITION INFORMATION
This method of assessment was developed for one-shot information literacy instruction sessions. It requires the students to respond to short open-ended questions of the librarian’s choosing, traditionally called the one-minute paper, then analyzing those responses based on word frequency. This method has been used to give a broad picture of what students are learning in their library instruction sessions over the course of one semester.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicators 1.1, 1.4, 1.5, 1.7

ACRL Framework for Information Literacy for Higher Education: Authority is Constructed and Contextual; Information Creation as a Process; Information Has Value; Research as Inquiry; Scholarship as Conversation; and Searching as Strategic Exploration

COOKING TECHNIQUE
Open-ended survey after library instruction and word frequency analysis using word clouds

INGREDIENTS
One-minute paper questionnaire
- Please tell us one thing you found helpful in your library instruction session.
- Please tell us one thing you found confusing in your library instruction session.
- Please tell us one thing you would change about your library instruction session.

Word cloud creation tool
Qualtrics, Wordle, or Nvivo

PREPARATION
Administer the one-minute paper after each library instruction session. It is helpful to group these responses based on the organization of your instruction program. For instance, you may want to create a group for all freshman-level classes or for each college your library serves.

If possible, collect responses via an internet survey tool, such as SurveyMonkey or Qualtrics. This allows you to download the data into an Excel file for analysis. Collecting results on paper is also an option but requires the researcher to enter the text manually into an Excel file for analysis.

Once you have the results collected into an Excel file, you can use one of the word cloud tools to create your own word clouds.

See the help section of each tool for instructions on creating word clouds.

ASSESSMENT
Visual Data
Any of the three programs discussed will provide a visual representation of word frequency in the form of a word cloud. However, the librarian should be aware of the settings that can change that visual representation. Qualtrics will only allow up to the 200 most frequently used words, which can leave out a significant portion of your responses. It also ignores common words, which can be problematic if you teach Boolean searching using and, or, and not. Wordle allows you to use common words such as and, or, and not in the language tab. Nvivo
Barefoot Section 3. Instruction Programs Assessment

gives you the most control over these visual representations by asking you to provide a minimum word length for inclusion and the number of words to display. Nvivo can group words by exact matches, include words with the same stem, and include synonyms, specialization, and generalizations. Nvivo captures 1,000 of the most frequently used words as a default.

**Numerical Data**
Providing the exact number of times a word has been used can be helpful for quantitative analysis. Wordle and Nvivo both provide this function. The “show word count” option is available in the language menu of Wordle and in the summary tab of an Nvivo query. Qualtrics does not provide this option.

**Providing Context**
Since many library concepts rely on phrases rather than individual words, it is important to provide context for the word clouds that are generated. Wordle does not provide any context options. However, in Qualtrics, you have the option to include a list of open-ended responses below the word cloud. This option is quick, but the amount of data is often cumbersome. Nvivo allows you run a Text Search query for specific phrases that you select. This context can be vital for many library concepts that are expressed as phrases, such as “narrowing results” or “choosing databases.”

**ALLERGY WARNING**
Spelling mistakes are abundant in open-ended student responses. This will throw off the words that are represented in the word cloud. Students often use their own words for library concepts, which can also cause some confusion.

**CHEF’S NOTE**
I recommend trying different word cloud software before settling on one. Since cost is an issue for many libraries, Wordle may be the best choice. However, Nvivo provides the most robust analytic options of the three.
Creating Connoisseurs:  
Assessing Students’ Ability to Evaluate Websites

By following this recipe, chefs can assess how well students critically judge the authoritativeness of information found on the web.

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NUTRITION INFORMATION
In today’s information landscape, the ability to evaluate web sources is critical. This recipe will inform future teaching strategies to better prepare students. The results can also demonstrate to appropriate stakeholders how the library is preparing students to become more information literate in today’s digital environment.

DIETARY STANDARDS
ACRL Framework for Information Literacy for Higher Education Authority is Constructed and Contextual; Information Has Value; and Searching as Strategic Exploration

COOKING TIME
Prep time, varies; student completing assessment page, 5–10 minutes; grading per 25 submissions, 15–30 minutes per grader; compiling scores from each grader and serving as a tie-breaker per 25 submissions, 15–45 minutes

COOKING TECHNIQUE
Graded exercise

INGREDIENTS
• Instruction session
• Web access or a screen shot
• Assessment questions
• Rubric
• Three graders.

PREPARATION
1. Prepare the learner-centered learning outcome. Fold in appropriate level verbs from Bloom’s Cognitive taxonomy. (For example, our outcome is: The student will identify the factors making up the authority of a source.) The outcome should also align with your institutional mission, your institutional and departmental accreditation guidelines, ACRL’s standards and frameworks, and your instructional content.

2. Prepare assessment questions to taste. We suggest that questions align with the outcome and are appropriate for the students’ developmental level, the instruction content, and any time constraints for the administration of the assessment instrument. (Our questions are: 1. Please list three factors that make any source authoritative; 2. Please circle two items on the provided website that make it authoritative, and explain why they do so.)

3. Choose a website that includes multiple authoritative-related elements such as a clearly-defined, credible author, a bibliography, recent updated/published date. (Our current favorite flavor is MedlinePlus’s webpage about genetically engineered foods.)

4. Create rubrics to use for grading student responses. (Our rubrics are: Question 1. Pass=three authoritative-related factors are listed; Fail=fewer than three are listed. Question 2. Pass=any two of: author’s credentials, domain, government resource, bibliography, date, unbiased content, or other relevant items are circled and explained; Fail=fewer than two factors are listed and explained.)

5. Always taste your food before serving it. Provide outcome(s), assessment questions and rubrics to another chef, preferably one outside your institution, to verify that all items are in alignment, which helps establish face validity.

6. Prepare your distribution plan. (We printed the questions and the webpage on a single sheet of paper to distribute to students in face-to-face one-shot classes. We allotted 5–10 minutes during the session for students to complete the questions.)
ASSESSMENT STEPS

1. Shortly before grading the exercises, all three graders should participate in a norming exercise using the rubrics and sample answers to ensure all graders rate answers the same. Cook up as many possible student responses as you can. Once grading begins, the graders CANNOT discuss student-supplied answers.

2. Each student exercise is graded by two graders. This should be a blind taste test. Both the student and the librarian who taught the session should remain anonymous to the graders.

3. Scores by each grader are compiled and compared. If the two answers do not match, the third grader acts as the tie-breaker. (Gourmet add-in: Calculate inter-rater reliability. Doing this demonstrates that the graders were unbiased and adds a measure of confidence to the assessment process. Also, it will greatly impress your stakeholders.)

4. Present the results to the appropriate audiences. Don’t forget that a visually appealing presentation is an important part of the dining experience. Graphical displays such as bar or pie charts are nice visual aids to help enhance the diners’ experience with the data.

5. Critique and analyze the results to inform future teaching and assessment.

ALLERGY WARNINGS

Students can come up with answers that the chefs could never have imagined, but they must resist the urge to discuss these oddities once the grading has begun.

Some students may not take the session and exercise seriously if they are not getting a class grade.

CHEF’S NOTES

We prefer real ingredients. We use a real-world website in our assessment rather than an artificial one.
Assessment Layer Cake
This recipe assesses library student worker skills using layers of assessment tools. Information literacy self-efficacy levels and information literacy skills were assessed and student worker training adjusted accordingly.

Patricia J. Mileham, Valparaiso University, trisha.mileham@valpo.edu; Kimberly J. Whalen, Valparaiso University, kimberly.whalen@valpo.edu

NUTRITION INFORMATION
As one of the largest student worker employers on campus, library staff and faculty wanted to insure that student employee research skills were positively impacted from their role in the library. Though position-specific training had been offered to student workers within various departments, information literacy skills were not as strong as library staff and faculty desired. Library faculty chefs evaluated, chose, and right-sized a recipe for assessing student worker training, information literacy self-efficacy levels, and information literacy skills. Library chefs then used the assessment evidence to add non-position specific information literacy, communication, patron interaction, and team-building sessions to the student worker training calendar.

DIETARY STANDARDS
ACRL Framework for Information Literacy for Higher Education Authority is Constructed and Contextual; Information Creation as a Process; Information Has Value; Research as Inquiry; Scholarship as Conversation; and Searching as Strategic Exploration
• Any or all depending on session content being assessed

COOKING TIME
One-minute assessment (cake), 1 minute
Freely available assessment (frosting), 30 minutes
For-purchase assessment (ganache filling), 45 minutes
Serves 30–40 student workers

COOKING TECHNIQUE
Individual reflection and feedback; proctored online group assessment sessions.

INGREDIENTS
• Student worker information literacy sessions, two-hours long, one each at the start of fall and spring semesters
• One-minute assessment questions
• Freely available assessment, such as the Information Literacy Self-Efficacy Scale (ILSES)
• For-purchase assessment tool, such as Project SAILS (Standardized Assessment of Information Literacy Skills) or National Survey of Student Engagement (NSSE)
• Access to online survey tool: Google Forms, Springshare LibGuides CMS, SurveyMonkey, Polldaddy, or others
• Computer access for all students

PREPARATION
• Develop one-minute assessment questions
• Search literature to identify freely available assessment tools recommended by other library testing kitchens
• Transition selected assessment questions, scales, or tools from print to electronic format
• Request funds or write grant proposals to obtain funds to access for-purchase assessment tools
• Coordinate timing of training with other library department student worker supervisors
• Schedule assessment activities to coincide with training sessions

ASSESSMENT STEPS
The Cake Layers:
Student Training Feedback
One-minute assessments require no expertise or extensive budgets for ingredients; a private-label cake mix will suffice.

Ask at least two questions per instruction session, such as “What was the most important thing you learned today?” or “What do you still have questions about?” or “If you could change one thing about this training session, what would it be?”
Vary layers of questions each semester.

Have all students complete the one-minute assessment using the online survey tool.

No need to keep a close watch on students as they complete the assessment; it is their immediate feedback of the training session, not an assessment of their knowledge or skill levels.

View results within the automatically created online survey tool spreadsheet. Look for a concentration of flavors or for lumps in the batter.

The Frosting: Information Literacy Self-Efficacy Levels

A more complex frosting recipe can call for stronger measurement tools; chefs need not look far for ingredients that will add another layer of flavor.

Prior to the end of the fall semester, have students complete the freely available assessment using the online survey tool.

This assessment is of their self-reported information literacy self-efficacy levels, not skills. Bakers need be aware that self-reported levels are often overly sweet and thickly spread.

Assessing self-efficacy levels can help library staff and faculty better understand barriers to student learning and potential areas of overconfidence.

View results within the automatically created online survey tool spreadsheet. Student responses can be correlated within the ILSES categories of basic, intermediate, or advanced information literacy skills. Within results, look for frosting to be smoothly spread or for cake showing through.

The Ganache Filling: Information Literacy Skills

To present an elegant finish, add ganache between the cake layers. More expensive than box cake batter or simple frosting, the ganache’s delicate information literacy skills ingredients require further professional culinary assessment.

At the end of the year, invite a segment of the student worker population to indulge in this flavorful assessment.

Consider targeting freshmen or sophomore students so future training sessions can target weak skill areas.

This assessment blends student learning and skills assessment. Bakers need be aware that this layer is not just a finishing touch; evaluation of skills deepens the complexity of this recipe.

View results within the calorie-laden reports often provided by the vendor. Look for areas where the ganache was evenly applied or spread too thin.

Serving Suggestions

• Each of these assessment elements can stand alone or be layered for a more comprehensive outcome
• Organize results by themes and share with library colleagues and student worker supervisors
• Use responses to shape a plan for subsequent training sessions
• Use responses as evidence within student worker evaluations

Allergy Warnings

• Searching for freely available assessment tools is time-consuming. Many tools are written about but not freely available. Look for tools that are valid, reliable, and feasible.
• Transitioning freely available tools from print to electronic format is time-consuming. Pay special attention to format and wording.
• Students are often overconfident in their skills and knowledge. When budget allows, incorporating a skills-focused assessment provides richer and more reliable results.

Chefs’ Note

Valparaiso University chefs layered all elements of this recipe within our information literacy program. One-minute assessments designed using Google Forms were made available via Springshare LibGuides. Librarians identified the ILSES tool, transformed it into an online tool, and used it as a pre-and post-assessment. Librarians wrote and received an internal grant to fund Project SAILS use.

References

Section 4.

Outreach and Programming Assessment

83  Shopping for Kitchen Implements? How to Decide If a Library Program is Useful, Usable, and Desirable
    Joy Oehlers and Joyce Tokuda

85  Assessing an Event: Mixin’ It Up with the Long Night Against Procrastination
    Katherine Penner and Sarah Clark

87  Measuring the Success of Library Outreach to First-Year Student Athletes
    Beth Hendrix

89  Planning the Perfect Party: Data for Dessert!
    Katy Mathuews and Zachary Lewis
Shopping for Kitchen Implements?

How to Decide If a Library Program is Useful, Usable, and Desirable

Apply user-experience (UX) principles of “usefulness, usability, and desirability” (Schmidt, 2013) to your program assessment to balance student learning with students being attracted by the novelty of your gadget.

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NUTRITION INFORMATION
Look beyond traditional assessment outputs. Measure outcomes such as the impact on student learning, behavior, or how students apply what they learned. Look to the “why” behind programs and its impact on the community.

Use this simple UX framework to guide your planning and then use the same framework to assess your program outcomes. Use for exhibitions, gaming events, makerspaces, etc.

DIETARY STANDARDS

COOKING TIME
Answer the assessment questions quickly and intuitively.

MAIN INGREDIENTS
Use the three pillars of useful, usable, and desirable in observations, user surveys, and an assessment rubric.

PREPARATION
Conduct a needs assessment to clarify the purpose of your program, understand what your community wants, and identify gaps in your programing from your users’ viewpoint. What do they consider to be useful, usable, and desirable? These three factors, in turn, become the main framework for assessing the outcomes.

THE ASSESSMENT
Based on the questions in Figure 1, get a range of people to help you observe and provide a 360-degree assessment.

Incorporate these three sets of questions in your participant surveys.

Alternatively, use similar questions in a rubric-style grid to assess UX (see Oehlers, Thomas, and Tokuda, 2015).

ALLERGY WARNING
Other uses: Use this framework in grant applications, grant reports, and other library reporting avenues.

REFERENCES

### FIGURE 1. USER-EXPERIENCE PRINCIPLES OF USEFULNESS, USABILITY, AND DESIRABLE ASSESSMENT SCORING

#### UX ASSESSMENT SCORE FOR LIBRARY EVENTS AND ACTIVITIES

<table>
<thead>
<tr>
<th>Useful:</th>
<th>YOUR SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the target community find this program useful?</td>
<td>(Minimum score to pass: 3)</td>
</tr>
<tr>
<td>Does it solve a current problem?</td>
<td></td>
</tr>
<tr>
<td>Does it fulfill a current or future need?</td>
<td></td>
</tr>
<tr>
<td>Does it serve a purpose?</td>
<td></td>
</tr>
<tr>
<td>Is it important to your community?</td>
<td></td>
</tr>
<tr>
<td>If promoted well, would the target community attend or participate in this?</td>
<td></td>
</tr>
</tbody>
</table>

In one sentence, *How does it benefit the community?* (2 bonus points)

<table>
<thead>
<tr>
<th>Usable:</th>
<th>YOUR SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is it easy to use and access?</td>
<td>(Minimum score to pass: 3)</td>
</tr>
<tr>
<td>Have you identified and removed potential obstacles?</td>
<td></td>
</tr>
<tr>
<td>Is it free of pain-points?</td>
<td></td>
</tr>
<tr>
<td>Is the community user able to start using or interacting with it without having to think too hard?</td>
<td></td>
</tr>
<tr>
<td>If instructions are needed, have you provided simple step-by-step instructions?</td>
<td></td>
</tr>
<tr>
<td>If assistance is needed, will it be available?</td>
<td></td>
</tr>
</tbody>
</table>

In one sentence, *How might a user have a difficult time with this event or program?* (2 bonus points)

<table>
<thead>
<tr>
<th>Desirable:</th>
<th>YOUR SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is it so cool that your community wants to be associated with your programs and events?</td>
<td>(Minimum score to pass: 3)</td>
</tr>
<tr>
<td>Would your users consider it a unique experience?</td>
<td></td>
</tr>
<tr>
<td>Does it look good?</td>
<td></td>
</tr>
<tr>
<td>Is it fun?</td>
<td></td>
</tr>
<tr>
<td>Is it valuable or of a high quality?</td>
<td></td>
</tr>
<tr>
<td>Are all promotional materials and physical environment aesthetically pleasing?</td>
<td></td>
</tr>
</tbody>
</table>

In one sentence, *If it were fee-based, why would anyone pay to access your program, events, or activities?* (2 bonus points)

<table>
<thead>
<tr>
<th>TOTAL points</th>
</tr>
</thead>
</table>

Add up your points in each category of useful, usable, and desirable, and then total your points.

If any of your category scores less than 3, then you should reconsider your plan.

If your total score:
- Ranges from 15–18 = Winner idea! This is project will provide an excellent UX.
- Ranges from 10–14 = Almost there. To strengthen your proposal, anticipate and plan for contingencies.
- Is below 9 = Underpowered. Maybe this is not the time for your event. Consider shelving your idea for a later time.
Assessing an Event:  
Mixin’ It Up with the Long Night Against Procrastination

Using a combination of assessment methods, librarians can use both qualitative and quantitative data for future planning.

Katherine Penner, University of Manitoba Libraries, katherine.penner@umanitoba.ca; Sarah Clark, University of Manitoba Libraries, sarah.clark@umanitoba.ca

**PREPARATION**
1. Acquire Ethics Board approval for questionnaire and focus groups.
2. Design online survey and determine best format and timing at the event.
3. Write focus group questions and participation waiver. Determine the best timing for delivery of two separate sessions at the event. Create an invitation for participation and distribute at the point of entry at the event.
4. Develop observation criteria with observers and confirm the process and objectives. Select appropriate physical spaces for observation. Create a real-time document accessible by all observers.
5. Create a sign-in/sign-out document and establish staffing of station for the entire night.

**Online Survey**: Load survey questions into the online survey tool and bookmark the link in the tablet’s browser. Bring the tablet to patron seating areas and solicit survey participation.

**Focus Groups**: Have the peer facilitator meet with each group and distribute participation waivers. Record each session using a recording device.

**Observation**: Send observers to predetermined locations. Have each observe one area for a length of time, and trade locations part way through the event to ensure data consistency.

**Sign-in/Sign-out data**: Set up a station at a designated point of entry. Inform staff of the sign-in/sign-out procedure. Collect student ID numbers and sign-in/sign-out times.

**THE ASSESSMENT**
1. Extract data from the survey tool.
2. Transcribe focus group sessions and identify themes throughout.
3. From observational data, identify categories such as patron activity and use of space.
4. Synthesize data from sign-in/sign-out files and connect with data from past events. Identify trends such as average attendance, high-traffic times, and overall length of stay.
5. Collect costs from various funding units (staffing, security, food) and synthesize data. Determine cost per student using the average attendance number from the sign-in/sign-out data.
Section 4. Outreach and Programming Assessment

**Delivery to “Steak” Holders**
1. Organize a meeting of partners.
2. Provide processed data in presentation format via charts and graphs.
3. Provide information without bias.
4. Allow ample time in the presentation for discussion and questions.

**ALLERGY WARNINGS**
- Survey response rate may suffer without tableside delivery during the event.
- Focus group participants may need further motivation via food, giveaways, etc.
- Debrief with observers recommended to avoid confusion during data analysis.
- Create an Excel sign-in/sign-out sheet to increase ease of use in the analysis process.
- Collecting sign-out data may be difficult as many students leave without signing out.

**CHEF’S NOTE**
The assessments used gave us a better picture of how the time was actually used by students, as well as what they valued about the event. As a bi-annual event, we had the opportunity to use a variety of different methods over a longer period of time. The assessment techniques used in this recipe reflect three years of data (six Long Nights Against Procrastination), and have been key in our planning processes until this point.

Going forward, the data that we have collected and now synthesized will inform decisions for changes in event hours, staffing models, and services provided. This process gives us the opportunity to evaluate the event in quantitative and qualitative measures and provides information to stakeholders that addresses all of their administrative priorities.
Measuring the Success of Library Outreach to First-Year Student Athletes

Finding quality sources for a research paper can seem overwhelming to first-year student athletes, whose schedules often cause them to miss an introduction to the library and its resources. We cooked up a plan to feed this hungry student group with a two-portion serving of library skills. Our assessment recipe calls for one part student exit surveys and one part institutional data.

Beth Hendrix, University of Idaho Library, bhendrix@uidaho.edu

NUTRITION INFORMATION
Student athletes often miss an introduction to the library in their first year on campus. They arrive to begin practice in mid-summer and can be excluded from the standard university orientation programs of their freshmen peers—and that includes an overview of the library.

We developed a recipe to add the ingredients of a one-shot library instruction session to the Athletics department’s NCAA Life Skills course for first-year student athletes (National Collegiate Athletic Association, 2014). Our recipe introduces the library as a welcoming environment and aligns with the University of Idaho’s goals for student success and retention, as well as the university’s Learning Outcomes for General Education (University of Idaho, 2008).

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicators 1.2, 1.3, 1.4 1.5; Principle 5, Indicator 5.4; Principle 9, Indicator 9.3

General Education Learning Outcomes (University of Idaho, 2008)

COOKING TIME
Two 45-minute sessions; serves up to 50 hungry student athletes

COOKING TECHNIQUE
A fun and interactive two-day workshop in the Life Skills course to introduce first-year student athletes to the library resources and services.

INGREDIENTS
• Library tour and scavenger hunt
• PowerPoint introduction to the library website and basic information literacy concepts
• Library Skills Jeopardy game (Johnson, 2008)
• Instructional handouts
• Prizes for scavenger hunt and Jeopardy game winners
• LibGuide for student athletes (Canzoneri, 2014)
• Assessment tools

PREPARATION
Review goals for the session:
• Introduce the library to first-year student athletes.

• Partner with Athletics department for student success.

Customize class session and instructional materials.

Design assessment tools:
• student exit survey questions
• institutional data

THE ASSESSMENT
Examine student responses to open-ended exit survey questions about:
• whether or not the explanations and activities were clear and helpful
• what they learned from the session
• what they would tell a friend to help them with their research

Compare institutional data with library instruction coverage for:
• the 2013–14 class of first-year athletes who received no library instruction
• the 2014–15 class of first-year athletes who had participated in our library session

Combine GPA data and library instruction sessions to infer a correlation between
library instruction and overall academic improvement.

**ALLERGY WARNING**
When providing snacks as game prizes for the student athletes, replace candy bars with granola or high-protein bars. Diets of student athletes typically have junk food restrictions.

This student group tends to be extremely competitive by nature; the instructor should restrict the library scavenger hunt to non-quiet floors only.

**CHEF’S NOTE**
Calculating cumulative GPA at the end of an academic year to compare student groups can be tricky. Some students enter the university in the summer or fall but leave the university at the end of the semester and are not enrolled in the spring. When submitting your request to the IR office, ask for data on students who completed both semesters. In addition, ask to have the data broken out by the semester of enrollment.

**REFERENCES**


**RESOURCES**

Planning the Perfect Party:  
**Data for Dessert!**

This recipe ties engagement with library outreach activities to student persistence data. This analysis helps the library communicate its value to the campus community.

*Katy Mathuews, Ohio University, mathuews@ohio.edu; Zachary Lewis, Shawnee State University, zlewis@shawnee.edu*

**NUTRITION INFORMATION**  
One of the most pressing issues facing librarians today is the need to assess and communicate value to library stakeholders. Particularly, academic libraries need to demonstrate how the library contributes to the greater institutional mission and to student success. This recipe helps the library communicate its value by connecting students’ participation in library outreach activities to student performance outcomes, an area of increasing interest to accreditors, state governments, and university administrators.

This recipe uses a fall semester welcome party targeted to first-year students to demonstrate how assessment of outreach activities can be tied to persistence data. The party is an opportunity for students to play games, dance, and win prizes, all while familiarizing themselves with library staff and services. The analysis can be used to demonstrate the impact of library engagement on student success.

**COOKING TIME**  
Cooking time varies from a few hours to host the event to a few semesters to completely analyze the data.

**COOKING TECHNIQUE**  
Raffle tickets and the data analysis software of your choice.

**INGREDIENTS**  
- Party to welcome students
- Library staff
- Sign-in table
- Numbered raffle tickets
- Raffle prize
- Data analysis software

**PREPARATION**  
Create or purchase numbered raffle tickets that include space for party-goers to write student ID numbers and a tear-away section for the student to keep as a reference for raffle drawings.

Set up a welcome table at the entrance to the party. The table can be used to display the raffle prizes and other informational materials about the library.

Plan fun activities for students to enjoy at a fall semester welcome party. Activities may include a photo booth, a disc jockey, board games, bingo, casino games, video games, and crafts. Don’t forget the food; pizza and cookies are always a hit!

**ASSESSMENT STEPS**  
Ask each student to write his or her student ID number on a numbered raffle ticket as he or she enters the event. Raffle prizes may be awarded by calling out ticket numbers or by writing ticket numbers on a prize board.

After the event, enter the ID numbers in a spreadsheet or database using the analysis software of your choice. Microsoft Access or Excel or Tableau software are excellent tools for this analysis.

Obtain persistence data from your institutional research office on campus; be sure this information includes student ID number. You may have to create the persistence variable based on students’ enrollment information for the spring semester. Simply create a yes or no variable to indicate the students’ enrollment status during spring semester following the party.
Using the ID number as the common variable, blend the two datasets using your preferred data analysis software.

Calculate the percentage of attendees who persisted from fall to spring semester. Use this information in library advocacy efforts, such as demonstrating the role of the academic library in student persistence/retention.

ALLERGY WARNINGS
Be sure to have enough library staff on hand to ensure you catch all the attendees as they enter the party. Place the sign-in table at the entrance to the event so all participants are recorded.

Obtaining persistence data can be tricky. We recommend friendly and open communication with your institutional research or information technology office to stimulate collaboration—maybe even deliver some cookies or other sweet treats (recipe not included).

CHEF’S NOTE
This recipe can be modified to include a sign-in sheet or ID card swiper in place of the raffle tickets.

This recipe can be applied to other events such as instruction sessions or workshops and can be modified to examine grades, GPA, retention, and graduation rates.

See “Academic Libraries: Breakfast of Student Champions” in this cookbook for more information.
Section 5.

Assessments Assessment

93 Rubrics and Rutabagas: Only One is Useful for Assessing Staff During Evaluations
   Sian Brannon and Julie Leuzinger

95 Cooking Times May Vary: Assessing Student Workflows in the Stacks
   Joyce Douglas and Katy Mathuews

97 Stop Folding the Dough: Intervening to Decide Whether or Not to Assess Again
   Sian Brannon

99 Recipe for Success: Add a Personal SWOT Analysis to Any Assessment Project
   Faithe Ruiz
Rubrics and Rutabagas:  
*Only One is Useful for Assessing Staff During Evaluations*

By using rubrics, the review process can go much faster and easier because the criteria for success are laid out to assess staff performance in comparison to prescribed standards, and they take much of the subjectivity out of the review process.

*Sian Brannon, University of North Texas, sian.brannon@unt.edu; Julie Leuzinger, University of North Texas, julie.leuzinger@unt.edu*

### NUTRITION INFORMATION
When expectations/criteria are agreed upon in advance, staff have the chance to excel when they know what performance is considered superior, what is meeting expectations, and what is below the acceptable level. Having unclear performance expectations (which in some instances means having no assessment expectations at all) is unfair to the employee, as it does not provide a framework within which the employee can work and set goals.

### DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 8, Indicators 8.2, 8.3

### COOKING TIME
- Prep time (making the rubric), 1–2 days
- Cooking time (applying the rubric—writing an evaluation, meeting with the employee to discuss), 1 week

Serves administrators, supervisors, and human resources

### COOKING TECHNIQUE
Comparison of performance to established criteria for success

### MAIN INGREDIENT
Rubrics

### PREPARATION
Rubrics essentially translate qualitative information (descriptions of levels of performance) into assessable and quantifiable evidence. A great example of a generic rubric is the University of Colorado’s “Apple Pie Recipe” rubric, which delineates standards for the crust, baking, and filling (link below).

### THE ASSESSMENT

#### Beginning of year
- Using a rubric in staff assessment starts at the beginning of the review year. As close to the beginning of the year as possible, send your employees the proposed rubric, then meet with them to go over it. Ask if they have questions and see if they have anything to add or changes to make. Talk about the specific job duties and explain the criteria.
- Including the employees in revising your rubric gives them buy-in to their performance expectations and makes things easier to justify at review time.

#### Throughout the year
- Have periodic check-ins with your employees, with frequency depending on their performance. Some employees require more reminders about expectations than others. Go through the rubric again and explain why their performance in all of the elements falls in certain areas.
- Do this with high-performing staff also. We sometimes neglect to praise when we are tied up dealing with non-performers.
- Also, if job duties have changed, the rubric elements should be adjusted.

#### Review time
- Before meeting with the employees, go over your rubric element-by-element, truly reflecting on their performance in each area. Make notes to justify why you chose each rating from the scale with specific examples from the year.
- Send the written evaluations and rubric to the employees at least twenty-four hours before your scheduled meeting to combat anxiety and give them a chance to prepare remarks. At your meeting, it may not be necessary to discuss every element; rather, focus on the “exceeds”
Section 5. Assessments Assessment

and “below” expectations. Give examples.

• Let the employees ask questions and respond. Get them to phrase things in regard to the specific criteria in the rubric to justify any disagreements.

• When submitting the official, final evaluation to administration or human resources, make the rubric available in case someone wants to review it.

Now it’s time to evaluate the rubric all over again because it is the beginning of a new review year!

ALLERGY WARNINGS
Some institutions may have a generic form created by human resources for evaluating staff. Supervisors may have some leeway in which job duties are included and may even include performance standards, but the rating system may be predefined and unclear.

Be aware of the requirements for evaluation given by administration and your human resources departments. Ensure that you get approval for the rubric by your Head Chef.

CHEF’S NOTE
The Tulsa Public Schools have a rubric for assessing librarians. It is online: https://www.tulsaschools.org/4_About_District/_documents/TLE/Observation_Evaluation_Rubric_Librarian.pdf.

Consult the RUSA “Guidelines for Behavioral Performance of Reference and Information Services Providers” for examples of elements that you can use in your rubric: http://www.al.org/rusa/resources/guidelines/guidelinesbehavioral.

The University of Colorado’s “Apple-Pie Recipe” rubric can be found online: http://www.ucdenver.edu/faculty_staff/faculty/center-for-faculty-development/Documents/Tutorials/Rubrics/1_what_is/easy_as_pie.htm.
Cooking Times May Vary:
Assessing Student Workflows in the Stacks

Assess the average time and resources needed to complete various student employment tasks and projects in the stacks.

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NUTRITION INFORMATION
Assess efficiencies of student workflows and to estimate resources necessary to complete tasks such as shelving a cart of books. This information may be applied to payroll data to calculate the cost of workflow or applied to circulation data to assess staffing needs. This information is valuable for strategic planning and communicating the value of student assistants.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 4, Indicator 4.1; Principle 5, Indicators 5.1, 5.6; Principle 7, Indicator 7.3

COOKING TIME
Approximately one hour for each task and a few hours for analysis

COOKING TECHNIQUE
Simple data sheets and basic computer software, as desired

INGREDIENTS
• Clock or timer
• Books
• Book cart

PREPARATION
Create a data sheet to record student task information (see sample data sheet).

ASSESSMENT STEPS
Have several students complete each task on the data sheet. Be sure each student records the total number of minutes required to complete the task and the number of items included in each task.

Once multiple students have completed the tasks, calculate the average minutes (AM) and average items (AI) for each task by using basic averaging methods. Use these figures to calculate items per minute (IPM) and minutes per item (MPI).

To calculate items per minute (IPM), divide average items (AI) by average minutes (AM) for each task. (IPM = AI/AM).

To calculate minutes per item (MPI), divide average minutes (AM) by average items (AI) for each task. (MPI = AM/AI).

Apply the calculations to payroll and circulation data to gain useful metrics for planning and communicating value.

To calculate actual or estimated payroll cost, multiply minutes per item (MPI) by the number of actual or estimated items included in a specific task or project. Convert minutes required to hours and multiply by your institution’s hourly student assistant payroll cost.

For future staff planning, divide total circulation returns by the number of items per minute (IPM) to obtain the student assistant staffing time required to maintain average circulation activity.

Use this information to communicate the resources required to maintain average activity levels and to monitor student assistance performance.

ALLERGY WARNINGS
Information collected may be affected by the length of student assistant employment, which affects their proficiency. Due to this, the assessment should include multiple students or should be completed at various times during the academic year to establish an overall baseline.
CHEF’S NOTE
This recipe can be modified to assess any student employment task such as shifting, checking missing item lists, performing in-house use counts, and preparation time before beginning each shift.

FIGURE 1. SAMPLE DATA SHEET
<table>
<thead>
<tr>
<th>Activity</th>
<th>Student A</th>
<th></th>
<th>Student B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Items</td>
<td>Time</td>
<td>Number of Items</td>
<td>Time</td>
</tr>
<tr>
<td>Prepare a cart</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelve a cart</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Stop Folding the Dough:
Intervening to Decide Whether or Not to Assess Again

If you are getting the same results over and over when you survey your staff about internal communication and organizational effectiveness, perhaps it’s time to try an intervention and see if you can make a difference.

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NUTRITION INFORMATION
After years of getting the same results when surveying staff biannually regarding workgroups, job satisfaction, and the physical environment, the University of North Texas Assessment Workgroup decided to intercede, ask for suggestions about how to improve recurring deficiencies, and then re-survey the staff to see if interventions gleaned from the suggestions helped at all.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicators 1.1, 1.4; Principle 7, Indicators 7.2, 7.7

COOKING TIME
One to two years; serves staff, human resources, and administration

COOKING TECHNIQUE
Experiment

INGREDIENTS
• Organizational survey
• Longitudinal data
• Questionnaire
• Intervention, re-test, analysis

PREPARATION
Look back at longitudinal data of the same assessment repeatedly given to staff. Identify trends and patterns; note what issues reoccur, such as pay, communication, workspaces, and so on.

THE ASSESSMENT
Based on the longitudinal data/trend analysis from previous surveys, create a questionnaire to administer to staff instead of the usual organizational survey. The purpose is to ask for specific solutions to the perceived problems and negative trends.

After getting back your responses, form a group to look at the results of this questionnaire. There will be things that can be fixed simply: Maybe the staff wants small recognition for accomplishments or better office supplies.

Some things may simply require re-education, such as staff not understanding how the institution’s compensation system works, or that criteria for position ratings is set by human resources, not the library dean.

Others may require organizational culture changes. You may need to start something along the lines of a monthly all-employee meeting to improve communication and transparency.

Once you’ve decided on quick-fixes and longer-term changes to improve the previous deficiencies, take action. Actually implement the suggestions given by your employees. The important thing is that you DO implement their suggestions. This is the experiment. Will implementing these potential solutions improve their feelings about the workplace?

Soon it will be time for the next organizational survey. Administer it normally, and when results come back, compare them to previous results. Did your interventions make any difference in the previous continuously appearing deficiencies?

You may want to repeat the process of testing various interventions, then resurveying. If you continue to get the same results, perhaps you should acknowledge that you can’t fix certain things, and focus efforts on other areas.

Prepare a report on the results of the intervention on your organizational survey results for your staff. This will show that
Section 5. Assessments Assessment

an effort was made to correct perceived deficiencies, summarize what interventions were used, and address concerns for the future.

**ALLERGY WARNINGS**
Keep in mind the biases and reliability issues associated with surveys. Ensure anonymity for the staff in proposing solutions. When you look at the new data, keep in mind that there are external variables, such as your institution giving raises, which can impact the results.

**CHEF’S NOTE**
Questions from the University of North Texas Library’s follow-up questionnaire asked for constructive suggestions for improvements in the common issues. Here are two examples:

“Salary was the single greatest area of concern identified in past SEE surveys. Taking into consideration the economy and budgetary issues, please suggest ways to address your salary concerns.”

“Some employees feel our workplace does not encourage open and honest communication. What changes in our workplace would you suggest to promote more open and honest communication?”

Suggestions for improvement in “communication” included publication of leadership team meeting minutes, responding to email quickly, and have the dean put more information into the staff newsletter.

Suggestions for improvement in “salary” included increasing transparency through communication of budgetary decisions, explanations of merit allocations, and creation of non-monetary awards.
Recipe for Success:
Add a Personal SWOT Analysis to Any Assessment Project

A personal SWOT analysis (representing Strengths-Weaknesses-Opportunities-Threats) can bring clarity to the workplace, fostering an environment where work is purposeful and activities are properly directed. The simplicity of this self-assessment tool makes it easily adaptable for a variety of situations, goals, and intended purposes.

Faithe Ruiz, College of Central Florida, ruizf@cf.edu

NUTRITION INFORMATION
A personal SWOT analysis begins with identifying a goal or objective, followed by an honest appraisal of strengths and weaknesses and identification of opportunities and threats to success. The strengths and weaknesses sections require self-analysis, while the opportunities and threats sections involve looking to one’s environment or external conditions.

DIETARY STANDARDS

COOKING TIME
Length of analysis and assessment is determined by intended purpose and degree of formality

COOKING TECHNIQUE
If your purpose is to evaluate job performance or get goals in order for a project, a personal SWOT can be given to all participants for brainstorming alone or as group work (others’ insights can be helpful, particularly if the intended goal is to set up for a project or evaluate collaborative work). If your desired outcome is to determine job placement or promotion, a more formal process may be best.

INGREDIENTS
- Goal/objective
- SWOT analysis grid
- Honesty and openness
- A quiet, comfortable space
- Guiding questions (to taste)
- Assessment criteria, competencies, performance guidelines, or performance-based assessment techniques (to taste)

PREPARATION
1. Set an intended goal or objective for your assessment project. Broad or flexible goals can be employed when using a SWOT for a performance evaluation or for creating assessment standards. If criteria/competencies are in place, specific objectives may be applied to each section of the SWOT for a more detailed analysis.
2. Create a SWOT analysis grid: 4 boxes in a 2x2 table. Label each box with one of the following categories: Strengths, Weaknesses, Opportunities, and Threats.
3. Secure a quiet, comfortable space for participants, preferably free of distractions.
4. Introduce the SWOT, inform participants of your objective, and remind participants to remain open and honest in their self-assessment.
5. Create assessment criteria or performance guidelines (to taste). Apply criteria or guidelines to each section of the SWOT for a more detailed analysis.
6. Introduce guiding questions to help with brainstorming (to taste).

ASSESSMENT STEPS
Performing a Personal SWOT
With much of the groundwork complete, action is now in the hands of project participants.
1. For job performance evaluations or creating assessment criteria, ask each participant to complete a personal SWOT analysis.
2. For creating or evaluating a project, ask each participant to complete a personal SWOT analysis, individually or as a group.
A SWOT can be used at the start of a project to help guide a project, employed mid-project to track progress, and/or appear at the end to assess outcome.

**Assessing your SWOT findings**
How you use the results of a personal SWOT is determined by the intended purpose of the analysis and the degree of formality of the assessment project. An evaluation may take the form of a friendly dialogue between the SWOT administrator and participant(s). Findings might also be used to evaluate competencies or establish guidelines and may include performance-based evaluation techniques, such as the performance of skills-based tasks.

**ALLERGY WARNINGS**
If a participant is having trouble brainstorming their way through self-analysis, creative suggestions or questions may be used as a helpful prompt. Encouragement and level of guidance depend upon need and established goals.

**CHEF’S NOTE: EXAMPLES**
1. A library director asks librarians to complete a personal SWOT and evaluates based on competencies. The director is then able to offer feedback on meeting competencies and performance guidelines.
2. A project coordinator uses the information gleaned from personal SWOTs to evaluate group members, track progress, and change course.
3. A library intending to cross-train staff, improve performance, and create guidelines for training future employees uses personal SWOTs to better understand employee competencies and opportunities for growth.

**RESOURCES**
Sample SWOTs can be found at https://faitherruiz.wordpress.com.
Section 6.

Strategic Planning Assessment

103 Two Birds with One Stone: Using a Survey to Get Employee Feedback and to Educate in the Strategic Planning Process
   Regina Mays and Peter Fernandez

105 Strategic Stress Test: Aligning Programs and Services with a Strategic Plan
   Strategic Initiatives Department

107 Chicken Soup for Digital Scholarship: Assessing Your Next Steps
   A. Miller
Two Birds with One Stone:  
Using a Survey to Get Employee Feedback and to Educate in the Strategic Planning Process

Strategic planning benefits from engaging the entire organization, but staff are often unfamiliar with the process or confused by jargon. A well-designed survey can educate participants and get their input at the same time. Suggestions for encouraging participation and sharing results are included.

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NUTRITION INFORMATION
A good strategic plan can change the future of an organization. Engaged employees are the key ingredient in reaching your strategic goals. The following recipe is a good first course to help achieve this goal.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.1; Principle 7, Indicator 7.1

PREPARATION
Develop an understanding of what kind of information is needed and design the survey to help fill the gaps and/or engage staff in the process.

Ensure support from administration and key influencers in your organization, but keep in mind that everyone in the organization has something to contribute and wide-scale buy-in will be crucial in the implementation phase.

THE ASSESSMENT
Prepare your survey. A survey designed to gain feedback on your mission statement, values, and vision might include questions like the following:

- In strategic planning, the purpose of a mission statement is to state our core purpose or the fundamental reason we exist. How well does our current statement reflect your understanding of our mission or core purpose? (Likert scale answer.)
- In strategic planning, values define the guiding principles we will follow as we go about meeting our goals. Please choose the five words from those listed below that represent your understanding of our most important values. (Multiple choice from a list of choices you develop.)
- Things are changing rapidly, both in libraries and in higher education. In your view, what are the most important trends, events, and developments that will continue to impact libraries (and/or your job) in the future? (Open-ended text answer.)

Build the survey in the survey software of your choice. Many free and low-cost options exist, and your institution may offer survey software for use by staff. A paper survey is also an option but will increase the difficulty of analysis.
Section 6. Strategic Planning Assessment

Send an email invitation to your staff to take the survey. Monitor your response rate for one week.

To increase response rate, possible options include:

- Plan open drop-in sessions. Have laptops set up for staff to take the survey on the spot. Offer refreshments to increase turnout. Invite those who have already taken the survey to also drop in and enjoy the refreshments.
- Print postcards or paper flyers to remind and encourage staff to take the survey. Consider hand delivering them.

Close the survey and analyze the results. Open-ended questions will require some text analysis. Look for common themes, but also note unique suggestions/views. You can do this using text analysis software, but you can also use Excel to do basic text coding. In the meantime, release a preliminary summary of results as soon as possible. A more in-depth report and open meeting(s) can follow later when your analysis is complete. Closing the loop by reporting your findings is a key step in keeping employees engaged.

**ALLERGY WARNINGS**

Many stakeholders believe they are allergic to strategic planning due to past experiences with low-quality ingredients. Be prepared for negative and positive feedback and evaluate it all with a detached attitude.

A balance of multiple choice and open-ended questions is preferable. Keep in mind that open-ended questions take longer to analyze.

Text-analysis software can have a steep learning curve and can be expensive. It may not be worth it if you are not already familiar with it. Use Excel instead.

**CHEF’S NOTE**

This recipe is meant to serve as an appetizer for the main course: the implementation and assessment of your strategic plan. Both share many ingredients, including a commitment to transparency and the need for active participation from stakeholders.
Strategic Stress Test:  
Aligning Programs and Services with a Strategic Plan

Use this tool to help guide innovation and align library activities with strategic goals. It will also help refresh existing programs and services and provide decision levers to launch new initiatives or to discontinue present or legacy programs.

Strategic Initiatives Department, Free Library of Philadelphia, morans@freelibrary.org; (Nathaniel Eddy, Sara S. Moran, Autumn McClintock, and Joel A. Nichols)

NUTRITION INFORMATION
The stress test is a flexible tool that initiates conversations that lead to change.

It can be used as a platform for staffing changes, management decisions, or budget recommendations, and provides a way to assess and measure the effectiveness of our work that goes beyond mere data to more qualitative info.

The way forward almost always appears as the process unfolds. Program staff and stress test team collectively come to a conclusion about the disposition of the program.

DIETARY STANDARDS
Assessment of Performance Indicators across the entire ACRL Standards for Libraries in Higher Education (2011) can be addressed using stress testing

COOKING TIME
• Program narrative ahead of time, review at least 24 hours before
• Analysis conversation, 1.5–2 hours
• Recommendations narrative, served at least 48 hours after; reports on each analytical category and offers concluding recommendations

COOKING TECHNIQUE
Guided discussion; analysis narrative

INGREDIENTS
• Stress Test team (to facilitate and guide the conversation)
• Program narrative from relevant staff that describes current activities, features, budget, measurements, goals, successes, challenges, etc.
• Program staff team
• Conversation and discussion

THE ASSESSMENT
Discuss each of the following with staff responsible for program being stress tested:

Core
Alignment with strategic plan objectives: Is the program essential/critical to the work of the library? How does it advance the goals of the strategic plan?

Innovation: Does this broaden the library’s reach? Is it new, creative, or different? Or is there potential to streamline and revitalize a long-time library process?

Risk: Do factors exist that lend instability to the program or keep it from being successful? Internal and/or external? Who are the FLP’s competitors?

Market
Institutional fit: What type of support exists for the program, both on a staff and board level?

Impact on staff: Would this have an impact on day-to-day work? What level of effort does implementation take? Do we have or could we get sufficient staff to execute?

Audience priority: Is there an interest, need, or demand among the public? Might one exist in the future?

Capacity
Operational capacity: Does the library have, or can it acquire, the physical capability to carry out the program or service? Are the required materials accessible, available, and affordable?
Section 6. Strategic Planning Assessment

Technical feasibility: Does the library have the technological capability? If not, could it be obtained and maintained?

Financial feasibility: Are revenues available within the existing budget? If not, can we reallocate or identify new funding opportunities? Are expenses proportionate to output?

Execution
Time to implement: What is the time frame? Is there sufficient time for planning and execution? Will it still be relevant once we’re ready to execute?

Goals/measurements: How will success be measured? Have goals been defined? What, if any, measurements have been or will be used to track those goals?

Sustainability: Assuming the activity is a success, can it be maintained? Should it be? How frequently should its value be reviewed?

Recommendations: Any final thoughts?

Report
Stress Test team writes up the results of this analysis, offers recommendations, and shares them with the program staff, and then the entire staff.

ALLERGY WARNINGS
Assessment areas above overlap on purpose. It is okay to let ideas and responses come out of order, but be sure to use each of the Assessment section categories above to ensure that all steps are taken.

CHEF’S NOTES
For local flavor, substitute any library service, activity, policy, project, department process, or other workflow for any mention of “program” in the Assessment section.
Chicken Soup for Digital Scholarship:
Assessing Your Next Steps

This recipe provides the library an opportunity to gather knowledge on where the campus is at with regard to digital scholarship and open access issues through pre- and post-assessments. Preparation materials, assessment methods, and outcomes are suggested to further the introduction and promotion of digital scholarship resources on campus.

A. Miller, Middle Tennessee State University

NUTRITION INFORMATION
In order to determine what your institution knows about digital scholarship and open access (OA), this recipe suggests using assessment methods before and after a presentation to learn the audience's perception, value, and current use of digital scholarship resources.

The results of the anecdotal and electronic feedback deepen your understanding of your next steps for moving the library and campus forward with scholarship. Presenting to the departments across campus can strengthen the library’s relationship with those departments, foster a deeper understanding of what the library can do besides hold volumes of books, and gives the campus a chance to see how the library is helping to not only fill in gaps of knowledge on scholarship issues, but also to be a contact for such inquiries.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 2, Indicator 2.3; Principle 5, Indicator 5.3; Principle 7, Indicators 7.2, 7.7

COOKING TIME
Cooking time is 60 minutes. Serves a faculty department of 10–25. Additional rise time may be needed, depending on how long it takes to secure time at a faculty meeting.

Substitution possibilities include students, by placing more emphasis on the materials they produce such as theses, dissertations, and posters.

COOKING TECHNIQUE
Post-presentation survey as a summative assessment

INGREDIENTS
- Computer with internet access
- Presentation screen
- Institutional repository (IR)*
- Online survey tool (Google Forms, Survey Monkey)
- A list of audience names and emails
- Handouts (optional; alternatively such material could be emailed)

*If your institution does not have its own IR, you can use another university's as an example, including why your institution should get one.

PREPARATION
Permission. Ask for fifteen minutes at a standing faculty meeting in a specific department. Inform the department of your intentions, an introduction to the library resources, and a post-presentation electronic survey.

Online Survey and Presentation. Before presenting, use an online survey tool to create a list of questions to ask the faculty in a post-assessment. Find example journals the faculty publishes in and review the publisher’s posting policies for an IR. This will show specific journals that promote or hinder open access related to the faculty discipline.

Optional Preparation. Ask a faculty member to submit a published article to the IR as a presentation example.

THE ASSESSMENT
Just before your presentation
Before you begin the presentation, ask the audience the Pre-Introduction, Anecdotal Assessment questions and mentally make a note of their responses. These pre-introduction questions may include:
Section 6. Strategic Planning Assessment

- Are you familiar with OA resources?
- Have you heard of an IR?
- To your knowledge, does our university have an IR?
- Do you use OA resources?
- Do you use Google Scholar?

Present your topic
Introduce digital scholarship and OA on campus. Keep in mind the time frame you agreed upon.

After the presentation
Ask the faculty to help you assess the library resources on campus by filling out an electronic survey. Send an email with the survey link and a reminder of the one-week deadline. Write down the pre-introduction anecdotal responses to your initial questions to later compare with the electronic survey results.

ALLERGY WARNINGS
Response rates to the electronic survey may be low. Reminder emails to complete the survey may be necessary. You will see better participation and interest if you do your homework—research each group you present/survey and provide examples they can relate to. Anticipate department concerns.

CHEF’S NOTE
The most effective presenters include library directors, digital scholarship librarians, digital initiatives librarians, IR managers, outreach librarians/staff, or a combination of this mix.

Results from the assessment can include:
- Level of awareness on OA issues
- Level of use, as consumers and disseminators, of OA platforms
- Perception of the library’s role in scholarship across campus
- Evidence of which services would help faculty most (i.e., workshop on which issue: copyright, author rights, OA journals, etc.)

Knowing these answers will give the library an assessment of where to put effort for the initial and long-term steps toward addressing the scholarly communication of the campus.
## Section 7.

### Service Points and Services Assessment

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Service Desk Activity Burrito

This recipe is designed to use data pulled from various sources around the library to give a comprehensive picture of the activities at a service point for any given interval or period of time. The results can be used to make changes in staffing models, build staff competencies based upon the identification of a particular type of activity, or to highlight services that are either popular or irrelevant.

Heather Scalf, UT Arlington Libraries, scal@uta.edu; Ali Adil, UT Arlington, alimohammed.adil@uta.edu

INGREDIENTS
• Tableau software for visualization or Microsoft Excel
• Data, including but not limited to:
  » entries/visits to the library
  » circulation desk activity/item checkout
  » data for reference interactions, less than 20 minutes
  » data for reference consultations, more than 20 minutes

PREPARATION
Identify the desired data. Download or extract the data from the various systems that may house it. Save all the data as separate Excel worksheets in the same workbook and then clean the worksheets to ensure that all cells have data, including activity date and time, header rows and consistent labeling across worksheets.

THE ASSESSMENT
Evaluate the data formats for consistency of data type; i.e., date/time and number or text. Reformat each data ingredient as necessary.

Generate a new data structure for each worksheet as follows:

• Designate the first column of spreadsheet (A1) as date_reference, where included dates span the period of observation.
• Remainder of the columns as times of use—hourly, as in 01:00 to 00:00 or any bi-hourly format depending upon preference.

Open Tableau and connect to the Excel workbook. Drag each of the worksheets onto the “Drag sheet here” space. You can preview your data here.

Using the Tableau worksheet, generate data canvases for each data ingredient worksheet by pulling:
• date reference from under respective data ingredient onto columns shelf
• automatically generated measure values from under the Measures section (quantities of data ingredients) onto the rows shelf
• automatically generated measure values from under Dimensions section (attributes of data ingredients) onto the columns shelf.

Clean any extra measures that appear in the Measure Values shelf. For instance, if the canvas is meant for “circulation desk visits,”...
then remove all other items except those identified for said data ingredient. Repeat the above steps for each data ingredient using a new Tableau worksheet.

Generate the final dashboard by pulling all the Tableau worksheets onto a new Tableau dashboard. Adjust the size of the dashboard for best presentation.

**ALLERGY WARNINGS**
- Make sure to clean the Measure Values shelf in Tableau to reveal individual data patterns on your canvas.

**CHEF’S NOTE**
This recipe potentially reveals patterns of use for any service offered in the library.

All services to be studied require date/time attributes. An example of the product of this recipe can be viewed at [http://tabsoft.co/2gBnFU5](http://tabsoft.co/2gBnFU5).

The data can also be visualized in Excel using the Combine chart type for multiple datasets, including those with different scales, using the dual axis feature.
Who’s at Your Table?

Planning for Success through Community Engagement

This recipe will assist libraries of all types and sizes in planning and conducting community needs assessments with little or no budget under tight time constraints.

Stefanie Metko, Virginia Tech, smetko@vt.edu

NUTRITION INFORMATION

This recipe allows users to collect community data for use in strategic planning initiatives and in making data-driven changes to programs and services that will align with programmatic outcomes.

DIETARY STANDARDS

ACRL Standards for Libraries in Higher Education (2011) Principle 1; Principle 7; Principle 9

COOKING TIME

Plan to spend 2–4 weeks mapping out the project, with at least 2 hours per week for working with students. The entire project could range from 2–6 months, depending on library size.

COOKING TECHNIQUE

Small group, committee work, student mentoring, presentations, interviews, surveys

INGREDIENTS

• A laptop computer equipped with word processing software for generating reports, coding data, delivering presentations, taking notes at interviews, and storing data

• Subscription-based software for creating surveys, and for creating data visualizations

• Multiple interns for workload distribution

• Description of the project, including desired outcome measures and sample needs assessments conducted at peer institutions

PREPARATION

Draft a short description of the needs assessment and what you hope to accomplish with the results that includes a brief history of the library. Recruit interns to work on the project. Meet with the students’ advisor in advance to set expectations. Set up a meeting with the students to go over the project details. Make it clear that there are stages to this process and that before moving on from one stage to another, students must meet with you before proceeding. If your library is not close to a university, think about engaging students who are studying online. If students are receiving college credit, invite their faculty mentor to this meeting to ensure that everyone understands expectations.

ASSESSMENT STEPS

Define your community in terms of internal and external library stakeholders. Make a list of community officials that could represent each of those stakeholders. Brainstorm at least one representative per group to be interviewed. For example, if you have a large ESL population, consider interviewing someone at the local literacy center. Interviewing government officials is vital to understanding how your municipality views the library. Representatives from the mayor’s office or the superintendent for your school district are good examples. Creating the interview list is quite possibly the most crucial step toward ensuring that all populations within a community are represented, so choose carefully.

Create a framework for how the needs assessment will be carried out. The framework should include:

• A list of who will be involved in the in-house committee

• A list of important issues to be addressed (major themes are nice)

• A list of key stakeholders and library user and non-user populations

• A list of methods for collecting the data, how you will analyze the data and how the data will be stored
Describe in advance how the results will be reported. Ask the students to consider how different reports might work for different audiences.

**Allow the students to design** the study, including interview and survey design. Suggest that they collect demographic data through Census, Department of Education, and other government websites. School data can give insight into populations who may not be represented on the Census. Look to key city officials who may have access to GIS software and other public information for visualizing Census and school data by zip code or Census tract. Have them use the framework you created as a guide for doing the actual work. Before executing a data collection method, test the questions out on various members of the library staff (circulation, reference, technical services) to ensure that the questions are clear. Avoid focus groups unless students have been trained. Suggest that students divide the duties of collecting and analyzing the data, and that they work as a team to generate final reports and presentations.

**ALLERGY WARNINGS**
It is easy for students to feel overwhelmed, especially in the initial stages of doing something they have never done before. By scaffolding the project work, you will alleviate this concern and keep the students on track. Weekly or bi-weekly meetings are recommended.

---

**CHEF’S NOTES**
Consider applying for IRB approval if you would like to publish the results of your study. Even if you are working at a public library, the students should seek IRB approval.
Survey System for Measuring Library Outcomes

An after-visit survey to assess any number of outcomes, such as how the provided information was used, goals achieved based on library information, and time savings to the user.

Rebecca Bayrer, Dawn Melberg, and Eve Melton, Kaiser Permanente [kplibraries@kp.org]

NUTRITION INFORMATION
This recipe provides instructions for creating an after-visit survey to evaluate outcomes associated with any number of library services, the library’s value to its users, and contributions of the librarians to their parent organization.

One strength of this survey plan is that it waits for a period of time to pass between the library visit and the survey request (generally two or more weeks), thereby ensuring the patron has had a chance to use the materials provided and evaluate the impact of the information offered.

DIETARY STANDARDS
Assessment of Performance Indicators across the entire ACRL Standards for Libraries in Higher Education can be addressed, depending on available data.

COOKING TECHNIQUE
Requires knowledge of organization’s goals and an understanding of patrons’ activities inside and outside the library. Develop survey questions that relate library activities to the fulfillment of organizational goals. Develop a systematic method for sending survey email and reviewing survey responses. Analyze and disseminate survey results.

INGREDIENTS
- Online survey tool
- System for logging search requests
- Email program

PREPARATION
The key to this recipe is developing the “secret sauce” for your library, which involves making sure your survey questions are aligned with your stakeholder’s goals, mission, and values. The more time you spend on this step, the more relevant your survey results will be. Potential sources of information include stakeholder or leadership messages, strategic plans, mission statements, and annual reports. Other sources to look at include community assessments, focus groups, and other items as determined by your library setting. Try to match specific library activities—and how patrons utilize your resources—with outcomes valued by your organization. The more closely you can align your desired library outcomes with institutional and stakeholder goals, the more effective your recipe will be.

ASSESSMENT STEPS
1. Develop survey questions that relate library activities to the fulfillment of stakeholder goals, as established above. Ideally, this survey will be short and should apply to a specific interaction.
2. Create an electronic version of the survey.
3. Develop (or adapt) a system for tracking patron requests. Make sure your system captures patron question, date asked, and patron email.
4. Decide on survey frequency. Bi-weekly, monthly, quarterly, etc. Space the survey request close enough to the interaction that the patron can comment specifically on that transaction, but distant enough that the patron can evaluate any outcomes associated with the information.
5. At pre-selected intervals, review recent patron requests and send emails to patrons with the link to your survey instrument. Develop an email template, which will be sent according to one of the following schemes:
Section 7. Service Points and Services Assessment

a. Individual email, including details of requester’s search as a reminder
b. Bulk email to all participants with a general reminder that a request was submitted recently

6. Periodically review and analyze the responses to the survey.
7. Create reports, infographics, marketing materials, etc. to demonstrate your impact!

ALLERGY WARNINGS
This survey tool can result in survey fatigue, both on the part of frequent library patrons and librarians responsible for sending the email.

Occasional review and alteration of the survey questions can address these issues. It is also important to note that your results will likely be affected by a selection bias as only patrons with strong opinions will complete the survey.

CHEF’S NOTE
We have had great success with survey tools created using this recipe. Key stakeholders now have a better understanding of our library’s role and value within the organization. In addition to measuring library outcomes, this recipe can be adapted to address questions of service recovery, development of new services, and areas for staff training. An “other comments” box at the end of the survey has also generated opportunities for individual staff recognition and general library praise.

Developing the “secret sauce” and survey through a collaborative effort helps strengthen individual librarian’s connection to the mission and revitalize commitment to library and organizational goals.
The Breakfast of Student Champions

Use this recipe to gain an understanding of the library patron population and the impact of library use on student success outcomes.

Katy Mathuews, Ohio University, mathuews@ohio.edu

NUTRITION INFORMATION
Understanding the impact of library use on student success is increasingly important in an outcomes-focused assessment environment. Using the student ID number as the common variable, this recipe combines library checkout data with institutional data fields such as class status, GPA, expected family contribution, and other factors of interest. This analysis helps the library gain a better understanding of the library user and non-user population and the possible impact of library use on student graduation rates.

This recipe focuses on circulation data because it is most readily accessible. However, any variable that can be mapped to student ID number can be included.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicators 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7; Principle 7, Indicators 7.6, 7.7, 7.8; Principle 9; Indicator 9.2

COOKING TECHNIQUE
Data analysis software such as Microsoft Access, Microsoft Excel, or Tableau

INGREDIENTS
- Library patron circulation data
- Student institutional data
- Data analysis software

PREPARATION
Collaboration is essential to successful outcomes-based assessment. Be sure to maintain a good working relationship with your in-house library assessment specialist, your university information systems staff, and institutional research analysts, who are often eager to partner on assessment projects.

ASSESSMENT STEPS
Export patron circulation data from your integrated library system, including ID number, the total number of checkouts, and any other non-identifying information that is of interest.

Using the ID number as the common variable, collaborate with your institutional research office to blend patron circulation data with institutional data that relates to student success factors. Examples of variables that are related to student success are GPA, individual course grades, ACT scores, first-generation status, expected family contribution from the FAFSA, and graduation status, among others.

The data can be used to gain an understanding of the library user population. Sort the blended data by any of the variables to find out how many students use the library, as indicated by checkout data. For example, sort out all the first-generation students and calculate the percentage of those students who have checked something out from the library. This information can be used to gain an understanding of the needs of the library user population, how to promote library resources, and to compare to overall institutional numbers to gain perspective.

To emulate IPEDS-defined graduation rates, capture a group of first-time, full-time, bachelor degree-seeking undergraduate students from the summer and fall term of an academic year at least six years in the past. Typically, institutional research offices already have this cohort determined for each entering class each academic year. Separate the cohort into library user and non-user...
groups based on the circulation data. Using graduation status information, determine the percentage of students who have graduated within six years of their first semester for the library user and non-user group. This information is invaluable when aligning with institutional goals and objectives targeted toward accreditation and improving student success. For example, library administrators can use this information in meetings with the provost or university president to demonstrate the contributions the library makes toward student success. The institution can use this information when reporting to state government funding agencies or accreditors to demonstrate how the library is a valued campus partner in achieving institutional goals.

**ALLERGY WARNINGS**
Correlation does not equal causation; however, it can be helpful to understand the habits of successful students and the library use behaviors of various subsets of the student population.

**CHEF’S NOTE**
It is important to develop the most thorough definition of library use possible. For example, attendance in library instruction sessions, workshops, or outreach events can be obtained easily. More challenging to obtain indicators of use are computer station logins or EZProxy authentications. Talk with your partners across campus to explore what is possible at your institution.

**REFERENCES**
If We Prepare It, Will They Come Back for More?

Best practices for assessing a workshop series from start to finish, with an emphasis on ensuring the workshops are providing what your users need or want.

Adriana Gonzalez, Kansas State University, ajgonzalez@ksu.edu; Jason B Reed, Kansas State University, jbreed@ksu.edu

**NUTRITION INFORMATION**
The assessment project focused on a graduate workshop series, The Library and Your Research, created at Kansas State University that resulted from an expressed need by the graduate student leadership. The workshop series is entering its third year and has been a collaborative effort with various librarians and other campus professionals. Feedback has been collected at each workshop. Importantly, reaching as many students as possible was critical; therefore, the main focus of the assessment has been on marketing. Initially, marketing was done almost exclusively using the graduate student listserv. The result of that proved to have little influence on student attendance. Feedback has been used to include more effective marketing approaches, and attendance has increased as a result. Additionally, the workshop series is now being offered to distance education students. The topics of the workshops and the instructor style has not changed; however, additional content has been added as a result of the feedback.

**COOKING TIME**
- 1-hour brainstorming session with workshop instructors
- 1 hour to prepare the schedule
- 1–2 hours to build an assessment instrument (depending on whether you are building from scratch or modifying existing instruments)
- 10 minutes for each workshop to update instruments and to print physical surveys or get link for digital ones
- 5–10 minutes to distribute instructions on filling out pre/post assessment forms, and collection

**COOKING TECHNIQUE**
Surveys, interviews

**INGREDIENTS**
- Online survey tool
- Pens, printed out surveys
- Attendees
- Open-mindedness
- Workshop, presenter, space

**PREPARATION**
Determine your audience, determine what you want to learn, craft questions to answer that objective, solicit independent reviewer to determine if questions will get you the information you want, revise as needed.

Develop recipe to be used by librarians in public services, assessment, learning, and outreach.

Print surveys for in-person and electronic surveys for virtual users.

**THE ASSESSMENT**

**Identify the target audience**
- Know who you are trying to reach and how to reach them.
- Schedule content to meet your targeted audience’s needs according to what stage they are in their studies, i.e., mission-critical workshops first.

**Craft your workshop**
- Find a niche: What information does your audience need that is not provided elsewhere?
- Solicit input from target audience on what content is mission-critical.
- Recruit instructors with subject expertise.
- Determine format of the workshop, i.e., in-person, online, combination.
- Identify best day, time, and location to offer workshop.

**Market workshop**
- Identify all appropriate avenues for

**DIETARY STANDARDS**
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.5; Principle 6, Indicator 6.7; Principle 9, Indicators 9.1, 9.3
reaching targeted audience, i.e., email lists, website, newsletters, calendars.
• Create an identifiable “brand” and own your time slot, i.e., set same time, day, and location, give consistent title, such as “The Library and Your Research.”
• Promote early and often.

**Craft assessment instrument**
• Determine what you want to learn. Craft research questions about the effectiveness of your marketing and audience expectations. Did we meet them? Will participants return and/or recommend to others?
• Identify appropriate tools for survey creation.

**Assess each workshop**
• Deliver assessment instrument.
• Online: share survey link immediately after the workshop.
• Repeat assessment process at each workshop series.

**Post series review**
• Meet with all the instructors and go over the feedback for each session.
• Discuss why classes were or were not well received/attended.
• Be open to changes, i.e., titling, content, marketing strategy, format.
• Identify potential new workshops, and/or new partnerships.
• Implement changes in preparation for new series.

**CHEFS’ NOTES**
Print double-sided surveys with pre-assessment and post-assessment. This allows you to compare answers, while maintaining confidentiality and reducing recall bias.

Listen to your users. Remember, they can’t want what they don’t know exists.

Build collaborations by recruiting existing instructors to join your workshop series.

Test new technology prior to workshop.

Use relevant language your audience will understand, i.e., author’s rights versus copyright.
Methods Mash

Reliable, actionable assessment data can come from methods that are straightforward and simple to plan and execute. Determine the question you want to answer, then choose the best method for the job.

Jennifer Jones, Georgia State University Library, jlink@gsu.edu

NUTRITION INFORMATION
In addition to multi-layered studies vetted by the institutional review board, reliable, actionable assessment results can come from methods that are straightforward and simple to plan and execute.

DIETARY STANDARDS
Assessment of Performance Indicators across the entire ACRL Standards for Libraries in Higher Education (2011) can be addressed, depending on available data.

ASSOCIATION OF COLLEGE AND UNIVERSITY LIBRARIES

COOKING TIME
As little as one business day

COOKING TECHNIQUE
Varies depending on method

INGREDIENTS
The methods outlined here are low-investment and rely on just a few ingredients each. The essential ingredient among all of the methods is the willingness of the chef to engage with library users.

PREPARATION
1. Determine the question that you want to answer or the problem that you want to solve.

2. Determine the information you need to answer your question.

3. Choose an assessment method that will gather the needed information, such as one of these:
   - Guerrilla survey
   - One-question whiteboard
   - Walk-through with new eyes
   - Paper preference tests

ASSESSMENT STEPS
Once you’ve prepared, the assessment steps depend on your chosen method.

Guerrilla Survey
- Create a survey using an online tool, such as Qualtrics or Polldaddy.
- Access the survey on a tablet computer or other mobile device.
- Approach library visitors and ask if they’re willing to complete a survey.
- Present them with the survey on the mobile device and repeat until you have the number of responses needed to inform your question.

Note: This method works best for very brief (five questions or fewer) surveys with few to zero open-ended questions.

One-Question Whiteboard
- Write a question across the top of a portable whiteboard or flipchart pad on an easel.
- Position the whiteboard in a high-traffic area of the library.
- Provide markers for people to use to respond to the question.
- Check on the whiteboard periodically throughout the day(s) to take photos of or otherwise record responses. Ensure there is space remaining for additional feedback.

Walk-Through with New Eyes
- Designate a library space for a thorough walk-through.
- Market to library users that you want their feedback on that particular space. Ask them to walk through and evaluate the space as if they had never visited before. This is a great ongoing activity for your student library advisory group.
- Provide prompts for volunteers to respond to, such as: “What are three specific things about this space that you’d like to see changed?”
- Encourage volunteers to include photos with their feedback.
**Paper Preference Tests**

- Print on paper in full color different designs on which you would like to collect feedback. These might be website layouts, logos for a new service, or color combinations for a space redesign.
- Approach people in the library and ask if they’re willing to help with a library decision. Alternatively, set up a table in a high-traffic area to solicit volunteers.
- Show them the paper printouts and ask which option they prefer. Also ask them to explain their preferences, and record this information to go along with the tallies.

**ALLERGY WARNINGS**

Library employees might be skeptical of results that stem from a quick assessment. It’s true that the methods outlined here are not scientific studies. Assure employees that some feedback is better than no feedback. Results of casual studies can be relied on to make minor changes and/or to inform the background of a more in-depth study.

Additionally, remind employees that soliciting feedback from users is great PR and shows that the library wants to have conversations with users about meeting their needs.

**CHEF’S NOTE**

The final steps for all these methods are to compile your results, analyze them, and then use them to inform your library’s services, resources, and policies. Having the ability to make decisions based on user feedback is about as gratifying as a slab of double-chocolate ganache cake—but without the regret.
Service Assessment with a Side of Secret Shoppers

There’s no better way to assess an aspect of your library’s service than with users interacting with employees. Libraries can rely on the secret shopper method to determine deficiencies in core services.

Jennifer Jones, Georgia State University Library, jlink@gsu.edu

NUTRITION INFORMATION
Secret shopping isn't just for the retail sector. There’s no better way to assess an aspect of your library's service than with users interacting with employees. Using the secret shopper method, a library can determine deficiencies in core services it provides, such as face-to-face reference, virtual reference, customer service, and technical support.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Principle 2, Indicator 2.5; Principle 4, Indicator 4.6; Principle 7, Indicators 7.6, 7.7, 7.8; Principle 8; Indicators 8.2, 8.5

COOKING TIME
Three months to prepare; two to three weeks to complete the secret shopping; three weeks to compile and report on results

COOKING TECHNIQUE
Secret shopper method

INGREDIENTS
- A small team comprised of representatives from service area(s) that will be shopped
- A team leader
- Volunteer shoppers
- Scripts for shoppers
- An evaluation tool for shoppers
- A scheduling system

PREPARATION
Secret shopping requires a good deal of mise en place.

1. Determine what aspect of service you want to evaluate: customer service, virtual reference skills, etc. Choose an aspect of service that has standards or policies in place, so that you can assess against the established policies.
2. Determine what you want to discover—the question you want to answer—using the secret shopping method; for example, are employees referring patrons to other departments when the library has a “no unnecessary referrals” policy?
3. Form the planning team that includes representatives who work in or supervise the points that will be shopped.
4. Design the scripts that shoppers will use. They should reflect typical interactions for the service point and have a final answer that is not too ambiguous. They should not be overly difficult or require specialized knowledge.
5. Design the evaluation tool that shoppers will use to rate the interaction. Base your evaluation tool on established standards or policies. Require written comments for every evaluation item.
6. Recruit secret shoppers. They should have some library experience but are not necessarily experts. They must be comfortable engaging in a scripted interaction.
7. Announce the secret shopping project to employees. Communicate the general timeline, service point(s) to be shopped, service(s) to be evaluated, and evaluation criteria. Provide the evaluation tool if you wish, but do not provide the scripts.
8. Train secret shoppers to ensure that they understand the assigned scripts and evaluation tool. If your goal is to collect some actionable data, then the training will be an overview of the process, expectations, and evaluation tool. For a scientific study, you will train your volunteers for interrater reliability to ensure that they provide qualitative ratings with a certain level of agreement.
9. Schedule shoppers to visit on different days at different times.

THE ASSESSMENT
The actual secret shopping visits go quickly after preparation.
1. Check in with shoppers periodically.
2. Once a shopper is finished, meet with him/her one-on-one to review results and make sure you understand all the feedback.
3. Communicate results to library stakeholders in aggregate. Host an open session(s) to interpret and discuss results. For example, are employees skipping some defined points of a virtual reference transaction? If so, why? Is this an employee training issue? Work with supervisors to identify next steps based on outcomes.

ALLERGY WARNINGS
Without appropriate communication, secret shopping can make library employees quite anxious. Clearly communicate the general plan to employees early in the process, and assure them that individual employees will not be singled out on account of lackluster performance.

The goal of secret shopping should be to identify service deficiency trends that might inform professional development, new policies, and/or changes to internal practices.

CHEF'S NOTE
This recipe is best prepared by thoroughly engaged volunteers. Consider members of your student library advisory group, undergraduate honors college students, graduate students with an interest in market research, and/or graduate students enrolled in a library/information science program.
Healthy Chat Reference Assessment with a Side of Zesty Infographs

This recipe will give you the techniques and tools you need to produce a readable report to share with your library colleagues.

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NUTRITION INFORMATION
This recipe was developed as a plan to produce an easy-to-understand report that informs reference librarians of any shortcomings of chat service and of the common types of chat questions received. This assessment plan opens the opportunity to touch base regularly with tips for better service.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.5, Principle 2, Indicator 2.5; Principle 3, Indicator 3.4; Principle 4, Indicator 4.6

RUSA Guidelines for Behavioral Performance of Reference and Information Service Providers Standards 1.3, 2.3, 3.2, 4.3, 5.3

RUSA’s Guidelines for Implementing and Maintaining Virtual Reference Services Standards 3.7, 5.6

COOKING TECHNIQUE
Use a tally system in pre-designated categories. Use the report spreadsheet to find wait time averages.

INGREDIENTS
- Chat transcripts
- Tally sheet
- Any other data that may be interesting to you and your colleagues

PREPARATION
You’ll want to set aside a decent block of time for this project. Good communication is also key; be sure that the librarians using chat are aware that quality assurance assessment is taking place and that it is geared toward improving the service for students.

THE ASSESSMENT
Read each chat and identify what type of question it is. Use a tally sheet [figure 1] to keep track. Some options for categories include:
- “Real” reference: Any question regarding real research, anything where the librarian had to look something up. Questions regarding citations, database choice, etc. E.g. “What are the best databases for nursing research?”
- General library or campus questions: Any question about the library or campus, in general. Perhaps less skill required in answering these types of questions. Examples include policies (such as Interlibrary Loan or Borrowing privileges), room reservations, library hours, etc., e.g., “Does the library have scientific calculators that students can borrow?”

NUTRITION INFORMATION
This recipe was developed as a plan to produce an easy-to-understand report that informs reference librarians of any shortcomings of chat service and of the common types of chat questions received. This assessment plan opens the opportunity to touch base regularly with tips for better service.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.5, Principle 2, Indicator 2.5; Principle 3, Indicator 3.4; Principle 4, Indicator 4.6

RUSA Guidelines for Behavioral Performance of Reference and Information Service Providers Standards 1.3, 2.3, 3.2, 4.3, 5.3

RUSA’s Guidelines for Implementing and Maintaining Virtual Reference Services Standards 3.7, 5.6

COOKING TIME
Recommended review of chats is twice per semester: once in the middle and once at the end. Combine data and create a report once per semester. More time is needed to create an infographic.

FIGURE 1. TALLY SHEET
Section 7. Service Points and Services Assessment

- Internal communication: Chats between staff members
- Tests/training: Test chats to make sure the service is running properly.
- Missed: Any chat where the librarian did not respond

Additional tracking that may be interesting for your librarians. Questions that fall in these areas should also be tracked above:
- Successful transfers: Anytime one service desk successfully transferred a chat to another service desk
- Citation management software questions

Generate a report from your chat service vendor for the date range you are looking at. Recommended data points:
- Wait time: How long the patron waited for a response from the librarian
- Duration: How long the conversation lasted

Use spreadsheet average function to find average wait times and durations.

Create a fun infographic [figure 2] to present the data to your colleagues. There are free infographic creators online that may be useful for learning data visualization.
- Break down data into interesting graphs and charts
- Include comparative data from previous semesters to give perspective

ALLERGY WARNINGS
This assessment is time-consuming. It may take several hours to read and tally, and more time to create the infographic. Doing a mid-semester assessment is very useful for breaking up the amount of transcripts to read and for identifying any issues that the service might be having.

CHEF’S NOTE
At our library, we are seeing a lot of questions coming in virtually. I think assessing our chat service is vitally important to providing quality service to our patrons. When this assessment was first conducted, we identified a number of shortcomings to our service. The report from that initial survey was the data we used to justify big software platform changes and mandatory staff “brush-up” trainings. We now are missing fewer chats, have shorter wait times, and a more consistent method for conducting chats. We also have a firmly established and accepted plan for quality assurance moving forward.

FIGURE 2. INFOGRAPH
Reference Referral Training Stew:
*The Perfect Assessment Mix*

Having trouble coming up with a recipe that ensures reference student assistants can identify when to involve a librarian in answering a question? This recipe describes a training program for student assistants (SAs) that provide front-line reference assistance for in-person transactions. This stew uses the READ Scale to ensure SAs accurately rate the level of difficulty of questions and will involve a librarian when needed.

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**NUTRITION INFORMATION**

This dish should please the palette and assuage concerns that SAs may answer questions that should be referred to librarians, and is part of a training program of multiple “dishes.”

This “meal” includes a checklist that introduces the students to different tasks, several group training sessions, and one-on-one librarian-assistant mentorships.

The checklist and two training sessions include instruction on a modified version of the Reference Effort Assessment Data (READ) Scale, developed by Gerlich and Berard, that was designed to measure “the skills, knowledge, techniques, and tools” required in reference transactions. This Superior Reference Referral Training Stew assesses how well the training program addresses SA skills in identifying higher READ Scale transactions, and recognizing that these should be handled by a librarian.

**DIETARY STANDARDS**


**INGREDIENTS**

- LibAnswers (substitutions can be made with other reference transaction databases)
- READ Scale cheat sheets, with example transactions for each level on the scale

**PREPARATION**

- Prepare Active-Learning Matching Game: Slips of paper with different reference transactions that share the same READ Scale rating.
- Develop a post-training quiz.

**COOKING TIME**

4 hours. The recipe can be adjusted to serve different numbers of students.

**COOKING TECHNIQUE**

- Solo class preparation and in-class training sessions
- Assessment of student work

**THE ASSESSMENT**

- Begin with a dash of introduction of the READ Scale in the checklist when students begin employment.
- Test student assistants for reference ripeness by assessing their transactions in LibAnswers for accurate READ Scale scores and referrals. Evaluate a minimum sample size of ten questions from each student assistant for full flavor.
- Prep a colorful, easy-to-understand array of READ Scale cheat sheets for training and seasoning.
- Introduce READ Scale cheat sheet to a bundle of students. Stir in a group discussion of different degrees of spices. Students can always “eat” green questions, use caution with yellow, and can only proceed with red if previously “tested.”
- Let simmer.
- Gather students for a second training session. Give teams of student-assistants two sample transactions from the Active-Learning Matching Game, one with a value of READ Scale 1 or 2, and the other of READ Scale 3 or 4. Instruct them to determine the READ Scale.
rating for each of their slips, then consult with the other teams to locate slips of matching READ Scale ratings.

- Discuss and let simmer.
- In a separate bowl, create a post-training quiz requiring students to rate transactions according to the READ Scale and indicate if the question should be referred.
- Sample quiz results and discuss individually with students to adjust the seasoning.
- Ensure optimal flavoring by assessing ten post-training LibAnswers transactions of each SA for accurate READ Scale scores and referrals. If needed, adjust seasoning with one-on-one discussions.
- Ladle the dish liberally over the reference desk schedule, and taste the rewards!

**ALLERGY WARNINGS**
Be prepared that students may interpret terminology and questions differently than librarians.

**CHEF’S NOTE**
The chefs were favorably impressed with the amount of knowledge SAs had picked up, and the great questions they asked throughout the cooking process. After tasting the final product and seeing all the assessment results, the entire reference services department felt much more comfortable leaving SAs alone at the desk. With the proper seasoning, the SAs have proved to be very reliable in bringing the librarian on backup into a reference question when it is warranted.

**REFERENCES**
Deconstructing Reference Statistics

Is your library still using a paper form and tick marks to track reference statistics? This is a simple but extendable reference statistics recipe that serves all types of libraries.

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NUTRITION INFORMATION
“Reference Statistics” is a classic. We librarians cook up (pun intended) the “Total Number of Reference Transactions” every year for internal annual reports and for other data-collecting agencies. This recipe shows how to create a web form that allows librarians to record information about each reference transaction in real-time. We will break down the key elements of a web-based reference transaction form and how the elements influence the ways we compile and analyze reference statistics.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.5; Principle 7, Indicator 7.7; Principle 9, Indicator 9.3

ANSI/NISO Z39.7-2013: 7.3 Information Requests


ARL Statistics Survey and ACRL Academic Library Trends and Statistics Survey: Number of Reference Transactions

Public Libraries Survey (PLS): Reference Transactions

COOKING TIME
30 to 60 minutes for creating a reference transaction web form

However, it only takes seconds to track a reference transaction using the form. Serves unlimited reference transactions.

COOKING TECHNIQUE
Web form and compile statistics using online systems or desktop spreadsheet software

MAIN INGREDIENTS
- Existing paper form for tracking reference transactions
- Computers and Internet connection
- A computerized system for gathering and analyzing reference transactions

PREPARATION
Identify a clear purpose for collecting reference statistics. What will you use the data for?

Select and acquire an online system that allows you to create a web form for recording reference transactions and has the functionality to generate statistics based on the recorded data. Selecting a system that can help you achieve your goal and is easy for you to manage is the key. Remember to research what systems are already available at your institution.

Develop questions, response types (e.g., single choice, multiple choice, or open-ended text), and how the questions will appear on the web (e.g., in the form of radio buttons, checkboxes, dropdown menus).

The base reference transaction web form is really simple and has two must-have questions: Date/Time (timestamp) and Question Type (directional, reference, etc.). To add more “flavors” to the form and really get some data relevant to your own library or community, considering adding these questions: Patron Type, Mode of Communication (In Person, Virtual/Chat, Phone, Email, Social Media, etc.), Time Spent (duration of a transaction), Subject, and Description (additional notes). Record the level of difficulty or the expertise needed to answer a reference question. The READ (Reference Effort Assessment Data) Scale is a good standard.

Test the form and the system, train library staff, and get the administration to approve and support it—and it is ready to go.
ASSESSMENT STEPS
After each reference transaction occurs, record it using the web form. It is that easy. Next, you can compile statistics using the online system. A good system should allow you create reports or charts like “Total Transaction by Year/Month/Week” in seconds. It should also allow you to download raw data, with which you can then use desktop software (e.g., Excel, SPSS, etc.) to conduct advance data analysis.

Most important, think creatively about what you can do with recorded reference transactions. For example, how to assess library impact on student learning. One way to show it is to count the total number of transactions that were recorded with “student” as the Patron Type. Or, is it possible that transactions associated with certain Question Type most often occur during a certain time? We can assess that by conducting a cross tabulation with Date & Time and Question Type, and use that information to inform staffing.

ALLERGY WARNINGS
Get buy-in from the staff and the administration BEFORE you implement the form. This is one of those assessments that depend on the frontline staff who use it every day.

Test repeatedly both the web form and the reports/data. Make sure the form is recording the data you need for your reports.

CHEF’S NOTE
Be mindful about “reporting periods” for internal and external data-collecting agencies. For example, the Association of Research Libraries (ARL) and the Association of College & Research Libraries (ACRL) request libraries to report statistics by fiscal year (twelve-month period ending on June 30 of that year). In this case, it is best if the new reference transaction form is ready to go live on July 1; that way, all reference transactions for the same reporting period are recorded in the same system.

Once the web form goes live, don’t be afraid to change up the “flavors” based on your needs as long as the “base” remains the same.
The Secret Ingredient:  
*Mystery Shopping Your Service Points*  
Evaluate current service, determine training needs, and/or assess whether training is effective.

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**NUTRITION INFORMATION**  
Do you want an inclusive process that informs library staff about customer service satisfaction at your service points? In mystery shopping exercises, trained outsiders pose as library users and approach a service point (such as a front desk or reference desk) requesting assistance and then assess the service they were given based on criteria developed by staff. This can be used as a snapshot to evaluate current service, and/or to start a cyclical training program.

**DIETARY STANDARDS**  

**COOKING TIME**  
2 months to prepare customer service guidelines and recruit and train shoppers; 2 weeks to run the mystery shopping

**COOKING TECHNIQUES**  
Secret shopper

**INGREDIENTS**  
- Service points to be assessed  
- Library buy-in  
- People who staff and supervise the points  
- Mystery shoppers  
- Online form for the shopping study  
- Library staff to assess results and make recommendations

**PREPARATION**  
For best results, get consensus and buy-in from all stakeholders: administrators, supervisors, and especially the people staffing the desk. If the desk staff members sense the assessment as a punitive measure or tantamount to spying, the results will be spoiled. To keep staff from boiling over, administrators and supervisors should be as transparent as possible about who the results will be shared with and if individual staff will be identified, how the results will be used, and how the library and its staff will benefit. Next, collaborate with the desk staff to identify ideal, measurable behaviors that could be observed by shoppers. RUSA’s “Guidelines for behavioral performance of reference and information service providers” is a great model.

You will also need to recruit and train mystery shoppers. We have used students who received class credit or extra credit from library-friendly professors for participating, and students who belonged to the library’s student advisory board.

**THE ASSESSMENT**  
After the staff members have agreed upon model behaviors, identify which ones you want to measure.

*Create a rubric*  
Describe unacceptable, acceptable, and optimal conditions for each behavior.

*Create the questions*  
Avoid closed questions which can be answered with “yes,” “no,” or “follow that sign,” as you want questions which will elicit enough interaction for the shopper to complete the mystery shopping rubric. You also don’t want a question that is overly broad or complicated. A successful question we have used: “Can you help me find scholarly articles about the portrayal of women in music videos?”

*Train your shoppers*  
Make the exercise’s goals clear, and role play how to approach the desk, interact with the staff member, and complete the assessment. (We’ve had good luck with online forms.)
**Schedule the assessment**

Two weeks is a good rule of thumb. You can assign each shopper to a particular staff member and share his/her desk schedule or assign the shopper to a particular time slot (Monday, 2–3 p.m.). You’ll need to coordinate with the shoppers’ schedules and confirm that the same staff member is not being repeatedly shopped.

**Plating the Results**

Unless you have a compelling reason, it is best to aggregate results. This reduces the stress on those who are shopped and makes for a better learning experience. Remove all identifying information from comments and share the data with all your stakeholders. Have a discussion with the service point staff: What are they doing well? Where are areas of improvement? Were the guidelines you created realistic or do they need to be tweaked? What’s the next step?

**ALLERGY WARNING**

Mystery shopping should be used for formative, not summative, assessments and never to “catch” people.

Make efforts to shop as many different employees as possible at the desk so that no one feels targeted.

Be sure to frame this as an opportunity to celebrate the confirmation of quality service as well as to improve overall service.
The Missing Piece:
Assessing Implementation Fidelity

A chef can only prepare a fine meal if she or he has the best possible ingredients. The same is true for assessing the quality of library services: in order to understand the outcomes of a particular service, one must understand the extent to which the service was implemented as planned. This recipe explains what implementation fidelity is and how to evaluate it.

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NUTRITION INFORMATION
While libraries are increasingly places of change and innovation, many of these changes are not assessed for their effectiveness or for the extent to which they were implemented as planned. While patron feedback is extremely important, it will not indicate whether the library’s implementation of that new service or program is consistent with what was originally envisioned.

Implementation fidelity is “the degree to which an intervention or program is delivered as intended” (Carroll, et al. 2007, 40). Libraries should consider assessing the implementation fidelity of programs and services to avoid abandoning innovations whose theories are sound and have failed only in execution.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.5; Principle 7, Indicator 7.8
American Evaluation Association’s Program Evaluation Standards

COOKING TECHNIQUE
Observations, surveys, interviews, or focus groups

INGREDIENTS
Any documentation created during the target program/service’s proposal and creation
This could include models, charts, procedure manuals, and staff memos.

PREPARATION
Documentation
Compile documentation created during the program or service’s proposal and creation. If such documentation does not exist—because the program grew organically, for example—take the opportunity to draft such documentation now. It is especially important to include information on the goals of the service and guidelines or procedures for how it ought to work in practice.

Questions
Determine the questions to be answered. Questions should be specific: “To what extent do staff and librarians accurately record statistics of answered questions?” for example, rather than “Does the new service model work the way as planned?” The more general the question, the more difficult to elicit meaningful responses.

Data collection method(s)
How will you gather information on whether or not the service was implemented as intended? Qualitative methods, such as interviews and focus groups, can be helpful for discovering and exploring unexpected issues due to their flexible structure, while quantitative methods are valuable for answering specific, targeted questions.

THE ASSESSMENT
Administer the evaluation(s)
Analyze the data to identify mismatches between theory and implementation. Consider potential solutions to identified problems.

Share evaluation findings
Report out to library administration and all librarians/staff who play a role in the service/program’s provision. Such open communication will ensure that feedback has been correctly interpreted, and it can be helpful for staff involved in different aspects of a program to understand each other’s roles.
Implement solutions as feasible
Expect to identify issues which indicate that your new service or program differs from the original plan in multiple respects. Prepare a plan of action for addressing inconsistencies and implementing solutions that bring the service or program closer in line with the original vision.

ALLERGY WARNINGS
It may be advisable to adjust the scale of the evaluation depending on the target program/service's own scale and the importance placed on it by library administration.

Ensuring confidentiality and/or anonymity of staff feedback is essential to elicit the most honest responses.

CHEF’S NOTE
This model is broadly applicable as libraries of all kinds implement new programs and services and subsequently overhaul or abandon them based upon their perceived failure when the program could have been suffering from implementation problems.

Regularly conducting evaluations of implementation fidelity and correcting any identified problems could result in staff feeling increased buy-in and ownership of future changes.

REFERENCES
Patron for a Day (PFAD):
A Space Assessment

A basic premise of User Experience (UX) is to empathize with your users. This assessment exercise encourages your staff to understand what users experience in your spaces and, as a bonus, identifies some immediate space usability issues as well.

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NUTRITION INFORMATION
Technically speaking, PFAD is a collection of different tests taken by staff volunteers at various locations. Practically speaking, it is an opportunity for staff to empathize with users by performing a series of tasks users regularly perform in a library’s physical spaces.

This series of tests, which was designed to promote empathy, had the unintended benefit of challenging the usability of our physical spaces. Some tasks required interaction with technology, such as scanners and computers, while others just required interaction with the physical space and collections. Some tasks were easy (“find the restroom”); others were harder (“scan pages from book X and send to your email”).

When we implemented PFAD, staff members generally visited libraries where they were less familiar to complete their “test.” (Because the MIT Libraries have four locations, this was possible. In a smaller library, differentiating public service spaces from each other may be an appropriate approach.) Participants were asked to take notes about their experience (good and bad) and after completion were asked to rate each task from easy to hard, then enter their comments into an established web form. We had twenty volunteers complete one of three different tests at one of four locations.

Both prep time and cooking time vary depending on the complexity of the ingredients used.

PFAD results serve all library staff.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 6, Indicators 6.1, 6.3, 6.6, 6.7; Principle 7, Indicator 7.8; Principle 8, Indicators 8.3, 8.5

COOKING TIME
Prep time, 1 week–1 month; cooking time, 10–60 minutes

COOKING TECHNIQUE
Observation (usability testing), survey

INGREDIENTS
• Staff volunteers
• Tests
• Physical library spaces and equipment
• Whatever extras may be needed for volunteers to perform tests (copy cards, note/picture taking device, etc.)

PREPARATION
Develop the test by identifying a variety of common tasks that users complete in your physical space. Complexity can and should vary. The number of items depends on the complexity of the questions and the time allotted for the activity. For example, our tests ranged from seven to nine questions, with thirty minutes or less allotted.

Remember to pre-test the test!

Example tasks: Look for a particular journal volume, then locate and use a scanner to scan and email several pages from this volume. Use the computer to print pages. Find a particular DVD, then use self-checkout to check out DVD.

ASSESSMENT STEPS
With each tester
• Ensure they have all materials needed: note/picture-taking device, if needed, survey, any other extras they may need (copy card, etc.).
• Review instructions for test with them.
• Remind them to time themselves.
• Ask them to note anything they would like to share about these exercises.
Section 7. Service Points and Services Assessment

- If they take photos or video, ask them to think aloud as they go and record what they are thinking.
- Remind them to think about themselves as the user: What’s hard? What doesn’t make sense?
- Remind them to complete the post-survey when they are done.

After the test
- Follow up with volunteers to ensure there are no outstanding questions and to get any further feedback.
- Determine which tasks were most difficult, summarizing the success rate for each task.
- Review and code the comments and photos or video, if available.
- Present your findings and act on them.

ALLERGY WARNINGS
Make sure you have buy-in and a plan on what to do with the information you gather. Empathy-building is the easy part; dealing with the usability issues you uncover takes time and effort across departments.

CHEF’S NOTES
This assessment can reveal basic inconsistencies or stumbling blocks in your spaces that can be fixed by simple adjustments and signage. Putting our staff in our users’ shoes really developed empathy. Staff enjoyed the activity and shared comments such as, “Great test! ... I have more empathy for users now!”
An Assessment Rubric Inspired by The Four Seasons®

Use this recipe to enhance your user’s service desk experience.

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NUTRITION INFORMATION
The Four Seasons’ hotel franchise is consistently recognized as one of the premier service providers in the international luxury hospitality industry. The core of their competitive service advantage is their SERVICE philosophy:
• Smile: active and genuine
• Eye contact: even in passing
• Recognition: using a guest’s name naturally
• Voice: in an appropriate manner
• Inform: guests about hotel products
• Care: in all we do
• Exceed: guests’ expectations

The SERVICE philosophy can be used by libraries as a foundation for an evaluation rubric that can be applied to every in-person interaction in the library users’ service experience.

The simplicity and generalizability of this philosophy make it a powerful tool for assessing service desk quality in a library context. Service desk quality is a particularly challenging criterion to measure.

While surveys such as LibQual+ attempt to measure the gap between minimum and expected service quality levels, the survey process is typically time-consuming and often seen as burdensome by library users. With minor modifications, our SERVE rubric allows for efficient covert (e.g., “mystery shoppers”) or overt (e.g., supervisors) observation to assess service standards and provide objective criteria for the performance management at library service points.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 7, Indicator 7.8; Principle 8, Indicators 8.3, 8.5; Principle 9, Indicator 9.3

COOKING TIME
Cooking time is the length of an interaction with a library patron. Additional preparation time may be necessary for training and analysis.

COOKING TECHNIQUE
Observation from the staff member’s supervisor or from a “mystery shopper”

INGREDIENTS
SERVE rubric (See figure 1)

PREPARATION
For supervisors
• Memorize the differences between each score in the rubric.
• Identify an appropriate observation area, ideally in a discrete location to minimize the impact of your presence.

For “mystery shoppers”
• Coach the mystery shopper to understand the difference between scores across the rubric.
• Develop a question that will allow the mystery shopper to test each element in the rubric.

THE ASSESSMENT
Observe and score the interaction using the rubric.

CHEF’S NOTE
The SERVE rubric is designed to delineate a set of expectations that capture the spirit of good service. It is important to keep a few things in mind when using it to help assess desk services:
• First, the SERVE rubric is designed to address those qualities that a student assistant may be expected to display almost from his or her first day at the desk. In other words, we have the rubric in mind during the hiring process because some students will understand more intuitively than others how to create a welcoming first impression and a memorable service experience. To be
sure, practice, positive reinforcement, and guidance from the desk supervisor can help take a student assistant from scoring 2s to scoring 3s. But thoughtful hiring practices remain a key hidden ingredient in this recipe.

• Secondly, the SERVE rubric may not initially seem specific or robust enough to provide enough direction to library staff. The rubric is intentionally vague in order to allow for the judgment of the supervisor and to acknowledge the difficulty of pinpointing every nuance of good service. There is an intangible quality that sets a level 3 above a level 2 that is difficult to define—yet we know it when we see it. Role-playing training techniques and modeling good service will be far more effective for the supervisor than trying to offer a written explanation of, for example, how to modulate one’s tone or inflection when assisting a patron by phone.

• Finally, it is important to use the rubric in a positive and encouraging way. We recognize that library staff member who scores more 2s than 3s is trying to improve but who still needs practice and guidance. Helping them to maintain their enthusiasm and their desire to improve is a key part of getting a library staff to become confident in their abilities at the desk.

<table>
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<th>FIGURE 1. SERVE RUBRIC</th>
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Section 8.

Equipment, Building, and Space Assessment

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Learning Space Ethnography Study

Observe Students in the Library to Inform Service and Resource Design

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INTRODUCTION

Ethnography is applicable to librarians and researchers who are studying learning spaces and the behavior of students in those learning spaces. The following eight mini-recipes will describe the essential ingredients of ethnography, the research questions one might set out to tackle (which could result in a multicourse meal), the specific data collection strategies one would employ (as individual recipes), and tips, tricks, and cautions for successfully creating an ethnographic study (while reducing the likelihood of burning an entrée and providing options for seasoning to taste).

ETHNOGRAPHY AND “QUICK” ETHNOGRAPHY

Ethnography is a methodology that should be selected when the goal is to observe complex behaviors in a natural setting. When considering whether to use an ethnography, consider the questions you want to answer, the data collection work you want to do, and the analysis you want to conduct. Culture is always at the core of ethnography and Handwerker defines culture as “cognitive elements and structure” (2001, p. 3). Ethnography is a flexible methodology that can accommodate a variety of data collection methods depending on the strengths of the researcher, the resources at their disposal, and the research questions that one wants to address. Ethnography is steeped in anthropological traditions and has required extensive time spent in the “field.” This time spent in the field is meant to observe and document the culture in which you are placed. At this time, the researcher is frequently known as a “participant observer,” as they are becoming part of the culture at the same time that they are conducting research and collecting data.

However, this extended time in the field to conduct an ethnography is not always feasible in libraries, and the researchers may not have time or resources to observe a space for six months or longer. It was due to these limitations that the tradition of “Quick Ethnography” created by Handwerker (2001) and used previously by Bryant, Matthews, and Walton (2009) was chosen for this research study. This methodology is especially appropriate for studying learning spaces, as it recognizes the rapid cultural change that occurs and allows for a mixed-methods study. Conducting a quality “quick” ethnography still produces credible interpretations of the phenomenon being studied, provided that the data collection is rigorous.

If the focus on culture and authentic settings is one crux of ethnography, the other crux is triangulation. Put simply, triangulation is the term used to describe the process of collecting multiple forms of data to study a central phenomenon and provide diverse perspectives on that phenomena. The goal at the end of triangulation is to build a richer data set but also to see similarities in the phenomenon from these diverse perspectives. This lets you know that you are understanding the core of that phenomenon and are going to be able to tell a “fuller” experience and richer account of that space’s assessment. With that in mind, read each recipe as a stand-alone data collection technique that does not have to be used with ALL of the data collected in our study but that should definitely be used with at least one other data collection strategy. The remainder of this methodology section gives several recipes for your arsenal in planning in informal learning space study to assess user culture of that space.

TIPS AND TRICKS

The conclusion of this section is intended to leave you with some tips and tricks to keep in your pocket as you proceed to pick and choose from these data collection tools. The most important point to remember when deciding which tools to use is:

There are always pros and cons when collecting data. Choosing the most
appropriate tool for the research question(s) will give the best outcomes.

Below are fifteen points that I wished I would have known when beginning this research process and are words of wisdom for my fellow librarians and researchers.

Avoid drowning in data. Always have a reference of your research questions. This will help to focus your data collection methods on what you want to capture.

Recognize optimal recipe results. Check to see if you are hearing or observing the same actions or words over and over again. When making bread pudding, there is a certain level of liquid saturation that makes bread pudding moist and delicious instead of dry or soupy. There will be a point when the data will be under-saturated; you won’t have enough data to fully answer the research questions. There will also be a point when the data will be over-saturated; you may have so much data without gaining richer knowledge. The optimal saturation is notoriously hard to define, but when you get there you will know.

Stay organized. You will have an unbelievable amount of data before you know it, and an organization system that each researcher is comfortable using is invaluable.

Communicate effectively. There are likely many different people interested in the research. Each of these groups of people may be interested in different areas of your research. Become accustomed to delivering different levels of information to different stakeholders.

Collaborate. People specialize in certain fields. Take advantage of this! Build your team with people who have different skill sets and deep levels of expertise within those skills.

Train. People come with different backgrounds and experiences. One person may be comfortable interviewing but not observing. Train people in how to properly engage in these data collection methods.

Language is crucial. The words you attribute to your research and the meaning you provide them matter.

Do not overextend the data. If you are looking at exploratory data, stress that. If you are looking at inferential statistics, stress that. However, never attribute causality to your data. One of the common errors in research is to make claims that the data can’t support. Everyone’s data has weaknesses, and being forthright with these will earn the respect of journal reviewers and give ideas for future research.

Credibility and rigor. When discussing the data collection methods used, stress the ideas of triangulation and credibility/rigor to add strength to your methodology.

Allow time for process. IRB is an essential part of doing research and it is tedious. Make sure to plan for two to three weeks alone for producing a quality IRB. Expect revisions to that IRB. You can reach out to your organization’s Department of Research Protections before beginning the IRB to estimate typical time to review.

Use appropriate technology. Do not use more technology than needed. While technology can help us immensely, it can also overcomplicate research. Did we need technology for the Google analytics? Yes. Did we need technology for the field observations? No. Use technology for a purpose, not for the sake of using technology.

Research raises more questions than answers. Do not be alarmed if at the end of your research study you feel that you have more questions now than when you started. This is a sign of good research.

Reward the research team. Collecting data is fun. However, collecting data can also be time-consuming and overwhelming. Having monthly meetings with the research team where people are encouraged (maybe food is provided) and can leave people eager to contribute to the team.

Rely on the expertise around you. Hutchins (1995) emphasizes distributed cognition in a system. The same can be said for the people and resources available to you. Many of the forms of data we collected, such as the Google analytics, would have been much harder without assistance. Don’t be afraid to help other people when you have something to offer and to ask others for help when you
feel they have something to offer. Even if they are unable to help, it will make them feel good that their colleagues’ value and can use their skills.

**Identify target journals** before beginning the research. Journals can prefer different sorts of research studies, different methodologies, and different content. Know what your goal journals prefer; this can also help to define the study.

Conducting research is challenging, and every decision that you make in planning your study and collecting data can impact your final result. It is the intention of this section to provide you with valuable advice and, hopefully, new ways of thinking about collecting data and informing your study.

One final piece of advice: your research question is absolutely the most important part of framing your study and organizing the data that you have collected. It will help to provide you with a sense of focus and leave you feeling accomplished in the face of complex and messy, authentic research.

### Ethnography Study Recipe A: Seating Sweeps

**NUTRITION INFORMATION**

This recipe has been used by Given and Leckie (2003) to conduct a quick assessment of user behavior in specific learning spaces. The goal of a seating sweep is to survey quickly the possessions that users have with them and how they structure their workspace. Conducting a seating sweeps requires researchers to have a careful eye on observation, an unobtrusive manner, and the ability to quickly and accurately produce a count.

Seating sweeps should not be used to gain an extended understanding of how students’ work, to understand their work strategies, to document observations that take place away from the typical workspace, or to accurately classify group work. It is impossible in a quick glance to understand how students are structuring their work time, to note behaviors away from designated seating areas, or to write an in-depth description of the structure of the group work.

**COOKING TIME**

Seating sweeps take on average 30 minutes to complete. These seating sweeps were divided equally into morning, afternoon, and evening observations. This is suggested if you are interested in looking at temporal differences in behavior.

**MAIN INGREDIENTS**

- Checklist with intended observed behaviors
- Name tag to identify oneself as a researcher
- Visual map to ensure each researcher follows the same path for observations
- Clipboard to write while moving and to alert students to study
- Locked office to store collected data

**THE ASSESSMENT**

Choose the space you want to study.

Identify the possessions you expect to say and the behaviors you expect to observe.

Review previous literature to identify possible possessions and behaviors.

### REFERENCES


Section 8. Equipment, Building, and Space Assessment

Create seating sweep template (see appendix for example).

Train the research team in how to conduct seating sweep. During this training, have a team walk around the space (preferably not at peak time) and observe one person conducting the seating sweep. Make time for questions at the end of the training.

Pilot tests. Continue conducting them until each researcher feels confident in their ability.

Schedule for seating sweep observation. This schedule will depend heavily on your research question and goals. What time of the semester do you want to observe? What time of the day do you want to observe? How many spaces do you want to observe?

Conduct seating sweeps. In this seating sweep, you use a “count” method of observation where you draw a hash mark for every four and then a diagonal line for the fifth. Regroup with the research team after everyone does their first official seating sweep and midway through to identify any issues, questions, or challenges that did not come up in the pilot test.

Debrief. Set a meeting after the conclusion of the seating sweeps to discuss experiences with the research team. If possible, provide food/prizes during this meeting if you have a team of research assistants, as conducting field observations is a time-intensive process.

Conduct data analysis.

ALLERGY WARNING
This form of data collection does not work well if you are trying to observe behaviors in the whole space. For example, while we initially wanted to record students using the service desks, this was not in our space of observation and was not a behavior easily recorded in a “count” fashion.

Field Observations

Ethnography Study Recipe B: Field Observations

NUTRITION INFORMATION
Field observations are an essential part of doing ethnographic research. They are frequently called “participant observations” (Van Maanen, 2011), but there are different levels of investment.

The essential takeaway of these field observations are that they allow you, in an unobtrusive way, to describe what you are seeing in someone else’s culture. Record all that you observe that piques your interest and is related to the question at hand. Undoubtedly, you will observe more than is possible to record. It is at these times that you need to keep in mind the research questions to ensure the data you are collecting can answer these questions. Unexpected observations should be noted for future research questions.

Field observations allow you to become immersed in the culture you are studying. This observation allows you to understand

REFERENCES
how people operate in a space. Our field observations focused on interactions and behaviors in the space that seating sweeps missed. For example, students’ interactions with staff frequently took place outside of the seating sweeps observational area.

**COOKING TIME**
Field observations can take place directly after the seating sweep. Each field observation was thirty minutes long so that the total time spent observing the informal learning space was approximately one hour. The researchers had some flexibility in how they recorded these field notes. What was essential was that no one was interpreting what they saw as they were recording them. Variation in what researchers note is an essential part of doing interpretive research and is not cause for alarm. Quality is more important than quantity in field observation notes.

**MAIN INGREDIENTS**
- Notepad of some sort, paper/pen or electronic
- Name tag to identify oneself as a researcher
- Visual map that identifies potential parts of space to sit at for extended observation

**THE ASSESSMENT**
**Choose** the space you want to study.

Write your research questions on the top of your field note.

**Select targeted areas** within the space where researchers could observe.

**Plan** for broad observation of the space. If one is using observations in addition to seating sweeps, the observations should pay particular attention to areas of space that the seating sweeps missed.

**Conduct trial observations** to practice not making interpretations or analysis.

**Schedule for field observations.** If doing seating sweeps, try to synchronize the two times. Other than that, the schedule will depend on what times you want to observe and what behavior you want to see.

**Conduct your field observations.** The most important part of this is to record what you actually see happening and not your interpretations of what you see happening.

**Timestamp** all of your observations. For any researcher who records the notes in pen/paper, type them in a document after the observation is complete.

**Debrief.** Set a meeting after the conclusion of the field observations to discuss experiences, talk about interesting trends, and begin analysis of data. If possible, provide food/prizes during this meeting if you have a team of research assistants, as conducting field observations is a time-intensive process.

**ALLERGY WARNING**
Field observations require a significant amount of time on the part of the researcher.

It is very easy to make interpretations during observation. However, this reduces the internal credibility of the research as it focuses less on what the students are doing and more on what the researcher thinks they are doing.

Field observations can far extend thirty minutes. The time dedicated to field observations depends on researcher availability and the importance placed on field notes in the data collection toolkit.

**CHEF’S NOTE**
Librarians interested in an in-depth understanding of student culture in a space should use field observations as a tool to develop that understanding. Field observations allow for a different type of behavior to be recorded and for one to immerse themselves in the culture of the space they are studying. While seating sweeps still treat you as a visitor of the space, field observations bring you closer to the culture of the space.

**REFERENCES**
Ethnography Study Recipe C: Interviews

**Nutrition Information**
Interviews are a way to get an individual’s perspective on a phenomenon they experience. One can have structured, semi-structured, or open-ended questions (Britten, 1995).

One can conduct the interview face-to-face, virtually, or through email. The questions asked in an interview depend heavily on the research questions and methodology chosen. However, there are common standards for good interviewing.

The first standard is to build a rapport with the participant. This can come through asking some questions at the beginning not entirely related to the research to make them feel comfortable.

The second standard is to not ask leading questions. Leading questions are ones that make it more likely a participant will answer in a biased way.

The third standard is to allow for reasonable wait times. These wait times let the interviewee take time to think about their response and lets them feel in control of the interview.

If possible, let the participant decide where they prefer to be interviewed. This starts the rapport building with the participant and gives them a feeling of comfort in the interview.

When choosing participants, there are multiple sampling techniques. Your sample will depend on the availability of participants and research questions.

**Cooking Time**
It takes time to recruit participants. Part of planning to use this data collection method requires one to allot time for recruitment and scheduling. Each interview takes approximately 30–45 minutes to conduct. It is recommended that no more than three interviews are conducted in a given day.

Interviews are draining on the part of the researcher. It takes an average of three hours to transcribe one hour of audio and this should be factored into the cooking time for interviews.

**How do you know when you are done?**
Interviews need to be conducted until there is a feeling from the researcher of “data saturation.” This term means that similar responses are coming up in multiple interviews. There is not set number of participants required to reach this point. When you experience it, you will know.

**Ingredients**
- Recording device/software
- Interview questions
- Compensation for participant
- Summary of research form
- Choosing your sample

The type of sample you use will depend on participants available to you and your research goal. The common sampling strategies are convenience, snowball, purposive, theoretical, or divergent.

**Convenience samples** are literally a convenience to you and are anyone readily available to you.

**Snowball sampling** begins with one or two people that you know who then tell their friends about the research.

**Purposive sampling** has specific criteria and is generally used to get at certain perspectives of a learning space.

**Theoretical sampling** comes from theory and is used to test that theory.

**Divergent sampling** is used when you obtain participants with divergent perspectives on a phenomenon to get variation in responses.

**The Assessment**
These steps only go over the actual
interview. There are previous steps to this, such as selecting your sample, that should be part of your overall research strategy but are not part of a data collection technique.

**Schedule a minimum number** of research interviews with participants.

**Peruse previous literature** to see how other researchers asked questions.

**Compose a question list.** This will vary depending on your interview structure.

**Print a summary consent** for research and bring compensation for the participant.

**Hand the participant a copy** of the consent (whether implied or written will depend on your institution’s IRB).

**Set up the recording device** before the participant arrives. They are giving you their time to participate in the research and you should be fully prepared for them. (We used Audacity software and it worked extremely well).

**Give participant information** on how the interview will be structured. Remind them of the goal of the research and how they are helping to further knowledge.

**Ask the participant for questions** about the research or interview.

**Announce that the recording will begin** and explain that the interview and that all questions are voluntary and they are not required to answer.

**Conduct the interview.** It is important during the interview to listen. It may be tempting to take notes during the interview, but the interview is really a conversation and it is best to be fully involved with the conversation.

**Finish the interview, stop recording.** At this point, you should export the audio file and save it in the correct format if you used Audacity. Play back the beginning of the audio to the participant so they know it was successful.

**Provide the participant with compensation** (if applicable). Thank them for their time. If you need more participants, now is a good time to ask them if they think any of their friends may be interested in participating to have them email the research team.

**ALLERGY WARNING**
Make sure the audio recording system is actually recording the interview!

Prepare research questions beforehand, but be flexible. We always stressed to participants that we had a set of research questions but we may not cover them all and may go onto other topics. This is all part of qualitative research!

Make a decision on compensation early in the research process. For our study, participants received a free credit for campus ice cream. Check with the IRB about compensation; the compensation should match the time involved for the participant. It would be hard to justify $200 in compensation for thirty minutes of time.

Ensure that your sample is going to get your desired data. If you are interested in students’ experience in a learning space, the sample should contain students who are regular users of that space.

**CHEF’S NOTE**
Librarians/researchers who are interested in understanding the user experience of their learning spaces should use interviews. Interviews allow for a deeper level of understanding than surveys, observations, or computer data. There are always points made in interviews that would not be likely to come out from another form of data collection.

**REFERENCES**
Ethnography Study Recipe D: Computer-Use Reports

NUTRITION INFORMATION
Computer-use reports provide basic information on the number of logins in a space, the average time of a login, and the total time per login. The type of information provided by these reports are thus the basic usage reports of the space.

It is likely that computer-use reports will vary depending on how the institution records this data. If this data collection strategy is desired, reach out to the information technology group to learn if and how this data is kept.

The types of questions that this data can answer are: How many students are using your space? and How much time are they spending there?

The limitations of this data collection strategy are that it is not telling of their behaviors in the space or the computer activity of students who are not on university desktops. It is good to collect student use reports for the same time as the other data you are collecting in your study.

COOKING TIME
Computer use reports, if data is already being collected, require very little in the way of cooking time. This data is already gathered and thus ready for you or your team to transform it into usable numbers for your research.

However, if these use reports are not already generated, it will require planning and programming to collect this data. This could be a relatively simple task for someone who already has access to this level of data and can save you time from doing it yourself.

INGREDIENTS
Computer use reports (Excel documents)

THE ASSESSMENT
These steps assume that you are at an institution that already has this data. For those who are not at this type of institution, it will require leg work on your part to figure out how to make this happen.

Retrieve the computer use reports from the department that stores them.

Organize the data in a coherent manner.

Save the data in a way consistent with the department it came from.

Transform the data into easy-to-understand descriptive statistics.

ALLERGY WARNING
When getting data from computer-use reports, it is very easy to become overwhelmed with the amount of data received. Luckily, it is relatively straightforward to analyze, and the analysis can be done soon after the data is received.

This data cannot tell you much about your space beyond basic use reports. These are very helpful, but at some point you will need to go beyond this level of data if you are truly interested in observing/understanding student behaviors in the space.

CHEF’S NOTE
This information is very helpful for researchers, librarians, and administrators who are interested in a quick survey of institutional-managed computers. This type of data collection is limited to people who are interested in studying spaces that have university computers in them.
Ethnography Study Recipe E: User Survey

NUTRITION INFORMATION
Surveys can be used to give demographic information, gain use patterns of students, and understand what students generally like and do not like about a learning space. There are many ways to disseminate a survey to users of the space. A survey could be loaded onto computers, and students may be asked if they would like to complete a survey about the space when they log on to a computer. Surveys could be sent to all students in the university to understand what spaces they study in generally.

When designing a survey, there are numerous decisions that need to be made. These decisions affect the validity and reliability of your survey. The validity of a survey affects the accuracy of the survey. Surveys can become complicated, and there are several steps you can take to ensure validity if this is a data collection instrument you choose for your study. The reliability of your survey is how consistent it is in measuring a certain concept or idea. If the survey asks two questions about what students like about a space and they answer differently with two different questions, then the reliability of the survey is questionable.

When designing a survey, you also need to consider how you want to present the results of your survey. Sampling techniques, such as random, stratified, and clustered, need to be explored for increased credibility of the survey. Fowler (2014) has an excellent book on survey research.

COOKING TIME
It takes time to design a survey or determine if an already existing survey suits your needs. One also needs to consider for how long the survey should be administered. If minimum power or sample size is a requirement, then your minimum sample will already be calculated. Generally, expect 3–4 weeks to design the survey, 1–2 weeks to pilot test the survey, and however much time/number of students you want to complete the survey.

MAIN INGREDIENTS
• Survey instrument
• Pen, paper

THE ASSESSMENT
Check previous literature to see if anyone else has published a survey measuring similar concepts. If possible, modify this survey to suit your needs.

Identify outcomes and concepts you wish to measure.

Build your survey to accurately and reliably measure intended outcomes.

Administer your survey. There are a variety of ways to do this as described above. There are pros and cons of each way.

Share your survey out for the desired time/number of people you want.

Analyze the data. If doing a pen-and-paper survey, collect the completed responses at specified intervals. If doing an electronic survey, check the response rate until the desired number of response/time is reached.

ALLERGY WARNING
Understand the limitations of using a survey. Surveys are used to answer demographic questions.

Do not work more than you need to. Many researchers have already designed valid and reliable surveys. It can save time to modify an existing survey.

If the survey is your main form of data collection, make sure that internal and external measures of consistency and reliability of the survey are strong.

CHEF’S NOTE
Anyone interested in gaining user demographics and use patterns of a learning space should consider using a survey. A survey is a relatively painless form of collecting data in terms of time and personnel resources.
REFERENCES
Fowler, Jr., Floyd J. Survey Research Methods.

Ethnography Study Recipe F: Questions Addressed to Reference Desks

NUTRITION INFORMATION
One of the defining features that differentiates “learning commons” or other staffed learning spaces from computer labs is the support they provide to students. If the designated learning space you would like to study staffs it with librarians, IT support, or tutors for students, recording questions fielded by that staff can provide insight into what students need.

These questions can reveal more about the day-to-day needs of students that they may not even be aware they have. For example, in an interview, students may not be able to recall how many times or the types of questions they have asked of the support staff. These questions can provide insight into what they need and how they use a particular space.

COOKING TIME
These questions should be collected for the duration of your learning space study.

At our institution, these questions are collected year-round, and questions were pulled that fit the time of the research. It should not be time-consuming to collect these questions.

Staff should be trained on how to record and report these questions. For the research, it is just a matter of pulling these questions and categorizing them according to your research questions.

MAIN INGREDIENTS?
• A questionnaire for staff to ask students when they approach the desks for help
• Weekly/monthly reports of the questions with descriptive statistics to capture information about them

THE ASSESSMENT
Design a checklist or questionnaire of information to collect from students that ask questions.

Train staff in how to administer this questionnaire in way that does not make the students asking the questions feel that they are being evaluated.

Track responses in a database.

Receive reports of this database.

Analyze the data.

ALLERGY WARNING
This is a very easy way to collect data about your study. However, it is very likely that some students do not know how to or do not feel comfortable asking questions of the staff. Thus, the needs of those students are not known.

CHEF’S NOTE
Researchers interested in how students are taking advantage of the support services offered to them would be wise to look at these questions. These questions can frequently be used to address the question of how learning spaces are any different than computer labs. Students who have a need for tutoring or IT support, for example, can receive it in the same space they study.
Ethnography Study Recipe G:

**Google Analytics**

**NUTRITION INFORMATION**
Collecting Google analytics can be considered under the same category as big data or learning analytics. The reason for collecting this information was to see if there are differences in how students used the library website in the learning spaces studied for this research. This information was then used to look at data such as how many pages deep students went into the library website and how they typically got to the library’s website.

This information is frequently used to evaluate websites for their user design and the successes and failures that people typically have on their web pages (Fang, 2007). For example, information collected included the bounce rate and exit percentage. These terms refer to how many people left the website without navigating beyond their entrance page and what percent of people exit on which pages, respectively. The Google analytics answered the question of how students are behaving in various informal learning spaces with regard to their use of the library’s website.

**COOKING TIME**
The time-consuming part of this data collection tool is programming Google analytics to collect specific information from university-owned computers. Once this programming was completed, it was a matter of running reports and analyzing the data. Collect the data for a minimum of 30 days to eliminate daily variations and trends.

**MAIN INGREDIENTS**
- Google Analytics account
- Programming to track specific IP addresses and specific websites
- Excel/statistical software to organize and analyze data

**THE ASSESSMENT**

**Obtain IP addresses** of computers you are interested in tracking.

**Obtain IRB approval** for the study.

**Configure Google Analytics** with the website and other account information.

**Enter the data** you want to track.

**Run reports**.

**Analyze and interpret results**.

**ALLERGY WARNING**
Collecting Google Analytics data is different than the other data we collected. An IT professional helped to run and explain what the language meant to interpret the data. Without a colleague with these capabilities, the cooking time for this method is extended.

All that this data collection method can tell you is which pages students are going to and generally how long they are staying on each page on the library website. This is very helpful information but in and of itself is not very telling in the comparison of two informal learning spaces.

**CHEF’S NOTE**
Librarians and IT personnel who are interested in student behavior on the library website would benefit from collecting this data. There are different fields and types of data that can be collected. Different groups of people will naturally be interested in different types of data. However, Google Analytics, in general, can be used by many people in the library to answer specific questions.

**REFERENCE**
Interview to the Double: 
Uncovering Student Motivations in the Library

Students reflect on both the conscious and unconscious choices they make in the library, informing service and resource design.

Kathleen Reed, Vancouver Island University, kathleen.reed@viu.ca; Cameron Hoffman, Vancouver Island University, cameron.hoffman@viu.ca; Meg Ecclestone, Vancouver Island University, meg.ecclestone@viu.ca

NUTRITION INFORMATION
Students make choices every time they enter the library: what to bring, where to sit, who to talk to, and more. The Interview to the Double method is a semi-structured interview technique that asks library users to imagine they have a double who will replace them in the library the next day. They are asked to provide all the instructions needed to ensure their “double” is not unmasked (Nicolini, 2009). This approach allows researchers to uncover behavioral and motivational details of library use that might not be elicited from traditional surveys or user observations. Unearthing these tacit motivations provides a deeper understanding how students use the library’s services and resources and identifies possible areas for improvement.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.5; Principle 4, Indicator 4.4; Principle 5, Indicator 5.4; Principle 9, Indicator 9.3

COOKING TIME
20–60 minutes per interview, depending on the number of follow-up questions asked of students; 1–3 hours per interview to transcribe; 1–2 hours per interview to analyze transcript

THE ASSESSMENT
1. Meet your interviewee in a quiet, private space, suitable for obtaining a good audio recording.
2. Introduce yourself and the purpose of the interview. Begin each interview in this way:

   “An actor is going to take your place next time you go to use the library. They’ll do whatever you normally do when you’re in the library and will even look like you. Everyone will think it’s you in the library and not someone else.

   “Walk me through a typical time that you spend in the library next time you go to use the library. They’ll do whatever you normally do when you’re in the library and will even look like you. Everyone will think it’s you in the library and not someone else.

   “Walk me through a typical time that you spend in the library so that I can direct the actor playing you accurately. I’ll ask you questions about what you think the actor will experience, the things you do, and how you think the actor should behave. Let’s begin outside the library doors, as you come in.”

3. As the interviewee walks you through a typical time in the library, ask supplementary questions (e.g., Why do you like to study there? What do you bring with you? How do you usually feel

Prepare your consent form and ensure the audio recorder is in working order.

INGREDIENTS
• Advertising materials
• Participants (variable depending on population size, time available)
• Question sheet
• Audio recorder
• Quiet space in which to conduct interview
• Qualitative research analysis software
• $20 participation incentive (to taste)
• Consent form (to taste)
• Research Ethics Board approval (to taste)

COOKING TECHNIQUE
One-on-one semi-structured interviews

PREPARATION
Obtain approval from your institutional research ethics board, if necessary.

Distribute advertising materials to the group you’re trying to reach; this may include posters, email, text messages, or social media messages.

Print the consent form (if necessary) and questions.
in the library?). These can flow naturally from the interviewee’s responses.

4. Thank the interviewee and provide them with any participation incentive you may be offering.

5. Transcribe, analyze, and report the results. Make improvements based on the findings.

**ALLERGY WARNINGS**

Interview to the Double can be used as a rigorous method in a research study as described in this recipe, or more haphazardly as an assessment tool. If you choose to transcribe and thoroughly analyze the results, be aware that this takes significant time. You may wish to hire a sous-chef to undertake transcription to save librarian time.

**CHEF’S NOTE**

One of the follow-up questions asked of all interviewee was, “Tell us about a memorable time in the library. It might have been something involving you or you might have seen something, but it’s stuck with you.” Frequently, interviewees talked about the value they placed on library resources and spaces. This question elicited stories and quotes that helped illustrate trends and provided valuable anecdotes about library use.

Although we used the Interview to the Double method for exploring space and information practices, it is a highly adaptable technique that could be used for a variety of assessment activities within library and information settings.

**REFERENCES**

Flipchart Surveys

Using markers and flipchart paper, these surveys are a great way to get quick, low-tech feedback on questions related to the library. Asking questions on strategically placed flipcharts is also an excellent way to engage users.

Laura Newton Miller, Carleton University, laura.newtonmiller@carleton.ca

**NUTRITION INFORMATION**

This is a great way to get quick and low-tech feedback on questions related to the library. Use on its own as an engagement tool with users. Responses from flipchart surveys can also help to guide and focus future assessment questions.

**DIETARY STANDARDS**

ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicators 1.4, 1.5; Principle 2, Indicator 2.5; Principle 7, Indicators 7.6, 7.7

**PREPARATION**

Type each question on an 8x10 colored sheet, using a different color for each question.

Tape a question to top of the flipchart. When the flipchart sheet is torn off, the 8x10 sheet can be easily taped onto new clean sheet.

Wrap string around a marker and tape. Tie the other end of the string to the flipchart, leaving enough string length for people to write comfortably.

Leave the flipchart up for a specified length of time in a high-traffic, strategically placed area.

**THE ASSESSMENT**

Questions for assessment can certainly vary. Examples include:

- Why do you come to our library?
- What do you like most about our library?
- What frustrates you about our library?
- In the library of your dreams, what services would we provide?

As pages fill up (or when any inappropriate comments appear), staff volunteers and/or student workers remove pages from flipchart.

Depending on how you want to assess the information, flipchart sheets can be marked with identifying items such as the floor, day, time, etc.

Transcribe the comments into Excel (or other data analysis program).

Analysis can be anything from a quick word cloud or reading to get a sense of themes, or could be more involved by coding comments in software like NVIVO for more in-depth qualitative analysis.

**Variation**

Place flipcharts in external locations.

Examples include student residence halls, student union, athletics buildings, town meeting, grocery stores, etc.

Take two flipcharts (and treats/chocolate) to somewhere people congregate for a two-to four-hour time period and have them complete one of two statements:
I go to the library because…
I DON’T go to the library because…

Make sure you go during a time when you’re most likely to see a lot of students.

**Virtual Flipchart**
In tandem with the physical flipchart campaign, have the same question posted somewhere on your library website. (Although we did get feedback this route, the response rate was only a fraction of what we received in the physical space).

**ALLERGY WARNINGS**
- Watch out for inappropriate/offensive comments.
- Have extra markers ready. Markers will run out of ink or go missing (even when taped and connected with string).
- Have extra question sheets on hand in case comments are written on the actual question sheet (instead of on the flipchart paper).

**CHEF’S NOTE**
There are many positive outcomes from this type of assessment. Students are engaged in this process and can be quite verbose. Although there were some inappropriate comments, the percentage of these went down as the weeks went along. Because the flipcharts are in high-traffic areas, staff from all levels and all departments can be very much engaged in the process.

PS I love these surveyboards 😊
Space Invaders:
Measuring Use and Satisfaction Through Mixed Methods

This recipe measures usage and satisfaction within a designated library space by blending direct observations, user surveys, and a dash of informal polling.

Susan Gardner Archambault, Loyola Marymount University, susan.archambault@lmu.edu

INGREDIENTS

- Online forms for recording the observations
- iPads for recording the observations
- Observers assigned to observation zones
- User survey
- Incentives for user survey
- Whiteboards and markers

PREPARATION

- Create a floor plan of your space divided into assigned zones for observation (see example floor plan linked in the Resources section).
- Create a “direct observation” form (see example direct observation form linked in the Resources section).
- Conduct a pilot with all observers to tweak the observation form and reach agreement on the coding scheme.
- Select dates and times for your observations.
- Create a user survey with questions that mirror the questions on your “direct observation” form.
- Create questions for whiteboard polling.
- Obtain IRB approval.

ASSESSMENT STEPS

1. Assign a different observer to each zone and have them record the behaviors, possessions, and environmental aspects observed in their zone at the designated dates/times.
2. During the same time period as the observations, ask users of the library space to fill out the user survey to capture self-reported usage and satisfaction with the same things you are directly observing so that you can compare results.
3. Post questions as whiteboard polls in the same space during the same time period of your observations. Example questions include: “On this map, put a smiley face next to the things that you like” and “What one adjective best describes this space?” Take pictures of your answers daily and clean off the boards to make way for new responses.
4. Analyze the data from each of the three methods, including the coding of all the comments, and stir it together. Along with frequencies, you can look at selected cross-tabs (such as gender and behavior) and visualize usage through a heat map. You can also look at routine usage statistics of the space during the same time period, as applicable.
5. **Identify major findings and make changes to improve the space.**

**ALLERGY WARNINGS**
Create the user survey in multiple formats (print and online) if possible, since user preferences vary.

Try to be discreet when observing your users so they don’t get nervous. Be sure to have “can’t tell” as an option on your observation form in case getting too close would jeopardize user comfort.

Be sure each observation point is clearly labeled in your physical space.

Due to its informal nature, users may not take the whiteboard polling seriously.

**CHEF’S NOTE**
The three ingredients of direct observations, surveys, and whiteboard polls can be combined to solidify evidence of what users want within a designated library space. Sometimes there are surprising findings, such as students desiring quiet and privacy over collaborative space.

**RESOURCES**
Sample Floor Plan Divided into Zones: https://lmu.box.com/floor.

Sample Direct Observation Form: https://lmu.box.com/patronobserv.
Assessing Student Learning Behaviors in Informal Learning Spaces

We often ask the students what they like about our space, but we do not very often ask them how they are using the space. This practical, doable recipe will outline a method of collecting quantitative data on student behaviors in informal learning spaces where students do most of their learning.

Susan Beatty, University of Calgary, sdbeatty@ucalgary.ca

NUTRITION INFORMATION
The purpose of the study is to determine what students are doing in the informal learning spaces. This recipe describes a mixed methods approach to collecting data using unobtrusive observation, and a short, post-observation interview.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 6, Indicators 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8

COOKING TIME
Timing is variable depending on the number of observations that are manageable and will give useful data, e.g., 20 per day for 7 days yields 140 observations. It is up to you.

COOKING TECHNIQUE
Using a set observational survey tool, observers will identify and observe selected numbers of students seated in various locations in the library spaces.

INGREDIENTS
- iPad or other mobile device
- Data collection software, e.g., Suma, an-open source tablet-based toolkit (https://www.lib.ncsu.edu/reports/suma), Survey Monkey, or other tool
- Data analysis software, e.g., MS Excel.

PREPARATION
- Confirm if ethics approval is required for your institution.
- Identify possible data collection software. Determine if you need assistance to create and install the software and create a data collection tool on mobile device(s). Talk to your IT experts.
- Identify behaviors to observe and quantify: e.g., reading print or online, studying with notes, research on computer, using laptop, social behaviors, in group, alone, a pair.
- Identify brief demographic data to collect: e.g., status, gender, length of stay, purpose.
- Prepare a draft observational behaviors checklist. The list can be as long or short as you like, depending on what you want to observe.
- Identify locations to observe students. Select your locations according to your organizational curiosity. Choose representational spaces, e.g., workroom, lounge area, study carrel, study table, quiet space, noisy space.
- You can’t observe everyone, so you will need to create a sample.
- Randomly select spaces for each observation. For example, if you want 200 observations and you have 400 possible seats or spaces, number the seats, then use a randomization app to identify twenty spaces for each of ten daily observations. This will help reduce bias in the selection of space and students. It is useful to have an accurate floor plan to work from in order to identify all spaces.
- Test the data collection tool and procedures.
- Review the test data collected to determine the utility of checklist and results.
- Modify elements of the study as needed.

THE ASSESSMENT
- Identify and train observers on procedures and data collection using a mobile device.
- Collect data according to a pre-determined schedule.
After each scheduled observation time, check to see if data is being recorded and collected correctly.
Once all data have been collected, download it to an analysis tool. Proceed with analysis.

**ALLERGY WARNINGS**
- Once is not enough. This study works best when repeated so that you can see the variety of behaviors and the changes in behaviors according to different times in the term, day, or with a different cohort of students. Trends will develop.
- The first time you conduct the study, you may be surprised by the data. Use your results to frame and improve your second round of data collection.
- Some students do not want to take the time to answer the short interview questions. It is okay. Move on to another student and remove the data collected for the student who refused.
- Always have more randomized locations to observe than is needed so you can account for the refusals or empty space.
- Use students to collect data; they are the most likely to fit in.
- Remember this is a quantitative study. Your data will tell you who and what, but not why or how. That is for the next assessment.

**CHEF’S NOTES**
This recipe can be applied at any location where you need quantitative information on user behaviors in order to improve programs, space design, services, or to determine how informal learning is being supported in your library.

**RESOURCES**
Culinary Snapshots: Assessing International Student Needs Through Photographs

An activity that solicits student feedback on library spaces and services via photographs.

Alyssa Berger, University of Washington Bothell/Cascadia College, berg31@uw.edu; Ana Villar, North Seattle College, Ana.Villar@seattlecolleges.edu; Danielle Rowland, University of Washington Bothell/Cascadia College, danir@uw.edu

NUTRITION INFORMATION
The photo diary method can be used in combination with focus groups and interviews. The visual, non-linguistic element of photography is potentially useful for international students who might wish to use images to convey their ideas. Additionally, both the students and librarians expressed excitement during the activity, and this method was an engaging, creative way to solicit feedback from our students.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.5; Principle 6, Indicators 6.2, 6.5, 6.6, 6.7, 6.8; Principle 9, Indicator 9.3

COOKING TIME
2 weeks to 1 month

We recommend asking students to take photos during a time in the semester/quarter when they’re likely to be using the library, such as midterms.

PREPARATION
Create a list of prompts—questions or instructions that direct students to photograph the spaces and/or services you are assessing. Our photo diary prompts asked students to take a variety of photos, from their favorite study place to the tools they use for a research assignment.

Recruit a small group of student participants. If funding is available, incentives (e.g., a gift card to the campus bookstore) are helpful.

Assign a librarian to contact each student. The contact librarian will field any student questions throughout the activity and will collect the photos.

Secure photo release forms or permission through appropriate avenues at your institution.

Alert library staff that this activity will be taking place.

THE ASSESSMENT
Introduce Photo Diary Tasks
Meet with students prior to the activity to explain the purpose of the photo diary, logistics, and to field any questions.

• Have students sign a release form for photos and interview.
• Discuss expectations around taking photos (i.e., do not photograph people without their knowledge).
• Give students a copy of the prompts with clear directions, librarian contact information, and a timeframe for the activity.
• If possible, have cameras available for student use, should they choose not to use their phones.

Set the students loose to take pictures over the predetermined time period. We gave students two weeks to take and send their photos during midterms.

Check in with the students at certain points during the photo-gathering process. We checked in via email, sending the students reminders at the halfway mark and near the end of the activity.

Debrief Participants
• Once the photographs are collected, schedule a follow-up interview with each student to discuss how the photos related to the prompts and their experiences with library services and spaces.
• Recruit an interviewer and note-taker.
• Identify photos of interest and create a set of interview questions that will elicit detailed responses from the students.

• During the interview, provide print copies of photos for students to refer to. Students may find it useful to write notes or draw on these during the interview.

• Prompt students to describe the photos, their reasons for taking the photos, and any other information about the space or service pictured. We used a semi-structured interview format, allowing students to guide the conversation, discuss other spaces/services, and ask questions throughout.

• Give students any incentives promised and encourage them to follow up with any thoughts or questions they may have.

ALLERGY WARNINGS
The activity requires a substantial time commitment, and you may want to consider how many students you have the capacity for before recruiting participants.

Students may not take photos in the same order as the prompts. Ask students to identify which photo corresponds with which prompt when they send them to you.

You may need to be flexible with your timeline. Students may need a few more days to submit their photos if busy with coursework, etc.

CHEF’S NOTE
In addition to moving away from more traditional assessment methods, photo diaries offer a number of advantages. The activity allows for substantial flexibility and works when combined with other data collection methods. However, the activity can also be used on its own. This method can be adapted to assess different user groups’ needs or as a space assessment activity.


Don’t Just Count ‘em, Sweep ‘em!

This recipe provides an easy, effective strategy for gathering data on library space use and user behaviors.

Gricel Dominguez, Florida International University, gdoming@fiu.edu

NUTRITION INFORMATION

This recipe provides a quick, easy-to-implement method for assessing library space usage and gathering data on user behaviors. Studies can be conducted individually or in teams, based on the size of the library or space(s).

DIETARY STANDARDS

ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.5; Principle 6, Indicators 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8; Principle 9, Indicator 9.3

COOKING TIME

Times will vary depending on the length of the study and the size of the building. Block out an hour per round to start. Practice will increase efficiency.

COOKING TECHNIQUE

Scheduled walk-throughs, head-counts, documentation, and snapshots

MAIN INGREDIENTS

- Outline or map of library user spaces and number of seats available
- Spreadsheet/tally sheet
- Counter (optional)
- Camera (optional)
- Release forms (if necessary)

PREPARATION

Design a walking route for sweeps. Map your journey and establish a pattern. Identify public spaces as well as areas where users regularly congregate (i.e., around corners and between shelves). Design your spreadsheet (see example) and record data, including observations and remarks.

THE ASSESSMENT

Getting Started

Print a blank copy of your spreadsheet. If your building features multiple floors and a variety of public spaces, create individual pages for each floor.

The first sweep is the toughest. Use your journey map to walk through your building, using a counter, tick marks, or a combination of these to tally the number of individuals in each space.

Recording Observations

Note user behaviors: Where do users gather? Are power cords stretched between aisles? How are the noise levels? Are users rearranging furniture or forgoing it altogether to sit on the floor? Add these to your notes column.

Taking Pictures (optional)

Use a photo diary to create a visual record.

Organize images by space, date, and time. Note: Some institutions may require release forms for images. If in doubt, ask permission.

Putting It All Together

Transcribe data, including notes and observations. Refer to images as needed. Note periods of low and high use, or differences between actual and intended use.

Create visual representations (charts, graphs, pictures) to tell a story.

Repeat

Seating studies are most effective when conducted regularly (once or twice a semester) to increase awareness of user experience and library space needs.

ALLERGY WARNINGS

The number of sweeps and times they are scheduled will depend on the goal of the study. Existing library stats, academic calendars, and anecdotal evidence can help identify areas worth examining. A two-week study, with sweeps scheduled every two or three hours is a good start.

CHEF’S NOTE

Thanks to Mott Linn, whose ACRL paper inspired the first of many such sweeps. With time, sweeps become streamlined and best
practices emerge. After several attempts to integrate technology into sweeps, I find that paper and pen work best, but modify as needed.

**SAMPLE SPREADSHEET**

<table>
<thead>
<tr>
<th>First Floor</th>
<th>Date:</th>
<th>Lounge</th>
<th>Computer Lab</th>
<th>Group Study Tables</th>
<th>Study Carrels</th>
<th>Total per hour</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9:00 a.m.</td>
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<td></td>
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<tr>
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<td>11:00 a.m.</td>
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<td></td>
<td>1:00 p.m.</td>
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<td></td>
<td>3:00 p.m.</td>
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<tr>
<td></td>
<td>5:00 p.m.</td>
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<td></td>
<td>7:00 p.m.</td>
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<td></td>
<td>Total per day</td>
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</tr>
</tbody>
</table>
Library Space Cake
This recipe provides students an opportunity to speak out about space needs in the library. How they study and use the space plays an important role in what is provided.

Jenny Horton, Lynchburg College, horton.jl@lynchburg.edu

NUTRITION INFORMATION
Assessing how students want to use newly available spaces in the library as a result of a reduction in bound volume collections, print reference collections, and microform collections is exciting. While we also reviewed the literature and made site visits, gaining student support and input through surveys and focus group meetings allows student input and collaboration, and gives them a voice in planning and ownership when changes are made.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicators 1.5; Principle 6, Indicators 6.6, 6.8

COOKING TIME
Varies depending on your motivation, schedule, participation, and funding

COOKING TECHNIQUE
• Surveys
• Focus group sessions

MAIN INGREDIENTS
• Student participants, undergraduate and graduate
• Surveys
• Computers
• Meeting room
• Video equipment
• Gift cards for rewards/thank you
• Library staff

PREPARATION
Choose questions for the survey and focus groups that address the information sought. Recruit students in person, through email, and on social media to participate in the survey and/or the focus groups. Secure video recording equipment. Reserve meeting rooms for the focus groups. Purchase food and gift cards for attendees.

THE ASSESSMENT
Know your competition and the trends
• Complete a literature review.
• Visit other libraries that have recently remodeled/refurbished spaces.
• Discuss with colleagues.

Create assessment tools
• Survey
• Questions for focus groups

Distribute the survey, collect results
• Hold the focus groups at convenient times for maximum attendance.
• Record the sessions for later review.
• Have another library staff member or neutral party in the room to record details of the discussion.
• Provide incentives for students to attend.

Evaluate results, find trends

Determine priorities
• Results-based
• Funding-based
• Time-based

Seek funding
• Follow the normal course for your campus/library.
• Find creative ways to accomplish change without funding, such as repurposing old or unused furnishings.

ALLERGY WARNINGS
Asking the right questions is paramount.

Keeping the discussion on track can be tricky. Because they have an interested audience, students may want to discuss the collection, staff, or other topics besides space.

Participation will be low; provide multiple opportunities for discussion/feedback.

If possible, provide food and drinks or gift cards for food and drinks. College students are always hungry.
Visiting other libraries to get ideas can cause heartburn and stomach upset when the funds are not available to accomplish the same outcomes at your own library.

**CHEF’S NOTE**
A quote from Jeanne Narum, the founding director of Project Kaleidoscope, encouraged us in asking the right questions. She recommends asking what will “happen” in the space instead of what will go into the space. This was key to keeping the focus on the students and how they wanted to use the space (http://www.pkal.org/documents/BuildingCommunitiesAskingTheRightQuestions.cfm).

Many of the requests made by students were “quick fixes” and could be accomplished with minimal time and funding over a summer. For example, we created a raised seating area we call the “tech bar” by repurposing some low shelving that was tagged for disposal. By adding power outlets and tall stools for seating, we added ten more seats at which students can study and charge devices.
Decorating the Library Cake: 
A Space Utilization Study

As libraries shift from book repositories to intellectual commons, physical space usage is crucial to understanding and supporting student needs. The space utilization recipe described below can help to determine when, where, and how patrons use the library.

Kellie Meehlhause, University of Minnesota Morris, kmeehlha@morris.umn.edu

**NUTRITION INFORMATION**

When, where, and for what purpose do patrons most frequently use the library’s physical spaces? What role (if at all) does technology play in this usage?

Space utilization studies can be used to determine how and where students use study areas in the library. Results not only indicate which days and times have the highest library usage, but also the study habits, technology usage, and furniture preferences of its patrons. This study may be served individually or in conjunction with focus group discussions and/or surveys to provide a well-rounded assessment of library usage and satisfaction.

**COOKING TECHNIQUE**

Observation, counting

**INGREDIENTS**

- Printed maps or blueprints of each library floor
- Pens/pencils

**Ingredient Substitutions**

For large libraries, GIS technology or mobile apps can provide a more eco-friendly method of data collection as well as more streamlined analysis. North Carolina State University Libraries’ “Suma” and tally/counter apps are just a few possibilities.

**PREPARATION**

Print off and copy floor maps. (If not using technology, you will need a map for each individual observation.) Label the observation date and time on each map. If not already visible, fill in furniture locations, computer areas, and other details (e.g., electrical outlets, windows) as needed.

**THE ASSESSMENT**

1. For each floor/area of the library, record the number of patrons and their location on the floor map.

2. Use different colored pens/pencils to differentiate between students working individually and in groups as well as activities (e.g., using a library computer or personal laptop, reading/studying). A checklist or spreadsheet may also be used to record user activities in addition to the map.

3. Repeat the observation periodically to note patron usage/behavior at different times. Briggs Library completed observations at 11 a.m., 3 p.m., and 8 p.m. daily, with some variation on weekends, during the middle and end of the semester.

4. Once observations are complete, compile data for comparison and tabulation.

**ALLERGY WARNINGS**

While Circulation and Reference Desk visitors were counted, users browsing the stacks, participating in library instruction, or attending library events were not included in observation data. If your library houses other academic offices or services (e.g., tutoring, writing center), consult with them first regarding inclusion.
CHEF’S NOTE
This is a recipe that any librarian-cook can undertake. It initially began as a class project and was replicated during Briggs Library’s strategic planning process. While observations were recorded mainly by librarians Monday–Friday, student workers were also recruited to fill in on evenings and weekends. An observation schedule is highly recommended if using multiple observers.

One of our most interesting discoveries was the importance of technology in library usage. At any given time, computer areas were among the most popular study spaces. For students who bring their own laptops/tablets, study spaces by an electrical outlet were most common and many would move furniture in order to be closer to one. Thus, the space study may serve to highlight future technology and space planning needs, such as making extension cords available for checkout or moving collaboration tables to more populated areas.

RESOURCES
Suma, an assessment toolkit: https://www.lib.ncsu.edu/reports/suma

FIGURE 1: FLOOR MAP OF RODNEY A. BRIGGS LIBRARY
## Section 9.

### Website and Web Services Assessment

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Add WebAIM and Stir:
Assessing Web Accessibility for Users with Disabilities

Using only free online resources and a dash of HTML, you can assess and improve the accessibility of your web presence for users of assistive technologies and mobile devices.

Laura DeLancey, Western Kentucky University, laura.delancey@wku.edu

NUTRITION INFORMATION
What challenges might users with visual or auditory impairments face when they encounter your website? Are they able to perform basic navigation and fulfillment tasks? Can they access tutorials?

This assessment will help identify specific usability barriers, many of which can be addressed without extensive testing or a complete website redesign. The end result will be a concise list of usability barriers to guide targeted improvement projects.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education: Standard Five, 5.2

COOKING TIME
1 day for initial assessment, but ongoing reassessment and updates recommended

COOKING TECHNIQUE
Assessment instrument: Use free online tools to assess the accessibility of your library’s website.

MAIN INGREDIENTS
- HTML/web content management system
- Online HTML validation tools (see Resources)
- Built-in Microsoft Office and Adobe Acrobat tools for PDFs, Word documents, and PowerPoints.
- Additional cookbooks, for detailed explanations of accessibility problems and solutions (see Resources)

PREPARATION
Web accessibility has a steep learning curve, so you may have difficulty conducting your assessment without a foundational understanding of web accessibility principles. Start by reading the cookbooks! Both the WebAIM and W3C websites (see Resources) offer clear introductions to web accessibility. Armed with some background knowledge, you’ll be ready to take the first steps toward an accessible website. These resources can also help you make a case to your administrators about the importance of universal design and web accessibility.

ASSESSMENT STEPS
It is recommended that you begin with the WAVE validator for your website (see Resources). Start by pasting the URL of your library’s website into the validator. Click “Go.”

The results will provide you with a list of potential accessibility hurdles. Once you have identified your most pressing problems, it’s time to jump into your web content editor. Common problems with easy solutions include adding “alt” tags to all images and adding labels to all forms.

Any Word documents and PDFs attached to your website will need to be tested separately using Microsoft and Adobe’s built-in accessibility tools (see Resources).

ALLERGY WARNINGS
Don’t be discouraged if this seems complicated. As you work with these tools and read the suggested resources, accessibility considerations will become second nature.

CHEF’S NOTE
Some problems can be fixed with minor HTML edits, or even the click of a mouse (for example, using Adobe’s Optical Character Recognition to make PDFs accessible to screen readers). But others will require more intensive intervention. Use the results of your assessment to plan future web updates. You can also use the web validation tools to draw
up a checklist for anyone who will be adding content to your web pages.

Web accessibility can seem daunting, but even a few quick fixes can have a big impact.

**RESOURCES**

**Online HTML Validation tools**
- WAVE (http://wave.webaim.org)
- W3C Validator (http://validator.w3.org)
- CynthiaSays (http://www.cynthiasays.com)

**Additional tools and resources**
- Adobe Text Recognition
- (PDF > Tools > Text Recognition > In This File)
- Microsoft Word
- (File > Info > Prepare for Sharing > Check Accessibility)
- More web accessibility evaluation tools (http://www.w3.org/WAI/ER/tools/)

**Accessibility Cookbooks**
For detailed introductions to web accessibility:
- W3C (https://www.w3.org/WAI/intro/accessibility.php)
- WebAIM (http://webaim.org/intro)
Easy (No-Bake) Online Card Sorting

Design and/or evaluate the information architecture of your library website with a no-hassle card-sorting activity. Reduce the stress of baking by creating your study and analyzing your results online.

Samantha Rich, New Mexico State University, snrich@nmsu.edu

NUTRITION INFORMATION
Card sorting is an excellent method of surveying your users’ preferences for and understanding of information organization. Through card sorting, you will learn how your library users would categorize and label your website content. Conducting card sorting online frees you from creating multiple stacks of index cards, allows you to easily edit and distribute your activity, and allows for easier analysis of data.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 4, Indicators 4.1, 4.2, 4.3, 4.4, 4.5, 4.6; Principle 5, Indicators 5.1, 5.2, 5.3; Principle 6, Indicators 6.1, 6.4


COOKING TIME
Online card sorting may extend 2–4 weeks, depending on the recruitment of participants

COOKING TECHNIQUE
Card sorting, ontology analysis

INGREDIENTS
• An enthusiastic library staff

PREPARATION
Consider how you want to use your card sorting results. If you’re redesigning your library website, ask yourself what you want to know more about. Are you focused on reorganizing your tabs? Who do you want to participate in your activity: community users, students, faculty, and/or staff? Answering these questions in advance will help to expedite the development of your card-sorting activity.

THE ASSESSMENT
Choose open or closed card sorting
In closed sorting, users sort cards into pre-defined categories.

In open sorting, users sort cards into categories that they understand and then name the categories with an appropriate title. Use open sorting when you’re uncertain what to name your categories.

Develop your cards
Cards may represent existing or proposed website content. Consider the scope of your project when designing your cards.

Limit your cards as to not overwhelm your participants. Try to keep your card count under fifty cards.

Determine your methodology
Do you want to conduct your activity one-on-one with participants? This would allow you to ask follow-up questions as to why participants sorted cards in specific categories.

Since your activity is online, you may want to administer it to participants independently to complete on their own time.

Select your online card sorting tool
Consider the limitations of the tool. Does it allow for open/closed sorting? What types of analytic features are available? How much does the tool cost? A quick online search of card sorting tools will yield many results. Once you select your tool, read all instructions and guidance.

Enter your cards into your online tool. If you’re performing closed sorting, enter your categories.

Develop thorough instructions. This is particularly important if you are not administering the activity in person. Instructions may describe the purpose of
Section 9. Website and Web Services Assessment

the activity, provide contact information for follow-up questions, limit the number of categories a participant can create (open sorting), request demographic information, etc.

**Recruit your participants**
Your card-sorting activity should include participants representing various demographics of your user groups. You should stop surveying your users once you are no longer learning new information. Research suggests including around fifteen participants (see References).

Consider the time needed to complete the activity. Will your library users require incentives to participate in a thirty-minute (or so) activity?

**Collect data**
Administer your card-sorting activity. If possible, make note of common questions regarding the cards and categories.

**Analyze your results**
Your card-sorting tool will provide some level of built-in analytics. Read the instructions or consult the help features to understand how the analytics work. If you cannot understand your data, you cannot make decisions appropriately.

**CHEF’S NOTES**
Complete the card-sorting activity yourself before administering it to others. This will allow you to check for spelling, clarity, and bugs within the tool.

No-Bake Online Card Sorting yields many results. Share your results with others!

**REFERENCES**
But This is for the Library:

**Best Practices for Usability Testing and Library Website Design**

This recipe is designed to help librarians do basic usability testing of their library websites.

Sojourna Cunningham, University of Richmond, scunning@richmond.edu; Regina Mays, University of Tennessee, rmays@utk.edu; Holly Mercer, University of Tennessee, hollymercer@utk.edu

**INGREDIENTS**

- **Equipment:** computer, audio recorder, portable eye-tracking headset (optional)
- **Software:** Morae recording software
- **Minimum of two staff members to perform test and analysis**
- **Human subjects, research approval, and an informed consent document**
- **Pre-test, ten tasks commonly performed from the library homepage, post-test**

**PREPARATION**

- Secure IRB approval to share the results outside the library.
- Determine your sample population, and recruit subjects.
- Set up and test equipment ahead of time.
- Use web analytics data, such as highly-used secondary page visits, to inform your usability tasks.

**ASSESSMENT STEPS**

Ask participants to accomplish specific, predefined tasks, i.e., open the chat function with a librarian, using your library website as the beginning point for each task. You should employ a pre-test to ask about Internet habits and familiarity with the library site. Have each participant perform ten tasks and complete a post-test and audio-recorded exit interview, where the participants give their impressions of the website and the tasks performed.

**Observation methods**

1. Record the tests using screen capture software. Ask subjects to talk aloud during each task, explaining their reasoning as they perform each task.
2. If you don’t have recording software, you can still use this basic protocol. Careful observations in real time, including notations on the start and finish time of tasks, can provide valuable information. In this case, at least two observers taking detailed notes are optimal. Audio recordings of the talk-aloud during the test and the interview after the test can provide further data for later analysis.

Use the data (audio recordings, video recordings, observations, and session transcriptions) to perform in-depth analysis of how the users interacted with the website. By observing and logging important moments, it is possible to pinpoint design changes that may improve the usability of the site, as well as calculate standard usability metrics, such as time to complete the task, that will allow...
researchers to compare and track the impact of design changes.

The path participants use to accomplish a task, problems encountered, the percentage of successful task completions, and average time to completion can be analyzed. Google Analytics data may also be used to cross-check and illuminate findings.

Finally, apply what you learn. Make data-informed site improvements that are responsive to patron navigational and use patterns. Where did participants focus on the page? Place heavily used content or links there. Did participants struggle because of terminology? Consider the language the participants used during the talk-aloud and use the specific language to re-label commonly used areas of the website.

**ALLERGY WARNING**

- Equipment and software can be temperamental; test the recipe first if you’re unfamiliar with equipment or protocols.
- Recruiting participants can be more time-consuming than testing or analysis, so build in extra time for recruitment and offer incentives for all participants.

**CHEF’S NOTES**

Research indicates that testing five users can discover the majority of usability problems, as long as those users are representative of the population (Nielsen, 2000). Since each user group uses the site in different ways, test five users from each group (faculty, undergraduates, graduate students).

**REFERENCES**

Hear the People Sing:
Communicating Usability Results to a Large Library Audience

This recipe will describe the outputs necessary to effectively communicate usability results using traditional reports, videos of test subjects, and small, focused question-and-answer sessions with stakeholders.

Sojournna Cunningham, University of Richmond, scunning@richmond.edu; Regina Mays, University of Tennessee, rmays@utk.edu; Holly Mercer, University of Tennessee, hollymercer@utk.edu

NUTRIENT INFORMATION
Communicate website usability results to a large audience, or use as a starting point for developing best practices for communicating large assessment project results. For more information on conducting usability tests, please see “But This Is For the Library” in this cookbook.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 3, Indicators 3.1, 3.3; Principle 4, Indicator 4.1, 4.2, 4.3, 4.4, 4.5, 4.6

COOKING TIME
Approximately 1 month

Tip regarding timing
The key with cooking time for this particular project is to be patient and plan for time to communicate to all interested parties. A library website is unique in that it “belongs” to the campus community, and a surprising amount of people will have strong opinions on any changes. You may not be able to reach everyone with just an open session or focus group, but providing multiple communication channels will allow everyone from an English professor with strong opinions to a front line worker who only works nights to request additional information or give you useful feedback.

COOKING TECHNIQUE
Stirring and portioning out data

MAIN INGREDIENTS
• Final report
• Open sessions
• Video reporting

PREPARATION
The final report is where all communication begins. We recommend that it be broken into pieces and subsequently be written by a minimum of two people with an optimal group of four people.

When writing up your tasks, budget a minimum of two hours per task. Recognize that some tasks, i.e., “find a book,” will be easier to write about than others, i.e., “think about a paper you’ve written for a class that required you to use a scholarly article.”

ASSESSMENT STEPS

Final Report
1. Introduction: Explanation and goals of project including timeline and demographics of participants
2. Overall/Executive Summary: Summary of findings that include users’ overall impressions of the website and main sources of error, i.e., dense and/or confusing text

This should be a bare bones summary that covers the most crucial findings succinctly, crafted for those who may read no other part of the report.

3. Summary of Findings: Break down each task. Include “Task Summary” and “Recommendations” sections. If possible, include quotes from users within the “Task Summary” section
4. Directions for Future Testing: This is a “lessons learned” section. It can be about changes to specific tasks or even about the format of the testing process

Open Sessions
We had focus groups with every department that worked heavily with the library website,
as well as with library administration. We went over the report at every group and opened the conversation for questions or comments.

**Video Reporting**

We used Morae recording software to record our participants and created a five-minute video, using Microsoft Movie Maker, of different participants taking the test and making comments about the website. We presented the video to subject librarians at an open meeting. The quick multimedia visual got great feedback from our faculty and staff and allowed for a different viewpoint than the usual text reporting.

**ALLERGY WARNING**

If you do use video recordings, be very aware of only sharing that video within the library. Even with IRB approval, there are privacy concerns.

**CHEF’S NOTE**

When writing your report, use clear language and bullet points wherever possible. Break up long streams of data with clear visuals and tables of specific tasks.

When communicating this data, start small, present your report to the library's Web Group and/or Assessment Group first. These particular groups can help refine your report, offer feedback on your recommendations, and present a “trial by fire.” These groups are very aware of what can realistically be done to create changes to the website.

Another group that should be aware of any recommendations soon after the report is ready is the Library Marketing and Communications Group. They can help with visual mockups of proposed changes.
Farm to Table:  
*A Recipe for Website Usability Testing on a Budget*

This recipe will outline a low-tech method of website usability testing. This testing will involve a set of tasks and observations designed to ensure optimum results.

*Tiffany Davis, Mount Saint Mary College, tiffany.davis@msmc.edu; Jen Park, Mount Saint Mary College, jen.park@msmc.edu; Derek Sanderson, Mount Saint Mary College, derek.sanderson@msmc.edu*

**NUTRITION INFORMATION**  
When redesigning your library’s website, you will want to improve its usability. In order to evaluate your website’s usability, design a usability test and administer it to a sampling of library stakeholders.

Participants should be split into two user groups to be tested, one group consisting of students, the other comprising faculty and staff. Assign a test administrator to each group. The testing instrument should include a selective set of tasks customized to the particular user group being tested. Each user group receives a separate series of tasks. Choose these tasks based on impressions of the functions each type of user would use most and the terminology the user would be familiar with. An example of this would be asking library staff members to locate the “OPAC,” since they should be familiar with that terminology. Likewise, students would be asked to locate a book in the library. Observe and note the level of difficulty or ease with which the user is able to complete the task. In addition to the task-based questions, ask users for their general impressions of the website.

Once testing is complete, test administrators should cross-check results, identify definite problem areas, and suggest changes to the website. Implement changes and retest accordingly.

**DIETARY STANDARDS**  
ACRL *Standards for Libraries in Higher Education* (2011) Principle 4, Indicators 4.1, 4.2, 4.3, 4.4, 4.5, 4.6; Principle 5, Indicators 5.4; Principle 9, Indicators 9.3


**COOKING TIME**  
- Preparation: 1 week  
- Actual cooking time: 1 to 2 hours  
- Analysis and comparison: 1 day

Serves: As many students, faculty, and staff you wish to test.

**COOKING TECHNIQUE**  
Test administrators give the testing instrument (set of tasks) to their assigned user groups. Results from each group are compared. Changes are implemented and retesting occurs accordingly.

**INGREDIENTS**  
- Computer access for users  
- Administrators of the test  
- Test instrument  
- Recording sheet

**PREPARATION**  
Develop respective task sheets for each of the user groups you will be studying.

Identify tasks frequently used by each user group and include them on the task sheet.

Develop an assessment sheet.

Use a Likert Scale to rate the user’s difficulty with the task. Include an area under each Likert Scale for notes.

**ASSESSMENT STEPS**  
1. Provide participants with access to the library website. One test administrator should assess only one participant at a time and devote their full attention to observing that participant’s behavior.
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2. Instruct the participant to complete the first task. Rate the level of difficulty with which they are able to complete the task. Note the time it takes for them to complete. Note how the participant navigates the website:
   » Where he or she clicks
   » How many clicks it takes the participant to complete the task
   » If they select an unexpected link
   » Any comments the participant makes

3. Repeat step two until all tasks are completed and observations are noted.

4. Ask participant for their general impressions of the website and any areas they believe require improvement.

5. Compare notes for every participant with test administrators. Identify tasks that multiple participants had issues completing.

6. Propose recommended changes to the website.

7. Retest once changes to the website have been made.

CHEF’S NOTE
The advantage of our usability testing method is that it could be replicated by anyone. Our method of assessment was relatively low-tech and simple but perfect for our needs. We were able to identify problem areas on our website and suggest appropriate changes. The next step in usability testing for the library will be to establish a method for consistently and regularly evaluating the usability of the website.

ALLERGY WARNING
This is a rather low-tech version of usability testing. If you have access to higher-tech methods, you may have more accurate results. For example, software that tracks participant’s eye movement over your webpage is available and would provide administrators with information that they cannot necessarily observe.
Assessing Your Library Website with Usability Testing

This recipe will help you quickly gather useful information about how real users use your website and what you can do to improve your site’s usability. Usability testing can be done informally and does not require any formal training or specialized knowledge.

Brighid M. Gonzales, Our Lady of the Lake University, bmgonzales@ollusa.edu

NUTRITION INFORMATION
This usability testing recipe is useful for those updating or redesigning a library website. It can be used to assess whether users can easily navigate the website, determine whether common tasks are easy and intuitive to accomplish, and identify areas where adjustments should be made to facilitate ease of use.

COOKING TIME
Usability testing can be done in a single day. With planning and data analysis, the project may take 2–3 weeks.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 4, Indicators 4.1, 4.2, 4.3, 4.4, 4.5, 4.6; Principle 5, Indicator 5.4; Principle 9, Indicator 9.3

ARL Web Accessibility Toolkit http://accessibility.arl.org/


MAIN COOKING TECHNIQUE
Usability testing

MAIN INGREDIENTS
• One computer with Internet access
• Two staff members to conduct the testing: one to lead the participant through the session and another to observe and take notes (or just one if that person is an excellent multi-tasker).
• 3 to 5 study participants (more tends to produce redundant results)
• Incentives to offer participants, such as gift cards or library-branded swag

Optional Ingredients
• Software to record sessions (such as Captivate, Camtasia, Morae, or QuickTime)
• Software to live stream sessions to another location for observation (such as NetMeeting, Blackboard Collaborate, Google Hangouts, Skype, or Morae)
• Consent forms if sessions are recorded

PREPARATION
• Turn each task into a question, i.e., “Can users locate the library’s hours on the website?”
• Formulate a prompt for each question that asks the participant to carry out a specific task, i.e., “Use the website to find out what time the library opens on Sunday.”
• Write a script to use in conducting each session. In the script, the session leader should introduce themselves and explain the purpose of the session, then lead the participant through the series of prompts. Include some ice-breaking/demographic questions up front to get the participant talking out loud. Remind the participant that it is the website being tested, not them. Emphasize the need for them to talk through the steps they take out loud. Explain that since you want to determine whether the website is easy to use, you can’t answer questions during the test, but will answer any remaining questions they have at the end.
• Get consent from your IRB to perform testing with human subjects.
• Recruit participants and schedule them in at least thirty-minute intervals for the day of testing.
ASSESSMENT STEPS
1. Set up recording/streaming software on the computer being used for testing.
2. Have participants sit at the computer. Have them read and sign the consent form if the session is being recorded.
3. Read through the script, leading the participant through each prompt while the observer takes notes. Record what steps they take, places they get confused or stuck, and any comments they make during the session.
4. At the end of the session, thank the participant and give them the incentive gift.
5. Write a report to analyze and distill the information gathered during testing.
6. Use the results to determine which parts of the website are most difficult to navigate, where jargon/unhelpful language is being used, and what changes would address those issues.
7. Make the changes suggested by the test results, then go back to the beginning and test again.

ALLERGY WARNINGS
• Iterative testing with small incremental changes is the most effective and least difficult for users to adapt to.
• Keep the number of prompts short enough so that each session will take approximately thirty minutes to complete. Usually, around five questions is ideal.
• Recruit one or two more participants than you think you’ll need to account for possible no-shows.

CHEF’S NOTE
Usability testing can be conducted iteratively to test the website’s adherence to continually changing web standards and user expectations, or as a standalone project to assess a redesign. The main benefit to conducting usability testing is that you can observe what users actually do when they try to complete a task on the website. Usability testing allows you to gather information from actual website users and provides information about the usability of the website from the user’s perspective.

RESOURCES
Steve Krug’s book *Rocket Surgery Made Easy* goes over the basics of how to perform a simple usability test. The related website, http://www.sensible.com/rsme.html, contains a number of useful downloads, including a sample script, consent form, and checklists to go through as you plan your usability tests.
Order Takeout:
Virtual Usability Testing to Meet Your Users Where They Are
A completely online college library uses virtual usability testing to assess the library homepage.
Jennifer C. Hill, Excelsior College Library, Johns Hopkins University, jennifer.hill@jhu.edu; Anita Norton, Excelsior College Library, Johns Hopkins University, anorton@jhu.edu

NUTRITION INFORMATION
Evaluate navigability and identify challenges with a library website by conducting usability testing from a distance. Use data to make improvements.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 2, Indicator 2.5; Principle 6, Indicators 6.1, 6.8; Principle 7, Indicators 7.6, 7.7, 7.8, 7.9

COOKING TIME
About 6 months to complete the meal:
• 2 months to recruit and schedule tests
• Meetings to create tasks and scenarios
• 2–3 hours to conduct usability pilots while preheating
• 1.5 hours for each usability test (includes time for prep and clean-up)
• 2 hours to combine the audio and video recordings and the notes from each session
• Meetings to review final transcripts and determine website changes

COOKING TECHNIQUES
Usability testing, screen recording, informal interviews

MAIN INGREDIENTS
• Web conferencing software, i.e., Adobe Connect, GoToMeeting, WebEx, etc. If you don’t have access to one of these, try an online usability tool, such as Open Hallway.
• Phone line (to taste). Web conferencing software can record audio, but consider technology challenges and accessibility for participants. Use an office phone on speaker. Record the conversation using a free voice/audio recording app.
• Google Forms or another tool to create a registration form
• 5–8 participants for a hearty sample
• 2–3 librarians: 1 to facilitate/read the tasks, and 1–2 as note takers
• Incentives: e-gift cards for each participant upon completion

PREPARATION
• Write 2–5 tasks with scenarios. Make tasks doable, specific, and concrete. Test what is most important to users and what you have control of to fix.
• Draft a facilitator script. Include steps to get the participant set up in a virtual room, sharing the screen, etc.
• Pilot the usability study with family and/or friends. Do not use colleagues because of their familiarity with the library website.
• Tweak tasks and scenarios, if needed.
• Create a registration form (i.e., name, phone #, email, etc.).
• Pre-identify populations that represent your largest user groups. Include diverse flavor profiles, such as different levels and disciplines (i.e., associates, masters, military, faculty).
• Market strategically to solicit participants from pre-identified populations. (Provide a link to the registration form).
• Contact selected participants to set up the test date/time.
• Send email reminders.

THE ASSESSMENT
Individual Sessions
1. Reserve a quiet room with a speaker phone and laptops.
2. Meet in a virtual room and on phone at scheduled time. Set up participant with any software downloads, as a presenter, etc.
3. Teach the participant to share their screen and how to toggle between the virtual room to read the tasks and their browser to access the website.
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4. Start recording the virtual room and the voice/audio recording app. If you use a phone line, you will have two recordings for each session: video and audio.
5. Facilitator reads the script. Includes an overview of how the session will work and how long it will take. Continuity in instructions is important for consistent results.
6. Facilitator shares note pod in a virtual room, which shows the task, and reads aloud once.
7. The participant attempts to complete the task. Repeat for all tasks.
8. Note takers record the steps/clicks for each task, the number of attempts, the start and completion time, and notable comments.
9. At end of the session, thank the participant and ask for any additional feedback. Use this time to ask any follow-up questions.

Results Aggregation
1. Blend audio, video, and notes to create one narrative for each test.
2. Remove personally identifiable information from file names.
3. Track time spent and success rate for each task.
4. Look for items that multiple people were challenged by.
5. Make a list of potential changes.
6. Immediately tackle those that will be most impactful and easiest to implement.
7. Review the list to prioritize remaining changes.

ALLERGY WARNINGS
All tasks were geared toward students, so some were not applicable to faculty.
Ensure participants return to the homepage before each task.

If anonymity is important, have users enter the virtual room as “user #1.” Otherwise, names will show in the recording.

Having the audio and video recordings separate was time-consuming and challenging to review, but it made it easier on participants to attend.

**CHEF’S NOTE**
A camera was not needed by our users because we decided to record their screens, not their faces.

Instead of waiting for another cycle of usability tests, we now track usability issues on a regular basis with an Excel spreadsheet on a shared drive. Librarians can enter potential issues that arise during reference interactions. We continually review this list and implement changes on the fly.

**REFERENCES**


Lean Usability Testing for Healthy Website Assessment

This recipe provides a template for reliable, lightweight usability testing that any library can conduct quickly and easily.

Alex Sundt, Utah State University, alex.sundt@usu.edu

NUTRITION INFORMATION
For decades, “discount usability” has delivered quick and reliable usability tests (Nielsen 2009). Perfect for everyday library assessment, this recipe adapts the discount method, serving a lean, nutritious usability test that pairs well with continuous design, rapid prototyping, and other agile techniques.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicators 1.1, 1.4; Principle 4, Indicators 4.2, 4.4, 4.5

COOKING TIME
1–2 hours; 10–15 minutes per user

COOKING TECHNIQUE
Informal usability tests featuring short task-based scenarios

INGREDIENTS
• Printed handouts with test scenarios
• Website/prototype and laptop with screen-recording software
• A table, chairs, incentives (optional)

PREPARATION
1. Drawing from assessment and usage data, select important user tasks for your website (e.g., finding a book).

EXAMPLE SCRIPT
Hello, would you have ten minutes to help us improve the library website?

Thanks for your time today. [Give name and association]. I’d like to observe how you complete a few activities on our website. Please keep in mind, the website is being tested, not you, and there are no right or wrong answers. [Provide/explain handout]. As you work through these activities, please try to talk aloud through your thought process to help me understand what is confusing or difficult.

THE ASSESSMENT
1. Recruit volunteers as they pass the table, offering incentives if needed.

2. Write realistic user scenarios prompting participants to engage with your website to perform the tasks. For best practice, see “Turn User Goals” (2014) and Rubin and Chisnell (2008).

3. Print several handouts with one to three scenarios. Provide copies for each observer and participant.

4. Using clear and simple language, prepare a script to recruit participants and administer the test.

5. Choose a place and time to test. Set up the table and test materials.

2. Provide a handout and explain the test process. Sitting next to the participant, start the recording software and provide control of the computer.

3. Reading from the handout, have the participant work through each scenario, encouraging them to think aloud to uncover points of confusion (Nielsen 2012). Ask follow-up questions and take notes as needed.

4. Finally, thank the participant and ask if they have any questions for you. Continue recruiting and testing for one or two hours, or until there’s enough evidence to modify your design. Typically, five users will uncover most usability problems (Nielsen 2000); however, if there are notable differences between user groups (e.g., students and faculty), it’s important to test five users from each group.

5. Review your notes, recordings, and observations, editing your design and re-testing as needed.

ALLERGY WARNINGS
This recipe is designed for quick, iterative tests and provides only a limited portrait of users’ needs.

Recruiting in the library oversamples frequent library visitors, so consider using
other research and recruitment tools to target less-visible user groups.

If you choose to time how quickly participants complete a task, don’t use the think-aloud method, as this will slow down his or her performance.

**CHEF’S NOTE**
Test early and often for best results. Repeated tests both collect ongoing feedback and allow user success rates to be measured for each user task, demonstrating ongoing usability gains.

**REFERENCES**


Simple Usability Stir Fry

Stir-frying is a cooking technique wherein ingredients are fried quickly while being stirred in a wok. Use simple ingredients to quick-start usability testing, which will help inform content and structural changes that improve patron engagement on the web.

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NUTRITION INFORMATION
Usability is a growing concern for all libraries. It’s particularly important on the web, which may be a library patron’s first point of contact. This recipe will show libraries how to start conducting usability tests for their website to improve the user experience. The goal is to make tasks easier for patrons and to reduce completion time while increasing success rates.

DIETARY STANDARDS
ACRL Standards for Libraries in Higher Education (2011) Principle 1, Indicator 1.5; Principle 5, Indicator 5.4; Principle 9, Indicator 9.3

COOKING TIME
Cooking time for 1 serving (1 user test) is 15–30 minutes. Repeat 5–10 times with additional patrons for additional servings.

COOKING TECHNIQUE
One-on-one activity, computer-based assessment, test administration, video recording/screen capture

INGREDIENTS
• 1 test administrator
• 1 library patron
• 1 desktop computer or laptop

PREPARATION
Set up the software or camera to record the patron’s screen and spoken comments as they complete the testing. Start up the laptop/desktop computer, launch a web browser, and navigate to your library’s homepage. Print out a sheet for the test administrator’s use with questions, such as:
• How can you contact a librarian for help?
• Can you find the database Academic Search Complete?
• What are the library’s hours on Saturdays?
• Are you able to find how long you can have a book checked out?
• Where can you find a peer-reviewed article on climate change?

THE ASSESSMENT
Explanation by Test Administrator
Patrons will complete five tasks, and there are no right or wrong answers. They need to verbalize their thinking process as well as what actions they are taking. Let them know there will be a series of follow-up questions when the test is over.

Perform Tasks 1–5
1. In a clear voice, ask the patron the first question.
2. Allow the patron five minutes to complete the task.
3. Record any patterns, observations, or errors that you notice.
4. Move to the next task. If the patron is unable to complete the task, end the task by asking, “Where would you expect this to be located?”
5. Repeat steps 1–4 until all tasks have been completed.

End the Assessment
Ask patrons the following questions and record the answers/comments:
1. Do you think that you would like to use this website frequently?
2. Did you find the website unnecessarily complex?
3. Did you think that the website was easy to use?
4. Do you think that you would need the support of a technical person to be able to use this system?
5. Did you feel very confident using the system?
6. Did you find the system very cumbersome to use?
**Compile Usability Test Results**

Compile a report of your findings based on your notes, audio, and video recordings. This report may contain overall time for completion of tasks, the difficulty level for user to complete tasks, the percentage rate of failure, pathway mapping (are patrons looking for navigation items in the wrong places?), and should cross reference comments to success and failure rates.

Based on the report above, implement website content and design changes and retest using the same five tasks. Repeat this process as necessary.

**ALLERGY WARNINGS**

Be sure patrons understand that the tests are designed to test the website, not them. Design questions to test the functionality of the website, rather than the individual library patron’s information literacy skills. Offering an incentive, such as a $10–$15 gift card or snacks, may help with recruitment of participants.

**CHEFS’ NOTE**

The tasks can be varied based on the library’s needs. The data that is gathered is qualitative in nature. It can be used to make changes based on data, rather than personal preference or guesswork.

IRB training from your institution for test administrators is highly recommended.
Standards Referenced

Your chefs offered suggestions for various standards in their recipes.
The standards below are those mentioned (with see references to the recipe page numbers in parenthesis).

STANDARDS

ACRL Standards for Libraries in Higher Education (Principles)

1. Institutional Effectiveness (see: 3, 5, 11, 19, 37, 49, 51, 53, 57, 59, 61, 63, 67, 70, 34, 85, 87, 89, 97, 103, 105, 111, 113, 115, 51, 52, 53, 123, 125, 58, 60, 64, 154, 160, 162, 164, 175, 186, 188)

2. Professional Values (see: 3, 7, 17, 57, 61, 65, 67, 70, 105, 107, 115, 53, 54, 125, 154, 166, 183)

3. Educational Role (see: 3, 22, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 70, 105, 115, 121, 125, 177)

4. Discovery (see: 3, 28, 35, 43, 49, 53, 57, 61, 63, 67, 95, 105, 115, 121, 123, 125, 64, 173, 175, 177, 179, 181, 186)

5. Collections (see: 3, 5, 17, 19, 26, 28, 31, 33, 35, 37, 39, 41, 43, 45, 49, 53, 57, 61, 63, 65, 67, 87, 95, 105, 107, 115, 121, 152, 171, 173, 179, 181, 188)

6. Space (see: 3, 7, 11, 37, 85, 105, 111, 115, 119, 121, 135, 156, 158, 160, 162, 164, 166, 173, 183)

7. Management/Administration (see: 3, 7, 9, 19, 26, 31, 33, 39, 41, 59, 70, 89, 95, 97, 103, 105, 107, 113, 115, 117, 121, 123, 129, 131, 133, 135, 137, 143, 183)

8. Personnel (see: 2, 13, 59, 93, 99, 105, 115, 121, 123, 127, 135, 137)


ACRL Framework for Information Literacy for Higher Education (Frames)

10. Authority is Constructed and Contextual (see: 72, 76, 78)

11. Information Creation as a Process (see: 72, 78)

12. Information Has Value (see: 72, 76, 78)

13. Research as Inquiry (see: 72, 78)

14. Scholarship as Conversation (see: 72, 78)

15. Searching as Strategic Exploration (see: 72, 76, 78)

ACRL Competencies for Special Collection Professionals Part III D (see: 24)

ACRL Guidelines on the Selection and Transfer of Materials from General Collections to Special Collections (see: 24)

ACRL Guidelines for Behavioral Performance of Reference and Information Service Providers (see: 125)

ACRL Guidelines for Implementing and Maintaining Virtual Reference Services (see: 1, 125)

ACRL Guidelines for Preservation, Conservation, and Restoration of Local History and Local Genealogical Materials (see: 24)

HHS Usability testing. (see: 179)

ANSI/NISO Z39.7-2013: 7.3 Information Requests (see: 129)


SURVEYS

ACRL Academic Library Trends and Statistics Survey: Number of Reference Transactions (see: 129)

ARL Statistics Survey (see: 129)

Public Libraries Survey (PLS): Reference Transactions (see: 129)

REFERENCES


