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Research Data Management Stone Soup: Gauging Team Competencies

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Gauging Team Competencies

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NUTRITION INFORMATION

This recipe incorporates ingredients from several competency documents designed by an array of library groups to create an exercise that helps to bolster skills and services surrounding research data management (RDM). This assessment allows the library to better understand and visualize the strengths and gaps in knowledge necessary to effectively run an RDM team creating an ever-changing, collaborative "stone soup."

NUMBER SERVED

The recipe scales with the number of library employees working with or interested in research data management work. While the competencies exercise can be used with groups of any size, groups should include a sufficient number to identify areas of strength and weakness.

LEARNING OUTCOMES

- Self-assess strengths and weaknesses of an institution's current RDM team
- identify gaps in knowledge in which professional development should be sought
- build upon the strengths of individuals

to form a balanced RDM team in light of the institution's research data management needs

COOKING TIME

It should take approximately one hour for an individual to complete the competencies exercise. Times may vary depending on customization of the recipe. Additional time will be required if you choose to evaluate the strengths and weaknesses of the group as a whole.

DIETARY GUIDELINES

This Stone Soup recipe addresses ACRL's *Framework for Information Literacy for Higher Education* in the following ways:

- Information Has Value: Understanding the strengths and knowledge gaps of individuals and the group can lead to the development of a balanced team, prepared to provide high-level service to researchers.
- Research as Inquiry: As groups responsible for data management may change over time, utilizing the competencies document will allow for ongoing evaluation of individual and group strengths

and weaknesses, leading to continued growth in skills and knowledge.
- Scholarship as Conversation: Group members will discuss which data management competencies are applicable and important to themselves and their institution's researchers.

INGREDIENTS

- Research Data Management Self-Assessment Tool Template (see appendix)
- Library staff who are involved or interested in data management, regardless of current skill level
- One or more of the resources from Additional Ingredients to make this recipe your own

PREPARATION

1. Copy the Self-Assessment Template into a text editor such as Word or spreadsheet software such as Google Sheets.
2. Ask the members of your RDM group to review the Additional Ingredients.
3. Review the competencies with your group to discuss what additional ingredients (either from the Additional Ingredients or from scratch) to add to the Self-Assess-

ment Tool Template.

4. Add these additional ingredients, such as data visualization, to taste and distribute the revised Self-Assessment Tool to the group.

INSTRUCTIONS

1. Using the customized Self-Assessment Tool, have each group member rate their level of competence on a sliding scale, from developing to expert, by placing a mark next to each ingredient.
2. Have group members share their results with the rest of the group.
3. Meet to discuss next steps, such as professional development activities. Based on the results, self-study, or group instruction in cases in which more than one or two people must learn or refresh a skill, should be planned.

REVIEWS/ASSESSMENT STRATEGY

After each member rates their level of competence, bring the self-assessments together to identify overlapping or complementary strengths or areas of weaknesses of your group. Compare this information with the assessed needs of your institution and the data services your library would like to provide. By doing this, you will be able to identify either service gaps or opportunities for expansion. The individual competencies list can also be used to identify specific areas for professional development.

ADAPTING THE RECIPE

This recipe can be adapted to include em-

ployees outside the library. People outside the library may be needed to fill some of the competency gaps identified the first time this recipe is made. This can be especially useful if you are just starting to investigate research data management at a library or university level.

ALLERGY WARNING

Warning: Sensitivities about an ingredient during assessment can result in false signs of an allergic reaction and feelings of inadequacy. To prevent this, any early signs of allergic reaction should be reported to the group. This should result in a frank and open discussion. The group can then help the individual reorient their perspective.

CHEF'S NOTES

It should be noted that cooks should not discount foundational ingredients. The ability to build meaningful relationships or communicate clearly are examples of important ingredients that create a delicious and nutritious dish.

ADDITIONAL INGREDIENTS

The complete self-assessment instrument is available for use here:

Armstrong, Michelle; Davis, Megan; Ellie Dworak; Yitzhak Paul, and Elisabeth Shook. "Research Data Management Competencies Self-Assessment." ScholarWorks, Boise State University, Data Management Services, paper 8, 2021. https://doi.org/10.18122/dataservices.8.boisestate.

You may wish to use these additional ingredients to customize your recipe.

American Library Association. "Knowledge and Competencies Statements." Accessed March 3, 2021. https://www.ala.org/educationcareers/careers/corecomp/corecompspecial/knowledgecompetencies.

Association of College and Research Libraries. "Roles and Strengths of Teaching Librarians." April 28, 2017. http://www.ala.org/acrl/standards/teachinglibrarians.

Association of Southeastern Research Libraries. "Shaping the Future: ASERL's Competencies for Research Librarians." November 10, 2000. http://www.aserl.org/programs/competencies/.

NASIG. "NASIG Core Competencies for Scholarly Communication Librarians." *NASIG Newsletter* 32, no. 5 (August 2017). https://tigerprints.clemson.edu/nasig/vol32/iss5/1.

Reference and User Services Association. "Guidelines for Behavioral Performance of Reference and Information Service Providers." Latest revisions approved May 28, 2013. https://www.ala.org/rusa/resources/guidelines/guidelinesbehavioral.

Schmidt, Birgit, and Kathleen Shearer. "Librarians' Competencies Profile for Research Data Management." Joint Task Force on Librarians' Competencies in Support of EResearch and Scholarly Communication, June 2016. https://www.coar-repositories.org/files/Competencies-for-RDM_June-2016.pdf.

APPENDIX: RESEARCH DATA MANAGEMENT SELF-ASSESSMENT TOOL TEMPLATE

Name: Date:

I. RDM competencies	Developing	Competent	Proficient	Expert	Notes:
1. Understands data & data management practices					
1.1. *Understands & can articulate the research life cycle & where data management fits in*					
1.2. *Locates, understands, & applies DMP guidance & best practices*					
1.3. *Understands & applies best practices for file naming & organization*					
1.4. *Understands & applies best practices for preservation & distribution of research data*					
2. Writes data management plans to follow best practices & NSF directorate guidelines as well as meeting researchers' & project needs					
2.1. *Identifies & uses guidance & documentation appropriate to the funding agency & project*					
2.2. *Includes guiding/supporting information specific to project needs*					
3. Familiar with research data repositories					
4. Can create organizational structures for researchers & research teams					
5. Communicates clearly verbally & in writing					
5.1. *Distills complex concepts for nonexperts*					
6. Builds relationships & networks					
7. Sets reasonable boundaries					
8. Has commitment to staying current in a quickly evolving research environment					
9. Manages projects to completion					
10. Understands & models ethical behavior, e.g., regarding research compliance, information security, & intellectual property					
10.1. *Respects researcher privacy & maintains confidentiality*					