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Research Data Management Competencies Self-Assessment

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Research Data Management Competencies Self-Assessment

Instructions: Make a copy of this document; for each row, place an X in the column corresponding to your skill level; add questions or comments to the *Notes* column on the right.

Name:					Date:
I. RDM competencies	Developing	Competent	Proficient	Expert	Notes:
1. Understands data & data management practices					
1.1. <i>Ability to identify likely data outputs based on descriptions of intricate research projects</i>					
1.2. <i>Understands & can articulate the research lifecycle & where data management fits in</i>					
1.3. <i>Locates, understands, & applies DMP guidance & best practices</i>					
1.4. <i>Understands & applies best practices for file naming & organization</i>					
1.5. <i>Understands & applies best practices for preservation & distribution of research data</i>					
1.6. <i>Locates, understands, & applies metadata standards</i>					
1.7. <i>Understands issues & applies best practices in data sharing & reuse</i>					
1.8. <i>Familiar with tools used to work with data</i>					
1.9. <i>Understands data cleaning processes as well as when they are necessary</i>					
1.10. <i>Understands how to create schema specific metadata</i>					
1.11. <i>Understands the steps in curating & publishing data sets</i>					
1.12. <i>Understands the steps involved in archiving data sets (with regard to format & preservation issues)</i>					
2. Familiar with data citation systems					
2.1. <i>Understands how to cite data such that it is easy for others to locate</i>					
2.2. <i>Locates & applies data citation styles such as APA & MLA</i>					
3. Writes data management plans to follow best practices & NSF directorate guidelines as well as meet researchers & project needs					
3.1. <i>Identifies & uses guidance & documentation appropriate to the funding agency & project</i>					
3.2. <i>Includes guiding/supporting information specific to project needs</i>					
3.3. <i>Identifies data management problems & recommends solutions</i>					

I. RDM competencies continued	Developing	Competent	Proficient	Expert	Notes:
4. Knowledge of intellectual property rights & licensing, especially regarding data as scholarship					
4.1. <i>Understands & can articulate when copyright, patents, or trade secrets might apply to a research project</i>					
4.2. <i>Understands & can articulate issues in licensing as it applies to publication & repositories</i>					
4.3. <i>Identifies when to refer researchers to the Office of Technology Transfer</i>					
5. Familiar with research data repositories					
5.1. <i>Locates & refers researchers to the best options for a given type of research data</i>					
6. Can create organizational structures for researchers & research teams					
6.1. <i>Generates ideas for structures</i>					
6.2. <i>Identifies tools for implementation</i>					
6.3. <i>Creates procedures & documentation</i>					
6.4. <i>Recommends strategies for successful implementation</i>					
7. Knowledge of the research process across a variety of disciplines					
7.1. <i>Understands research designs used within a variety of disciplines</i>					
7.2. <i>Understands statistical methods used within a variety of disciplines</i>					
II. Interpersonal competencies	Developing	Competent	Proficient	Expert	Notes:
1. Communicates clearly verbally & in writing					
1.1. <i>Effectively explains & kindles enthusiasm for research data management</i>					
1.2. <i>Effectively explains various aspects of research data management (metadata, organizational structure, elements of a DMP)</i>					
1.3. <i>Distills complex concepts for non-experts</i>					
2. Builds relationships & networks					
2.1. <i>Collaborates effectively</i>					
2.2. <i>Maintains communication with stakeholders</i>					
2.3. <i>Fosters trust & readiness to accept change</i>					

II. Interpersonal competencies continued	Developing	Competent	Proficient	Expert	Notes:
2.4. <i>Requests & integrates constructive criticism from team</i>					
2.5. <i>Requests feedback from the researcher on the product of the consultation</i>					
2.6. <i>Indicates willingness to offer further help</i>					
2.7. <i>Develops & maintains trusted relationships with researchers & support partners</i>					
2.8. <i>Gauges & responds to researcher's readiness & commitment to adopt data management practices</i>					
3. Sets reasonable boundaries					
3.1. <i>Negotiates timeline with researchers</i>					

IV. Academic environment competencies	Developing	Competent	Proficient	Expert	Notes:
1. Commitment to staying current in a quickly evolving research environment					
2. Understands the environment of higher education & federal/state grants					
3. Familiarity with institutional stances on intellectual property technology transfer					

V. Library professional competencies	Developing	Competent	Proficient	Expert	Notes:
1. Manages projects to completion					
1.1. <i>Provides product of consultations in a timely manner</i>					
2. Demonstrates a spirit of lifelong learning					
2.1. <i>Quickly locates & comprehends contextual information about disciplinary research</i>					
2.2. <i>Is willing to help researchers with complex questions</i>					
2.3. <i>Finds connections in themes of projects & problems</i>					
3. Understands & models ethical behavior, e.g. regarding research compliance, information security, & intellectual property					
3.1. <i>Respects researcher privacy & maintains confidentiality</i>					
4. Identifies gaps in one's own and others' comprehension					
4.1. <i>Clarifies confusing terminology & jargon</i>					
4.2. <i>Asks clarifying questions as appropriate</i>					
5. Conducts a thorough data management needs interview					

V. Library professional competencies continued	Developing	Competent	Proficient	Expert	Notes:
5.1. Prepares & organizes questions in advance of the interview					
5.2. Identifies researchers' goals & objectives					
5.3. Clarifies researchers' needs & issues					
5.4. Can diverge from prepared questions as needed during the interview					
5.5. Employs a system of triage to identify and prioritize opportunities to serve researchers. ¹					
6. Identifies appropriate expertise & resources					
6.1. Cites sources consulted in preparing recommendations					
7. Understands & applies assessment & evaluation strategies to data management services					
8. Facilitates knowledge transfer across organization					
VI. Technical competencies	Developing	Competent	Proficient	Expert	Notes:
1. Literate with computer hardware and software used in a university research data setting					
1.1. Able to utilize hardware such as workstations, printers, scanners, and 3D printers & can address gaps in knowledge to acquire necessary skills					
1.2. Acquainted with available research lifecycle software tools including knowledge of popular analysis & visualization software					
1.3. Knowledge of popular data analysis & visualization software					
1.4. Ability to use basic command line operations for file & data manipulation					
1.5. Familiar with relevant coding languages such as R & Python					
VII. Entrepreneurial competencies	Developing	Competent	Proficient	Expert	Notes:
1. Communicates about & markets research support services					
2. Is willing to embrace failure					
3. Prioritizes research support services to meet organizational needs					

¹ Reference and User Services Association, 2013

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