### **Washington University in St. Louis** Washington University Open Scholarship

IASSIST & DCN - Data Curation Workshop

Workshop Schedule

Dec 11th, 10:40 AM - 11:00 AM

# Checklist of DCN CURATE Steps

Lisa Johnston

University of Minnesota - Twin Cities, ljohnsto@umn.edu

Jake R. Carlson

University of Michigan - Ann Arbor, jakecar@umich.edu

Wendy Kozlowski

Cornell University Library, wak57@cornell.edu

Heidi Imker

University of Illinois at Urbana-Champaign, imker@illinois.edu

Robert Olendorf

The Pennsylvania State University, rko5039@psu.edu

 $See\ next\ page\ for\ additional\ authors$ 

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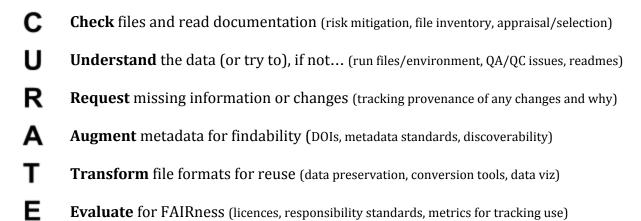
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Presenter Information Lisa Johnston, Jake R. Carlson, Wendy Kozlowski, Heidi Imker, Robert Olendorf, and Cynthia Hudson-Vitale	
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### **Checklist of CURATE Steps and FAIRness Scorecard**

(published in the DCN Planning Phase Report (2017)



## **CHECK Step**

CURATE Action	Curator Checklist
<ul> <li>Check data files and read documentation</li> <li>Review the content of the data files (e.g., open and run the files or code).</li> <li>Verify all metadata provided by the author and review the available documentation.</li> </ul>	☐ Files open as expected ☐ Issues ☐ Code runs as expected ☐ Produces minor errors ☐ Does not run and/or produces many errors ☐ Metadata quality is rich, accurate, and complete ☐ Metadata has issues ☐ Documentation Type (circle) Readme / Codebook / Data Dictionary / Other: ☐ Missing/None ☐ Needs work

## **UNDERSTAND Step**

CURATE Action	Curator Checklist
<ul> <li>Understand the data (or try to)</li> <li>Check for quality assurance and usability issues such as missing data, ambiguous headings, code execution failures, and data presentation concerns.</li> <li>Try to detect and extract any "hidden documentation" inherent to the data files that may facilitate reuse.</li> <li>Determine if the documentation of the data is sufficient for a user with similar qualifications to the author's to understand and reuse the data. If not, recommend or create additional documentation (e.g., a readme.txt template).</li> </ul>	Varies based on file formats and subject domain. For example  Tabular Data Questions (Microsoft Excel)  Organization of data well-structured  Not rectangular  Split tables into separate tabs  Headers/codes clearly defined  Define headers  Clarify codes used  Clarify use of "blanks"  Clarify units of measurement  Quality control clearly defined  Unclear quality control  Update/add Methodology

### **REQUEST Step**

CURATE Action	Curator Checklist
Request missing information or changes  • Generate a list of questions for the data author to fix any errors or issues.	Narrative describing the concerns, issues, and needed improvements to the data submission.

#### University of Michigan sample email to researcher:

Dear [name of the person Identified as the contact for the data set as stated in the DBD metadata],

Thank you for depositing your data set, [title of the data set] to the library's Deep Blue Data repository.

After we receive a data set, we review it to ensure that the data sets we host are as complete, accessible and understandable as possible. We have reviewed your data set and have the following recommendations for you:

- Recommendation #1
- Recommendation #2
- Recommendation #3
- Recommendation #4

We look forward to hearing your response to our questions and requests for additional information.

Please do let us know if you have any questions about or recommendations. We would be happy to talk with you over the phone or meet with you in person to discuss our review of your data should you wish to do so.

Sincerely,

[Name of Liaison]

## **AUGMENT Step**

CURATE Action	Curator Checklist
<ul> <li>Augment the submission</li> <li>Enhance metadata to best facilitate discoverability.</li> <li>Create and apply metadata for the data record, including descriptive keywords.</li> <li>When appropriate, structure and present metadata in domain-specific schemas to facilitate interoperability with other systems.</li> </ul>	□ Discoverability sufficient □ Recommend (circle one) full-text index / file rename / file reorder / file descriptions / zip files into one archive Other □ Keywords Sufficient □ Suggestions □ Linkages Sufficient □ Link to report/paper □ Link to related data sets □ Link to source data □ Link to other

## **TRANSFORM Step**

CURATE Action	Curator Checklist
<ul> <li>Transform file formats         <ul> <li>Identify specialized file formats and their restrictions (e.g., Is the software freely available? Link to it or archive it alongside the data).</li> <li>Transform files into open, non-proprietary file formats that broaden the potential audience for reuse and ensure that preservation actions might be taken by the repository in later steps. Retain original files if data transfer is not perfect.</li> </ul> </li> </ul>	□ Preferred file formats in use □ Recommend conversion from to Retain original formats □ Software needed is readily available □ Unclear version of software □ Unclear software used □ Visualization of data easily accessible □ Recommend graphical representation □ Recommend web-accessible surrogate

Cornell's List of Preservation Format Recommendations <a href="http://guides.library.cornell.edu/ecommons/formats">http://guides.library.cornell.edu/ecommons/formats</a>

## **EVALUATE Step**

CURATE Action	Curator Checklist
Evaluate and rate the overall data record for FAIRness.*  • Score the dataset and recommend ways to increase the FAIRness of the data and become "DCN approved."	Findable -  Metadata exceeds author/title/date, Unique PID (DOI, Handle, PURL, etc.). Discoverable via web search engines.  Accessible -  Retrievable via a standard protocol (e.g., HTTP). Free, open (e.g., download link).  Interoperable -  Metadata formatted in a standard schema (e.g., Dublin Core).  Metadata provided in machine-readable format (OAI feed).  Reusable -  Data include sufficient metadata about the data characteristics to reuse Contact info displayed if the direct assistance of the author needed.  Clear indicators of who created, owns, and stewards the data.  Data are released with clear data usage terms (e.g., a CC License).

<sup>\*</sup> Rubric evaluating the FAIR principles are based on the scoring matrix by Dunning, de Smaele, & Böhmer (2017).