Data Curation Tool Scholars Portal Dataverse

Meghan Goodchild Tech Tools for RDM Showcase - Portage Webinar June 16, 2020

National grant for RDM development (CANARIE)

- "Dataverse for the Canadian research community: Developing reusable and scalable tools for data deposit, curation, and sharing"
- Led by Scholars Portal and UTL with support from CARL and Portage
- 3 key focus areas:
 - Authentication
 - Data Curation
 - Scalability and large-file support
- November 2018 March 2020
- <u>Blog post</u> on project completion





Data Curation Tool

- "As a user, I want to add details about the variables in my dataset after I've uploaded it to Dataverse."
- Developed the Data Curation Tool (DCT)
 - External web application that connects to Dataverse to create and edit metadata at the variable level using DDI standard
- Aim to improve data curation workflows and promote adoption of standards and best practices

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	v1	v2	v3	v4	√5	v6	v7	v8	v9	v10	v11	v12	v13	v14	v15	v16
1	1.040e+14	4	26	104012	99	1	1973	2	1642	1040	1040	1	6	1	5	5
2	1.040e+14	1	19	104008	99	2	1943	1	99	99	99	1	1	6	4	5
3	1.040e+14	4	98	104003	99	1	1990	1	99	99	99	1	6	3	99	11
4	1.040e+14	2	98	104010	99	1	1983	2	1756	1040	1040	1	6	3	99	11
5	1.040e+14	1	18	104007	99	2	1927	1	99	99	99	1	1	6	4	1
6	1.040e+14	2	19	104007	99	1	1983	1	99	99	99	1	6	2	5	3
7	1.040e+14	4	15	104005	99	2	1970	1	99	99	99	1	1	2	4	6
8	1.040e+14	4	19	104006	99	1	1942	1	99	99	99	2	1	6	5	88
9	1.040e+14	4	15	104005	99	1	1965	2	1040	1276	1040	7	4	1	5	5
10	1.040e+14	7	15	104004	99	2	1955		99	99	99	1	1	2	5	5
11	1.040e+14	7	15	104003	99	2	7777	1	99	99	99	1	1	6	77	77
12	1.040e+14	4	18	104005	99	2	1938	1	99	99	99	1	3	6	5	5
13	1.040e+14	7	17	104005	99	1	1945	1	99	99	99	1	1	6	5	4
14	1.040e+14	4	18	104005	99	2	1949	2	1040	1380	1040	1	4	6	5	5
15	1.040e+14	2	15	104003	99	2	7777	1	99	99	99	1	1	2	4	5
16	1.040e+14	4	32	104007	99	1	1974	1	99	99	99	1	6	2	5	5
17	1.040e+14	4	98	104006	99	1	7777	1	99	99	99	1	6	3	99	11
18	1.040e+14	4	25	104010	99	2	1968	1	99	99	99	1	1	2	5	1
19	1.040e+14	4	40	104007	99	1	1967	1	99	99	99	1	1	2	6	2
20	1.040e+14	1	23	104004	99	1	1932	1	99	99	99	1	1	6	4	3
21	1.040e+14	2	18	104003	99	2	1965	1	99	99	99	1	6	2	5	5
22	1.040e+14	1	27	104011	99	1	1956	1	99	99	99	2	1	1	5	2
23	1.040e+14	4	18	104004	99	2	1923	1	99	99	99	1	3	6	3	3
24	1.040e+14	1	19	104006	99	2	1952	1	99	99	99	1	4	2	5	3
25	1.040e+14	3	16	104004	99	2	1947	2	1276	1040	1040	1	1	6	3	3

Curation Workflows

Researcher signs up / login, create dataverse or dataset, edit metadata, upload files, gets a DOI (citation)

Researcher deposits data

Curator / Dataverse Admin reviews dataset, feedback is provided

Dataset Review

Submit for review

Researcher submits dataset for review by Institutional Dataverse Administrator Dataset published

Curated dataset published openly in Institutional Dataverse

Data Curation Tool - Features

- View summary statistics for variables
- Add labels, groups, weights
- Create and edit variable-level metadata
- DDI XML file saved back to Dataverse and can be exported by users
- DDI-formatted HTML codebook for entire dataset that also includes variablelevel metadata

Development details

- Works with tabular data files (CSV, SAV, XLSX, etc.)
- Uses Angular 7, Angular Material Theme, & Dataverse API
- Completed UX testing with 5 participants
- French translations provided by the University of Ottawa
- GitHub: <u>https://github.com/scholarsportal/Dataverse-Data-Curation-Tool</u>

DCT Demo

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Labour Force Survey (Curated)

LFS2016-01_PUMF_EN.tab

Tester, Curation, 2019, "Labour Force Survey (Curated)", https://doi.org/10.5072/FK2/YLJJAY, Scholars Portal Dataverse, V1, UNF:6:EerkQFr2ySzwCu4oV5jExA== [fileUNF]

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			v14106	SURVMNTH	Survey month		0	1	
			v14127	LFSSTAT	Labour force status		0	1	
			v14165	PROV	Province		0	1	
		v14110 REC_NUM Order of record in file v14130 SURVYEAR Survey year v14106 SURVMNTH Survey month v14127 LFSSTAT Labour force status	3 largest CMAs		0	1			
			v14155	AGE_12	Five-year age group of respondent		0	1	
			v14136	AGE_6	Age in 2 and 3 year groups		0	1	

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LFS2016-01_PUMF_EN.tab

Tester, Curation, 2019, "Labour Force Survey (Curated)", https://doi.org/10.5072/FK2/YLJJAY, Scholars Portal Dataverse, V1, UNF:6:EerkQFr2ySzwCu4oV5jExA== [fileUNF]

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Data Curation Tool Codebook

Data Curation Tool Testing Dataset (ICPSR doi:10.5072/FK2/0TYIHL) (DCT Testing Dataset)

View: Part 1: Document Description Part 2: Study Description

Part 3: Data Files Description Part 4: Variable Description Part 5: Other Study-Related Materials

Entire Codebook

Document Description

Citation

Title: Data Curation Tool Testing Dataset

Identification Number: doi:10.5072/FK2/0TYIHL

Distributor: Scholars Portal Dataverse

Date of Distribution: 2019-06-14

Version: 2

Bibliographic Citation: Lubitch, Victoria; Leahey, Amber, 2019, "Data Curation Tool Testing Dataset", https://

Study Description

Citation

Title: Data Curation Tool Testing Dataset

Subtitle: DDI Test

Alternative Title: DCT Testing Dataset

Identification Number: doi:10.5072/FK2/0TYIHL

Authoring Entity: Lubitch, Victoria (University of Toronto)

Leahey, Amber (Scholars Portal)

Producer: Leahey, Amber

Date of Production: 2019-05-22

Grant Number: 4445555

Distributor: Scholars Portal Dataverse

Date of Distribution: 2019-06-14

Study Scope

Keywords: Astronomy and Astrophysics, test, smoking

Topic Classification: Metadata

Try it out!

- Launched in Scholars Portal Dataverse (October 2019)
 - Production Dataverse: <u>dataverse.scholarsportal.info</u>
 - Demo Dataverse: <u>demodv.scholarsportal.info</u>
- GitHub: <u>https://github.com/scholarsportal/Dataverse-Data-Curation-Tool</u>

Future developments

- Improvements to groups (sub-groups, re-ordering, viewing variables in group)
- Incorporating variable metadata within main Dataverse search (SOLR index)
- Investigating metadata elements/fields that could be added
- Improve accuracy of metadata in the DDI Codebook "Document Description" section
- Adding content from the DCT to the Data Explorer
- UI tweaks, including improved multi-select for variables

Want to learn more?

• Blog post "Introducing the Data Curation Tool":

https://spotdocs.scholarsportal.info/x/BIROD

• Basic documentation available in GitHub:

https://github.com/scholarsportal/Dataverse-Data-Curation-Tool#using-the-datacuration-tool

• OCUL webinar on DCT (recording):

https://ocul.zoom.us/rec/share/yNxRlun2_zhOGqfL6VPtUbJiENzKT6a81SRlqKBf

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Comments, questions, suggestions?

dataverse@scholarsportal.info