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

(v1	v2	v3	V4	v5	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	1	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



Submit for review

Researcher submits dataset for review by Institutional Dataverse Administrator

Curator / Dataverse Admin reviews dataset, feedback is provided

Dataset Review



Dataset published

Curated dataset published openly in Institutional Dataverse

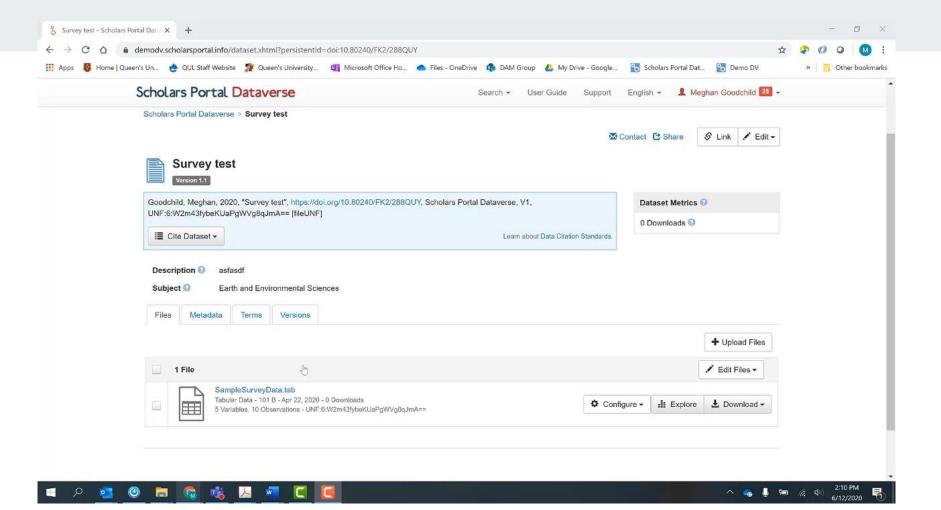
Data Curation Tool - Features

- 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: https://github.com/scholarsportal/Dataverse-Data-Curation-Tool

DCT Demo



Launch from "Configure" button for tabular file



Labour Force Survey (Curated)

LFS2016-01_PUMF_EN.tab

Hide Groups

Add Group

All Variables

Number of hours

Search

Name

REC_NUM

SURVYEAR

SURVMNTH

LFSSTAT

PROV

CMA

AGE_12

AGE_6

ID

v14110

v14130

v14106

v14127

v14165

v14168

v14155

v14136

Test

Q

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

Label

Order of record in file

Survey year

Survey month

Province

3 largest CMAs

Five-year age group of respondent

Age in 2 and 3 year groups

Labour force status

Download

1 - 25 of 75

View

0

0

0

Items per page: 25

Weight

Save

+

Labour Force Survey (Curated)

v14158

SEX

LFS2016-01_PUMF_EN.tab

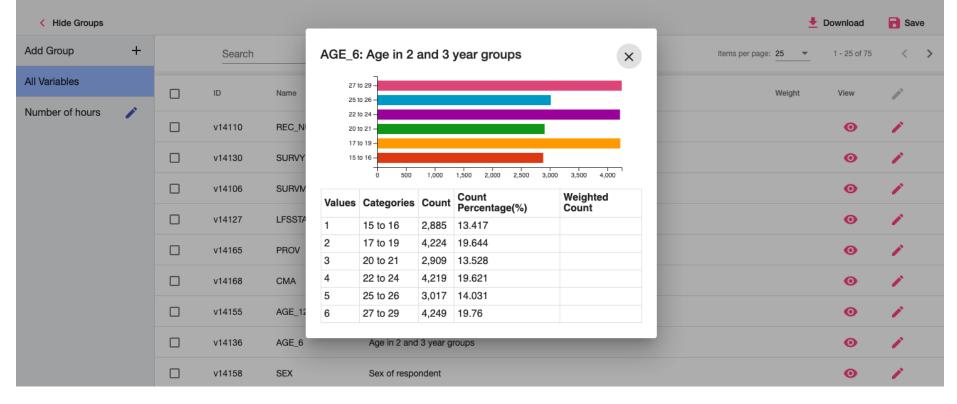
Tester, Curation, 2019, "Labour Force Survey (Curated)", https://doi.org/10.5072/FK2/YLJJAY, Scholars Portal Dataverse, V1, UNF:6:EerkQFr2ySzwCu4oV5jExA== [fileUNF] Download **Save** Hide Groups Variable Information Add Group + Search Items per page: 25 1 - 25 of 75 ID Name v14158 SEX All Variables ID View Name Weight Label Sex of respondent Number of hours REC_N v14110 0 Literal Question v14130 SURVY 0 v14106 SURVIV Interviewer Instructions 0 0 v14127 LFSSTA Post Question v14165 **PROV** Universe 0 v14168 CMA Notes AGE_12 v14155 v14136 AGE_6

Sex of respondent

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]



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

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://

Citation

Study Description

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: https://github.com/scholarsportal/Dataverse-Data-Curation-Tool

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-data-curation-tool
- OCUL webinar on DCT (recording):
 https://ocul.zoom.us/rec/share/yNxRlun2_zhOGqfL6VPtUbJiENzKT6a81SRlqKBf
 yB2m8tUX1e9ioLrZo6bQRlnD

Comments, questions, suggestions?

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