Presenting DMPCore: A Metadata Schema for Data Management Plan Repositories

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What is a Data Management Plan (DMP)?

"A data management plan describes the data that will be [produced in a research project] and how the data will be managed and made accessible throughout its lifetime. The contents of the data management plan should include:

- the types of data to be authored;
- the standards that would be applied, for example format and metadata content;
- provisions for archiving and preservation;
- access policies and provisions; and
- plans for eventual transition or termination of the data collection in the long-term future."

Rationale

Funding agencies are increasingly requiring DMPs at the time of requesting funding

Combine this with a growing need for standardized research data management education across LIS environments

Necessity: metadata pertaining to DMPs to help standardize how these resources are indexed and found online

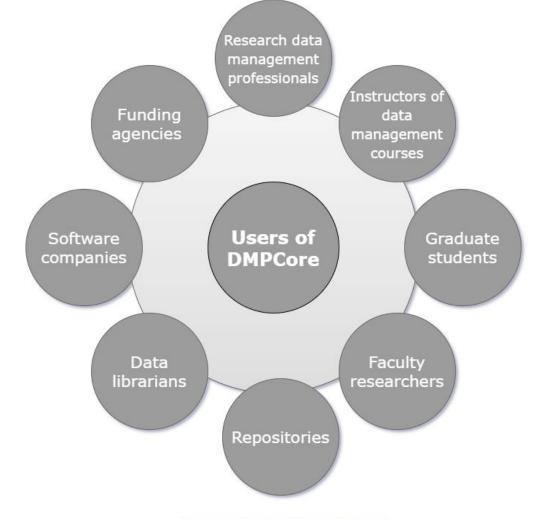
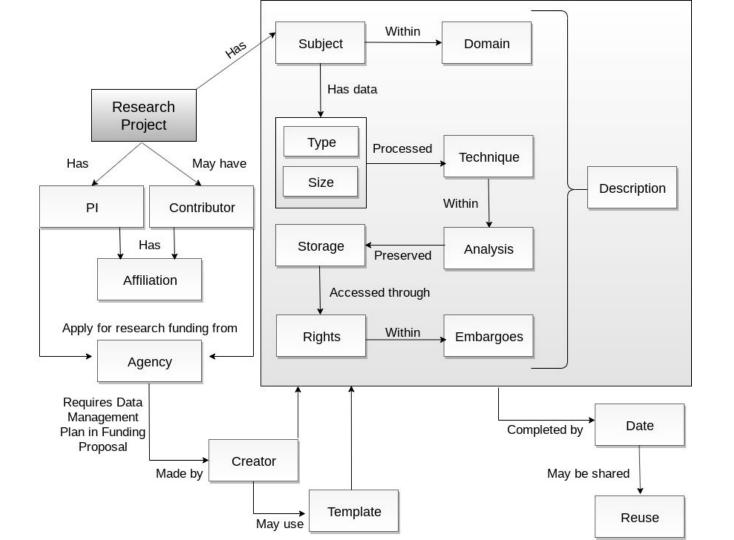


Figure 1: Potential Users of DMPCore



The Elements

- Tools and Templates
- Creator
- Affiliation
- Funding Agency
- Copyright Information
- PI or Co-PI
- Academic Domain
- Affiliated Websites
- Types and Sizes of Datasets
- Storage of Datasets Including Repositories

- Tools and Methods Used for Data Analysis
- Embargoes
- Data Access and Rights
- Associated Institutions

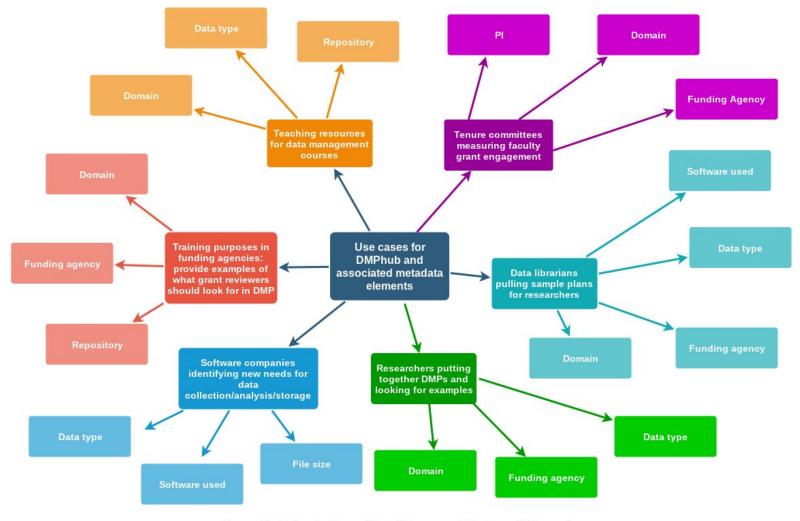


Figure 2: Network Map of Use Cases and Relevant Elements

Vocabulary Specification for Analysis

Initial vocabulary includes 20 software packages and programming libraries most commonly found in data management plans across several disciplines of research. More terms will be added to the controlled vocabulary as DMPCore expands.

SPSS

R

OpenRefine

MatLab, etc.

Example XML Record

```
<?xml version="1.0" encoding="UTF-8"?>
<record xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
   xsi:noNamespaceSchemaLocation="file:/C:/Users/Leah/Desktop/MSIS/INSC524%20Metadata/Assignment4/XSDFinal.xsd">
   <fundAgency termsource="LCNAF" termsourceid="n2006182431">National Science Foundation (U.S.). Subcommittee on
Nanoscale Science, Engineering, and Technology</fundAgency>
   <template>DMP Tool</template>
   <template>Reynholm Industries Internal Template
   <staffWrap>
       <creator termsource="local" termsourceid="0118">Avenal, Richmond</creator>
       <creator termsource="local" termsourceid="999">second creator</creator>
       <PI termsource="local" termsourceid="881">Barber, Jen</PI>
       <PI termsource="local" termsourceid="999">Reynholm, Denholm</PI>
       <contributor termsource="local" termsourceid="119">Moss, Maurice</contributor>
       <contributor termsource="local" termsourceid="725">Trenneman, Rov</contributor>
       <contributor termsource="local" termsourceid="3">Reynholm, Douglas</contributor>
       <affiliation termsource="LCNAF" termsourceid="n2001131100">Channel 4 International</affiliation>
       <affiliation termsource="local" termsourceid="IT">Information Technology</affiliation>
   </staffWrap>
```

Futures

Integrate into Carnegie Mellon University Libraries institutional repository collection of DMPs

Submit to DCMI Annual Conference

Potential engagement with DMPTool

Further Resources for DMPCore

Website:

https://hannahcgunderman.github.io/INSC524 Final Cannon Gunderman/

Slides on Open Science Framework:

https://osf.io/cmz3s/

Questions? Comments?

Thank you!

References

DataONE. (n.d.). *Data Management Planning*. Retrieved from https://www.dataone.org/data-management-planning