

Development of an Analytic Rubric to Facilitate & Standardize the Review of NSF Data Management Plans

International Digital Curation Conference 2015

DART Project

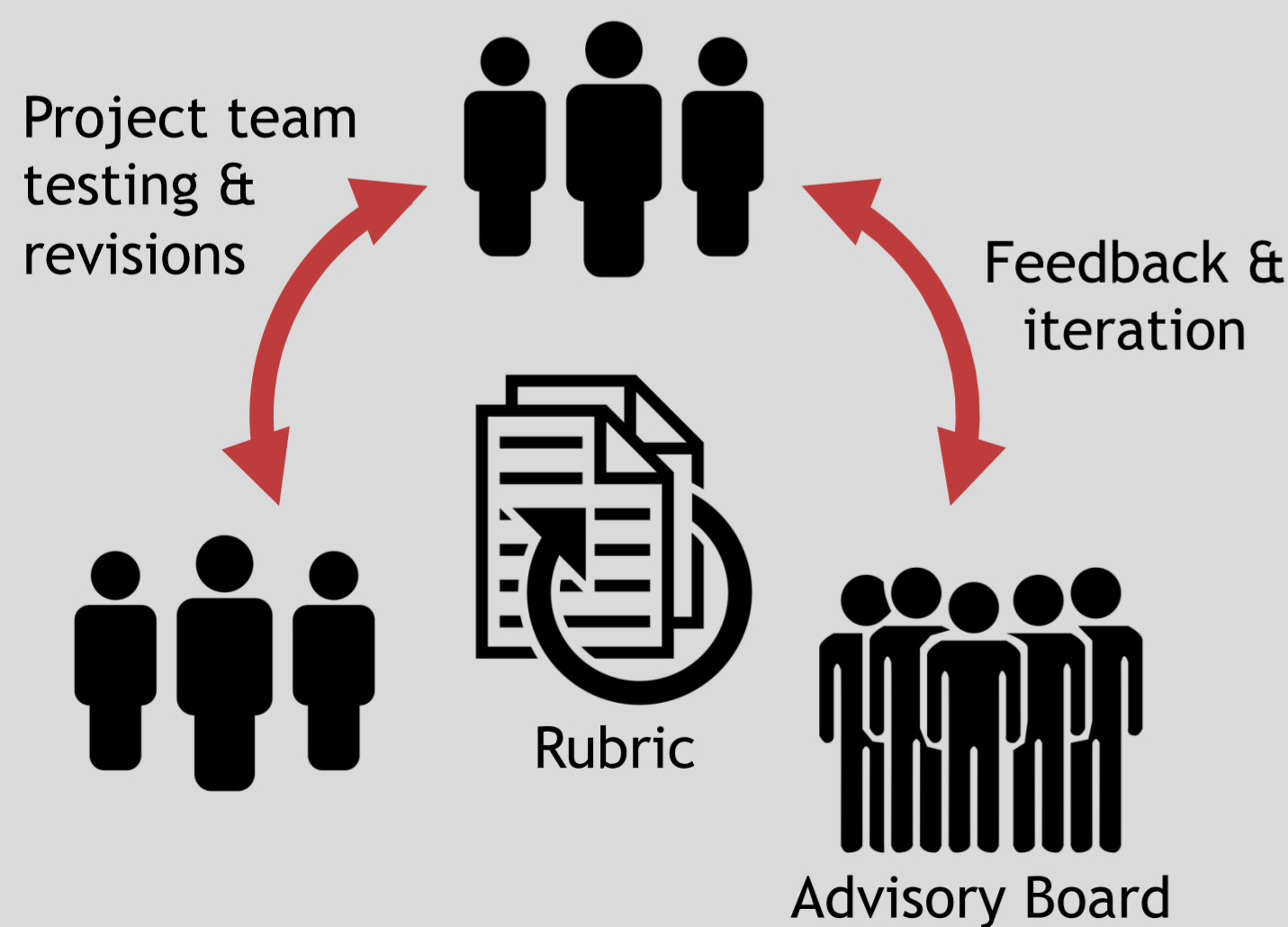
A multi-university study of faculty data management plans submitted to NSF. Turn the DMP into a research tool!

Project Outputs

- 1) An analytic rubric to standardize the review of data management plans as a means to inform targeted expansion or development of research data services at academic libraries;
- 2) A study utilizing the rubric that presents the results of data management plan analyses at five universities.

Project Phases

- 1) Acquisition of DMPs
- 2) Iteratively develop analytic rubric
- 3) Use rubric to analyze DMPs
- 4) Finalize & share rubric
- 5) Share results of DMP analyses at 5 research intensive US universities



Rubric Development

1. Analyze DMP requirements from NSF-wide & directorate guidance
2. Identify tasks in DMPs, and components of each task
3. Develop scale to describe how well component was addressed in DMP
4. Pilot test the rubric using 25 DMPs

	Performance Level				Details were clear, but answer was WRONG
	High	Low	No	N/A	
Describes what types of data will be captured, created or collected All directorates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Describes how data will be collected, captured, or created (whether new observations, results from models, reuse of other data, etc.) GEO_AGS, GEO_EAR_SGP, MPS_AST	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Identifies how much data (volume) will be produced GEO_EAR_SGP, GEO_AGS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discusses the types of data that will be shared with others CISE, EHR, SBE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan discusses the types of data the investigator expects to retain CISE, ENG, SBE, MPS_PHY, MPS_DMR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For interdisciplinary proposal submissions, the plan addresses the customary data practices of partner disciplines MPS_DMS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Preliminary Observations

- Developing the rubric was challenging
 - The NSF requirements / guidelines are not always clear
 - How to cover multiple directorates within a single rubric while streamlining the form & process?
 - What is a reasonable level of granularity?
 - How to ensure consistency across reviewers?
- Wording in DMPs indicates that concepts are not well understood
 - Questions on what was meant by statements like “no restrictions on access”
- There is potentially useful information in DMPs that is not captured by only evaluating NSF requirements
 - E.g., did they mention the IR?

Project team:

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Data management plans as A Research Tool
<http://bit.ly/dmpresearch>
 @DMPResearch

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Next Steps

- Revisit the rubric to determine:
 - Are we capturing the right information?
 - At the right level of depth?
 - In ways that are useful?
- Test for inter-rater reliability
- Report our findings
- Finalize the rubric for others to use

We want to hear from you!

What would be the most useful to learn from DMPs?

- Types of data being generated
- Standards / Formats being used
- Plans for sharing data
- Policies surrounding use of data
- Plans for archiving data



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