Title: Accelerating Public Access to Research Data (APARD): A Guide for Change in Research Universities

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Abstract:

With funding from the National Science Foundation (NSF# 1939279) and National Institutes of Health, APLU and AAU released a Guide to Accelerate Public Access to Research. The guide is designed to help institutions develop and promote systems to support sharing of research data. It also contains information concerning the infrastructure and support that may be required to facilitate data access, and it offers specific examples of how various institutions are approaching challenges to sharing research data and results. The guide is based upon previous workshops and conferences that convened teams from campuses, including two National Summits held in February 2019 and March 2020.

Summary Information:
Accelerating Public Access to Research Data (APARD)

A Guide for Change in Research Universities

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Kacy Redd, Associate Vice President, Research and STEM Education, Association of Public and Land-grant Universities
Overview

• Why data access is important (high-level language)
• Past AAU & APLU data access activities
• *Guide to Accelerate Public Access to Research Data* (process mechanics/culture change)
• Achieving cultural change to accelerate data access (meta process mechanics)
• Challenges in accelerating data access
Who We Are

The Association of American Universities (AAU) is an association of 63 U.S. and two Canadian leading research universities that transform lives through education, research, and innovation. AAU member universities collectively help shape policy for higher education, science, and innovation; promote best practices in undergraduate and graduate education; and strengthen the contributions of leading research universities to American society.

The Association of Public and Land-grant Universities (APLU) is a research, policy, and advocacy organization with a membership of over 247 public research universities, land-grant institutions, state university systems, and affiliated organizations in the U.S., Canada, and Mexico, that is dedicated to strengthening and advancing the work of public universities.
APARD Project Team and Steering Committee

**Project Team**
- Toby Smith, AAU
- Kacy Redd, APLU
- Emily Miller, AAU
- Katie Steen, formerly AAU
- Sarah Nusser, AAU senior fellow
- Bob Samors, AAU senior scholar/consultant

**Steering Committee**
- Jeff Chasen, U Kansas
- Tom Cramer, Stanford
- Kevin Gardner, U Louisville
- Heidi Imker, U Illinois at Urbana-Champaign
- Jim Luther, Duke
- Greg Madden, formerly Penn State U
- Sarah Nusser, Iowa State U
- Pegah Parsi, U California, San Diego
- Lawrence Sutter, Michigan Tech
- Tyler Walters, Virginia Tech
- Jim Wilgenbusch, U Minnesota
Importance of public access to research data

• Accelerating discovery and innovation
  - Science advances through sharing what we know and what we don’t know
  - Want scholarship to be used

• Increasing rigor and public trust
  - Addressing “reproducibility” concerns
  - Scientific accountability through transparency

• Meeting sponsor requirements
  - Institutional polices ensure consistency of data management plans across campus
APARD: Facilitating institutional change for data sharing

1. Align the community
   • 2017 AAU/APLU Public Access Working Group Report

2. Galvanize implementation (APARD I, NSF (#1837847))
   • 2018 Accelerating Public Access to Research Data Workshop with 30 U teams

3. Institutional Guide and strategic planning (APARD II, NSF (1939279) with NIH)
   • Feb. 2020 Conference (30 Us) and 1st National Summit (75 Us) to broaden participation and provide input to a guide for campus data sharing support
   • April 2021 – Guide released
   • March 2022 – AAU/AGU/APLU Workshop on the role of disciplinary societies
Ecosystem influencing researcher actions

I. VISION / FOUNDATION
- Message institutional priority & commitment
- Establish clear leadership & committee structure
- Identify resources

II. STRATEGIES / PLANNING
- Survey capabilities and assets
- Identify gaps
- Design system
- Develop implementation plan

III. IMPLEMENTATION
- Research data policy
- Workflow for support compliance
- Supporting infrastructure & services
- Researcher skills & capacity
- Communications, culture
APARD Guide Overview

• Resource for university administrators to accelerate progress

• Articulates how public access to research products is aligned with the mission of a research institution

• Outlines major steps in developing robust data sharing support systems
  - Description
  - Initial actions
  - Examples from other campuses
Introduction

PART I: Framing a Campus Initiatives to Accelerate Public Access to Research Data
• Why Public Access to Research Data is Important
• Accelerating Public Access to Research Data will Require Cultural Change

PART II: Making Priorities Visible and Establishing A Plan
• Establish Data Sharing as a Campus Priority
• Create a Structure to Guide Campus Initiative and Provide the Required Support to Ensure its Success
• Develop Plan for an Effective Research Data Stewardship System

PART III: Key Implementation Areas to Consider
• Establish or Update Institutional Research Data Policy and Related Guidelines and Procedures
• Identify Research Data Services and Expertise for Supporting Public Access to Research Data
• Identify Costs and Resources to Address Them
• Build Capacity and Skills for Good Research Data Stewardship Practice
• Build Support for Embracing the Research Data Policy and Research Data Sharing

Conclusion with Essential Questions
AAU’s and APLU’s Unique Role in Facilitating Institutional Change

• Convening power
  — AAU & APLU represent over 250 public & private research universities

• Help identify and share university practices and policies
  — Utilize ‘coopetition’ as a lever for change

• Cultural change
  — Top down is important, but not sufficient
Challenges in accelerating data sharing

1. **Leadership** – who is responsible for providing data access?
2. **Money** – who pays to facilitate data access?
3. **Policy** – what data to share, retain, and for how long?
4. **Recognition** – faculty incentives and rewards
5. **Infrastructure** – repositories, researcher services, compliance review
6. **Disciplines** – variation in data access practices and requirements
7. **Sponsors** – lack of harmonization of federal agency policies
8. **Cross-winds** – growing tension between security and scientific openness
Thank you!

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