CYFS Post-Award Resource: Data Repository Guidance

We are pleased to share a new post-award resource available exclusively to CYFS research affiliates: *Data Repository Guidance*. Designed for social, behavioral and educational (SBEd) researchers, this guidance helps answer the question: "What data repository is right for me?"

This resource provides guidance at multiple points during the research cycle. The information may be useful during proposal development and provide support for developing data management plans, personnel needs and budgets. It may also be useful at the conclusion of research when data needs to be stored in a public repository. Ultimately, researchers are responsible for selecting the most appropriate repository for the indicated data.

ADDITIONAL SUPPORT:

- MAP Academy: CYFS research affiliates working with our methodologists in the MAP Academy can receive additional support in selecting a data repository and preparing data for deposit. For additional information or support from MAP Academy, please visit: mapacademy.unl.edu or email mapacademy@unl.edu.
- UNL Libraries: UNL Libraries can also assist with data curation and repository identification. For more information, please visit: <u>libraries.unl.edu/research-data-management</u> or email <u>datamanagement@unl.edu.</u>

Data Repository Guidance

We offer guidance below for researchers to consider as they select repositories for data.



Researchers are encouraged to review requirements, restrictions and guidance from funders who may specify approved repositories for researchers to use.

Guidance from Commonly Used Funders

As a starting point, below are links to guidance from commonly used SBEd funders. Researchers should directly consult the funder's official information for the latest guidance.

- **NIH:** sharing.nih.gov/data-management-and-sharing-policy/sharing-scientific-data
- IES: ies.ed.gov/about/public-access-research/implementation-guide
- NSF: par.nsf.gov
- USDA: <u>nal.usda.gov/services/agdatacommons</u>



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If no specific repository or other guidance is required by the funder, researchers are encouraged to consider general principles and best practices for repository selection.

FAIR Principles

Specifically, researchers should consider the FAIR principles for scientific data management and stewardship when determining the "right" repository for their work. The following table outlines each FAIR principle. For more information, visit: go-fair.org/fair-principles.

FAIR Principle	Description				
Findability	Data and metadata should be easy to find by humans and computers. They should include sufficiently rich metadata, a unique and persistent identifier, and be registered or indexed in a searchable resource.				
Accessibility	Identified data can be retrieved to maximize its re-use (i.e., easily downloaded from a trusted repository). Ideally, there is a free and open, universal or standard way for users to retrieve data (or at least metadata), while allowing for user authentication or authorization as necessary.				
Interoperability	Data and metadata use a "formal, accessible, shared and broadly applicable language for knowledge representation."				
Reusability	Follow best practices or community standards for archiving data so that data are accurate and metadata are thoroughly described. Data should have clear usage license.				

Note: Metadata refers to data about data, and includes contextual information about the study such as title, topic and description of the study, design, methods, measures used and variable level information.

Other factors for consideration:

- NIH Selecting a Data Repository
- UNL Libraries Research Data Management & Sharing
- **Discipline-specific:** Researchers should also consider discipline-specific repositories that might be most appropriate for their content areas and data types.
- **Long-term use:** Researchers are also encouraged to investigate the stability and longevity of their selected repository, as some repositories are grant-funded.



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Consult select repositories reviewed by the CYFS Data Repository Workgroup for their specific relevance to CYFS research affiliates.

Review Process

We have identified repository options that align with CYFS research themes: Academic Intervention and Learning; Early Childhood Education and Development; Social, Emotional and Behavioral Well-being; Biological Bases of Learning and Behavior; and Rural Schools and Communities. These selected repositories have a significant or growing body of research that aligns with CYFS thematic areas. The repositories were reviewed according to the factors outlined below:

Factor	Description			
Cost Efficiency	Some repositories are free to all researchers, while others are free only to member institutions. Whereas there may be no cost to a researcher to deposit data, there could be a cost for users to access the data.			
Data Curation Services and Technical Assistance Availability	Availability and levels of services can vary. Basic curation services ensure that your dataset is findable and preserved. Services with increasing levels of depth can include data organization, description, cleaning and providing additional protections or restrictions on the data as needed.			
Allowance for Restricted Data	Some repositories can accommodate access restrictions placed on datasets.			

Our review process resulted in four external and one internal repository options for CYFS research affiliates to consider (summarized below and in Table 1).

POTENTIAL REPOSITORY OPTIONS RELEVANT TO CYFS RESEARCH:

- Inter-university Consortium for Political and Social Research (ICPSR)
 (icpsr.umich.edu). ICPSR has a 50-year history of serving as a data archive and is certified as a Trustworthy Data Repository by CoreTrustSeal. ICPSR provides a variety of options for social science researchers who want to deposit data and for investigators who want to use the data.
 - Data curated by ICPSR. ICPSR will, at a minimum, review study data for disclosure risk and make changes as needed to preserve confidentiality. It can also improve dataset documentation and usability.
 - OpenICPSR (<u>openicpsr.org/openicpsr</u>)This ICPSR site allows researchers to share their datasets at no cost to the researcher, though data users may be charged for access to the data.



- SANDY UNL Research Data Repository (<u>sandy.unl.edu</u>): Stewarding Nebraska
 Data, known as SANDY, is housed within UNL Libraries and was upgraded in early
 2025. It accepts research data from affiliates across the University of Nebraska System
 and only accepts data that can be made open to the public. UNL Libraries recognizes
 that SANDY meets all of the <u>Desirable Characteristics of Data Repositories for
 Federally Funded Research</u>.
 - View UNL Libraries' Guide for Depositing Research Data with SANDY: unl.libguides.com/sandy/welcome
- Harvard Dataverse (<u>dataverse.harvard.edu</u>): Harvard University's platform allows researchers from any discipline, institution or organization to share their data or to set up collections of related datasets (a "dataverse").
- LDBase (<u>Idbase.org</u>): LDBase is a data repository hosted by Florida State University
 with funding from the National Institutes of Health. LDBase will accept data from
 education studies involving students across a range of abilities.
- Open Science Framework (osf.io): OSF is a multi-faceted research platform that supports scholarly collaboration and sharing of research materials. Researchers can decide what material from their studies, including data files, to share publicly.



Table 1. Comparison of Potential Repository Options Relevant to CYFS Research

	Harvard Dataverse	ICPSR			005	LINII OANDY
		ICPSR Curation	Open ICPSR	LDBase	OSF	UNL SANDY
Free to Deposit Data	√	✓	✓	✓	✓	Yes, for NU affiliates
Free to Access Data	✓	Yes, if researcher pays ICPSR to curate data; otherwise, only affiliates of member institutions	ICPSR may charge a fee to access data	✓	✓	√
Accepts Restricted- Use files	✓	✓	√	✓	NO	NO
Assigns DOI	✓	✓	\checkmark	√	\checkmark	✓
Researcher can update or remove data	√	Not specified	√	Not specified	✓	In delimited circumstances in consultation with UNL libraries
Offers Data Curation Services	Yes, for a fee	✓	✓	NO	NO	✓
Generalist	✓	NO	NO	NO	√	✓
Discipline- Specific	NO	✓	✓	✓	NO	NO

Modified from:

ies.ed.gov/sites/default/files/migrated/nces pubs/ncee/pubs/2022004/pdf/2022004.pdf