

DATA MANAGEMENT PLAN

[Project Title]

Roles and Responsibilities

This Data Management Plan (DMP) was created on [date] for submission to the National Science Foundation (NSF) as required by NSF guidelines in the interest of securing funding for the proposed [project title] project. The aim and purpose of this DMP is to provide details of plans to preserve and make publicly available any data collected during this study, as well as any results derived from the associated research. Principal Investigator (PI) [PI Name] will be responsible for obtaining all necessary provisions to ensure the data are properly archived and that funding for the management of the data is secured.

The data collected for this study will be archived at the Odum Institute Data Archive. There, the data will be preserved and made publicly available online via the UNC Dataverse virtual archive hosted by the Odum Institute. The Odum Institute Data Archive has been awarded the internationally recognized 2014-2015 Data Seal of Approval by meeting quality guidelines for trustworthy digital repositories. As a member of the Data Preservation Alliance for the Social Sciences (Data-PASS), the Odum Institute Data Archive is recognized as a trusted and well-established data archive in the social science research and archiving communities. As such, it provides a strong archival and data dissemination resource to the proposed project.

This DMP is intended for review by relevant NSF personnel, as well as Odum Institute Data Archive staff. Pending project funding, ongoing review of this plan will ensure preservation of and access to the data.

Expected Data

Project data will include extant restricted-use data from the Educational Longitudinal Study of 2002, for which the PI has been granted a license for access and use by the Institute of Education Sciences. In addition, the project will collect data from individual web surveys from a participant sample of approximately 500 undergraduate students. The project will also produce a dataset on students' exposure to select disciplinary domains from analysis of coursework presented in college transcripts, as well as data on public-sphere participation obtained from automated capture and analysis of online social media accounts.

In accordance with University of North Carolina at Chapel Hill Institutional Review Board rules and regulations and the U.S. Federal Policy for the Protection of Human Subjects (45 CFR 46), the project team will obtain written informed consent from participants with full disclosure of uses of the data both during and after the active phase of the project period. All rules and regulations protecting educational records will be applied in accordance with the Family Education and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) when obtaining consent to disclose education records. All required security measures will be in place to protect against breaches of confidentiality. Personally identifiable information (PII) and/or protected health information (PHI) of research participants will be kept separate from survey responses to protect the confidentiality of participants. Any data to be made publicly available will undergo a comprehensive de-identification process to ensure the removal of all PII/PHI prior to release.

Period of Data Retention

The PI and research institutes involved in this project are not aware of any reasons that might prohibit the sharing and re-use of public use versions of the data. An embargo period of one year will be placed on the data to allow the project team to retain first use rights of the data. After the one-year embargo period, the data will be made publicly available via the UNC Dataverse.

Data Format and Dissemination

Project data will be processed and analyzed using widely adopted qualitative and quantitative statistical analysis software programs. To facilitate and encourage data sharing and re-use, de-identified public use versions of the datasets will be made accessible online via the UNC Dataverse. The UNC Dataverse platform enables researchers to download project data in the original formats as well as various common file formats including tab-delimited text optimized for long-term preservation as well as those compatible with R, Stata, SPSS, and Microsoft Excel. Along with these data, the UNC Dataverse will preserve and provide access to supporting materials including instruments, codebooks, methodology reports, programming code, and other materials necessary to interpret and use the data appropriately.

Data Documentation Initiative (DDI) metadata standards, which have been widely adopted by the international data archives community, will be applied during the creation of descriptive metadata to enhance search and discovery of project data. In addition, the UNC Dataverse automatically assigns a unique and persistent digital object identifier (DOI) for each dataset to ensure that the data will be accessible online even if their physical location should change.

Data Storage and Preservation of Access

During the active phase of the project period, data files will be stored and backed up on an access-restricted, password-protected server hosted by the PI's department and maintained by the University of North Carolina Information Technology Services (ITS). Departmental computing support follows all ITS policies and procedures for safeguarding sensitive data. This includes provisions for secure data storage, transmission, access restrictions, and incident management. Only the PI and authorized project personnel will be allowed access to project files.

Final public-use versions of project data will be stored and made accessible at the Odum Institute Data Archive. The long-term strategy for the maintenance, curation, and archiving of the data will be implemented when the final datasets are transferred to the Odum Institute Data Archive for deposit in the UNC Dataverse. Upon receipt of dataset files, Data Archive staff will execute a standards-based data curation and archiving workflow, which includes data quality review, file format normalization, and descriptive metadata generation, to support the long-term discovery, access, and usability of project data. The Odum Institute Data Archive also performs automated back-up of all data on multiple geographically distributed servers, which provides an added layer of protection and security for the data. As a member of Data-PASS, the Odum Institute Data Archive is also prepared to designate a successor for its holdings if necessary.

Funding for the long-term management of the data as described in this DMP will be secured through the proposed grant budget. As a result of this arrangement, there are no unforeseen financial considerations of which the PI is currently aware that might impact the long-term management of the data.