Plan Overview

A Data Management Plan created using DMPTool

Title: Students Local and International Collaboration for Environment through Innovative Technology

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Students Local and International Collaboration for Environment through Innovative Technology

Data to be generated in this education research program includes student response data to various assessment instruments implemented in context of a *multicenter clinical trial.* Four project schools will be involved, as well as four control group schools, as described in our research plan. Teacher, community and partner assessment data will also be produced in this three year study. Combined, we expect over 60 data sets. Additional research data sets will be produced by assessment analyses, including metadata describing analytics employed. Demographic data sets will also be produced. Data to be generated by education model development includes curriculum, student outcome assessments, survey responses, photo and/or video documentation.

Data will be available immediately following processing, quality assurance and documentation by our team.

We will employ comma separated .csv formats that are easily imported to Matlab, Excel, SAS and similar statistical software. Metadata will be provided in pdf form to preserve content integrity. Because our research involves human subjects as per learning and attitude assessments, including demographic information, Boise State University Institutional Review Board Full Board application applies to approval of our assessment instruments, surveys and interview scripts.

The research data from this project will be deposited with the Boise State repository, comprised of scalable virtual servers and dedicated research data storage, to ensure that the research community has long-term access to the data. The Office of Information Technology has built a dependable virtual server infrastructure and Network Attached Storage to provide a predictable cost-based, managed and reliable platform. The virtual servers run on Cisco UCS server hosts which have VMWare ESX virtualization platforms. The storage for virtual machines is on Netapp Filers. The Research Data Storage Facility provides a high integrity space for storing data using enterprise-class equipment. This storage is provided by redundant Digiliant devices presenting CIFS shares authenticated against Active Directory, as well as secure SCP and Globus Toolkit GridFTP protocols. Storage is configured using LVM and can be expanded as needed. Data will be replicated from the primary Digiliant to a second device using CommVault. Best practice standards for data backup and retrieval will be followed.

Additionally, the PI will work with members of Boise State's Albertsons Library to identify permanent data storage and preservation options, utilizing publicly accessible repositories when appropriate.

The website that we will develop for this education program will include a research blog and links/contacts for easy routing to our data and products.