EFFECTS OF FINANCIAL CONSTRAINTS TO UNIVERSITY STUDENTS’ ACADEMIC PERFORMANCE

A Data Management Plan created using DMPTool

Creator: Martin Macharia

Affiliation: Non Partner Institution

Template: NSF-EHR: Education and Human Resources

Last modified: 03-06-2015

Copyright information:
The above plan creator(s) have agreed that others may use as much of the text of this plan as they would like in their own plans, and customize it as necessary. You do not need to credit the creator(s) as the source of the language used, but using any of the plan's text does not imply that the creator(s) endorse, or have any relationship to, your project or proposal.
EFFECTS OF FINANCIAL CONSTRAINTS TO UNIVERSITY STUDENTS’ ACADEMIC PERFORMANCE

Data generated by the project

Data description: The data that will be collected for this project will be a combination of qualitative and quantitative information gathered from human subjects. A variety of cognitive, affective and developmental data will be collected using combination of extant instruments, newly developed instruments, interviews, observations and internet correspondence.

Metadata: The metadata I am likely to use will be extracted from three states’ office of education which may include accessing publicly available data such as aggregate student tracking system data and therefore, will be stripped of identifiers prior to our access and use.

Existing data: I will rely on the state and the county government data as well as data organizations and workforce data

Data organization: Njiraini John and Rehab Wanjiku will be responsible for data collection, Stanley Mathenge will be in charge of data maintaining and storage and ensure its secure. Data will be named according to the source of the data, the nature of the data and the data the data will be collected. This is close to the procedure the researchers currently use in conducting their research. Our external evaluators will be responsible for collecting evaluated data for the program.

Period of data retention

This data will be deposited in Chuka University from Meru University of Science and Technology (MUST) following quality assurance and documentation by my team for a long term storage upon completion of the project study, once data is transferred to Chuka University, all data will be made publicly available immediately. No data will need to be retained for other purposes.

Data format and dissemination

Software code will need adequate metadata wrapping to ensure that either it can be migrated to another coding language, or there can be an emulation solution for future use. The metadata must be complete enough to include technical details, contextual story-lines, user behavior assumptions, and structural information. Metadata for interactive software objects such as video games is nascent. Using Metadata recommendations from the projects Preserving Virtual Worlds I and II, this project plans to employ OWL ontology with METS and OAI-ORE schema to sufficiently provide the detailed information required for wrapping this type of Software code.

Other data formats will be text files from interview transcripts, planning documents and academic papers. These will use METS schema to sufficiently enhance discoverability.

With this metadata wrapping, the protocols submitted with our IRB applications will allow easy sharing, standard consistent with quality research and accessibility.

Interviews will be for historical purposes.

Data storage and preservation of access

The research data from this project will be deposited with Chuka University 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 XTML server hosts which have high-tech virtualization platforms. The storage for virtual machines is on Ubuntu Filers. The Research Data Storage Facility provides a high integrity space for storing data using enterprise-class equipment. This storage is provided by redundant Digilitant devices. Storage is configured using my own ram supportive portable devices and can be expanded as needed. Data will be replicated from the primary Digilitant to a second device using CommVault. Best practice standards for data backup and retrieval will be followed. Additionally, I will work with members of Meru university and chuka university library to identify permanent data storage and preservation options, utilizing publicly accessible repositories when appropriate. All public data will be deposited in the Chuka University Repository Service from Meru University of Science and Technology (MUST) that has capabilities to manage, archive and share digital content. Chuka University allows access to the public via persistent URLs, provides tools for long-term data management, and permits permanent storage options. Chuka University has built-in contingencies for disaster recovery including redundancy and recovery plans.

Additional possible data management requirements

My team and I will develop a network/website for this education program that will include a research Blog and links/contacts for easy routing to our data and product.

I will use the data that I will collect to draft manuscripts and reports which will be shared at the annual, regional and national conferences and later publications.