

## Digital Humanities and MU's CI Plan

Draft Document updated following August 18 meeting with Gary Allen and Tim Middelkoop

Prepared by the following who met several times during Summer, 2015.

Anne Barker

Randy Diamond

Sanda Erdelez

Twyla Gibson

Ann Riley

Diane Oerly

Jeannette Pierce

### Key Planning Assumption:

This cyberinfrastructure plan recognizes the leadership role of MU's Digital Humanities Commons and assumes achieving the objectives described by the DHC will address the priority needs of MU's current and emerging digital humanists. Launched in February, 2014, the Digital Humanities Commons @ The Allen Institute (DHC) serves as MU's nexus of digital scholarship and innovation. DHC's mission is to promote faculty research projects and catalyze new scholarship in the emerging field of Digital Humanities. The facility offers a dedicated space, technical expertise, and networks for collaboration in a unique laboratory that aims to advance the work of arts and humanities faculty and their senior graduate students.

### Background

The term "Digital Humanities" (DH) was coined about ten years ago to describe the field formerly known as "humanities computing." Since the term is relatively new, many scholars in arts and humanities disciplines do not identify "digital humanities" as a major area of research interest, even though they may have some DH tools and techniques in their research repertoires. Similarly, the term 'cyberinfrastructure' is likely unfamiliar to humanities scholars and hence, not perceived as relevant to many in humanities subject areas.

Humanities scholarship has a long tradition of single-authored articles and books. Collaborating on co-authored publications with faculty colleagues in information and technology-focused disciplines can help humanities researchers increase the number and quality of scholarly papers and products they produce. These interdisciplinary collaborations will expand the range of journals to which humanities researchers can submit essays for publication and thereby secure citations relevant to MU's AAU goals. Additionally, collaboration of humanities scholars on interdisciplinary teams increases the potential for winning grants from funding agencies such as the National Endowment for the Humanities (NEH) and American Council of Learned Societies (ACLS), and expands the range of funding bodies to which humanists can apply for resources.

MU faculty in the arts & humanities disciplines (English, Classics, Romance Languages and Literatures, Art History, etc.) are familiar with recent technology developments *in their discipline*. A number have incorporated some algorithmic / computational approaches into their research. However, since humanities scholars typically acquire technology-related skills subsequent to doctoral or postdoctoral training, they have little formal training in computer science. As a consequence, they are not confident hiring and supervising computer science/data science/ electrical engineering/informatics students. Nor are they able to conceptualize high-level digital tools, adopt and adapt existing open-source tools, or undertake the development of custom digital tools uniquely designed to facilitate their particular research questions. Effectively serving the IT and digital research needs of scholars in the humanities requires an entirely different model from the "DIY" model of purchasing one's own server, etc. used by other STEM researchers.

Many faculty are not aware of the technology and the limited technical support that exists and when they are, they do not know how to access it. Plus, the different language, vocabulary, and communication styles of computing people and humanities scholars makes cross-disciplinary work challenging. While humanities faculty may be familiar with what has been done in their home discipline, they are often unfamiliar with tools developed in other fields that might be adapted to their own research needs. Humanities faculty can benefit from help envisioning and exploring possibilities and help understanding the complexities behind the surface of technologies. Even at the level of the basic “research website” (i.e., digital tools to post bios, CVs, or research statements) there is little (if any) support or assistance available for MU faculty beyond what is offered at the DHC. There is greater support for instruction than for research: ET@MO offers courses to help faculty create and maintain online courses and produce websites to facilitate teaching.

The majority of DH centers at US universities (see <http://www.dhcenters.org> for a list of centers) grow out of the achievements of individual scholars or are initiated and supported by major gifts or grants. For example, University of Nebraska’s Center for Digital Research in the Humanities (<http://cdrh.unl.edu/>), which was recognized as a Program for Excellence in 2004, was built on the work of Director, Dr. Kenneth M. Price. The University of Pennsylvania started a DH center in 2015 following a \$7 million gift, (see: <http://www.upenn.edu/almanac/volumes/v61/n22/digital-humanities-gift.html>) For a list of DH Centers see: <http://www.hastac.org/content/listing-digital-humanities-centers-and-institutes>

MU’s DHC is taking a broader impact approach designed to raise the capabilities and success of existing MU faculty. Its purpose is to help MU faculty and their senior graduate students build the cross-disciplinary teams of collaborators with the knowledge and skills needed to conceive, conduct research, complete digital projects, and publish the results in high impact journals.

Several high-profile DH projects at MU have demonstrated how challenging even relatively simple projects can be.

- Daniel Domingues – “migrating” the “African Origins” site from Emory University and updating the coding required extensive graduate student labor: <http://www.african-origins.org/>.
- Kristin Schwain - the Heart of the Nation website would not function when housed on A&S servers; DHC graduate students and Arts & Science IT staff were not able to make the site operational until it was migrated to SISLT servers.
- Timothy Materer - had difficulty receiving support beyond the DHC for his site, “Poems of James Merrill” <http://scalar.usc.edu/works/james-merrill-poetry-manuscripts/index> ;
- Noah Heringman – there was difficulty getting Scaler open-source software to work for Vetusta Monumenta (in collaboration with the Smithsonian and other institutions)

The School of Information Science & Learning Technologies is currently in the process of creating a joint Graduate Certificate in Digital Humanities with Carleton University in Canada that will be offered through the DHC. High-level administrators at MU have indicated their support for turning the Digital Humanities Commons into a full-fledged center. Demand for DH assistance and support is certain to outstrip capacity in future.

NOTE: The DHC website <http://dhc.missouri.edu/> is under construction. The backend can be accessed at <http://dhc.missouri.edu/wp-admin/>. The username and password provided by Twyla Gibson upon request.

- Computer hardware (disk storage, processing power) and networking are *\*not\** limiting factors. In the near term, the DHC is intending to host sites on SISLT servers with the help of the iSchool systems analyst and DHC Graduate Research Assistants. Chi-Ren Shyu and the Informatics Institute had agreed to provide servers and systems analyst support. However, turnover in the systems analyst position at MUII posed problems, so the DHC moved all the web sites they support to SISLT servers. For the longer-term, additional servers and support will be needed.
- With limited funding, the DHC has relied on advanced computer science and informatics graduate students who require training in DH. Graduate students are of course a temporary and high-turnover workforce. Following a Graduate Research Assistantship at the DHC, students are in high demand in today's market and cannot be retained. Students with advanced computer skills and training in DH are recruited elsewhere. Consistent support by knowledgeable technical staff is required
- Beyond the DHC and ET@MO, faculty members have no place to go for help conceiving and developing more comprehensive websites, troubleshooting problems, or maintaining and upgrading sites. Faculty waste time and energy trying to find someone from MU's computing environment to assist with even minor programming tasks when no such assistance is available. Extending the ATL (Academic Technology Liaisons) model deployed by ET@MO to help faculty with their digital humanities research may be one feasible option. This model leverages full-time staff and ongoing support while also providing opportunities for synergistic interactions between graduate students with current knowledge and faculty members needing assistance. See: <http://etatmo.missouri.edu/about/teams.php>.
- The Division of IT is reluctant to embrace open source software. However, major funders such as NEH expect researchers to use the tools and technologies developed elsewhere – especially those funded by previous agency grants. This can be a non-negotiable requirement for some grants offerings.
- The IT Pro model of IT support in MU's various schools and colleges has not provided sufficient support for researchers in the humanities. In addition, as the student enrollment has increased, teaching demands have grown tremendously and faculty time is at a premium [so what does this mean? Not sure what you are getting at here??].
- Assistance and support is missing.

#### Needed Support

- Assistance with articulating and documenting projects and exploring viable and secure solutions that can be deployed and maintained on the University of Missouri's computer systems.
- Information on what knowledge, experience, and resources exist at MU and beyond.
- Information on relevant external funding opportunities for digital humanities projects that are not typically available for traditional humanities research.
- Programmer assistance to get locally developed and open source solutions deployed.
- High-level interdisciplinary faculty research collaborations and support to help scholars conceptualize projects that move beyond ideas that simply graft digital media onto traditional techniques and methods. Faculty need support to devise research strategies and tools that produce results that are not possible using traditional means.
- Support in licensing and securing funding for locally-developed solutions.

### One Year Objectives

- 1) Identify IT professionals and/or IT staff who will serve as resources for the DHC – helping integrate solutions into MU’s computing environment, etc.
- 2) Work with the Division of IT to determine how best to support digital humanities within the new support model that will emerge from MU’s IT Transition Project (ITTP)
- 3) Make Digital Humanities a special emphasis of MU’s next CI day.
- 4) Advance the idea of a ‘technology concierge’ who can assist MU researchers (not just in the humanities) with the various facets of using technology in support of research including: imaging/visualization, data storage, mining and manipulation, 3D printing, geospatial, data dissemination, archiving and presentation, etc.
- 5) Collaborate with MU leaders and development officers to cultivate potential donors for a digital humanities center at MU.
- 6) The Division of IT should emphasize digital humanities as one of the first areas for establishing the proposed ‘scholars gateway’ designed to focus CI research resources and support in particular academic areas.

### Three Year Objectives.

1. Define positions and create a sustainable model for staff support.
2. Clarify and communicate the long-term preservation and archiving needs of MU’s research data collection.
3. The Division of IT will establish a process for the review and consideration of software tools relevant to humanities scholars that can be effectively deployed and supported in the university’s security framework. Students associated with the Digital Humanities Commons can be engaged in helping identify and evaluate relevant software for consideration.