

A Tale of Two Cities: Implications of the Similarities and Differences in Collaborative Approaches within the Digital Libraries and Digital Humanities Communities

Siemens, Lynne

siemensl@uvic.ca

Faculty of Business/School of Public
Administration, University of Victoria

Cunningham, Richard

richard.cunningham@acadiau.ca

Acadia Digital Culture Observatory, Acadia
University

Duff, Wendy

wendy.duff@utoronto.ca

Faculty of Information, University of Toronto

Warwick, Claire

c.warwick@ucl.ac.uk

Department of Information Studies, University
College London

Besides drawing on content experts, librarians, archivists, developers, programmers, managers, and others, many emerging digital projects also pull in disciplinary expertise from areas that do not typically work in team environments. To be effective, these teams must find processes – some of which are counter to natural individually-oriented work habits – that support the larger goals and group-oriented work of these digital projects. This paper will explore the similarities and differences in approaches within and between members of the Digital Libraries (DL) and Digital Humanities (DH) communities by formally documenting the nature of collaboration in these teams. The objective is to identify exemplary work patterns and larger models of research collaboration that have the potential to strengthen this positive aspect of these communities even further, while exploring the key differences between them which may limit digital project teams' efforts. Our work is therefore designed to enable those

who work in such teams to recognise factors that tend to predispose them to success, and perhaps more importantly, to avoid those that may lead to problematic interactions, and thus make the project less successful than it might otherwise have been.

1. Context

Traditionally, research contributions in the humanities field have been felt to be, and documented to be, predominantly solo efforts by academics involving little direct collaboration with others, a model reinforced through doctoral studies and beyond (See, for example, Cuneo 2003; Newell and Swan 2000). However, DL and DH communities are exceptions to this. Given that the nature of digital projects involves computers and a variety of skills and expertise, collaborations in these fields involve individuals within their institutions and with others nationally and internationally. Such collaboration typically must coordinate efforts between academics, undergraduate and graduate students, research assistants, computer programmers and developers, librarians, and other individuals as well as financial and other resources. Further, as more digital projects explore issues of long term sustainability, academics and librarians are likely to enter into more collaborations to ensure this objective (Kretzschmar Jr. and Potter 2009).

Given this context, some research has been done on the DL and DH (See, for example Liu and Smith 2007; Ruecker and Radzikowska 2008; Siemens 2009) communities as separate entities (See, for example Johnson 2009; Liu, Tseng and Huang 2005; Johnson 2005; Siemens et al. 2009b), but little has been done on the interaction between these two communities when in collaboration. Tensions can exist in academic research teams when the members represent different disciplines and approaches to team work (Birnbaum 1979; Fennel and Sandefur 1983; Hara et al. 2003). Collaborations can be further complicated when some team members have more experience and training in collaboration than other members, a case which may exist with digital projects involving librarians and archivists, who tend to have more experience, and academics, who have tend to have less. Ultimately, too little is known about

how these teams involving DL and DH members collaborate and the types of support needed to ensure project success.

2. Methods

This paper is part of a larger project examining research teams within the DH and DL communities, led by a team based in Canada and England (For more details, see Siemens et al. 2009a; Siemens et al. 2009b). It draws upon results from interviews and two surveys of the communities exploring the individuals' experiences in digital project teams. The findings include a description of the communities' work patterns and relationships and the identification of supports and research preparation required to sustain research teams (as per Marshall and Rossman 1999; McCracken 1988). A total of seven individuals were interviewed and another 69 responded to the two surveys.

3. Preliminary Findings

At the time of writing this proposal, final data analysis of the surveys and interviews is being completed. However, some preliminary comparisons between the two communities can be reported.

As a starting point, similarities exist among DL and DH projects. First, digital projects are being accomplished within teams, albeit relatively small ones, as defined by budget and number of individuals involved. Both communities report that the scale and scope of digital projects require individuals with a variety of skills and expertise. Further, these collaborations tend to operate without formal documentation that outline roles, responsibilities, decision making methods, and conflict resolution mechanisms. The survey and interview respondents from both communities report similar benefits and challenges within their collaborations. Finally, these teams rely heavily on email and face-to-face interaction for their project communications.

Some interesting differences between DL- and DH-based teams exist and may influence a digital project team's effectiveness. First, the DL respondents seem to have a greater reliance on email as opposed to face-to-face communications and tend to rate the

relative effectiveness of email higher than the DH respondents. Several explanations may be offered for this. According to survey results, DL teams appear more likely to be located within the same institution, which means that casual interpersonal interaction may be more likely to occur between team members than with groups that are geographically dispersed, as many DH teams are. For dispersed teams, meetings need to be more deliberately planned, which may mean a higher consciousness about the importance of this kind of interaction and the necessity to build this into project plans. Also, given that many of the DL teams are within the same organization, team members may be more familiar with each other in advance of a project start, meaning that more communication can be done by email. Less time may need to be spent in formal meetings developing work processes as is the case with those teams whose members may not have worked together on previous projects.

Second, a greater percentage of respondents (42%) within the DH community indicated that they "enjoyed collaboration" than the DL respondents (18%). Comprising of more academics, the DH community tends to undertake more solitary work, and therefore collaboration may be seen as a welcomed change and may be a deliberate choice that they have made to undertake this type of work. In contrast, team work is more the norm for librarians and archivists, and thus they may feel it is an expected part of their jobs, rather than a choice and welcomed activity. As a result, members of these two communities approach collaboration from two fundamentally different positions, which must be understood from the outset of a digital project in order to reduce challenges and ensure success.

Further, differences in roles and perceived status may complicate collaboration. Often, tensions may exist between service departments, such as libraries and computer support, and the researcher, who is perceived to have higher status (Warwick 2004). These differences in perceived status can complicate work process as those with lower status may have difficulty directing those with perceived higher status (Hagstrom 1964; Ramsay 2008; Newell and Swan 2000).

The benefits to the DL and DH communities will be several. First, the study contributes to

an explicit description of these communities' work patterns and inter-relationships. Second, it designed to enable those who work in such teams to recognise factors that tend to predispose them to success, and perhaps more importantly, to avoid those that may lead to problematic interactions, and thus make the project less successful than it might otherwise have been.

References

- Birnbaum, Philip H.** (1979). 'Research Team Composition and Performance'. *Interdisciplinary Research Groups: Their Management and Organization*. Richard T. Barth and Rudy Steck (ed.). Vancouver, British Columbia: International Research Group on Interdisciplinary Programs.
- Cuneo, Carl** (November 2003). 'Interdisciplinary Teams - Let's Make Them Work'. *University Affairs*. 18-21.
- Fennel, Mary, and Gary D. Sandefur** (1983). 'Structural Clarity of Interdisciplinary Teams: A Research Note'. *The Journal of Applied Behavioral Science*. **19.2**: 193-202.
- Hagstrom, Warren O.** (1964). 'Traditional and Modern Forms of Scientific Teamwork'. *Administrative Quarterly*. **9**: 241-63.
- Hara, Noriko, et al.** (2003). 'An Emerging View of Scientific Collaboration: Scientists' Perspectives on Collaboration and Factors That Impact Collaboration'. *Journal of the American Society for Information Science and Technology*. **54.10**: 952-65.
- Johnson, Ian M.** (2005). 'In the Middle of Difficulty Lies Opportunity' - Using a Case Study to Identify Critical Success Factors Contributing to the Initiation of International Collaborative Projects'. *Education for Information*. **23. 1/2**: 9-42.
- Johnson, Ian M.** 'International Collaboration between Schools of Librarianship and Information Studies: Current Issues'. *Asia-Pacific Conference on Library & Information Education & Practice*.
- Kretzschmar Jr., William A., and William G. Potter** (2009). 'Library Collaboration with Large Digital Humanities Projects'. *Digital Humanities*.
- Liu, Jyi-Shane, Mu-Hsi Tseng, and Tze-Kai Huang** (2005). 'Building Digital Heritage with Teamwork Empowerment'. *Information Technology & Libraries*. **24.3**: 130-40.
- Liu, Yin, and Jeff Smith** (2007). 'Aligning the Agendas of Humanities and Computer Science Research: A Risk/Reward Analysis'. *SDH-SEMI*.
- Marshall, Catherine, and Gretchen B. Rossman** (1999). *Designing Qualitative Research*. Thousand Oaks, CA: SAGE Publications, 3rd edition.
- McCracken, Grant** (1988). *The Long Interview. Qualitative Research Methods*. Newbury Park, CA: SAGE Publications. V. 13.
- Newell, Sue, and Jacky Swan** (2000). 'Trust and Inter-Organizational Networking'. *Human Relations*. **53.10**: 1287-328.
- Kretzschmar Jr., William A., and William G. Potter** (2008). 'Rules of the Order: The Sociology of Large, Multi-Institutional Software Development Projects'. *Digital Humanities*.
- Ruecker, Stan, and Milena Radzikowska** (2008). 'The Iterative Design of a Project Charter for Interdisciplinary Research'. *DIS*.
- Siemens, Lynne** (2009). 'It's a Team If You Use "Reply All": An Exploration of Research Teams in Digital Humanities Environments'. *Literary & Linguistic Computing*. **24.2**: 225-33.
- Siemens, Lynne, et al.** (2009). 'Able to Develop Much Larger and More Ambitious Projects: An Exploration of Digital Projects Teams'. *DigCCurr 2009: Digital Curation: Practice, Promise and Prospects*. Helen R. Tibbo, et al. (ed.). University of North Carolina at Chapel Hill.
- Siemens, Lynne, et al.** (2009). 'Building Strong E-Book Project Teams: Processes to Maximize Success While Drawing on Essential Academic Disciplinary Expertise'. *BooksOnline '09: 2nd Workshop on Research Advances in Large Digital Book Collections*.
- Warwick, Claire.** 'No Such Thing as Humanities Computing? An Analytical History

of Digital Resource Creation and Computing in the Humanities'. *Joint International Conference of the Association for Computers and the Humanities and the Association for Literary & Linguistic Computing.*