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Developing Academic Capacity in Digital Humanities: Thoughts from the Canadian Community

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Abstract

Despite DH's long history, it is still perceived as a relatively emergent academic discipline which has several implications for its ongoing development and acceptance. In order to understand its role in supporting the field's development and acceptance, SSHRC commissioned a survey of the larger Humanities and Social Science's community to understand the issues related to DH's development and acceptance and the types of activities that should be funded. The survey results suggest there is reason for optimism regarding the growing acceptance of digital methods, resources and tools and electronic dissemination as instructors, researchers, and students are using and publishing in digital outlets and creating and employing digital recourses, methods and tools and venturing into new research fields. This trend is likely to continue as students and younger scholars continue to embrace the digital in all aspects of their personal and professional lives. However, this optimism should be tempered to some extent as students and junior faculty are still less likely than associate professors to present and publish their digital-oriented research for a variety of reasons. The field's more senior faculty can mentor their junior colleagues and students to this end and shape salary, tenure and promotion policies to recognize and reward these efforts. Finally, issues remain around the amount of funding required for the initial development and ongoing sustainability and relevance of digital resources and may become more critical over time. Granting agencies will need to evaluate their funding role in this regard.

Introduction

Despite Digital Humanities' (DH) long history, it is still perceived as a relatively emergent academic discipline, rather than an established one [Borgman 2009]; [Council of Canadian Academies 2006]; [Juola 2008]. This perspective has several implications for the ongoing development and acceptance of the field. First, the valuation and creditability of electronic publishing, and digital resources and tools development and application for purposes of employment, salary, tenure and promotion have still not been resolved despite many ongoing efforts on the part of community members [Borgman 2009]; [Schreibman and Hanlon 2010]. Further, while a committed core of digital humanists exists, the DH community is still exploring ways to encourage both "traditional" scholars and graduate students to create and use digital tools, resources and methodologies. Finally, digital humanists, administrators, and granting agencies alike continue to struggle with age-old questions about the type and amount of resources, including but not limited to computing infrastructure and funding, needed to support and grow DH's academic capacity.

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Within this larger context, Canada's Social Sciences and Humanities Research Council (SSHRC) is evaluating its role in the ongoing development and acceptance of DH within Canada and beyond. Historically, SSHRC's primary financial support was through the Image, Text, Sound and Technology (ITST) fund with some additional

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funding through discipline-specific committees and some strategic grants, such as the Digging into Data Challenge [SSHRC 2010]; [Office of Digital Humanities 2010]. However, the agency is considering other possibilities for support that may move its funding from DH targeted solely to digital initiatives within the wider Humanities and Social Sciences community. As a result, it commissioned an environmental scan of the academic capacity of DH in Canada, which included a survey of the larger community which draws upon digital resources, tools and methodologies in their research and teaching, in order to understand the issues in the community and the types of activities that could and should be funded. This paper will report on the survey results.

Briefly, the survey results suggest there is reason for optimism regarding the growing acceptance of digital methods, resources and tools and electronic dissemination within Humanities and Social Sciences in Canada. Instructors at all levels, researchers, and students are using and publishing in digital outlets and creating and employing digital resources, methods and tools. Further, a diverse range of research, both within "traditional" fields and those created by technology itself are being undertaken. This trend is likely to continue as students and younger scholars continue to embrace the digital in all aspects of their personal and professional lives. However, this optimism should be tempered to some extent. Students and junior faculty are still less likely than associate professors to present their digital-oriented research at both discipline-specific and digital-focused conferences and to publish these results. Further, despite progress made, it remains unclear how this digital-oriented research is treated for salary, tenure and promotion. As a result, the more senior faculty can play an important mentoring role with the junior ones and students to encourage them to present and publish their digital-oriented work while continuing to shape salary, tenure and promotion policies to reward these efforts. Finally, issues for funding both initial development and ongoing sustainability and relevance of digital resources remain unresolved and may become more critical over time as more digital resources and tools are created. Funding agencies will need to continue to evaluate their role in this regard while individual projects explore alternative funding mechanisms.

This paper is structured as follows. First, the context for this study will be discussed. Then, the survey methodology will be outlined followed by a detailed discussion of the survey results with the implications both for the Canadian DH community and beyond. It will conclude with recommendations to support the ongoing of larger DH community ^[1].

Context

As a community of practice, DH has had a long history with its roots in the work of Roberto Busa, who developed a machine-generated concordance with IBM [Winter 1999]. From there, more researchers saw the potential of computers in their work and worked to incorporate the ever growing computational capacity into their research and teaching. To support these efforts and provide outlets for research dissemination, the Association for Computing and the Humanities formed in 1978 and the Association for Literary and Linguistic Computing formed in 1973. The Canadian association (now known as Society for Digital Humanities/Société pour l'étude des médias interactifs) followed in 1986 (ADHO). Despite this established history, this field is still considered to be a relatively emergent academic discipline [Council of Canadian Academies 2006]; [Juola 2008]. As Borgman argues, DH is at a "pivotal moment" and, with the right support and argument for funding and professional acceptance, the field can transition to an established discipline [Borgman 2009].

This raises the question about the nature of that "right" support needed to enable the field to become more mainstream. To this end, several barriers have been identified. First, given the reliance on technology and computing power, the Digital Humanist needs computers and cyberinfrastructure, accessible from their desk, within their institution and across organizational and national boundaries. Further to this, the researcher also needs access to data in electronic form and the tools that allow them to analyze, re(interpret) and otherwise visualize that data for new understandings. Of course, this requires more money than the traditional humanities

researcher who has been traditionally seen to rely solely on their books and pencils. This funding is needed not just to start projects but to subsequently maintain and sustain them, an expectation not often applied to books. Finally, researchers, particularly those in traditional academic positions, need the support of their peers in order to be able to disseminate their research in discipline-approved venues and ultimately receive tenure [Borgman 2009]; [Unsworth 2007]; [Babeau 2011].

Despite these challenges, progress has been made on a variety of fronts to the community's strength. First, various national granting agencies and non-profit foundations have provided funding for digital initiatives, including programs such as individual projects [SSHRC 2010], [National Endowment for the Humanities Office of Digital Humanities 2010], research infrastructure [Canada Foundation for Innovation 2010], and support for digital research [The Andrew W. Mellon Foundation 2011]. Further many of these agencies are cooperating to fund large collaborative projects, such as the Digging into Data Challenge [Office of Digital Humanities 2010]. At the same time, outlets for electronic dissemination have increased through online versions of print journals as well as open access ones, many of which are supported through the Open Journal System [Public Knowledge Project] and through more informal means such as personal webpages, blogs and wikis. Finally, groups such as the Modern Language Association ([Modern Language Association 2002], [Modern Language Association 2003], [Modern Language Association 2010]) and others have articulated language for tenure documents to ensure that digital-oriented work receives appropriate academic credit.

As the DH community makes this transition to a more established discipline, it is important to measure the progress made thus far and the impact of past initiatives in order to recommend next steps. Within Canada, two studies have measured changes in the acceptance in electronic resources and publishing within the Humanities and Social Sciences [Archer 1990]; [Siemens et al. 2002]. Conducted several years apart and using similar survey questions, these studies documented the increasing acceptance of these in conducting research and teaching, but not necessarily, however, as peer-approved outlets for disseminating research that will appear on one's tenure dossier. These findings have been confirmed by studies conducted in other countries [Harley et al. 2010]; [Research Information Network 2010].

It is within this context that SSHRC requested this environment scan of the Canadian DH academic capacity in order to understand where the community currently stands and to determine required next steps to strengthen the field within Canada and beyond. In particular, the funding agency wanted to understand the type of funding programs which were needed. This survey is intended to provide recommendations in this regard.

Methodology

This survey was developed in January 2009 and focused on three components of academic capacity: research activity and dissemination, professional development, and teaching and student development. Given the broad audience for this survey, the term "digital methods, technologies and resources" was used in place of Digital Humanities or Humanities Computing for several reasons. First, the broader term was intended to capture those who may not consider themselves to be a "Digital Humanist," but yet undertake that type of work using and creating databases, analytical tools, digital manuscripts, electronic resources, and others. (A list of these digital-oriented methods, technologies and resources can be seen in Table 2.) Second, the DH community as a whole itself is debating the skills and knowledge required to be a "Digital Humanist," as evidenced by blog postings (For example, see [Hoover 2011]; [McCarty 2011]; [Reside 2011]; [Pannapacker 2011]; [Ramsay 2011a]; [Ramsay 2011b]).

In order to provide some comparison to earlier surveys related to the credibility of electronic publishing and determine if attitudes to electronic resources and materials have changed over the past 10 years [Archer 1990]; [Siemens et al. 2002], demographic information and several questions related to electronic dissemination and tenure and promotion policies were repeated from these earlier surveys. Given the Canadian audience, the

survey was translated into French. The English and French versions can be found in Appendix 1 and 2.

The survey was distributed in May and June 2009 with data collection closing on June 19. In an attempt to reach the full Humanities and Social Sciences community in Canada, it was distributed through the emailing lists of the Society for Digital Humanities/Société pour l'étude des médias interactifs, the Canadian DH society, the Digital Humanities Summer Institute to the attention of Canadians, and email messages to the associations which comprise the Canadian Federation of Social Sciences [Canadian Federation for the Humanities and Social Sciences] asking them to forward, if appropriate, a copy of the invitation to their members, and email invitations to other individuals that may not have received it through these various other channels. (This echoed the approach used in earlier surveys [Siemens et al. 2002].) A total of 227 usable responses were received.

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The survey data was analyzed through the use of Excel and SPSS in order to gain statistical information. The open-ended questions were analyzed through a grounded theory approach which focuses on the themes that emerge from the data. This analysis is broken into several steps. First, the data is organized, read and coded to determine categories, themes and patterns. These are tested for emergent and alternative understandings, both within a single interview and across all interviews. This is an iterative process, involving movement between the data, codes and concepts, constantly comparing the data to itself and the developing themes [Glaser and Strauss 1967]; [Marshall and Rossman 1999].

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Survey Results

The following section will explore the results from the survey, including demographic information, research activity and dissemination, professional development, and teaching and student development. (This order reflects the survey's structure.) The fuller implications of these results along with recommendations will be discussed in the paper's final sections.

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Demographic Characteristics

The respondents represented a broad cross-section of a broadly defined DH community of practice in Canada. As can be seen in Table 1, most respondents work in English and are affiliated with a university. Of those who indicated their gender, females were the larger group. The spread of academic rank and age was reasonable with 45% between the ages of 30 and 49, and 16% were at the Assistant Professor level, 17% at the Associate, and 17% at the Full Professor. Graduate students comprised 6% of the responses.

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The respondents represented over 35 disciplines from the social sciences, humanities, library and information sciences, computer science and business. (Respondents could check more than one discipline.) The best represented disciplines were English (40%), Literature (25%), Humanities (15%), Culture and Language Studies (12%), and History (10%). Approximately 6% of the respondents identified humanities computing as their discipline, which suggests that DH is beginning a recognized discipline in its own right. An overwhelming majority of the respondents (80%) have undertaken research projects involving digital methods, technologies and resources. Those who answered "no" to this question still provided information on their research dissemination, professional development, and teaching and student development activities.

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Demographic Characteristic	Percentage
Working Language	<p>English (69.2%)</p> <p>French (2.2%)</p> <p>Both (15.4%)</p>
Gender	<p>Female (43.6)</p> <p>Male (37)</p> <p>Prefer not to answer (5.7)</p>
Affiliation	<p>College^[2] (0.4)</p> <p>Research Centre (2.2)</p> <p>University (83.2)</p>
Role ^[3]	<p>Administrator (0.4)</p> <p>Assistant Professor (16.3)</p> <p>Associate Professor (17)</p> <p>Doctoral Student (10.6)</p> <p>Emeritus Professor (1.3)</p> <p>Full Professor (16.7)</p> <p>Graduate Student (5.7)</p> <p>Instructor or Lecturer (8.4)</p> <p>Librarian/Archivist (2.2)</p> <p>Postdoctoral Fellow (3.5)</p> <p>Researcher (2.2)</p> <p>Retired (0.4)</p>
Age	<p>20–29 (10.1)</p> <p>30–29 (24.2)</p> <p>40–49 (21.1)</p> <p>50–59 (12.8)</p> <p>60 and over (11.9)</p> <p>Prefer not to answer (4.4)</p>
Academic Discipline (top 5)	<p>English (39.6)</p> <p>Literature (24.7)</p> <p>Humanities (15)</p> <p>Culture and Language Studies (12.3)</p> <p>History (10.1)</p>

Table 1. Demographic Characteristics

Academic Capacity: Research

As the survey results show, Humanists and Social Scientists are actively embracing digital technologies and resources, and to a lesser extent, digital methods, in their research. In particular, they are using and creating software, databases, digital manuscripts and electronic resources within a traditional approach to research. For some, the digital has created new research avenues. The survey participants have been successful in accessing funding for their projects. They are also overwhelmingly using formal and informal electronic outlets to disseminate their scholarship. However, as a group, these participants are not generally presenting their digital-oriented research at conferences. Finally, they have received very little training in digital technologies, resources and digital methods.

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Research Activity

As stated above, 80% of respondents indicated that their research projects involve digital methods, technologies and resources at some level. As seen in Table 2, databases, software, webpages, digital manuscripts, and electronic resources were used most regularly. Approximately one-third of respondents use analytical tools, authoring tools, bibliographic software, and wikis and blogs in their research.

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As evidenced in their responses to an open-ended question about their research focus, respondents are involved in both the creation of these digital methods, technologies and resources and their application. They are also grounding their research in traditional Humanities and Social Sciences research approaches and within new fields of studies such as virtual worlds, interface design and online gaming. Further, they are using digital methods, tools and resources to facilitate and enhance collaborations.

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By way of example and to name but a few, the "creators" are creating online scholarly annotated editions and digital editions, preparing and then using "electronic versions of historic texts" with the Text Encoding Initiative (TEI), building a "database that will be a scholarly reference work," developing search tools and building "a digital library of illustrations and books from the 1860s." Further, the "users" draw upon digitized images, manuscripts, and other materials, encoded texts, electronic editions and databases, online journals, websites, and software such as TEI, googledocs, Zotero, and authorship attribution. For others, the digital has created new opportunities such as "examining social media "best practices," researching "game studies, the development of synthetic worlds and experiential simulations," and undertaking "in-game ethnography of virtual worlds."

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Digital Methods, Technologies and Resources	Never	Seldom	Often	Always
Databases	2.6%	8.4%	33.5%	30.4%
Software	3.5	11	22.5	39.2
Analytical Tools	20.7	23.3	19.4	10.6
Authoring Tools	19.8	16.3	21.6	13.7
Webpages	1.3	11.5	33	30
Digital Manuscripts	4	8.8	39.6	23.8
Electronic Resources	0	3.1	33.9	40.1
Blogs/Wikis	21.1	23.3	20.7	10.1
Online Project Planning Spaces	34.8	21.1	12.3	6.6
Bibliographic Software	17.2	20.3	21.6	15
Facebook/Social Networking ^[5]	38.5	16.7	10.6	6.2

Table 2. 1.2 What digital methods, technologies and resources do you incorporate into your research?^[4]

There is some variation among age groups on the use of these methods, technologies and resources. In particular, the younger age groups were more likely to use Facebook and social networking. Approximately 34% of the 20–29 age group and over 25% of the 30–39 age group indicated that they were regular users of Facebook/Social Networking. This is in contrast to the 40–49 age group (14.5%), 50–59 age group (0%), and 60 and older (18.5%).

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The respondents also indicated the type of electronic resources that they used within their research. As seen in Table 3, they primarily draw upon electronic versions of previously paper resources, such as journals, government resources, newspapers and archival materials. However, they do not appear to be using tools such as TAPoR, OJS and Conftool, tools that can make some aspects of academic life easier to coordinate. Further, sizable portions of respondents (up to 10% in some cases) do not appear to be aware of these types of resources.

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Electronic Resource	Yes	No	Not Sure
On-line Scholarly Journals	75.8%	2.2%	.9%
On-line Government Resources	51.5	22.9	1.8
On-line Newspapers	56.8	17.6	1.3
On-line Archival Materials	71.4	5.3	0
TAPoR	10.1	53.3	9.3
TAPoRware Tools	9.7	55.5	8.8
Text Encoding Initiative	15.9	49.3	8.8
Open Journal System	36.6	29.1	9.3
Open Conference System	12.8	54.2	7.5
Conftool	3.5	59.9	8.4
TACT	7.0	55.5	10.1
Hyperpo	3.5	60.4	8.4
S.A.T.O	0	61.7	8.8

Table 3. 1.3 Do you ever incorporate the following electronic resources into your work?

At one level, the respondents suggest an "of course" perspective with regard to their use of digital tools, methods and resources in their research. As one respondent said about the research in which they are involved,

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Loci of research are: (1) scholarly editing & bibliographical work, for which the development and use of digital tools is necessary & commonplace; (2) historical research, whose data sets are often of a size to make manual management hard, so digital tools (e.g. databases) are a necessity; (3) literary-critical projects.

For another respondent, they had difficulty even answering the question. As they commented,

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I'm having trouble here because I'm not sure what you mean by digital methods, technologies and resources. Broadly speaking, ALL of my research involves this because it's all written on computer, submitted to publishers electronically, and typically the data collection and analysis is done on computer as well. I don't think there's much of a dividing line between digital and non-digital anymore.

Research Funding

Given the size and scope of many DH projects, research funding is a necessity. Just under half (47%) of the respondents have applied for funding for their digital-oriented research in the last 10 years. As can be seen in Table 4, most of those seeking funding generally applied and received funding as graduate students, postdoctoral fellows or faculty members, either from SSHRC or their own university.

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Funding Program	Application	Successful
Social Sciences and Humanities Research Council Graduate Scholarship	13.2%	7.9%
SSHRC Post Graduate Fellowship	4.8	2.2
SSHRC Standard Research Grant	23.8	14.5
SSHRC Image, Text, Sound and Technology Fund	4.8	3.1
SSHRC Research Development Initiative	5.7	1.3
SSHRC Research/Creation in the Fine Arts	1.8	0.9
Natural Sciences and Engineering Council	1.8	1.3
Canadian Foundation for Innovation	6.2	4.0
FQRSC Établissement de nouveaux professeurs-chercheurs-créateurs	0.6	0.3
Internal University Funding	20.7	20.3

Table 4. 1.8 To which grant programs have you applied to fund digital-oriented research in the past 10 years (check all that apply)/ 1.9 Was your digital-oriented application successful (check all that apply).^[6]

Respondents provided guidance on the type of granting program they felt was needed to support digital-oriented research. First, a segment of respondents recommended more funding from SSHRC. This included a request for an independent application category for DH/Humanities Computing scholarship while another suggested an extended Image, Text, Sound and Technology program^[7]. Second, respondents specifically suggested funding for technical support and infrastructure and the capacity to share this between institutions. One respondent stated,

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...but we definitely need infrastructure here in Canada, e.g., something like surveymonkey, space for setting up interactive web sites for participant engagement. Right now, each team and each university reinvents the wheel, leading to a huge waste of precious resources. Researchers should have a service for digital humanities research to go to that includes design and software experts, etc.

Further, several respondents called for renewal-based funding programs for ongoing research agenda, similar to that seen in the sciences. As one respondent argued, "programmes permettant un financement à plus long terme pour financer l'embauche de personnels techniques; programmes permettant la mise en place de digital humanities centers (acceptant la dimension hybride de services et de recherche).^[8]" Finally, some respondents argued for grant funding for maintenance and renewal of existing projects. One respondent commented that funding is needed "to ensure that we can continue to update and improve the resource. But funding bodies (perhaps understandably) want to support new digital projects, rather than helping to make existing ones continue to be relevant and cutting edge."

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Amongst the calls for additional funding was the recognition that digital projects experience challenges that are often not associated with traditional forms of scholarship, such as long term usability, sustainability, quality standards and training. For example, one respondent called for "more funding for projects that involve substantial work on conservation, archiving and upgrading digital collections and research databases for ongoing work that keeps research data and archival collections in useable form." Another argued for additional "support for online archiving of rare materials, which probably includes support for continued training (a bigger problem in DH than in other branches of scholarship) and access to sophisticated technologies for rendering manuscripts in high def or under different kinds of light, etc."

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At the same time, a portion of the respondents suggested that additional support from colleagues and knowledgeable grant adjudicators and reviewers were just as important as funding. One commented that they

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think digital projects should be treated exactly as other research projects are treated, and judged on their own merits. As long as we have knowledgeable SSHRC committees who understand the place of digital tools, resources and practices in humanities research, we should be able to compete on a level playing field with other grant applicants.

Another echoed that "I'd like to see it incorporated more into the 'normal' grant processes, rather than it being a 'special' thing to use digital methods."

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Research Dissemination

The respondents are actively disseminating their research through electronic means with over 72% of all respondents having made their scholarship available in some digital form. This suggests the use of electronic dissemination is increasing, albeit with some variation among age groups. As compared to the younger age groups, older respondents were more likely to have made their scholarship available electronically, as seen in Table 5.

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Age Group	Percentage	
20–29	Yes: 52%	No: 43%
30–39	Yes: 72.7%	No: 25.5%
40–49	Yes: 89.6%	No: 8.3%
50–59	Yes: 82.8%	No: 13.8%
60 and older	Yes: 74%	No: 25.9%

Table 5. 1.11 Have you ever made your scholarship available electronically in any way?

The respondents are disseminating their research electronically through a variety of formal and informal channels. In terms of other electronic outlets, respondents are publishing in electronic journals (both open access and pay-per-view), online conference proceedings and electronic books, and through inclusion in research databases as well as distributing through websites, email, listserves, blogs and wikis. In terms of refereed electronic outlets, almost 40% have published in this type of outlet. Again, some variation among age groups and roles exists. As shown in Table 6 and Table 7, both the 40–49 age group and Associate Professors are more likely to have published in a refereed electronic outlet than other age groups and roles. At the same time, the youngest age group and graduate and doctoral students were least likely to have published in a refereed electronic outlet.

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Age Group	Percentage	
20–29	Yes: 26%	No: 26%
30–39	Yes: 49	No: 25
40–49	Yes: 58	No: 25
50–59	Yes: 38	No: 48
60 and over	Yes: 33	No: 33

Table 6. 1.13 Have you published any item of scholarship in a refereed electronic outlet? (Age Group Response)

Role	Percentage	
Assistant Professor	Yes: 51%	No: 27%
Associate Professor	Yes: 67	No: 23
Doctoral Student	Yes: 42	No: 21
Emeritus Professor	Yes: 67	No: 0
Full Professor	Yes: 32	No: 47
Graduate Student	Yes: 15	No: 38
Instructor or Lecturer	Yes: 32	No: 47
Librarian/Archivist	Yes: 40	No: 40
Postdoctoral Fellow	Yes: 37.5	No: 25
Researcher	Yes: 0	No: 40

Table 7. 1.13 Have you published any item of scholarship in a refereed electronic outlet? (Role Response)

While they are disseminating electronically, respondents appear to be hesitant to present their digital-oriented research at conferences. Only 37% have presented their digital-oriented research at discipline-specific conferences. A still smaller number (21%) have presented at a digital-oriented conference. Of those who have, they have presented primarily at Society for Digital Humanities/Société pour l'étude des médias interactifs (7%), Digital Humanities (6%) and Canadian Symposium on Text Analysis (5%). Other venues named include Text Encoding Initiative Annual meeting, International Conference on Electronic Publishing, Digital Resources in the Humanities, Digital Games Research Association, Computer Assisted Language Instruction Consortium, and Association for History and Computing. Following the trends highlighted above, the 40–49 age group and Associate Professors tend to be the most active in this regard, as can be seen in Tables 8 through 11.

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Age Group	1.15 Have you presented research with a digital focus at a discipline specific conference?	
20–29	Yes: 17.4%	No: 83%
30–39	Yes: 34.5	No: 65
40–49	Yes: 50	No: 50
50–59	Yes: 38	No: 62
60 and over	Yes: 48	No: 48

Table 8. Age group response for conference presentations, discipline specific conferences

Age Group	1.16 Have you ever presented research at a digital content oriented conference?	
20–29	Yes: 8.6%	No: 91%
30–39	Yes: 18	No: 82
40–49	Yes: 31	No: 68
50–59	Yes: 10	No: 89
60 and over	Yes: 26	No: 74

Table 9. Age group response for conference presentations, digital content oriented conferences

Role	1.15 Have you presented research with a digital focus at a discipline specific conference?	
Assistant Professor	Yes: 43%	No: 57%
Associate Professor	Yes: 54	No: 46
Doctoral Student	Yes: 21	No: 79
Emeritus Professor	Yes: 100	No: 0
Full Professor	Yes: 42	No: 55
Graduate Student	Yes: 23	No: 76
Instructor or Lecturer	Yes: 32	No: 68
Librarian/Archivist	Yes: 20	No: 80
Postdoctoral Fellow	Yes: 38	No: 63
Researcher	Yes: 20	No: 80

Table 10. Role response for conference presentations, discipline specific conferences

Role	1.16 Have you ever presented research at a digital content oriented conference?	
Assistant Professor	Yes: 22	No: 78
Associate Professor	Yes: 33	No: 67
Doctoral Student	Yes: 25	No: 75
Emeritus Professor	Yes: 33	No: 67
Full Professor	Yes: 16	No: 84
Graduate Student	Yes: 0	No: 100
Instructor or Lecturer	Yes: 16	No: 84
Librarian/Archivist	Yes: 0	No: 100
Postdoctoral Fellow	Yes: 12.5	No: 87.5
Researcher	Yes: 20	No: 80

Table 11. Role response for conference presentations, digital content oriented conferences

Only a small percentage of respondents are members of DH associations. Approximately 9% are members of the Society for Digital Humanities/Société pour l'étude des médias interactifs, 7% are in the Association for Computing in the Humanities and 6% are members of the Association for Literary and Linguistic Computing. 34

The final set of questions within this category related to training. Less than one-third of respondents have attended digital methods institutes, workshops or courses for skill development. Of those who indicated that they had, over 50% named the University of Victoria's Digital Humanities Summer Institute (DHSI) and its courses including text encoding, digitization, text analysis, and project management. Respondents also mentioned other institutes and workshops such as Nineteenth Century Scholarship Online (NINES), Digital Humanities Observatory (Royal Irish Academy), University of Illinois Urbana Champagne Software Environment for the Advancement of Scholarly Research (SEASR). The respondents also noted that they have taken courses in website development, graduate courses and programs, computers and composition, and media applications. As seen in Tables 12 and 13, the 40–49 age group and associate professors are more likely to have undergone training of some nature. 35

Age Group	Percentage	
20–29	Yes: 21.7%	No: 78.3%
30–39	Yes: 27.2	No: 70.9
40–49	Yes: 29.2	No: 66.7
50–59	Yes: 27.6	No: 69
60 and over	Yes: 29.7	No: 70.4

Table 12. 1.19 Have you attended a digital methods institute/workshop or course?

Role	Percentage	
Assistant Professor	Yes: 21.6%	No: 73%
Associate Professor	Yes: 35.9	No: 64.1
Doctoral Student	Yes: 29.2	No: 70.8
Emeritus Professor	Yes: 0	No: 100
Full Professor	Yes: 26.3	No: 71.1
Graduate Student	Yes: 23.1	No: 76.9
Instructor or Lecturer	Yes: 26.3	No: 68.4
Librarian/Archivist	Yes: 40	No: 60
Postdoctoral Fellow	Yes: 37.5	No: 62.5
Researcher	Yes: 40	No: 60

Table 13. 1.19 Have you attended a digital methods institute/workshop or course?

Overall, the respondents are actively incorporating the digital within their research activity and disseminating through electronic means. However, at the same time, they are not as involved in conference presentations on their digital-oriented work or in receiving formal training in digital methods, resources and tools.

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Academic Capacity: Professional Development

Respondents were asked their expectations and understandings of the impact that their digital-oriented work will have on their professional development and career trajectory, particularly in relation to tenure, salary and promotion. As seen in Table 14, approximately 10% of respondents answered that their institutions had policies regarding electronic documents and publication and development and use of digital technologies, tools, and resources for purposes of tenure, salary and promotion. However, the majority did not know if their institutions had these policies, which means that scholars are undertaking their work without knowing how it will count in professional contexts.

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Question	Percentage		
2.1 Does your institution have a policy concerning how electronic documents are to be evaluated in tenure, salary, and promotion procedures?	Yes: 9.7%	No: 26.4%	Don't know: 56.4%
2.2 Does your institution have a policy concerning the consideration of electronic publication in cases of promotion and tenure?	Yes: 11.9	No: 22.5	Don't know: 58.1
2.3 Does your institution have a policy of the consideration of the development and use of digital technologies, tools, and resources in cases of promotion and tenure?	Yes: 9.7	No: 21.6	Don't know: 62.1

Table 14. Knowledge of institution policies regarding salary, tenure and promotion

Academic Capacity: Teaching and Student Development

When it comes to teaching and work with students, the survey respondents are actively including digital resources, methods and technologies in the classroom. This level of interaction is further supported by digital program development, particularly at the undergraduate level. Finally, the survey respondents suggested that

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their students were actively incorporating digital methods, technologies and resources into their course work and personal lives, something that was encouraging, or even pushing, instructors to do the same within their teaching.

Teaching

Over 80% of respondents are actively incorporating electronic resources into their teaching. As outlined in Table 15, the most popular digital methods, technologies and resources incorporated include electronic resources, webpages, course management systems, digital manuscripts, and databases. At the time of the survey, respondents were not incorporating web 2.0 technologies, such as second life and Facebook and other social networks, though this may be different today.

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	Never	Seldom	Often	Always
Course Management Systems	15.9	7.9	25.6	26.9
Virtual Space (Second Life)	60.8	8.4	2.2	0.9
Databases	15	18.5	29.1	12.8
Software	23.8	15.4	21.1	14.1
Analytical Tools	39.2	15.9	12.3	4.0
Authoring Tools	40.1	14.5	11.5	4.8
Webpages	9.7	14.1	28.2	27.3
Digital Manuscripts	17.2	11.9	30.8	12.3
Electronic Resources	3.1	8.8	35.2	30.4
Blogs/Wikis	28.6	22.9	15.9	6.2
Online Project Planning Spaces	46.3	13.2	7.9	4.4
Bibliographic Software	35.7	15.4	17.2	4.8
Facebook/Social Networking	46.3	16.3	7.0	2.6

Table 15. 2.5 Please indicate the digital methods, technologies and resources that you incorporate into your teaching.^[9]

As above with other questions, some variation exists among age groups. As seen in Table 15, the use of electronic resources within courses tended to increase with each age group, peaking with the 40–49 age range.

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Age Group	Percentage	
20–29	Yes: 78%	No: 22%
30–39	Yes: 94.5	No: 5.5
40–49	Yes: 98	No: 2
50–59	Yes: 86	No: 14
60 and over	Yes: 70	No: 22

Table 16. 2.4 Have you integrated electronic resources into any of the courses that you teach?

Institution Level

In terms of university programs, approximately 40% of respondents indicated that their university has programs

with a digital focus within their faculties of Humanities, Arts, Social Sciences and Information Sciences, primarily at the undergraduate level (35%), with fewer at the masters (24%) and PhD level (14%). Approximately 41% indicated that their universities had plans to develop courses or programs at the undergraduate (33%), the masters (22%) and PhD (15%) levels. This growth is expected to be in the longer term with 26% indicating this development will likely occur in the next few years.

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Student Development

Respondents were also asked about whether students use digital methodologies, tools and resources. Perhaps not surprisingly, as seen in Table 17, many students were perceived to be actively incorporating digital methodologies, tools and resources in their course and thesis work, teaching assistantships, research assistantships and particularly their social lives.

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	No	Few	Some	Most	All
in their course work	0.9%	8.4%	29.1%	30.8%	11.9%
in their thesis work	3.5	12.3	22.9	24.2	11.5
in their TA work	5.3	10.6	28.2	20.3	7.9
in their RA work	2.2	8.8	27.3	22.9	9.7
in their social life	0.4	0.9	4.0	43.6	23.8

Table 17. 2.11 Are your students or students in your institution incorporating digital methodologies, tools and resources?

Further, approximately 50% of respondents indicated that their departments encourage students to use these in their course work. At the same time, 21% did not know if this was the case.

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These results suggest that undergraduate and graduate students are learning and using digital tools, methods and resources within various aspects of their student, professional and personal lives.

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Final Comments from Respondents

At the end of the survey, the respondents were asked a series of open-ended questions regarding the future of DH and the supports required to develop capacity in this community.

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The first question focused on the respondents' use of their "crystal ball" to envision future directions of DH. Collectively, the respondents provided thoughts along a series of themes. Several respondents indicated that they foresaw DH moving beyond a narrow disciplinary focus into more collaboration and broader questions. For example, one suggested that there would be increased "cross-discipline work with computer science, library/information science and the fine arts in areas such as data mining and multimedia incorporation" while another foresaw the following activities:

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Interconnecting researchers and building teams; archiving and analysis of large amounts of textual, audio, and visual data; working more closely with colleagues in other fields to solve problems rather than remaining within a purely disciplinary framework; new ways of relating text to image as the latter grows in importance; using resources to provide the public with informed, scholarly materials aimed at a popular audience.

Others suggested that the field would be developing new tools, especially those that would "facilitate the migration of humanities scholars into digital environments." For example,

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DH appears to be tackling increasingly non-trivial computing programs. I see two future tracks of development: one in which these more challenging avenues are explored, and another in which the realized tools and techniques are repackaged and made more accessible to the less sophisticated late adopters within the humanities field.

Another argued that they

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believe one important strategic direction the digital humanities will take will be to develop tools, workflows, and expressive and attestive conventions to facilitate the migration of humanities scholars into digital environments. For such a migration to occur, digital humanities scholars will need to devise and test tools, workflows and scholarly conventions for communication.

Finally, one foresaw "a shift away from the digitizing and tagging of primary materials toward the development of tools for integrating research tools, e.g. NINES."

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Another set of respondents focused on the likely development of additional online resources for research, dissemination and teaching. One individual envisioned "more use of digitized texts — wider access to instant answers from queries on historical and cultural issues..." while another suggested that within their field "...digital critical editions of significant but not widely distributed texts will become increasingly important for both scholarly and financial reasons."

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Finally, respondents suggested the DH will likely become more widely adopted. One individual articulated that they "think that it will become mainstream — everything that succeeds will be available through Google or its equivalent. Specialized sites with a high learning curve won't last." Another echoed this with "(l)arge scale adoption" happening through "ubiquity rather than conscious effort." Another suggested that their "goal is for students to work seamlessly between the real and digital worlds and see that expanded workspace as integral to their learning, their research, their work and to their private and public lives."

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However, some concern was expressed that a digital divide may be created between those who already have the skills and those who cannot easily access training to develop them. As one respondent stated, "I am not a digital user unless required. It does save me time and it can be used widely. However, the problem is that there is [sic] no programs to allow faculty to develop their digital skills."

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In a second open-ended question, the respondents offered recommendations on the capacity needed to strengthen the DH community. First, they called for more infrastructure such as networks, labs, supply workstations, and computer programming. One individual stated that this included "computational infrastructure in the humanities, generally, that plus appropriate instruction, expertise, and support." A key component is to ensure adequate research funding to both individuals and universities so that they can "keep digital technologies up-to-date and the infrastructure to support such technologies well into the future — this is the biggest problem at my institution." Finally, there was also a call for maintenance and sustainability. As one stated, "increased funding is an obvious one, but not only for new projects. We need a system in place for ensuring project sustainability." Besides more dollars, some respondents indicate the need to educate grant adjudicators and reviewers to ensure that they have the knowledge needed to effectively evaluate a digital-oriented application.

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Beyond funds for digital projects, respondents suggested continued support and leadership from universities is required. Some recommended courses for students and faculty to learn the skills by "making available know-how: workshops, team-teaching programs, traveling seminars." Rewards and recognition policies were also highlighted. As one suggested, "at the faculty level, collaborative research and publishing needs to be encouraged, recognized and rewarded. Interdisciplinary research also needs to be funded and encouraged."

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Further, "(m)ore acceptance of/respect for publishing in online journals. This needs to happen not only at the level of official policies on hiring and promotion, but also in the attitudes of professors."

A selection of the respondents argued that it is important to keep the digital development grounded within the humanities. While digital material and tools are important, one respondent suggested that "we still need know how to read, how to interpret, how to analyze and how to write." Finally, "the interface between 'the digital' and 'the humanities' needs to be strengthened. Too few humanists (let alone administrators) understand what d.h. is."

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The respondents also saw the opportunity to develop new skills beyond traditional humanities skills. For example, "Digital Humanists will need to develop the skills required to conduct lab and field experiments. We will also need to develop methods to support such research." There is also a recognition of the need for collaboration and cross-disciplinary work as there is a "shift from disciplinary to problem focused research; structures and funding that encourage cross-disciplinary work and team building; creation of physical spaces that allow for interactive work amongst researchers (not just individual scholars in individual offices)..."

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At the same time, however, several respondents did not perceive the need to take concrete steps to increase academic capacity within the community. As stated, "the community is strong and our numbers are growing. 'Digital Humanities' is being recognized as a legitimate field of study." Several suggested that change will be driven by students as articulated in this comment "Le renouvellement viendra des étudiants Peu de la génération des profs."^[10]

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As a third open-ended question, respondents were asked to articulate the type of support needed to develop this capacity within DH. One key priority identified was continued leadership from deans, other administrators and colleagues. Policies to support publishing in electronic journals and recognition are needed because "the creation of digital repositories, thematic collections, etc. has to be viewed on an equal footing as publishing monographs." Given the amount of time required to learn and utilize new technologies, several respondents also articulated a desire for more time to do this type of work. As one respondent articulated, they need "Funding, and time!!! Time is important — it takes a long time to learn and utilize new technologies and to be able to trouble shoot them."

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Echoing many of the comments already made, respondents recommended funding as well as the involvement from other disciplines, particularly computer scientists as researchers, rather than purely as programmers and developers. Further, there needs to be "greater support for research in the digital outside of 'digital' departments. That is, keep the research highly interdisciplinary." Finally, one respondent suggested that the community of practice needs "more 'hybrid' individuals who are at home with the two cultures and who are committed to building a new hybrid culture within the academy." With this, several respondents also suggested that infrastructure needs to be shared more, especially across a single campus. As one respondent stated, "We need infrastructure here badly. Otherwise, each research team needs to come up with their own server, designer, programmer, maintenance, etc. Lots of previous time and resources are lost that way."

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Finally, respondents were asked whether they recommend that untenured faculty undertake digital research and teaching. Their answers fall into three categories. First, a selection of respondents felt that untenured faculty could undertake digital research and teaching, but that it not be "at the expense of traditional research and teaching." This caution recognized that "the academy does not yet take new methods seriously across the board." Another echoed that "reality still dictates that "traditional" scholarship be strong."

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The second category was "yes, but" with some overall caution since digital scholarship is not always recognized for tenure. As one stated, "it is vitally necessary that younger scholars take up digital research and teaching, but I would not ask someone to do so where it might not be recognized in retention and tenure decisions." Another respondent suggested that an untenured faculty member undertake this work "but it has to

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be kept secret from older colleagues and especially the administration." Another individual is encouraging the work "because we don't want valuable projects to be postponed to a time when faculty are 'safe'... Some projects need several years to gain momentum and achieve results." Finally, in recognition of the amount of time required to learn the skills, one untenured faculty member stated,

Since I happen to be untenured at this point — and I undertake digital research and teaching — my answer is yes, with one proviso. That proviso is that the given faculty member have those skills prior to their entry into a tenure-track position. If they don't have those skills, they will not have the time to acquire them in the five or so years they are untenured. Such a person would be better served completing whatever teaching, research and service requirements they need to acquire tenure before learning a new digital skill.

Finally, a third group provided an unqualified "yes." One suggested "Yes — I think there is rich terrain there for publication and experience, and often junior faculty have more experience with these methods in their PhD programs, so the trajectory seems natural." Another stated "yes, because by the time they acquire tenure, they will be familiar with the process and more likely to incorporate it and mentor new faculty into it." One more individual recommended "Yes, at this stage, my department (regardless of what it might say) couldn't imagine bringing anyone in for a career with us unless they were aware, and incorporating, digital methods in their work — even if it wasn't the focus of their own research endeavour." Several respondents highlighted that the number of faculty positions positioned within both the humanities and DH are increasing.

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Some respondents also provided a practical reason for the incorporation of digital methods, tools and resources. They suggested that faculty do not have much choice in this regard given the importance of keeping ahead of students. As one stated emphatically, "Absolutely. Tenured or untenured shouldn't really make any difference, but it's a greater expectation that younger colleagues can keep up with their students and will have the know-how to make time-efficient use of technology to help in course-management and democratizing the learning process." Finally, "Yes. It is the way of the future, and the way to keep ahead of and in tune with students."

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Discussion

This survey provides a snapshot of DH capacity within the Canadian context. These opportunities and ongoing challenges are, however, not unique to Canada, but reflect issues in the larger DH community.

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First, these results suggest much reason for optimism regarding the growing acceptance of digital methods, resources, and tools and electronic dissemination, particularly at the associate professor rank and 40–49 age group. From an overall perspective, as can be seen in Table 18, since the larger academic community has been asked questions about the incorporation of electronic resources into their work [Archer 1990], [Siemens et al. 2002], a steady increase in use and acceptance can be seen. This trend is reinforced by the fact that many publishers and libraries have moved from print journals and books to print and electronic materials and solely digital ones, as well as efforts to digitize materials such as newspapers, government documents and archival material [Schonfeld and Housewright 2010]. Further, over the past decade, several projects which make access to online materials easier have started and grown in size and acceptance, including initiatives such as the Public Knowledge Project (<http://pkp.sfu.ca/>), the Open Journal System (<http://pkp.sfu.ca/?q=ojs>), Synergies (<http://www.synergiescanada.org/>), NINES (www.nines.org), and other open access and open source projects.

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Electronic Material	Archer 1999: Yes	Rockwell/Siemens 2000: Yes	2009: Yes
On-line scholarly journals	50.9%	69%	75.8%
On-line government resources	51.1	68	51.5
On-line newspapers	39.7	65	56.8
On-line archival materials	40.7	62	71.4
Other on-line resources	67	82	N/A
Open Journal System	N/A	N/A	36.6

Table 18. 1.3 Do you ever incorporate the following electronic resources into your work?

This trend is also carrying through to an acceptance of research dissemination and teaching materials through various electronic outlets, especially compared to Archer [Archer 1990] and Rockwell/Siemens [Siemens et al. 2002]. As can be seen in Table 19, individuals are incorporating materials into the classroom and an increasing number are publishing in refereed electronic outlets and using broad electronic dissemination methods.

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Question	Archer 1999: Yes	Rockwell/Siemens 2000: Yes	2009: Yes
2.4 Have you integrated electronic resources into courses?	55.7%	70%	79.3%
1.13 Have you published in refereed electronic outlets?	10.6	16	39.2
1.13 Have you attempted to publish in refereed electronic outlets?	2	7	15.9
1.11 Have you made scholarship available electronically in some way?	N/A	61	72.7

Table 19. Electronic dissemination

Second, respondents have embraced broader methods of dissemination beyond the traditional print journal. Many faculty, staff, students and projects have webpages which provide links to research and journal articles [Harley et al. 2010]; [Research Information Network 2010]. Further, blogging has become popular among digital humanists with examples such as Lisa Spiro's "Digital Scholarship in the Humanities" (<http://digitalscholarship.wordpress.com/>), Bethany Nowviskie's musings (<http://nowviskie.org/>), and Dan Cohen's Digital Humanities Blog (<http://www.dancohen.org/>) to name but a few. And of course, twitter has taken off in the community as evidenced by the numerous accounts and hash tags related to all things DH, such as @DHAnswers, @RayS6, @nowviskie, @dhinstitute, @unsworth, #dh11, #teifuture, #thatcamp, and many others [Kirschenbaum 2010].

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Third, the consideration of digital is creating a diverse range of research, both within 'traditional' fields and those created by the technology itself. The new generation of scholars and alternative academic professionals are demonstrating high comfort levels with digital tools, methodologies, and resources and incorporating these into all aspects of their professional and personal lives. These individuals are also likely to strongly encourage others to accept these in their efforts to stay current. Further, many faculty are drawing upon this potential by employing students within their digital-oriented research. The additional training opportunities are providing additional support and skill development.

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Further, these results suggest that a new generation of scholars, who may not build or develop a tool, database or digitized manuscript, but will instead incorporate these resources into their research and teaching. From this, new opportunities for scholarship will occur which will, in turn, likely contribute to ongoing discussions of who is actually a "digital humanist" (For example, see [Hoover 2011]; [McCarty 2011]; [Reside 2011]; [Ramsay 2011a]; [Ramsay 2011b]. In the future, will a person need to have encoded their own document, created their own database or even written their own software code to be accepted into this community of practice, as argued by some [Ramsay 2011a]; [Ramsay 2011b]? The answer to this will then inform the direction that DH will proceed. Should more creators of these digital methods, technologies and resources be developed? Or should users be trained to become creators? Or finally, should the community work to accomplish both options while creating more general acceptance of digital methods, technologies and resources? The answers to these questions will drive many aspects of determining the type of support that is needed — whether funding, tools, training, infrastructure and others — to increase academic capacity. For example, if the goal is to attract more users, then perhaps the response is the creation of more "tools for the novice" [Flanders 2009] or "killer apps" [Juola 2008]. If the goal is to develop more creators, more training in these skills and knowledge will be required.

Despite these opportunities, challenges still abound for those who wish to undertake this type of scholarship. For example, these results suggest the most active Digital Humanist is an associate professor and likely between the ages of 40–49. This group appears to be the most active in terms of making their research available electronically, presenting on their digital-oriented research at both discipline-specific and digital-focused conferences, and employing these materials in the classroom, a finding echoed by [Harley et al. 2010]. If this is the case, despite the growing acceptance of things digital, then more work needs to be done to ensure that graduate students and pre-tenured faculty feel confident to embrace the digital methods, technologies, and resources and to incorporate these into their professional portfolio [Harley et al. 2010]; [Schonfeld and Housewright 2010]; [Schonfeld and Housewright 2010]; [Babeau 2011]. Some of this reluctance on the part of the community's junior members may be explained by the apparent lack of headway that has been made in the valuation of these within the salary, tenure and promotion process, especially when compared against past surveys. As can be seen in Table 20, while the number of respondents who said "yes" that their institution has policies related to the evaluation of digital resources, methods and tools has increased and the percentage of "no" has decreased, the percentage of respondents who do not know has increased. This trend comes despite work done over the past decade following examples from other institutions [Price and Walter 2010] and work by organizations such as the MLA ([Modern Language Association 2002], [Modern Language Association 2003]). In particular, Schreibman and Hanlon [Schreibman and Hanlon 2010] have identified tool development as one area where more work is required to value this activity for the purposes of employment, professional advancement and tenure.

Significant change may be slow to come in the short term. The more senior scholars do not appear to be pursuing digital-oriented research, disseminating electronically or employing digital resources in the classroom. Given their roles as researchers, administrators, decision makers, and grant reviewers, if this group does not support DH's potential, efforts on the part of graduate students and pre-tenured faculty to employ these methods may be stalled.

Questions	Rockwell/Siemens 2000	2009
2.1 Does your institution have a policy concerning how electronic documents are to be evaluated in tenure, salary, and promotion procedures?	Yes: 4% No: 47% Don't know: 48%	Yes: 10% No: 26% Don't know: 56%
2.2 Does your institution have a policy concerning the consideration of electronic publication in cases of promotion and tenure?	Yes: 4 No: 44 Don't know: 50	Yes: 12 No: 23 Don't know: 58
2.3 Does your institution have a policy of the consideration of the development and use of digital technologies, tools, and resources in cases of promotion and tenure?	N/A	Yes: 10 No: 22 Don't know: 61

Table 20. Treatment of digital humanities in salary, tenure and promotion

Another challenge identified by these results is the apparent hesitation for individuals to present their digital-oriented research at discipline-specific and digital-oriented conferences. Perhaps, given the growing ubiquity of digital materials, many respondents may not think of presenting at digital-oriented conferences or identify these as parts of their paper at discipline-oriented conferences, such as the Modern Languages Association (MLA) and Renaissance Society of America (RSA). Alternatively, the younger scholars may be reluctant to identify themselves in this manner, particularly at those conferences which are an important contribution to the CV of a starting scholar. More work will need to be done to understand this trend.

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As always, issues of funding for both initial development and ongoing sustainability and relevance of digital resources remains unresolved and may become more critical in the future. Unlike books where an expectation of updates does not exist, this community will need to work with granting agencies to create new funding models that will support not only the development of these resources, but changes and updates that come with advances in both technology and scholarship [Kretzschmar 2009]. Given the amount of resources needed for many DH projects, every effort should be made to ensure ongoing sustainability [McKie and Thorpe 2002].

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Conclusions and Recommendations

The following conclusions and recommendations are designed to support the already strong efforts that are in place to develop and strengthen academic capacity in Digital Humanities both within Canada and beyond.

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First, given that most respondents appear to be learning digital methods, technologies and resources on their own rather than through more formal settings, more opportunities for the development of training and skill development opportunities must be created. For example, departments, faculties and universities need to continue their plans for additional undergraduate and graduate courses and degrees, combining skill and knowledge development in traditional disciplinary methods with digital and project management skills. Further

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thought should also be given to certificate programs that could be taken in parallel to traditional graduate programs or in addition to these [Spiro 2010]. The recently launched Praxis Program at the Scholars' Lab ([Scholars' Lab 2011]) at University of Virginia is one example of this type of program. It would also be beneficial for students to have hands-on experiences through internships with libraries and DH centres, to the benefit of the students and the projects [Conway et al. 2010]. At the same time, individuals who are interested in developing their skills can take advantage of the growing number of courses, such as DHSI (dhsi.org), THATCamp (thatcamp.org), One Week|One Tool (oneweekonetool.org), the Advanced Topics in Scholarly Text Encoding [WWP] and many others.

As indicated by these respondents and in other forums, such as a recent DH funding conference panel [ADHO 2011], DH projects continue to need funding and often on a scale that is not typically seen within the Humanities. Lobbying efforts with various funding agencies should continue, not only for resources to support the creation of new digital resources and tools, but also for the ongoing maintenance and sustainability as technology and scholarship advances. Users expect that these will stay current and survive changes in hardware and software and not "gather dust" like a book on a shelf, particularly given the sometimes large amounts of money that was invested to create the resource at the outset. The DH community may also need to look beyond traditional funding sources to include alternative revenue models, some of which may be borrowed from the private sector [Guthrie et al. 2008]. For example, while the success of these efforts still have to be determined, the Internet Shakespeare Editions has moved in this direction with cooperative advertising and click-through ads with AbeBooks.com and Amazon.com [Internet Shakespeare Editions 2010].

To support these ongoing calls for additional funding, DH community members need to continue to educate colleagues, administration, and granting agencies so that these individuals understand how DH supports and extends Humanities and Social Sciences research by answering traditional questions as well as forming new ones. Associate professors can play an important role in this regard as they move into positions of decision making and leadership within their institutions and disciplines as a whole. In addition, as associate professors, they have the security of position which allows them to take these types of risks to use and promote digital methods, tools and resources [Hackett 2005]. Further, Digital Humanists can support these efforts by making the "digital" more visible within their discipline-specific conference presentations and articles. At the same time, the DH associations need to continue their membership recruitment efforts among graduate students, faculty and alternative academics. As is often said, strength comes with numbers and larger membership bases will give these associations more credibility when engaging with administration, granting councils and other key stakeholders. Finally, efforts to both write and ensure awareness of policies regarding digital methods, technologies and resources for the purposes of employment, tenure and promotion must continue. With these in place, graduate students, untenured faculty, and alternative academics will be more likely to invest their efforts in the creation and application of DH.

As the results from this survey suggest, the acceptance and use of digital methods, tools and resources within research and teaching are increasing within the Canadian context and beyond. The above recommendations are intended to support the ongoing efforts to move DH from "emergent" to the mainstream.

Appendix 1. Survey on Academic Capacity: Digital Humanities/Humanities Computing (English language version)

This section will concern funding, developing, presenting, and disseminating research that includes digital methods, technologies and resources.

Part 1. Research Capacity

A. Your Current Research

1.1 Do your research projects include digital methods, technologies and resources?

80

- Yes
- No

If yes, please describe your research.

81

1.2 What digital methods, technologies and resources do you incorporate in your research?

82

	Never	Seldom	Often	Always
Databases				
Software				
Analytical tools				
Authoring tools				
Webpages				
Digital manuscripts				
Electronic Resources				
Blogs/Wikis				
Online Project Planning Spaces				
Bibliographic software				
Facebook/social networking				
Other (please list)				

Table 21.

1.3 Do you ever incorporate the following electronic resources into your research?

83

Type of Electronic Resource:	Yes	No	Not Sure
On -line scholarly journals			
On -line government resources			
On -line archival materials			
TAPoR (http://portal.tapor.ca/)			
TAPoRware Tools (http://taporware.mcmaster.ca)			
Text Encoding Initiative (http://www.tei-c.org/index.xml)			
Open Journal System (http://pkp.sfu.ca/?q=ojs)			
Open Journal System (http://pkp.sfu.ca/?q=ojs)			
Conftool (http://www.conftool.net/)			
TACT (http://www.chass.utoronto.ca/tact/)			
Hyperpo (http://hyperpo.org/)			
S.A.T.O (http://www.ling.uqam.ca/sato/)			
Other (please list)			

Table 22.

1.4 Do you work in teams to undertake your research?

84

- Yes
- No

1.5 How often do you work in teams to undertake your research?

85

- I usually research with a team
- I sometimes research with a team
- I occasionally research with a team
- I rarely research with a team

1.6 The teams that I research with consist of (Check all that apply)

86

- Designers
- Colleagues in my discipline
- Colleagues from other disciplines
- Software developers
- Content specialists
- Librarians
- Computer Scientists
- Students
- Other (please list)

B. Research Funding

These questions will focus on funding for your research.

87

1.7 Have you applied for funding for your research incorporating digital methods, technologies and resources?

88

- Yes
- No

1.8 To which grant programs have you applied to fund digital-oriented research in the past 10 years (Please check all that apply)

89

- Social Sciences and Humanities Research Council Graduate Scholarship
- SSHRC Post Graduate Fellowship
- SSHRC Standard Research Grant
- SSHRC Image, Text, Sound and Technology Fund
- SSHRC Research Development Initiative
- SSHRC Research/Creation in the Fine Arts
- Natural Sciences and Engineering Research Council
- Canadian Foundation for Innovation
- Conseil de recherches en sciences humaines du Canada Établissement de nouveaux professeurs-chercheurs
- CRSH Établissement de nouveaux professeurs-chercheurs-créateurs
- CRSH Appui à la recherche-création
- CRSH Appui aux arts et technologies médiatiques
- CRSH Soutien aux équipes de recherche
- Fond québécois de recherche sur la société et la culture (FQRSC) Établissement de nouveaux professeurs- chercheurs
- FQRSC Établissement de nouveaux professeurs-chercheurs-créateurs
- FQRSC Appui à la recherche-création (individuel)

- FQRSC Appui à la recherche-cr ation ( quipe)
- FQRSC Appui aux arts et technologies m diatiques
- FQRSC Soutien aux  quipes de recherche
- Financement interne universitaire
- Internal University Funding
- Other (please list)

1.9 Was your digital-oriented application successful (please check all that apply)

90

- Social Sciences and Humanities Research Council Graduate Scholarship
- SSHRC Post Graduate Fellowship
- SSHRC Standard Research Grant
- SSHRC Image, Text, Sound and Technology Fund
- SSHRC Research Development Initiative
- SSHRC Research/Creation in the Fine Arts
- Natural Sciences and Engineering Research Council
- Canadian Foundation for Innovation
- Conseil de recherches en sciences humaines du Canada  tablissement de nouveaux professeurs-chercheurs
- CRSH  tablissement de nouveaux professeurs-chercheurs-cr ateurs
- CRSH Appui   la recherche-cr ation
- CRSH Appui aux arts et technologies m diatiques
- CRSH Soutien aux  quipes de recherche
- Fond qu b cois de recherche sur la soci t  et la culture (FQRSC)  tablissement de nouveaux professeurs- chercheurs
- FQRSC  tablissement de nouveaux professeurs-chercheurs-cr ateurs
- FQRSC Appui   la recherche-cr ation (individuel)
- FQRSC Appui   la recherche-cr ation ( quipe)
- FQRSC Appui aux arts et technologies m diatiques
- FQRSC Soutien aux  quipes de recherche
- Financement interne universitaire
- Internal University Funding
- Other (please list)

1.10 What sort of grant program would you like to see to support digital- oriented research?

91

C. Research Dissemination

These questions will concern the dissemination of your research in publications and at conferences.

92

Publications

1.11 Have you ever made your scholarship available electronically in any way?

93

- Yes
- No

1.12 Please briefly describe the ways you have made your scholarship available electronically.

94

1.13 Have you published or attempted to publish any item of scholarship in a refereed electronic outlet?

95

	Yes	No
Published		
Attempted to Publish		

Table 23.

1.14 If yes for either, please describe the outlet.

96

C. Research Dissemination

These questions will concern the dissemination of your research in publications and at conferences.

97

Conferences

1.15 Have you presented research with a digital focus at a discipline specific conference?

98

- Yes
- No

If Yes, indicate which ones. If No, why not?

99

1.16 Have you ever presented research at a digital content oriented conference?

100

- Yes
- No

1.17 If yes, please indicate digitally focused conferences at which you have presented (Check all that apply):

101

- Society for Digital Humanities/Société pour l'étude des médias interactifs
- Canadian Symposium on Text Analysis
- Digital Humanities (previously ALLC/ACH)
- Digital Curation
- Text Encoding Initiative Annual Meeting
- International Conference on Electronic Publishing
- Joint Conference on Digital Libraries
- Digital Resources in the Humanities
- Digital Games Research Association
- Canadian Games Studies Association
- American Association for History and Computing
- Other (please list)

1.18 Are you a member of a digital association (Check all that apply)

102

- Society for Digital Humanities/Société pour l'étude des médias interactifs
- Association for Computing in the Humanities
- Association for Literary and Linguistic Computing
- Text Encoding Initiative
- Digital Games Research Association
- Canadian Games Studies Association
- American Association for History and Computing
- Other (please list)

1.19 Have you attended a digital methods institute/workshop or course? 103

- Yes
- No

1.20 If yes, please list the institute/workshop and/or course(s) 104

- Institute
- Workshop
- Course

Part 2. Professional Development

This section will focus on your expectations and understanding of the impact that your digital work will have on your professional development and career trajectory. 105

2.1 Does your institution have a policy concerning how electronic documents are to be evaluated in tenure, salary, and promotion procedures? 106

- Yes
- No
- Don't know

2.2 Does your institution have a policy concerning the consideration of electronic publication in cases of promotion and tenure? 107

- Yes
- No
- Don't know

2.3 Does your institution have a policy of the consideration of development and use of digital technologies, tools and resources in cases of promotion and tenure? 108

- Yes
- No
- Don't know

Part 3. Teaching and Student Development

A. Your Teaching

These questions will concern the use of digital methods, technologies and resources within your teaching 109

2.4 Have you integrated electronic resources into any of the courses that you teach? 110

- Yes
- No

2.5 Please indicate the digital methods, technologies, and resources that you incorporate into your teaching. 111

	Never	Seldom	Often	Always
Course Management Systems				
Virtual Space (Second Life)				
Databases				
Software				
Analytical tools				
Authoring tools				
Webpages				
Digital manuscripts				
Electronic Resources				
Blogs/Wikis				
Online Project Planning Spaces				
Bibliographic software				
Facebook/social networking				
Other (please list)				

Table 24.

This section will focus on the incorporation of digital humanities within your teaching and more generally at your institution 112

B. Your institution

These questions will concern the use of digital methods, technologies and resources at your institution 113

2.6 Does your university have programs with a digital focus within the Faculties of Humanities, Arts, Social Sciences and Information Sciences? 114

- Yes
- No
- Don't know

If yes, please list the programs 115

2.7 At which academic level are these programs? 116

- Undergraduate
- Masters
- PhD

2.8 Does your university have plans to develop courses or programs with a digital focus within the Faculties of Humanities, Arts, Social Sciences and Information Sciences? 117

- Yes
- No

2.9 At which academic level will these programs be? 118

- Undergraduate

- Masters
- PhD

2.10 Please specify when these programs are likely to be developed

119

- Within the next six months
- Within the next year
- Within the next few years

C. Student Development

These questions will concern student use of digital methods, technologies and resources

120

2.11 Are your students or students in your institution incorporating digital methodologies, tools and resources:

121

	No Students	Few Students	Some Students	Most Students	All Students
In their course work					
In their thesis work					
In their teaching assistant work					
In their research assistant work					
In their social life					

Table 25.

2.12 Does your department encourage students to use digital methodologies, technologies and resources in course work?

122

- Yes
- No
- Don't know

Part 4. Final Thoughts

3.1 Using your crystal ball, what do you envision the future directions in digital humanities to be? Please explain.

123

3.2 What kind of capacity needs to be developed to strengthen the digital humanities community? Please explain

124

3.3 What kind of support would help the digital community develop this capacity? Please explain

125

3.4 Do you recommend that untenured faculty undertake digital research and teaching? Please explain.

126

Part 5. Information about yourself

This information will allow us to better understand the digital humanities community

127

4.1 Working Language:

128

- English

- French
- Both

4.2 Gender:

129

- Female
- Male
- I prefer not to answer

4.3 Affiliation:

130

- University
- Publisher
- Research Centre
- Other (please explain)

4.4 Role:

131

- Academic
 - Assistant Professor
 - Associate Professor
 - Full Professor
 - Instructor or Lecturer
- Programmer/Developer
- Librarian/Archivist
- Researcher
- Other
- Student
 - Undergraduate
 - Graduate
 - Doctoral
- Postdoctoral Fellow
- Other (please explain)

4.5 Age:

132

- 20-29
- 30-39
- 40-49
- 50-59
- 60 and over
- I prefer not to answer

4.6 Academic Discipline:

133

- Social Sciences
 - Anthropology
 - Archaeology
 - Economics
 - Geography
 - History

- History and Politics
- Industrial Relations
- Information and Communication
- Political Science
- Social Sciences
- Sociology
- Sociology and Anthropology
- Psychology
- Other
- Humanities:
 - Arts
 - Arts and Communication
 - Asian Studies
 - Classics
 - Culture and Language Studies
 - English
 - French Studies
 - German
 - Humanities
 - Languages/Languages and Linguistics
 - Literature
 - Native Studies
 - Philosophy
 - Religious Studies
 - Russian
 - Theology
 - Women and Gender Studies
 - Other
- Computer Science
- Library and Information Science
- Business

4.7 Level of Academic training:

134

- BA/BSc
- MA/MSc
- PhD
- Other:

Appendix 2. Survey on Academic Capacity: Digital Humanities/Humanities Computing (French language version)

Partie 1. Capacité de recherché

Cette section portera sur le financement, le développement, la présentation et la diffusion de la recherche qui comprend des méthodes numériques, technologiques et des ressources.

135

A. Votre recherche actuelle

1.1 Est-ce que vos projets de recherche incluent des méthodes numériques, technologiques et des ressources? 136

- Oui
- Non

Si oui, veuillez décrire votre recherche: 137

1.2 Quelles méthodes numériques, technologiques et des ressources intégrez-vous dans votre recherche? 138

	Jamais	Rarement	Souvent	Toujours
Bases de données				
Logiciels				
Les outils analytiques				
« Authoring tools »				
Sites Web				
Manuscrits numériques				
Ressources électroniques				
Blogs / Wikis				
Espaces pour la planification de projets en ligne				
Logiciel bibliographique				
Facebook / réseautage social				
Autres (veuillez lister)				

Table 26.

1.3 Es-ce qu'il vous arrive d'incorporé des ressources électroniques dans votre recherche? 139

Type de ressources électroniques: 140

	Oui	Non	Pas certain
Revue savantes en ligne			
Ressources gouvernementales en ligne			
Journaux en ligne			
Documents d'archives en ligne			
TAPoR (http://portal.tapor.ca/)			
"TAPoRware Tools" (http://taporware.mcmaster.ca)			
"Text Encoding Initiative" (http://www.tei-c.org/index.xml)			
"Open Journal System" (http://pkp.sfu.ca/?q=ojs)			
"Open Conference System" (http://pkp.sfu.ca/?q=ocs)			
Conftool (http://www.conftool.net/)			
TACT (http://www.chass.utoronto.ca/tact/)			
Hyperpo (http://hyperpo.org/)			
S.A.T.O (http://www.ling.uqam.ca/sato/)			
Autres (veuillez lister)			

Table 27.

1.4 Travaillez-vous en équipe pour faire votre recherche?

141

1. Oui
2. Non

1.5 Travaillez-vous en équipe pour faire votre recherche?

142

1. J'ai l'habitude de faire de la recherche en équipe
2. Parfois je fais de la recherche en équipe
3. De temps en temps je fais de la recherche en équipe
4. Je fais rarement de la recherche en équipe

1.6 Les équipes avec qui je fais de la recherche consistent en (Cochez tout ce qui s'applique):

143

1. Designers
2. Les collègues dans ma discipline
3. Les collègues dans d'autres disciplines
4. Les développeurs de logiciels
5. Spécialistes de Contenu
6. Bibliothécaires
7. Spécialistes d'informatique
8. Étudiants
9. Autres (veuillez lister)

B. Le financement de la recherche

Ces questions porteront sur le financement de vos recherches.

144

1.7 Avez-vous sollicité du financement pour vos travaux de recherche qui intègrent les méthodes numériques, technologiques et des ressources?

145

1. Oui
2. Non

1.8 Pour quels programmes de subventions avez-vous appliqué pour financer votre recherche basée sur des médias interactifs au cours des 10 dernières années? (Prière de cocher tout ce qui s'applique). 146

- Bourses et subventions d'études supérieures en Conseil de recherches en sciences humaines (CRSH)
- Bourse CRSH pour études post-supérieures
- Subvention ordinaire de recherche du CRSH
- Programme CRSH « image, texte, son et technologie »
- Programme CRSH « initiative du développement de la recherche »
- CRSH recherche/création dans le domaine des Beaux Arts
- Conseil de recherches en sciences naturelles et en génie
- Fondation canadienne pour l'innovation
- Fonds québécois de recherche sur la société e la culture (FQRSC) Établissement de nouveaux professeurs-chercheurs
- FQRSC Établissement de nouveaux professeurs-chercheurs-créateurs
- FQRSC Appui à la recherche-création (individuel)
- FQRSC Appui à la recherche-création (équipe)
- FQRSC Appui aux arts et technologies médiatiques
- FQRSC Soutien aux équipes de recherché
- Financement interne universitaire
- Autres (veuillez lister)

1.9 Est-ce que votre demande d'application a été acceptée? (Prière de cocher tout ce qui s'applique) 147

- Bourses et subventions d'études supérieures en Conseil de recherches en sciences humaines (CRSH)
- Bourse CRSH pour études post-supérieures
- Subvention ordinaire de recherche du CRSH
- Programme CRSH « image, texte, son et technologie »
- Programme CRSH « initiative du développement de la recherche »
- CRSH recherche/création dans le domaine des Beaux Arts
- Conseil de recherches en sciences naturelles et en génie
- Fondation canadienne pour l'innovation
- Fonds québécois de recherche sur la société e la culture (FQRSC) Établissement de nouveaux professeurs-chercheurs
- FQRSC Établissement de nouveaux professeurs-chercheurs-créateurs
- FQRSC Appui à la recherche-création (individuel)
- FQRSC Appui à la recherche-création (équipe)
- FQRSC Appui aux arts et technologies médiatiques
- FQRSC Soutien aux équipes de recherché
- Financement interne universitaire
- Autres (veuillez lister)

1.10 Quel type de programme de subvention aimeriez-vous voir pour soutenir la recherche orientée vers les médias interactifs (Digital Humanities)? 148

C. Diffusion de recherche

Ces questions concernent la diffusion de votre recherche dans des publications et à des conférences. 149

Publications

1.11 Avez-vous déjà mis votre recherche ou les articles qui en découlent? 150

- Oui
- Non

1.12 Veuillez décrire brièvement le format dans lequel vous avez mis votre recherche/ érudition en ligne. 151

1.13 Avez-vous publié ou avez-vous tenté de publier un ou plusieurs travaux de recherche dans un forum arbitré en ligne? 152

	Oui	Non
Publié		
Tenté de publier		

Table 28.

1.14 Si oui pour l'un ou l'autre, veuillez décrire le contexte : 153

C. Diffusion de recherche

Ces questions concernent la diffusion de votre recherche dans des publications et à des conférences. 154

Conférences

1.15 Avez-vous déjà présenté votre recherche/ érudition avec un focus sur les médias interactifs à une conférence ayant pour thème une discipline spécifique? 155

- Oui
- Non

Si oui, veuillez indiquer les conférences spécifiques. Si non, pourquoi? 156

1.16 Avez-vous déjà présenté à une conférence ayant comme thème principal les médias interactifs? 157

- Oui
- Non

1.17 Si oui, veiller indiquer les conférences sur les médias interactifs auxquelles vous avez présenté (Veuillez cocher toutes les réponses qui s'appliquent): 158

- Society for Digital Humanities/Société pour l'étude des médias interactifs
- Canadian Symposium on Text Analysis
- Digital Humanities (Auparavant connu sous les noms : ALLC/ACH)
- Digital Curation
- Text Encoding Initiative (rencontre annuel)
- International Conference on Electronic Publishing
- Joint Conference on Digital Libraries
- Digital Resources in the Humanities
- Digital Games Research Association

- Canadian Games Studies Association
- American Association for History and Computing
- Autres (veuillez lister)

1.18 Êtes-vous membre d'une association de médias interactifs (Veiller cocher tout ce qui s'applique):

159

- Society for Digital Humanities/Société pour l'étude des médias interactifs
- Association for Computing in the Humanities
- Association for Literary and Linguistic Computing
- Text Encoding Initiative
- Digital Games Research Association
- Canadian Games Studies Association
- American Association for History and Computing
- Autres (veuillez lister)

1.19 Avez-vous déjà visité une école d'été ou avez-vous participé à un atelier ou cours?

160

- Oui
- Non

1.20 Si oui, veuillez énumérer le(s) institut(s) / atelier(s) et / ou cours

161

Institut:

162

Atelier:

163

Cour:

164

Partie 2. Développement Professionnel

Cette section mettra l'accent sur vos attentes et la compréhension de l'impact que les médias interactifs auront sur votre développement professionnel et votre cheminement de carrière.

165

2.1 Votre institution a-t-elle une politique sur la façon dont les documents électroniques doivent être évalués en ce qui concerne la titularisation, le salaire, et les procédures de promotion?

166

- Oui
- Non
- Je ne sais pas

2.2 Votre institution a-t-elle une politique qui considère les publications électronique en cas de promotion et titularisation?

167

- Oui
- Non
- Je ne sais pas

2.3 Votre institution a-t-elle une politique qui considère le développement et l'utilisation des médias interactifs, d'outils et de ressources électroniques en cas de promotion et titularisation?

168

- Oui
- Non
- Je ne sais pas

Partie 3. Développement des enseignements et élèves

Cette section mettra l'accent sur l'intégration des médias interactifs dans les sciences humaines au sein de votre enseignement, ainsi que plus généralement au sein de votre établissement. 169

A. Votre enseignement

Ces questions concernent l'utilisation des médias interactifs, de la technologie et des ressources dans votre enseignement. 170

2.4 Avez-vous intégré des ressources électroniques dans l'un des cours que vous enseignez? 171

- Oui
- Non

2.5 Veuillez indiquer les médias interactifs, la technologie et les ressources que vous intégrer dans votre enseignement 172

	Jamais	Rarement	Souvent	Toujours
Systèmes de gestion des cours				
L'espace virtuel (Second Life)				
Bases de données				
Logiciels				
Les outils analytiques				
«Authoring tools»				
Sites Web				
Manuscrits numériques				
Ressources électroniques				
Blogs / Wikis				
Espaces pour la planification de projets en ligne				
Logiciel bibliographique				
Facebook / réseautage social				
Autres (veuillez lister)				

Table 29.

Cette section mettra l'accent sur l'intégration des médias interactifs dans les sciences humaines au sein de votre enseignement, ainsi que plus généralement au sein de votre établissement. 173

B. Votre enseignement

Ces questions concernent l'utilisation des médias interactifs, la technologie et des ressources dans votre enseignement. 174

2.6 Est-ce que votre université offre des programmes qui mettent l'accent sur les médias interactifs dans les facultés de lettres, arts, sciences sociales et sciences informatiques? 175

- Oui

- Non
- Je ne sais pas

Si oui, veuillez énumérer les programmes 176

2.7 A quels niveaux académiques sont offerts ces programmes? 177

- Baccalauréat
- Maîtrise
- Doctorat

2.8 Est-ce que votre université a des plans pour développer des cours ou des programmes avec un accent sur les médias interactifs dans les facultés de lettres, arts, sciences sociales et sciences informatiques? 178

- Oui
- Non

2.9 A quels niveaux académiques seront offerts ces programmes? 179

- Baccalauréat
- Maîtrise
- Doctorat

2.10 Veuillez préciser (ou estimer) quand ces programmes seront développés 180

- Dans les six prochains mois
- Au cours de la prochaine année
- Au cours des prochaines années

C. Développement des étudiants

Ces questions porteront sur l'utilisation des médias interactifs, la technologie et les ressources par les étudiants 181

2.11 Est-ce que vos étudiants ou les étudiants de votre établissement d'enseignement intègrent les méthodologies de médias interactifs, les outils et les ressources? 182

	Aucun étudiants	Peu d'étudiants	Quelques étudiants	La plupart des étudiants	Tous les étudiants
Dans leurs travaux de cours					
Dans leurs travaux de thèse					
Dans leurs travaux d'assistant d'enseignement					
Dans leurs vies sociales					

Table 30.

2.12 Est-ce que votre département encourage les étudiants à utiliser les méthodologies de médias interactifs, les outils et les ressources dans leurs cours? 183

- Oui
- Non
- Je ne sais pas

Partie 4. Pensées finales

3.1 Selon vous, comment envisagez-vous l'orientation future de l'enseignement des sciences humaines en fonction des médias interactifs et des développements des communautés/ la communauté des sciences humaines en ligne? Veuillez expliquer. 184

3.2 Quels types de capacités doivent être développés pour renforcer la communauté des sciences humaines en ligne? Veuillez expliquer. 185

3.3 Quel type de support permettrait la communauté des sciences humaines en ligne de développer ces capacités? Veuillez expliquer. 186

3.4 Recommandez-vous que des enseignants non-permanents développent l'enseignement et la recherche en médias interactifs? Veuillez expliquer. 187

Partie 5. Des informations sur vous-même

Cette information nous permettra de mieux comprendre le développement de la capacité d'enseignement des sciences humaines dans l'étude des médias interactifs/ la communauté des sciences humaines en ligne. 188

4.1 Langue de travail: 189

- Anglais
- Français
- Les deux

4.2 Sexe: 190

- Femme
- Mâle
- Je préfère ne pas répondre

4.3 Affiliation: 191

- Université
- Éditeur
- Centre de recherché
- Autres (veuillez expliquer)

4.4 Rôles (veuillez cocher une case): 192

- Professeur adjoint
- Professeur agrégé
- Professeur titulaire
- Chargé de cours ou instructeur
- Programmeur / Développeur
- Bibliothécaire / archiviste
- Chercheur
- étudiant au baccalauréat

- étudiant à la maîtrise
- étudiant au doctorat
- étudiant post-doctoral
- Autres (veuillez spécifier)

4.5 Age:

193

- 20-29
- 30-39
- 40-49
- 50-59
- 60 et plus
- Je préfère ne pas répondre

4.6 Discipline Académique (veuillez cocher toutes les cases qui s'appliquent):

194

- Anthropologie
- Archéologie
- Economie
- Géographie
- Histoire
- Histoire et politique
- Étude des médias interactifs dans les sciences humaines
- Relations industrielles
- Information et communication
- Nouveaux média
- Science politique
- Sciences sociales
- Sociologie
- Sociologie et Anthropologie
- Psychologie
- Arts
- Arts et communication
- Études Asiatiques
- Études classiques
- Études de langue et de culture
- Études anglaises
- Études françaises
- Études allemandes
- Sciences Humaines
- Langues / langages et linguistiques
- Littérature
- Études amérindiennes
- Philosophie
- Études religieuses
- Études russes
- Théologie
- Étude des femmes
- Science informatique
- Sciences de l'information et des bibliothèques

- Entreprises
- Autres (veuillez lister)

4.7 Plus haut niveau de formation universitaire:

195

- BA/BSc
- MA/MSc
- Doctorat
- Autres (veuillez lister)

Notes

^[1]I would like to thank Drs. Michael Eberle-Sinatra and Geoffrey Rockwell, and Caitlin Brownrigg for their contribution to the development of the survey and SSHRC for the research funding.

^[2]Within the Canadian context, a college is a primarily undergraduate teaching institution with a focus on applied skills, certificates and diplomas. A college does not generally award undergraduate degrees.

^[3]Since the number of respondents was less than 1%, the administrator and retired roles have been eliminated from the analysis when only the role is considered statistically significant.

^[4]The top and bottom 5 answers are highlighted in bold.

^[5] This survey was conducted before Twitter became popular within the DH community. The results may be different if the survey was repeated in 2011.

^[6]The top and bottom 3 are highlighted in bold.

^[7]SSHRC discontinued this program in 2010 and instituted a broader funding program focused on the Digital Economy.

^[8]English Translation: 'Programs that allow longer term funding to finance the hiring of technical personnel; programs to establish digital humanities centres (which accept a hybrid of service and research)'

^[9]The top and bottom 5 are highlighted in bold.

^[10]English translation: "The renewal comes from the generation of students, not of the professors."

Works Cited

ADHO Alliance of Digital Humanities Organizations. "About." Accessed 12 September 2011. <http://www.digitalhumanities.org/about>.

ADHO 2011 ADHO 2011. Alliance of Digital Humanities Organizations. "Preconference, Conference and Post-Conference Schedule." Digital Humanities 2011, Stanford University, 17–22 June 2011. Accessed 13 September 2011. <http://www.stanford.edu/group/dh2011/cgi-bin/wordpress/wp-content/uploads/2011/06/dh2011Schedule.pdf>.

Archer 1990 Archer, K. (1999) Archer, K. "Electronic Publishing in the Humanities and Social Sciences: A Report to the Humanities and Social Sciences Federation of Canada on Survey Findings." Humanities and Social Sciences Federation of Canada, 1999.

Association for Computers and the Humanities Association for Computers and the Humanities. "History of ACH." Accessed 12 September 2011. <http://www.ach.org/history>.

Association for Literary and Linguistic Computing Association for Literary and Linguistic Computing. "The ALLC Mission." Accessed 12 September 2011. <http://www.allc.org/>.

- Babeau 2011** Babeu, A. *"Rome Wasn't Digitized in a Day": Building a Cyberinfrastructure for Digital Classics*. Washington, D.C.: Council on Library and Information Resources, 2011.
- Borgman 2009** Borgman, C. L. "The Digital Future Is Now: A Call to Action for the Humanities." *Digital Humanities Quarterly* 3:4 (2009).
- Canada Foundation for Innovation 2010** Canada Foundation for Innovation. "What is the CFI?" 2010. Accessed 1 November 2012. <http://www.innovation.ca/en/AboutUs/WhatCFI>.
- Canadian Federation for the Humanities and Social Sciences** Canadian Federation for the Humanities and Social Sciences. "The Federation." 2011. Accessed 12 September 2011. http://www.fedcan.ca/content/en/235/The_Federation.html.
- Conway et al. 2010** Conway, P., N. Fraistat, P. Galloway, K. Kraus, D. Rehberger & K. Walter. "Digital Humanities Internships: Creating a Model iSchool-Digital Humanities Center Partnership." *Proceedings of Digital Humanities 2010*, 7–10 July, Kings College London, UK, 2010.
- Council of Canadian Academies 2006** Council of Canadian Academies. "The State of Science & Technology in Canada." Ottawa, Ontario: Council of Canadian Academies, 2006.
- Flanders 2009** Flanders, J. "The Productive Unease of 21st-Century Digital Scholarship." *Digital Humanities Quarterly* 3:3 (2009).
- Glaser and Strauss 1967** Glaser, B. G. & A. L. Strauss. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Aldine De Gruyter, 1967.
- Guthrie et al. 2008** Guthrie, K., R. Griffiths & N. Maron. *Sustainability and Revenue Models for Online Academic Resources: An Ithaka Report*. New York: Ithaka, 2008.
- Hackett 2005** Hackett, E. J. "Essential Tensions: Identity, control, and risk in research." *Social Studies of Science*, 35:5 (2005) 787–826.
- Harley et al. 2010** Harley, D., S. K. Acord, S. Earl-Novell, S. Lawrence & C. J. King. *Assessing the Future Landscape of Scholarly Communications: An Exploration of Faculty Values and Needs in Seven Disciplines*. Berkeley, CA: Center for Studies in Higher Education, UC Berkeley, 2010.
- Hoover 2011** Hoover, D. "25: 161 Re: [Humanist] 25.153 a Big Tent?" Email to Humanist Discussion Group. 12 July 2011. Accessed 12 September 2011. <http://www.digitalhumanities.org/humanist/Archives/Current/Humanist.vol25.txt>.
- Internet Shakespeare Editions 2010** Internet Shakespeare Editions. "Support the Internet Shakespeare Editions." 2010. Accessed 2 February 2011. <http://internetshakespeare.uvic.ca/Foyer/donate.html>.
- Juola 2008** Juola, P. "Killer Applications in Digital Humanities." *Literary and Linguistic Computing*, 23:1 (2008), 73–83.
- Kirschenbaum 2010** Kirschenbaum (2010) Kirschenbaum, M. G. "What Is Digital Humanities and What's It Doing in English Departments?" *ADE Bulletin* 150 (2010), 55–61.
- Kretzschmar 2009** Kretzschmar Jr., W. A. "Large-Scale Humanities Computing Projects: Snakes Eating Tails, or Every End Is a New Beginning?" *Digital Humanities Quarterly*, 3:2 (2009).
- Marshall and Rossman 1999** Marshall & Rossman, (1999) Marshall, C. & G. B. Rossman. *Designing Qualitative Research*. Thousand Oaks, CA: SAGE, 1999.
- McCarty 2011** McCarty, W. "25: 153 the Big Tent Hypothesis." Email to Humanist Discussion Group. 10 July 2011. Accessed 13 September 2011. <http://www.digitalhumanities.org/humanist/Archives/Current/Humanist.vol25.txt>.
- McKie and Thorpe 2002** McKie, R. & V. Thorpe "Digital Domesday Book Lasts 15 Years Not 1000." *Guardian.co.uk|The Observer*, 2 March 2002. <http://www.guardian.co.uk/uk/2002/mar/03/research.elearning>.
- Modern Language Association 2002** Modern Language Association. "Guidelines for Evaluating Work with Digital

Media in the Modern Languages." 2002. Accessed 21 January 2011. http://www.mla.org/resources/documents/rep_it/guidelines_evaluation_digital.

Modern Language Association 2003 Modern Language Association. "Statement on Publication in Electronic Journals." 2003. Accessed 21 January 2011. http://www.mla.org/resources/documents/rep_it/statement_on_publica.

Modern Language Association 2010 Modern Language Association. "Evaluating Digital Work for Tenure and Promotion: A Workshop for Evaluators and Candidates." 2010. Accessed 21 January 2011. http://www.mla.org/resources/documents/rep_it/dig_eval.

National Endowment for the Humanities Office of Digital Humanities 2010 National Endowment for the Humanities Office of Digital Humanities. *Summary Findings of NEH Digital Humanities Start-Up Grants (2007–2010)*. Washington, D.C.: National Endowment for the Humanities, 2010.

Office of Digital Humanities 2010 Office of Digital Humanities. "Digging into Data Challenge." 2010. Accessed 26 September 2010. <http://www.diggingintodata.org/>.

Pannapacker 2011 Pannapacker, W. "Pannapacker at MLA: Digital Humanities Triumphant?" *The Chronicle of Higher Education*, 8 January 2011. Accessed 13 September 2011. <https://chronicle.com/blogs/brainstorm/pannapacker-at-mla-digital-humanities-triumphant/30915>.

Price and Walter 2010 Price, K. M. & K. L. Walter. "With Help, Digital Scholarship Is Likely to Dominate in Coming Years." *The Chronicle of Higher Education*, 4 July 2010. <http://chronicle.com/article/With-Help-Digital-Scholarship/66137>.

Public Knowledge Project Public Knowledge Project. "Open Journal Systems." Accessed 12 September 2011. <http://pkp.sfu.ca/?q=ojs>.

Ramsay 2011a Ramsay, S. "On Building." Online posting, 11 January 2011. Accessed 13 September 2011. <http://lenz.unl.edu/papers/2011/01/11/on-building.html>.

Ramsay 2011b Ramsay (2011b). Ramsay, S. "Who's In and Who's Out." Online posting, 8 January 2011. Accessed 13 September 2011. <http://lenz.unl.edu/papers/2011/01/08/whos-in-and-whos-out.html>.

Research Information Network 2010 Research Information Network. "If You Build It, Will They Come? How Researchers Perceive and Use Web 2.0." 6 July 2010. Accessed 12 September 2010. <http://www.rin.ac.uk/our-work/communicating-and-disseminating-research/use-and-relevance-web-20-researchers>.

Reside 2011 Reside, D. "25: 162 Re: [Humanist] 25.153 a Big Tent?" Email to Humanist Discussion Group. 9 July 2011. Accessed 12 September 2011. <http://www.digitalhumanities.org/humanist/Archives/Current/Humanist.vol25.txt>.

Scholars' Lab 2011 Scholars' Lab. "The Praxis Program at the Scholars' Lab." 2011. Accessed 12 September 2011. <http://praxis.scholarslab.org/>.

Schonfeld and Housewright 2010 Schonfeld, R. C. & Housewright, R. *Faculty Survey 2009: Key Strategic Insights for Libraries, Publishers, and Societies*. New York: Ithaka S+R, 2010.

Schreibman and Hanlon 2010 Schreibman, S. & A. M. Hanlon. "Determining Value for Digital Humanities Tools: Report on a Survey of Tool Developers." *Digital Humanities Quarterly* 4:2 (2010).

Siemens et al. 2002 Siemens, R. G., M. Best, E. Grove-White, A. Burk, J. Kerr, A. Pope, J.-C. Guédon, G. Rockwell, & L. Siemens. "The Credibility of Electronic Publishing: A Report to the Humanities and Social Sciences Federation of Canada." *Text Technology* 11:1 (2002), 1–128.

Spiro 2010 Spiro, L. "Opening Up Digital Humanities Education." Blog post, 8 September 2010. Accessed 17 January 2011. <http://digitalscholarship.wordpress.com/2010/09/08/opening-up-digital-humanities-education/>.

SSHRC 2010 Social Sciences and Humanities Research Council of Canada. "Funding Opportunities: Image, Text, Sound and Technology Research Grants." Accessed 31 January 2011. http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/itst/research_grants-subventions_recherche-eng.aspx.

The Andrew W. Mellon Foundation 2011 The Andrew W. Mellon Foundation. "Scholarly Communications and Information Technology." 2011. Accessed 12 September 2011. http://www.mellon.org/grant_programs/programs/scit.

Unsworth 2007 Unsworth, J. "Digital Humanities Centers as Cyberinfrastructure." Paper presented to Digital Humanities Centers Summit, National Endowment for the Humanities, Washington, D.C., 12 April 2007. <http://people.lis.illinois.edu/~unsworth/dhcs.html>.

Winter 1999 Winter (1999). Winter, T. N. "Roberto Busa, S.J., and the Invention of the Machine-Generated Concordance." 1999. Accessed 12 September 2011. <http://digitalcommons.unl.edu/>

WWP Women Writers Project. "WWP Seminars on Scholarly Text Encoding." Accessed 2 February 2011. <http://www.wwp.brown.edu/outreach/seminars/>.