A Survey of Digital Humanities Programs

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Introduction

Existing studies of anglophone digital humanities (DH) curricula have examined course syllabi (Terras 2006; Spiro 2011) and the development of programs at specific institutions (Rockwell 1999; Siemens 2001; Sinclair 2001; Unsworth 2001; Unsworth and Butler 2001; Drucker, Unsworth, and Laue 2002; Sinclair & Gouglas 2002; McCarty 2012; Smith 2014). This study adds to the literature on teaching and learning by presenting a survey of formal degree and certificate programs in anglophone DH.

While these programs represent only part of the entire DH curricula, they are important in several respects: First, they reflect intentional groupings of courses, concepts, skills, methods, and techniques, purporting to represent the field in its broadest strokes. Second, these programs include explicit learning outcomes, and their requirements form one picture of what all DHers are expected to know upon graduation. Third, formal programs organize teaching, research, and professional development in the field; they are channels through which material and symbolic capital flow and thereby shape the field itself. Finally, these programs, their requirements, and coursework are one way—perhaps the primary way—in which prospective students encounter the field and make choices about whether to enroll in a DH program and, if so, which one.

In addition to helping define the field, a study of DH programs also has the capacity to comment on pedagogical discussions in the literature. Hockey, for example, has long wondered whether programming should be taught in the field (1986) and asks, "How far can the need for analytical and critical thinking in the humanities be reconciled with the practical orientation of much work in humanities computing?" (2001). Also skeptical of mere technological skills, Mahony and Pierazzo (2002) argue for teaching methodologies or "ways of thinking" in DH, and Clement examines multiliteracies in DH (e.g., critical thinking, commitment, community, and play), which help to push the field beyond "training" to a more humanistic pursuit (2012, 372). Others have called on DH to engage more fully in critical reflection, especially in relation to technology and the role of the humanities in higher education (Brier 2012, Liu 2012, Walzer 2012).

These and other concerns point to longstanding questions about the proper balance of skills and reflection in DH. While a study of DH programs cannot address the value of critical reflection, it can report on its presence (or absence). These findings, together with our more general observations about DH activities, give pause to consider what is represented in, emphasized by, and omitted from the field at its most explicit levels of educational training.

Methodology

We compiled a list of 37 DH programs active in 2015, drawn from public listings (UCLA Center for Digital Humanities 2015; Clement 2015), background literature, and web searches (e.g., "digital humanities masters"). In addition to degrees and certificates, we included minors and concentrations in which humanities content was the central focus, and omitted digital arts and media programs in which this was not the case. Because our sources and searches are all English-language, it limits what we can say about global DH.

We recorded the URL and basic information (e.g., title, level, location) about each program and looked up descriptions of any required courses in the institution's course catalog. To analyze topics addressed in these programs, we applied the Taxonomy of Digital Research Activities in the Humanities (TaDiRAH 2014), which attempts to capture the "scholarly primitives" of the field (Perkins et al. 2014). TaDiRAH contains forty activities terms organized into eight parent terms ('Capture', 'Creation', 'Enrichment', 'Analysis', 'Interpretation', 'Storage', 'Dissemination', and 'Meta-Activities'). TaDiRAH was chosen for its basis in the literature on "scholarly primitives" (Unsworth 2000), as well as

three earlier sources (an arts-humanities.net taxonomy, DIRT categories and tags, and a Zotero bibliography) and community feedback and revision.

We applied terms to program/course descriptions independently and then tested intercoder agreement, which was extremely low. We attribute this to the many terms in TaDiRAH, complexity of program/course description language, questions of scope (i.e., using a broader or narrower term), and general vagueness. We did find discussing our codings helpful and, in doing so, were able to agree. Accordingly, each of us read and coded every program/course description and discussed them until we reached consensus. Often, this involved pointing to specific language in the descriptions and referencing TaDiRAH definitions or notes from previous meetings when interpretations were discussed.

Findings and discussion

The number of DH programs has risen sharply over time, beginning in 1991 and growing steadily by several programs each year since 2008 (see Figure 1).
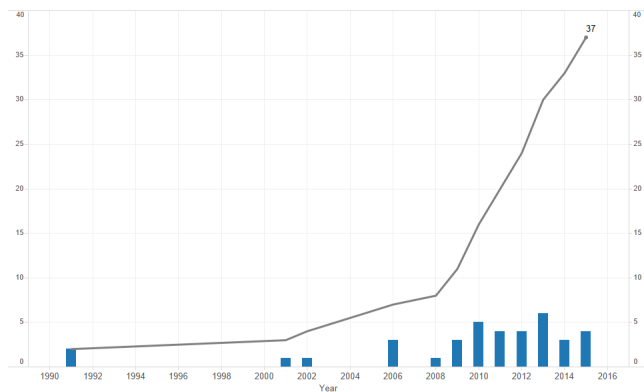

Figure 1. Growth of digital humanities programs in this study

Geography

Most of the programs studied here were located in the US (22 programs, 60%), followed by Canada (6 programs, 16%), the UK (5 programs, 14%), Ireland (3 programs, 8%), and Australia (1 program, 3%). We note that these programs are all located in Anglophone countries and that TaDiRAH, too, originates from this context, which necessarily limits what we can say about DH programs from a global perspective.

Structure

Less than half of these DH programs grant degrees: some at the level of bachelor's (8%), most at the level of master's (22%), and some at the doctoral level (8%) (Figure 2). The majority of these programs are certificates, minors, or specializations—certificates

being more common at the graduate level and nearly one-third of all programs studied here.
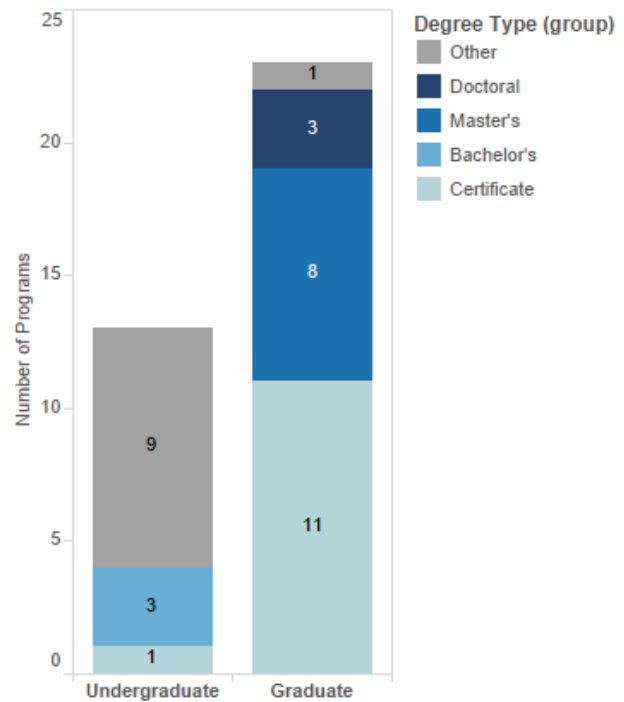
Figure 2. Digital humanities programs in this study (by degree and level)

We also examined special requirements of these programs, finding that half require some form of independent research (see Figure 3), and half require a final deliverable, referred to variously as a capstone, dissertation, portfolio, or thesis (see Figure 4). About one-quarter of these programs require fieldwork, often an internship (see Figure 5).

Figure 3. Independent research requirements of digital humanities programs in this study

Figure 4. Final deliverable required by digital humanities programs in this study

Figure 5. Fieldwork requirements of digital humanities programs in this study

Location & disciplinarity

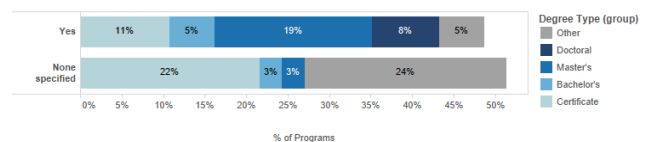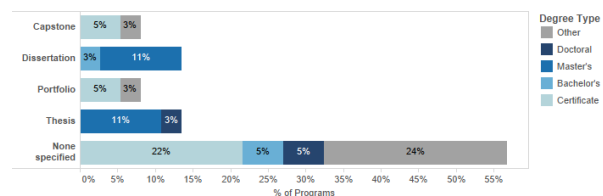Most of these programs are housed in colleges/schools of arts and humanities, but about one-third are outside of traditional schools/departments, in centers, initiatives, and, in one case, jointly with the library (see Figure 6). Most DH concentrations and specializations are located within English departments, commensurate with Kirschenbaum's claim that DH's "professional apparatus…is probably more rooted in English than any other departmental home" (2010, 55).

Figure 6. Institutional location of digital humanities programs in this study

Elective courses for these programs span myriad departments and disciplines, from humanities departments (art history, classics, history, philosophy, religion, and various languages) to along with computer science, education, information and library science, design, media, and technology.

DH activities

We analyzed our TaDiRAH codings in two ways: overall term frequency (see Figure 7) and weighted frequency across programs (see Figure 8). To compute weighted frequencies, each of the eight parent terms were given a weight of 1, which was divided equally among the subterms in each area. These subterm weights were summed to show how much of an area is represented, regardless of its size.

Analysis and meta-activities (e.g., 'Community building', 'Project management', 'Teaching/Learning') make up the largest share of activities, along with creation (e.g., 'Designing', 'Programming', 'Writing'). It

is worth noting that 'Writing' is one of the most frequent terms (11 programs), but this activity certainly occurs elsewhere and is probably undercounted because it was not explicitly mentioned in program descriptions. The same may be true for other activities.

Figure 7. TaDiRAH term coding frequency (grouped)

Figure 8. Digital humanities programs in this study and their required courses (by area)

Enrichment and storage terms (e.g., 'Archiving', 'Organizing', 'Preservation') were generally sparse (only 1.9% of all codings), but we suspect these activities do occur in DH programs and courses—in fact, they are assumed in broader activities such as thematic research collections, content management systems, and even dissemination. Generally, there seems to be less emphasis on content ('Capture', 'Enrichment', and 'Storage' terms) and more focus on platforms and tools ('Analysis' and 'Meta-Activities' terms) in the programs studied here—or at least, those may be more marketable to prospective students and institutions, two important audiences of program webpages.

Theory and critical reflection

To analyze theory and critical reflection, we focused our analysis on two terms: 'Theorizing' and 'Meta: GiveOverview', which we used to code theoretical or historical introductions to DH itself. We found that all programs studied here included some mention of theory or historical/systematic overview (see Figure 9). Our codings, of course, do not reveal anything further about the character of this reflection, whether it is the type of critical reflection called for in the literature, or how it interfaces with skills and techniques in these programs.

Institution	Degree	Theorizing Program	Theorizing Courses	Meta: Give Overview Program	Meta: Give Overview Courses
Australian National University	Minor (undergraduate)	●	●	●	●
Brigham Young University	Minor (undergraduate)				●
Brock University	multiple			●	
Carleton University	MA	●	●	●	●
CUNY Graduate Center	MA (program track)	●	●	●	●
Farleigh Dickinson University	Minor (undergraduate)			●	
Illinois Institute of Technology	BS	●			
King's College London	BA	●	●	●	●
	MA	●			
Loyola University Chicago	MA		●		
Michigan State University	Certificate (graduate)	●			●
	Specialization (undergraduate)		●		●
National University of Ireland Maynooth	MA		●	●	●
	PhD	●			
North Carolina State University	Certificate (graduate)	●			
Pratt Institute	Certificate (graduate)	●	●		●
Rutgers University	Certificate	●	●	●	●
Stanford University	Certificate (graduate)		●		
Texas A&M University	Certificate (graduate)	●		●	
Texas Tech University	Certificate (graduate)	●			
Trinity College Dublin	MPhil	●		●	●
UCLA	Certificate (graduate)	●		●	
	Minor (undergraduate)			●	
University of Alberta	MA	●	●		●
University of California, Santa Barbara	Specialization (undergraduate)	●			
University of Georgia	Concentration (graduate)		●		
	Concentration (undergraduate)		●	●	
University of Iowa	Certificate (graduate)	●	●	●	●
University of Nebraska-Lincoln	Certificate (graduate)		●	●	●
University of North Carolina at Chapel Hill	Certificate (graduate)		●	●	
University of Victoria	Certificate (graduate)	●	●	●	●
University of Washington	Certificate (graduate)	●		●	
Western University Canada	Minor (undergraduate)		●		

Figure 9. Theory in digital humanities programs in this study

Further directions

We plan to publish our data and visualizations publicly for researchers, students, and those developing curriculum: http://bit.ly/DHprograms. We believe it provides a baseline of field growth, areas, structure, and learning experiences, which can be used to measure changes in future, in addition to providing a data-driven perspective on the field today.

In that respect, we hope this study gives the community pause to consider how DH is described, represented, and taught. If there are common expectations not reflected here, perhaps we could be more explicit about those, at least in building our taxonomies and describing our formal programs and required courses. Conversely, if there are activities that seem overrepresented here, we might consider

why those activities are prized in the field (and which are not) and whether this is the picture of DH we wish to present publicly.

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