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Expertise with New/Multi/Modal/Visual/Digital/Media Technologies Desired: Tracing Composition's Evolving Relationship with Technology through the MLA *JIL*

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Abstract

This article reports on the results of a detailed examination of the past two decades of MLA *Job Information List* advertisements to identify the changing ways in which members of the field of rhetoric and composition have talked about the kinds of texts, technologies, and composing practices they are looking for in the teaching and research of new hires. This study catalogued the ways in which seventeen technology-related keywords have been used in MLA job advertisements over the past two decades. It discusses how trends can be understood through the lens of significant developments in the field of computers and writing suggests future trajectories. Finally, it argues that by taking ownership over the way we name and define the new composing practices and technologies we have come to value, we will be better positioned to guide the development of our students and articulate the importance of our work in a way that ensures its continuation.

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Over the past two decades, rhetoric and composition has adapted to a wide variety of composing technologies and practices that have changed the way we teach and the way our students communicate. These changes can be observed in research by scholars in the field who have asked us to pay attention to digital (e.g., McKee & Devoss, 2007; Porter, 2009; Eyman, 2012), new media (e.g., Bolter & Grusin, 1999; Ball & Kalmbach, 2010; Wysocki, 2004), visual (e.g., Hocks, 2003; Handa, 2004; Hill & Helmers, 2004), multimedia (e.g., Hocks, 2001; Faigley, 2003), multimodal (e.g. Kress, 2005; Selfe, 2007; Palmeri, 2012; Shipka, 2005), online (e.g., Hewett, 2004; Warnock, 2009), and other new composing practices and environments. The changes can also be observed through textbooks that now include multimodal assignments and readings (e.g., Roen, Glau, & Maid, 2008; Johnson-Sheehan & Paine, 2009), resolutions and position statements put out by CCC committees (e.g., "On Teaching, Learning, and Assessing Writing in Digital Environments,"), topics in chairs' addresses (e.g., Faigley, 1997; Selfe, 1999; Yancey, 2004; Wooten, 2006), and changes in the WPA outcomes statement, which added a "composing in electronic environments" plank in 2008.

Changes in composing technologies have not necessarily changed the fundamentals of rhetorical thinking and problem solving, but they have expanded them to include additional modes and media through which to construct

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meaning. For instance, blogging, as a communicative practice, is not an entirely new form of writing, but, in fact, shares a great deal in common with journaling projects of the past (Jonathan Alexander, as cited in Lauer, 2012). Conversely, James Porter (2009) argued that "computers are not merely instrumental tools of writing, but rather influence the nature of composing and our rhetorical understanding of the composing situation" (p. 384). And scholars such as Jason Palmeri have shown how we can look back in our field's history and see the extent to which we have always already been engaging in multimodal teaching and text production (Palmeri, 2012; Lauer, 2012). At the very least, new technologies have facilitated our ability to choose from and engage with an increasing number of modes (such as sound, color, image, video) beyond just written words on a printed page. New technologies have also ushered in expanded avenues for the circulation and distribution of texts that are more instantaneous and diverse than ever before, bringing our students in touch with new audiences and opening them up to an ever-widening array of conversations.

As the textual and technological possibilities for constructing meaning have expanded, so too have the terms scholars and teachers use to describe the work they and their students do. While we have seen trends in term use emerge (the present popularity of *multimodal*, for instance), technology-related terms are not always used or defined consistently. And yet, if we value the new composing practices that enable our students to communicate thoughtfully and develop into engaged citizens, we must be able to authoritatively articulate that value to those outside our classrooms, including those who approve requests for courses, majors, hires, and grants. This does not mean that as a field we must always agree on which terms to use or how those terms should be defined. Rather, we must strive, as individual scholars and teachers, as well program and field representatives, to have reasoned and thoughtful justifications for the terms we use and how we define those terms so that we can build our credibility and justify our leadership in this area. As a field we have engaged in serious research and reflection about our approaches to technology over the past few decades (see every issue of this journal and the 2012 WPA-L discussion of MOOCs, for instance). Toward this effort, we can examine the terms that have been used throughout the last 20 years and take note of which terms have fallen in and out of favor, when, and in what contexts. This knowledge can then inform how we lead the way forward through our rapidly changing technological landscape.

In this article, I report on the results of my examination of the past two decades of Modern Language Association's *Job Information List (JIL)* advertisements to identify the changing ways in which members of the rhetoric and composition field have talked about the kinds of texts, technologies, and composing practices they are looking for in the teaching and research of new hires. I interpret the *JIL* data through the lens of significant developments in the field of computers and writing and suggest reasons why this data is valuable to our conception of the field as we move forward. I argue that by becoming aware of the terms we have been using and by taking ownership over the way we name and define the new composing practices and technologies we have come to value, we will be better positioned to guide the development of our students and articulate the importance of our work in a way that ensures its continuation.

1. How language use provides a chronicle of the field

The language scholars and practitioners have used to describe the work we are doing in composition studies has lent insight into the contextual landscape of the field at various moments in history. Duane Roen (2005) in his book *Views from the Center*, examined the chair addresses from the past 25 years of the Conference on College Composition and Communication, noting how they reflect the vast constellation of scholarship that has defined the field, and locating common themes that chairs have spoken about, including teaching effectively, evaluating scholarship, giving voice to those on the margin, viewing CCCC as an organization, sharing autobiographical narratives, and confronting vexing issues in the field. Roen cited Andrea Lunsford's 40th anniversary address as one that suggests that our field has not followed a typical disciplinary trajectory of setting out clear boundaries and then defending those boundaries. Rather, we have valued heterogeneity, expansiveness, and inclusivity. This may help explain the eagerness with which we have identified the potentials of new technologies and composing practices and the ambiguity with which we have often named those practices.

Similarly, Erika Lindemann (2000) in "Early Bibliographic Work in Composition Studies" examined the *MLA International Bibliography* for rhetoric and composition and suggested how the taxonomies of multiple bibliographies preceding and including the *MLA International Bibliography* reflected the time in which they were developed and left a legacy for members of our field to witness how the field has defined itself over the past few decades. Lindemann suggested that composition's bibliographic efforts have enabled the field to bring more visibility to our scholarship,

classify that scholarship with greater precision, and use our field's history to inform and extend our current work. Both Roen's and Lindemann's work, as well as work that has examined trends in journal volumes (Muldoon, 2007; Tirrell, 2012), showed how examining field documents throughout our history provides us the opportunity to take stock of where we've been, observe congruent and incongruent themes in our history, and ultimately inform our practice as we move forward.

One text that has not yet been examined, but can be equally informative to our field's past understanding and future practice, has been the Modern Languages Association's *Job Information List (JIL)*. The *JIL* has been central to the field and its hiring practices. It is published five times annually, in October, December, February, April, and in the Summer. It was digitized in 1997, and made keyword and discipline searchable in 2000. In 2010 the *JIL* was distributed primarily online, with paper copies available to departments rather than individual subscribers. The *JIL* is the "recognized professional source" for advertising and finding out about full-time jobs in English studies in North America (MLA, 2014). "In 2010–11 the *JIL* carried more than 1,800 ads from over 1,100 departments and 725 institutions in all 50 states, the District of Columbia, Canada, and overseas (MLA, 2014).

Because of its broad use and wide distribution, the *JIL* can be characterized as serving as a chronicle of our field and the field's relationship with the communications technologies that have influenced the work we do in our scholarship and teaching. It is thus a telling resource to examine as a barometer of where the field has been and where it might be going in its ever-evolving relationship with the changing technologies and composing practices of our contemporary society.

2. The genre of the job advertisement

Academic job advertisements, as a genre, tend to follow a pattern. The *JIL* currently asks submitters to include a range of information in their job advertisements, such as the job title; starting date and term of appointment; areas and subsidiary area of expertise; teaching load and teaching experience required; departmental duties; salary range; degree and publication record; as well as information about how applicants should apply, and any statements of compliance with EEOC and affirmative action regulations. Job ads may also include information about the major, department and/or campus environment (MLA, 2014).

It is important to acknowledge at this point that job advertisements are written by a variety of people and committees so they should not necessarily be seen as accurately representing the knowledge and values of a particular program, department, or of the rhetoric and composition field. Ads can be written by deans (especially for position in newly-developed programs and majors), department chairs (who may or may not affiliate with rhetoric and composition), hiring committees comprised of a wide variety of scholars from both inside and outside English studies, and even human resources personnel, who often vet job advertisements to make sure such ads are compliant with university policy. However, it is also the case that advertisements are written by those who will be working most closely with the new hire and are intimately aware of the field and of the needs of the particular program. Because of this, it is important not just to collect a sample of ads, but examine each and every advertisement published so that a more complete picture can be ascertained.

3. Methods

My research entailed examining thousands of pages of job advertisements for how search committees used key terms to solicit applicants and describe the field's evolving engagement with new/multi/modal/visual/digital/media texts and technologies. I conducted keyword searches of 17 terms throughout the *JIL* from 1990–1991 to 2011–12. Initially, this research required that I travel to the MLA headquarters in New York because the *JIL* back-issues were not available in digital form. In the summer of 2010, I photographed all twenty years of *JIL* issues. During my visit, I found that not all of the summer issues could be located, so I decided to focus instead on the four primary issues that are released during the school year (in October, December, February, and April). To keep the scope of the project more manageable, fellowships and non-US institutions were also excluded from the study.

In the year that followed this initial stage of inquiry, The MLA developed PDFs of the *JIL* and provided me access to those in addition to making them available on the *JIL* website. PDFs provided more accurate locating of terms via a keyword search. The keywords included in the study were determined by my familiarity with the scholarship and

pedagogical practices of the field and by examining the *JIL* for terms that referenced technology or new composing skills and practices. Seventeen keywords (and their variant forms) were identified. Those keywords included:

- *Computer* (e.g., computers and writing, computer technology, computer-mediated-communication (CMC), computer-aided instruction (CAI), computer-based writing)
- Design (document design, information design)
- Desktop publishing
- Digital (media, text, technology, studies)
- *Electronic* (media, text, technology)
- Emerging/Emergent (media, technology)
- *Graphic/Graphics* (design, communication)
- *Hyper* (text, media)
- Media (studies, mass)
- Multimedia (or multi-media) (text, lab, design, technology)
- *Multimodal* (text, production)
- New media (text, technology, studies)
- *Technology* (instructional technology, teaching with technology)
- Visual (design, communication)
- Web/WWW (text, technology, publishing, editing,)
- Internet (technology)
- Online (text, technology, teaching, education)

The keywords on this list often stand on their own as nouns (*media* or *multimedia*), or they may be part of a compound phrase (like *electronic media*). To reduce redundancy, phrases were catalogued by the first term in the phrase (so *electronic media* would count for *electronic* but not also for *media*). Terms like *media* or *design* were only ever counted on their own when they did not follow one of the other keywords.

Strings of keywords did count as more than one keyword, because they read more like a list of terms than a single term. For instance: *new electronic media* counts for both *new media* and *electronic*, and *new digital media* counts for both *new media* and *digital*.

Only keywords that described the desired applicant qualifications or job/program attributes and titles were included. Keywords were not included if they described benefits (faculty are given a computer), the name of the university (Massachusetts Institute of Technology), or other incidentals (e.g., applicants should "apply online").

Finally, a few terms did not make the initial list and did not appear with great frequency, but because of their relevance could be considered in future searches. Those terms include *distance education*, *networked*, *hybrid*, and *interactive*.

Keywords were color-coded as they were located throughout the *JIL*. They were then recorded in a spreadsheet that also included the *JIL* publication date, the language and phrasing that surrounded the keywords (for context), the state, school, rank of position (e.g., non-tenure, assistant professor, associate professor), title of position, department, and field emphasis. The number of times each keyword appeared in each ad was also recorded. After the initial list was developed, a column was added that documented the *Carnegie Classification of Institutions of Higher Education*TM, obtained by searching for the name of each school on the Carnegie classification website. It may be the case that schools that advertised in the 1990s or early 2000s would no longer have the same classification as they did at the time they released their job ads, but as there is no clear way of finding out what previous designations were (as those too have changed over the years), the most current designation was deemed appropriate for the purposes of this study.

¹ Classifications only reference current school names, so for schools whose names were not found in the current Carnegie database, a search was conducted for the school name on Wikipedia.org, which was able to help in identifying what the current name of the school was (e.g. Example State College in 1994 is now Example State University).

4. Results

A total of 2690 jobs advertised in the English *JIL* from 1990–1991 to 2011–2012 were found to have used at least one keyword in their job ads. Of those, 1220 were categorized by the researcher as jobs with an emphasis or shared emphasis in rhetoric and composition. Other designations used to characterize job ads included English (which generally applied to "kitchen sink"-type jobs or jobs at smaller schools that tended to hire more generalists), creative writing, literature, technical and professional communication, journalism, English education, film and media studies, and interdisciplinary. Job ads were sometimes characterized as having more than one emphasis due to both ambiguities or mixed emphasis in the job ad (e.g., job ad described successful hire as contributing to both the rhetoric and composition and technical communication majors). There was no way of knowing how the jobs were tagged by the original submitters (MLA only started having submitters self-tag their posts in 2001, but even since then tagging records have not been kept), thus I determined field classification after a careful reading of each job ad that considered a variety of factors, including job title, degree required, hiring department or program, classes requested, research emphasis, and other descriptors.

In addition to job advertisements characterized as "rhetoric and composition," ads characterized as generalist "English" and "interdisciplinary" postings were also included in the study because they were considered jobs for which a person with a degree in rhetoric and composition would likely be qualified. This combination brought the total number of job ads examined for this study to 1544.

4.1. Trends in Keywords

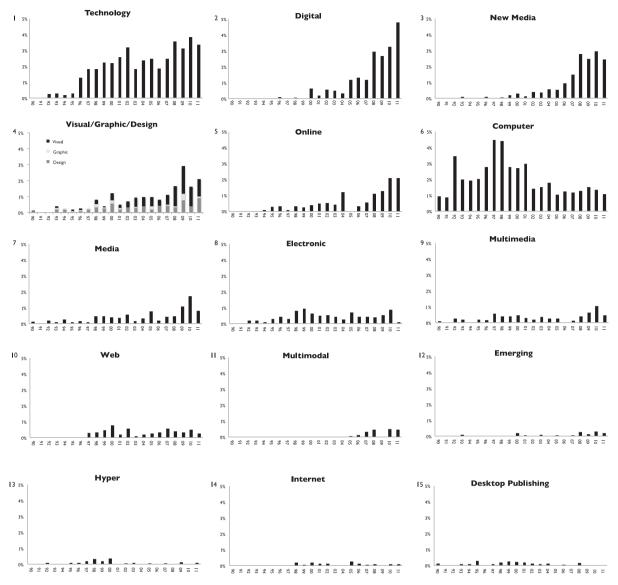
Figures 1–15 chart the frequency with which certain terms appear from 1990–91 to 2011–12. Figure 16 shows the increase in the number of job ads that contain at least 1 keyword from 1990 to 2011. To control for fluctuations in the number of total jobs advertised each year; frequency is displayed as a percentage; derived by dividing the number of ads that included a keyword each year by the number of total ads in the English *JIL* for the four issues that spanned from October to April of each year. This adjustment was important when determining popularity of terms over time because there has been substantial fluctuation in total number of job ads. For instance; in 2000 there were 1828 advertisements while in 2009 there were only 1100 advertisements. Total ad numbers were provided by the MLA (2012).

Computer was largely the dominant keyword in the early years of the 1990s, but not surprisingly, as technologies expanded and came to have an even greater and broader presence in our composing practices, computer no longer sufficed as a term that could describe the multitude. As computer began to drop rapidly in use around 2002, it was replaced by the even more generalized technology and digital, as well as the more specific new media, online, and, to a small extent, multimodal. Those keywords described not the singular technology of the computer that helped produce new kinds of texts, but a wide range of technologies, semiotic channels, delivery mechanisms, theoretical lenses, and access points, as well as the textual products themselves. Other keywords like visual/design and media also increased in use, while electronic, multimedia, and web held steady with a smaller but consistent overall use throughout. Emerging saw an increase in use from 2008 to the present, while hyper, Internet, and desktop publishing were never used to a great extent and have declined in use over the past decade. As Figure 16 shows, the overall number of ads that used at least one keyword increased steadily over the past 20 years, with a substantial jump occurring from 2008 to the present, largely due to increases in the use of terms such as technology, digital, new media, visual/design, and online.

4.2. Number of keywords per ad

The number of distinct keywords included in each ad has increased over the past twenty years. Figure 17 shows the average number of distinct keywords per ad from 1990-2011.

There has been an increase of almost a full keyword per ad since the early 90s. This increase is logical considering the multitude of new composing practices and technologies—thus new terms to describe those practices—that have entered the discussion since the early 1990s. Although *computer* is a keyword used much less frequently than it used to be, most other terms have only seen an increase in their use.



Figures 1–15. Column graphs showing the number of rhetoric and composition job ads in the MLA *JIL* that included various keywords from 1990 to 2011. Trends shown as percentages to adjust for variations in total job ads for each year.

4.3. Rank

Starting in 2004, the MLA started keeping data on the rank sought in job advertisements. Figure 18 shows the breakdown by hiring rank for ads that used at least one keyword compared to the rank of all ads advertised in the English MLA *JIL*.

From 2004–2011, assistant ads accounted for 60% of all the ads that contained at least one keyword. This is 7% higher than the number of total assistant ads in the *JIL* over the same period. For open rank or "other tenure" jobs (jobs that generally seek associate or full professors) there are 4% more job ads that contain keywords than MLA job ads. For non-tenure track ads, there are 9% fewer job ads that contain keywords than MLA job ads.

4.4. Position and department titles

From 1990–2011, 63 position titles used 85 keywords. Position titles were determined by the title specified in the top italicized portion of the *JIL* advertisement. For job ads previous to 1997 (and the modern, digital formatting of

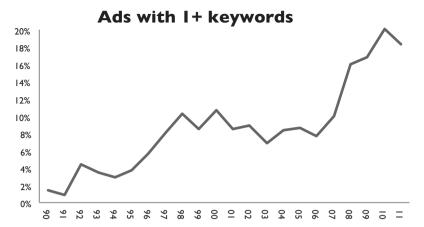


Figure 16. Line graph that shows the increase in the number of job ads that contain at least 1 keyword from 1990 to 2011. Trend shown as a percentage to adjust for variations in total job ads for each year.

the *JIL*), job titles were discerned were they could be. Job titles are worth examining apart from keywords in the job descriptions because titles that include a keyword indicate that a committee has a prime interest in hiring a candidate with technology-related skills (rather than a candidate that might have secondary or tertiary experience with such skills). Figure 19 indicates the trend in number of position titles that included at least one of the keywords each year.

Although the graph is shown adjusted for variations in number of job ads throughout this period, the actual number of position titles that contain at least one keyword can also provide useful comparisons. From 2009 to 2011, the average number of position titles that used keywords each year increased 410% (3.6 from 1990–2008 vs. 14.7 over 3 years from 2009–2011), despite the fact that total numbers of jobs advertised were much lower during this period than in any other period since 1990 (MLA, 2012). From 1990 to 2004, the keyword *computer* was used in 50% (N=21) of the position titles that used a keyword. Of the job ads up through 2004, the title "Computers and Writing" or "Computers

Year		Average number of distinct keywords
	1990	1.31
	1991	1
	1992	1.16
	1993	1.5
	1994	1.22
	1995	1.33
	1996	1.29
	1997	1.28
	1998	1.61
	1999	1.7
	2000	1.95
	2001	1.33
	2002	1.75
	2003	1.59
	2004	1.51
	2005	1.73
	2006	1.76
	2007	1.72
	2008	1.77
	2009	1.86
	2010	1.88
	2011	2.31

Figure 17. Table showing the average number of distinct keywords per MLA JIL ad from 1990-2011.

Rank sought in ads 2004-2011

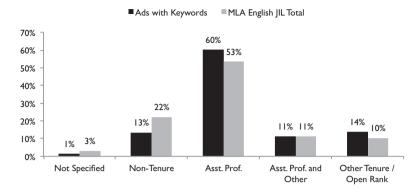


Figure 18. Column graph that shows the breakdown by hiring rank for ads that used at least one keyword in the MLA JIL.

and Composition" accounted for 11 of 27 ads and was by far the most common job title that used a keyword throughout that period. Since 2004 the word *digital* has accounted for 42% (N=33) of the job titles that use a keyword, with *new media* used in 17% (N=14) of the job titles and *media* used in 14% (N=10) of the titles. *Technology* occurred in 1 title per year in seven different years. *New media* first appeared in a job title in 2006 and has occurred in two titles each of the last three years. The keyword *digital* first occurred in 2000 and occurred several more times from 2005 to 2008 before spiking in use from 2009 to 2011, most commonly in the form of the phrases *digital humanities* and *digital media*.

A total of 76 programs were responsible for the 112 job advertisements that included at least one keyword in the position title; however, two schools in particular accounted for relative spikes in usage at each end. The University of Texas at Austin advertised for 6 positions in Computers and Writing/English and Computers between 1993 and 2003, and the University of Kentucky advertised for 5 positions in Writing, Rhetoric and Digital Humanities/Media from 2009 to 2011.



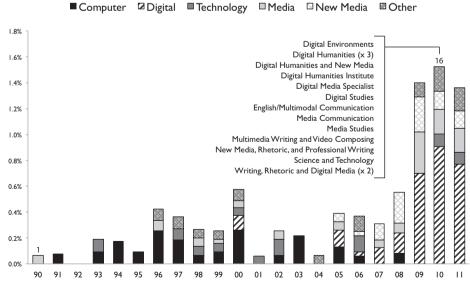


Figure 19. Stacked column graph that indicates the trend in number of position titles that contain at least one keywords (shown as a percentage to adjust for variations in total job ads) in each year of the MLA *JIL*. Also included is a list of all position titles from 2010.

Carnegie classification

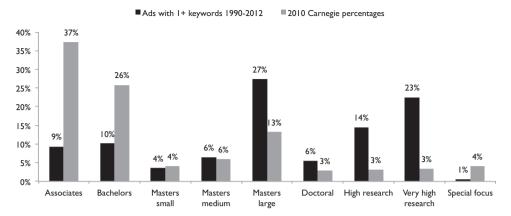


Figure 20. Column graph comparing the Carnegie classification of schools ("Basic") from 2010 with the classification of schools from the MLA *JIL* between 1990 and 2011 that posted job ads including at least one of the keywords.

4.5. Carnegie classification

The Carnegie Classification of Institutions of Higher EducationTM classifies schools in a number of ways, including a "Basic" classification that indicates the size and research activity of any given school. The primary classifications adapted for this study include: Associates (A), Bachelors (B), Master's-Small (MS), Master's-Medium (MM), Master's-Large (ML), Doctoral (D), Research University-High (H), Research University-Very High (VH), and Special Focus (SF)². Figure 20 shows the classification of schools between 1990 and 2011 that posted job ads including at least one of the keywords.³

The 2010 numbers are included in a lighter grey shade to indicate the overall breakdown of school classifications for that year and to use as a source of comparison.

As the figure shows, between 1990 and 2011, 27 percent of ads that included at least one keyword were for Master's-L schools, with VH and H schools representing 23% and 15% of the ads respectively. Yet these percentages vastly exceeded the percentage of schools classified as ML, VH, and H overall in 2010. Conversely, although in 2010, 37% of the schools were classified as "Associates" (majority of degrees awarded are two-year degrees) and 26% were classified as "Bachelor's," only 9% of the schools with advertisements that included at least one keyword were Associates-classified and only 10% were Bachelors-classified.

4.6. Trending "online"

Figure 21 shows the classification of schools between 1990 and 2011 that posted job ads that included the keyword *online*.

Between 1990 and 2011, 284 job ads used the keyword *online*, with large master's institutions (Master's/L) responsible for the highest percentage of those jobs (37%). A distant second to this is research universities with "very high" research activity (RU-VH) comprising 14% of the ads and research universities with "high" research activity comprising 13% of the ads. As we have seen with other keywords like *digital* and *new media*, there was a significant spike in use of the term *online* that started in 2010 and continued in 2011.

Carnegie Foundation because the foundation does not keep records of a school's classification history.

² For the purposes of this study, all of the sub-classifications of Associates and Bachelor's schools were counted under the larger umbrella of A and B. Because the *JIL* does not publish advertisements from for-profit institutions, 2010 percentages listed here do not include for-profit schools.

³ The MLA has never kept track of the classification of schools over the years so there is no way of comparing the classifications of schools overall who advertise in the MLA. Additionally, classifications for 1990–2011 were determined using the most recent information provided by the

Use of "online" in job ads by classification

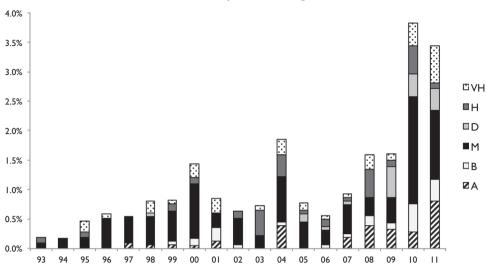


Figure 21. Stacked column graph showing the Carnegie classification of schools between 1990 and 2011 that posted job ads in the MLA *JIL* that included the keyword *online*. Trend is shows as a percentage to adjust for variations in total job ads.

5. Discussion

5.1. Keywords in context

There is no way to prove direct causality between the frequency of keywords used in the *JIL* and the surrounding disciplinary context at the time. However, it does appear that there are clusters of influence that may have played a part in the timing of some keywords. For example, although it was perhaps only a matter of time before a term like *Internet* was used, Lester Faigley focused much of his 1996 CCCCs chair's address on the Internet (Mueller, 2012). That address was published in *College Composition and Communication* in 1997, and we see the keyword appear for the first time in a job ad in 1998.

Multimodal first appeared in an MLA job ad in 2005. This timing correlates with the influence and actions of Cynthia Selfe and Gail Hawisher, who have championed the term from its initial coining by members of the New London Group (Cope & Kalantzis, 2000), including Gunther Kress (2003, 2005) and Kress and Van Leeuwen (2001). Selfe and Hawisher invited Gunther Kress to be a keynote speaker at the Computers and Writing conference in 2004. Then, as the co-editors of Computers and Composition, Hawisher and Selfe (2005) devoted a special issue of the journal to "The Influence of Gunther Kress' Work." In November 2005, NCTE released its "Position Statement on Multimodal Literacies." And in spring of 2006, then CCCC's chair Judith Wootten discussed multimodal literacy as part of her chair's address, which was published in College Composition and Communication in December 2006. In the spring of 2006, the results of a grant from the National Council for the Teachers of English (NCTE) was published that had surveyed how instructors in the field taught and composed multimodal texts (Anderson, Atkins, Ball, & Millar, 2006). Following its first appearance in a job ad in 2005, there were two instances of multimodal in job ads in 2006. Then, in 2007, that number jumped to five and in 2008 there were six.

Digital first appeared in 1996 and appeared again throughout the early 2000s, but the frequency of its use jumped in 2005. In 2004 there were five uses of the term digital and in 2005 there were 18. In 2004 CCCC released a position statement: "On Teaching, Learning, and Assessing Writing in Digital Environments," published in College Composition and Communication in December of that year. The Digital Media and Composition Institute at Ohio State University was founded in 2006. Digital also has the advantage of being by far the most widely used of the keywords in publication titles indexed by Comppile (Haswell & Blalock, 2012). In a search of the title field from 1990–2012, digital returned 230 records, while multimedia returned 92, new media returned 86, and multimodal returned 71. And according to a search of the term using Google Ngram Viewer (which searches all Google Books

from 1800 to the present), it also has the advantage of being a more widely used keyword (by 5–7 fold over *multi-media*, *new media*, and *multimodal*) in larger culture. (See [http://books.google.com/ngrams/graph?content=digital %2Cmultimodal%2Cnew+media&year_start=1990&year_end=2008&corpus=0&smoothing=3] for graphical results.)

New media appeared in 1993 and 1996, but has appeared without interruption from 1998 onward. In 2000 Jay David Bolter and Richard Grusin published Remediation: Understanding New Media, which has become a widely cited text in the field of computers and composition and was the winner of outstanding scholarship/book awards Media Ecology Association (MEA). From 1993 to 2000, 45.5% (5 out of the 11) of ads that included new media came from Georgia Institute of Technology, where Bolter is the James and Mary Wesley Chair in New Media. However, since 2000, 128 other schools have been responsible for all the instances of new media in job ads. In 2001 Lev Manovich published The Language of New Media, which opened up a discussion as to how Manovich's understanding of new media was or was not useful for the field of composition (see Dilger, 2002; Sorapure, 2003; Ball as cited in Lauer, 2012). In 2003, Kairos published a special issue on "Issues of New Media." But perhaps the most impactful publication came in 2004, when four well-known scholars in composition (Anne Frances Wysocki, Johndan Johnson-Eilola, Cynthia L. Selfe, & Geoffery Sirc) published Writing New Media: Theory and Applications for Expanding the Teaching of Composition. This publication brought the concept and application of new media more strongly into the mainstream of composition and gave compositionists a less digitally-contingent understanding of new media (see Wysocki's introductory chapter "Opening New Media to Writing," 2004) as well as ideas about integrating new media into the composition classroom directly. Perhaps not surprisingly, the instances of new media in JIL ads increased almost exponentially from 2005–2008 (from 8, to 15, to 24, to 35) and have remained high ever since.

The use of *online* almost doubled in ads from 2009 to 2010 and stayed high in 2011. This reflects the trend toward an increasing number of institutions offering online course and degree options for students, especially large master's institutions (Master's/L) and larger (H and VH) research institutions. This suggests that online classes are being offered at institutions that may serve a higher percentage of non-traditional students who might be pursuing post-baccalaureate degrees and may need the extra flexibility that online education allows. It also suggests that larger universities may have the infrastructure necessary to implement entire programs of online coursework rather than simply a sampling of classes. As of 2006, two-thirds of colleges and universities were offering courses online (Parsad & Lewis, 2008). A majority of institutions (especially larger, public universities) see online education as key to their long-term growth (Allen & Seaman, 2004).

We are likely to see an increase in the number of advertisements specifically geared toward experience with online writing pedagogy for several reasons. For one, universities are increasingly interested in offering such options to their students as a way of increasing student enrollment and university revenue, and thus need experienced teachers to lead in the teaching and development of such options. In addition, the results of a U.S. Department of Education (2009) meta-analysis of 1000 studies concluded that student learning was higher in online and hybrid environments vs. face-to-face environments, no matter what the subject of instruction (see Lauer, 2013, for further discussion of this study). Differences in learning were more pronounced when the online curricular materials and instructional approach varied from a face-to-face environment (U.S. Department of Education, 2009). What this suggests is that instructors who are teaching online courses need to be experienced in effective online teaching practices to increase student learning and success in the online classroom. Such specialized knowledge is likely to be specifically sought in job advertisements.

5.2. On our way to the market

The keyword data provides a great deal of information about not just the state of our programs and our field, but also what we and our graduate students need to know about preparing for and sustaining a career in the field.

5.2.1. Rank

The higher proportion of assistant and other tenure-track jobs that contain keywords suggests that technology-related jobs are jobs that universities are more invested in because they have made them proportionately more of the tenure-track jobs than the non-tenure track. It also suggests that having experience with technology is considered a specialized skill representative of training that a tenure-track candidate would have. Knowing that proportionately higher numbers of ads for tenure-track jobs include at least one of the keywords will provide incentive for graduate students and others

on the market to become more knowledgeable in technology-related areas. Further, a higher proportion of Assistant ads (vs. Associate or Full), may suggest that the "newness" of certain technologies and new composing practices is something more commonly explored by a younger generation of scholars, making newer PhDs ideal candidates for these positions.

5.2.2. Position titles

The spike from 2009 to the present in number of position titles that use at least one keyword seems to suggest that an increasing number of colleges and universities will continue to use keywords in job titles, presumably to bring greater visibility to new programs and tracks developed within English departments. Technology-infused position titles also signal to prospective students and funding agencies a more contemporary focus and relevance to what has been often seen as a more traditional (English) degree.

5.2.3. Institution types

The inverse relationship between the overall number of associates, bachelors, masters and doctoral research institutions and the percentages of job ads for those schools that use at least one keyword suggests that larger schools that award the most graduate (Masters and PhD) degrees seem to be the schools that are also the most interested in technology because they are the schools whose advertisements are more likely to include one or more of the keywords. It may also be the case that larger schools are able to specialize more frequently in their job ads than smaller schools, which tend to hire more generalists.

5.3. Increases in practices, technologies, and... ambiguities

The overall increase in ads that use keywords and the increase in average number of keywords per ad indicates that rhetoric and composition is a field that is facing—and embracing—a greater number of composing practices and technologies. Staying abreast of the latest technological developments is a way for the field to remain relevant. Equally likely is that the field's embrace of new composing practices is a reflection of the genuine sense of curiosity and wonder exhibited by its members, who, rather than see new technologies as a threat to what we do, see them as an opportunity to explore the myriad new ways to compose meaning.

One illustration of the increase in average number of keywords is how the term *multimedia* has been used throughout the past twenty years. In the early 1990s, job ads asked for experience with or knowledge of: *multimedia* (as a noun), *multimedia studies, multimedia applications*, and *multimedia authoring tools*. In the early 2000s we see references to *multimedia texts* (2001, 2003) and *multimedia writing* (2003). In most instances throughout these periods, *multimedia* was not grouped with any of the other keywords. In the late 2000s, however, we see *multimedia* being paired with newer terms (sometimes separated by /) in what feels like an old-to-new transition: *multimedia/multigenre writing* (2009), *digital multimedia writing* (2009), *computer and multimedia technology* (2009), and *new media/multimedia writing* (2009–2011)

The array of keywords used in these ads may also reflect an ambiguity of understanding with terms that results in search committees taking a more inclusive approach, where job ads use more than one keywords in an effort to connect with potential applicants using whatever language applicants use and understand themselves. As Cheryl Ball commented in an interview when asked about her own experience on the job market:

The hiring committees are like: well you tell us what you mean by "new media," and we'll see if it fits with what we want to do. Which is cool. It's powerful because the people who are on the market now who do multimodal or new media or whatever you want to call it, digital rhetoric stuff, are defining the field through their work, through their research, through their teaching, and you're getting a huge range of what that means and I think that's wonderful. (as cited in Lauer, 2012)

This interchangeable and redundant use of terms is not just happening in job ads, but in articles, surveys, resolutions, CFPs and other circulated texts (see Lauer, 2009). In his 2006 CFP for a special issue on "media convergence," guest editor Jonathan Alexander used half-a-dozen different combinations of terms to solicit work for the issue. When asked in an interview about this practice, he suggested that

The idea was use a number of different phrases that people are going to recognize as terms that they use, because.. there are many different ways these terms are used, and probably used very specifically by different people so I wanted to use as many different kinds of terms as possible. (as cited in Lauer, 2012)

It is understandable that job ads attempting to solicit interest from as many qualified candidates as possible would use a variety of terms. However, while ambiguity and redundancy can create a more inclusive landscape, it can also work against our efforts to be able to speak with authority about why composition should be engaging in these expanded avenues of textual production. In other words, if we can't decide what to call the new kinds of composing that we now do in our classrooms, we are going to have a difficult time legitimizing the seriousness of our work to outside entities and even to our own departments and colleges. Lindemann (2000), suggested that one of the advantages of the process of classifying our work for various bibliographies over the years is the greater precision with which the field can now identify its scholarly work. Our use and understanding of terms would also benefit from an attempt at greater precision, while acknowledging that the process toward precision requires our understanding of terms to evolve as our technologies and practices evolve. For instance, Anne Wysocki put forth one definition of new media for compositionists in her 2004 co-authored book Writing New Media (Wysocki, Johnson-Eilola, Selfe, & Sirc), and a much more specific and layered definition of new media (including its relationship to multimodal) for an audience of technical communicators in her chapter "What technical communicators need to know about new media" published in the 2013 edited collection Solving Problems in Technical Communication. The precision and depth of her 2013 discussion struck an authoritative chord that would work powerfully to make an argument to those outside the field for the importance of new media composing in writing studies. Somewhat paradoxically, its precision also has the important effect of drawing specific boundaries around the term. These boundaries invite alternative definitions from others in the field because only until lines have been drawn can those lines be challenged and tested. Defining and redefining is important work for our field to engage in, with the knowledge that the more precise we can continue to be the more powerful our arguments will be to those who may be in a position to approve a new major or graduate degree program, fund a grant, or hire new faculty.

5.4. Looking ahead

This study tracked the frequency of seventeen keywords, though it is likely that as this data collection continues, that count will increase as newer terms bring more specificity to particular composing tasks and environments. For instance, even as our understandings of particular terms coalesce around certain features (e.g. *multimodal* describes the semiotic channel used to compose a text, *new media* describes the distribution channels and technologies used to circulate a text), it is likely that someone experienced in *new media* will also have experience with *multimodal* composing because through these terms we are naming ever more specific features of a larger textual development process and the multitude of technologies now informing that process, from conception to circulation.

With regard to the past and future of specific keywords, the decline of *computer* that began in 2002 happened before we had access to the mobile computing technology that would facilitate a more full-scale shift to newer terms with the emergence of the iPhone in 2007. It will thus not be surprising that we don't see *computer* in all that many job ads or position titles in the future because, although computers still dominate much of the academic work we do (i.e. I am writing this on a laptop computer, not a tablet, not a phone), the term itself is not representative of future technological advancement. *Computer* has a relatively long history (as *multimedia* also does), and that history weighs heavily on it and tethers it to our first experiences with computers that preceded this century. In fact, one place we used to see *computer* most often was to describe a classroom or lab. But if you picture a "computer classroom" (and you are old enough to have taught in some of the first such classrooms) it is likely that you picture a static place with large machines where students are stuck in rows anchored to heavy devices. Now, rather than "computer classrooms" we have spaces like networked classrooms, wireless classrooms, digital media labs and new media labs. These spaces still rely on computers and computing technology, yet rather than describe the hardware in the space (i.e., computers), these new labels describe how the space can enable students to connect to information and to others (by being networked/wireless) and what kinds of texts the space can enable students to produce (digital and new media).

With regard to the recently popular terms *new media* and *digital*, the staying power of a term like *new media* appears to be due to the rapid emergence of the iPhone and other mobile technologies because that term has become more affiliated with the distribution and circulation of texts, rather than the semiotic channels used to compose a text

(i.e., *multimodal*). The question about the future trajectory of *digital* is also an interesting one to consider because it doesn't appear that the use of the term *digital* will be waning anytime soon considering the spike in interest in *digital humanities* that has emerged as a popular interdisciplinary field, fueled in part by the funding available out of the "Office of Digital Humanities" of the National Endowment for the Humanities, which awards "Digital Humanities Start Up" and "Implementation" grants (National Endowment for the Humanities, n.d.). Making sure faculty and graduate students are familiar with sources of grant funding (and phrases like *digital humanities*) is becoming an increasing priority in the higher education landscape, even for those fields (like English) that are not traditionally expected to secure large amounts of funding.

And yet, digital is largely a redundant term because at this point it is difficult to find any communication that is not facilitated by or produced using digital software and technology. Presumably, the digital label will either buckle under the weight of its redundancy (i.e. all communication is digital) and stop being used altogether, or become dated (like computer has) because of its association with the technologies that arose in the first decade of the new century. It will be interesting to monitor, with regard to a phrase like digital humanities, how long will it take for all humanities work to rely on or be intertwined with the digital in some way and thus return to being humanities work rather than digital humanities work. Conversely, because the digital in digital humanities does not refer to personal computing, but to the use of larger web, database, visualization, and archiving technologies to study, store, produce, and interact with humanities texts in new ways, we may be using it for quite some time because these technologies are relatively new and have much room for growth and development.

6. Conclusion

By cataloging the ways in which seventeen technology-related keywords have been used in job advertisements over the past two decades, we can use the *JIL* to chronicle changes within the field of rhetoric and composition in an entirely new way. This chronicle can teach us much about where we have been and enable us to move forward with greater authority to theorize the trajectory and importance of our work. Although job advertisements are primarily directed at members of an academic community, the language they use is important because it names particular skills and specializations that influence and are influenced by our scholarship, program titles, assessments of the field, and interactions with members outside the field. The language we use both describes and constructs our values and allows us to communicate those values to a wide range of audiences, including our students, universities, local communities, national organizations, industries, and funding agencies.

The field of rhetoric and composition has helped facilitate and manage a rapid expansion of composing practices fueled by technological advancements over the past several decades. We have valued both questioning the effects of new composing technologies and helping our students acquire the critical thinking skills to more effectively navigate this changing communicative landscape. Yet, this rapid expansion of composing practices has left us with a variety of new terms to use to describe this work that we may not always understand or be able to define with consistency or authority. In this respect the genre of the job ad does little to help clarify our understandings because of its limited scope and because it is likely that those who write job ads may themselves be seeking clarification and perspective about terms they use in ads.

In previous research, I have argued that the terms we use depend more on the audience to whom we are speaking than any external definition of the term itself. The data here support that argument even further. For instance, *digital*, as a term, has little significance on its own because almost all communication is now mediated by digital technologies on some level. Despite this redundancy, *digital* has become the most commonly used term in job advertisements, in part because it is the term used most often in our scholarship (e.g., Comppile), in the discourse of larger society (e.g., Google Ngram), and by one of the field's largest funding sources (NEH). Yet, *digital* is not used to signify the fact that everything can now be represented in zeros and ones, but rather to signal a cutting-edge break from more traditional ways of managing, analyzing, and composing information.

As terms and technologies evolve, we must be the leaders in characterizing and understanding such evolutions. This is imperative in securing for ourselves ownership over the content and direction of rhetoric and composition in the face of funding cuts, appropriation of resources, and administrative dictates. What we call the work that we do inside the field has direct implications for how we are able to talk about it outside the field, to potential students, graduates, administrators, employers, and funding streams.

Continued leadership as a field requires action at the local level. It requires that we take responsibility for developing informed and reasoned perspectives that we make public in our own research, teaching, and program administration. This local ownership accumulates across the field, which prompts productive conversations among scholars within the field. These conversations in turn strengthen our legitimacy in the eyes of those outside the field to determine the future course of rhetoric and composition research and pedagogy.

If we value our field's contribution to our students' development as public citizens, a development that is immersed in a world of ever-evolving communication technologies, we must be able to articulate the larger significance of what terms we are using, how we understand those terms, and why those terms are important to our work within the classroom and the public sphere.

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