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Adapting Journalism Curriculum: Digital Journalism Education and Its Relevance to
Current Industry Demands

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Spring 2011

A thesis
submitted in partial fulfillment
of the requirements
for baccalaureate degrees
in Communication and Political Science
with honors in Communication

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ABSTRACT

Journalism education is evolving as rapidly as the industry itself. This research explored whether graduate programs in journalism, and the businesses employing those graduates, were adapting to the digital trend in industry. A content analysis of ten graduate journalism programs' course descriptions suggests that some universities are reacting faster than others to digitalization trends in the journalism industry. A similar content analysis of 165 current job descriptions for editors and reporters indicates that many positions in the journalism industry expect a certain amount of familiarity with digital journalism skills. Industry expects students to come prepared with the tools and techniques that have only been developed in even the last few years: this study examines whether they are taught adequately to meet that expectation.

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Chapter 1

The Changing Landscape of Journalism: The Digital Revolution

One of the most used Thomas Jefferson quotes refers to journalism. “Were it left to me to decide whether we should have a government without newspapers or newspapers without a government, I should not hesitate a moment to prefer the latter,” he wrote in a letter to Edward Carrington.

If Mr. Jefferson were alive today, no doubt he would have stuck in a disclaimer about websites, blogs, and constantly updated video streams onto an iPad. In Jefferson's time, as well as in the majority of American history, the printed media have always flourished. Despite playing varied roles – from publishing Paine, to the Federalist papers, to “muckraking,” to “yellow journalism” – the printed media have been engrained in the history of the United States of America in a way which is almost synonymous with the free press.

In 2011, however, the digital media have begun to take over the industry. The Internet has become a medium which is essential to the functioning of journalism. In Jefferson's time, the letter to the editor – a weapon Jefferson himself used countless times – was the best way with which one would interact with news stories. Today, the audience can, in one click, share the story on Facebook, tweet it so their friends can view it, or Digg it so that it becomes “viral.” Such interaction with news stories is expected by news organizations. In fact, many even depend on it; these social media sources and news aggregators such as Google News provide a significant amount of traffic for news organizations (Edmonds).

Where this has left society, of course, is with an entirely different system of journalism than was prevalent in the early years of the United States. Ethical problems, ranging from the

responsibilities of a journalist in interacting with their readers to expectations of “citizen journalists,” plague the industry. Revolutionary technological developments which used to happen over the span of several decades now occur over the span of several weeks. How, then, can journalism schools educate their students in these developments? Can students truly be expected to enter the journalism industry equipped with skills which many industry veterans may not understand?

This paper seeks to answer the most fundamental of these questions regarding digital media education in the United States: what is the relationship between digitization trends in the journalism industry and adaptations in journalism curricula?

Chapter 2

Literature Review

The digital media revolution in today's journalism industry is one of controversy and contradiction. Some maintain that the digitization of journalism is beneficial, while others lament that this newest change to the industry signals the end of journalism. Many recognize that education plays a significant role in preparing journalists for a fast-changing career, but even within education, there is discord. The stakes are high for determining how to educate journalists in digital media techniques, in large part, because the newspaper industry is in a state of crisis. Reinardy discusses high “burnout” rates and cynicism in the industry (33). McChesney and Nichols note higher levels of media concentration (18). Picard points out that the media are having difficulty adjusting to new technologies, and by proxy, are struggling to reach their audiences. Despite the fact that 2010 was nowhere near as “hair-raising” in terms of revenue dips for the industry as 2009 and 2008, advertising revenue still dropped 6.3 percent (Edmonds). The

State of the Media Report in 2011 notes that when it was first issued in 2004, the news industry was “simple” - mostly print circulation with bare-bones websites (Edmonds). Fast forward to 2011, and digital revenue accounts for 11.7 percent of the total industry ad revenue, and is “certain to be the base of future growth” (Edmonds). Clearly, the journalism industry is changing. Whether or not new journalists are prepared to handle these changes is another important issue.

For the purposes of this study, the term “digital media” must be defined. One of the earliest definitions came from Palmer and Eriksen in 1999. They classified digital media in terms of certain characteristics when compared to other forms of media. They argued that digital media could be defined by five traits, all involving the Internet:

- the ability to support multiple media,
- the ability to support interaction with users,
- the ability to provide individualized response to users,
- the ability to allow instantaneous access,
- and the ability to provide unlimited support for distribution (33).

These five traits will be used in this paper to define the term “digital media.” Palmer and Eriksen argue that society was beginning to recognize digital media techniques as legitimate forms of journalism based on four criteria: content, advertising, delivery, and revenue model (33). Each prior form of journalism – print, radio, and television – offered their own particular strengths in these areas. Digital media, however, “attempt to take the best of existing formats and develop a unique profile” (Palmer and Eriksen 33). Content, which had been limited by space (pages in print) or time (limited “spots” in TV and radio) in previous formats, now could be printed in unlimited amounts, and updated constantly (Palmer and Eriksen 33). A unique aspect of the content of digital media, too, is their “push and pull” ability with users, and news providers’ ability to customize the news for its specific audiences. Delivery, too, played an important part in defining this new platform. Rather than updating the news daily, as in the late-1900s print

industry, or frequently, as in television and radio, online communication was delivered instantly and updated constantly.

The digital revolution within the industry has led to a type of gold rush in the higher education system in the United States. Universities and colleges want to be on the cutting edge of this change in the industry, and are adapting their curriculum to attract students.

Part of the draw for students still flocking to journalism schools is a new generation of courses retooled for new media. The same rapidly changing technology that is creating headaches for many media executives appeals to a generation of students who grew up playing computer games and texting and now tweeting their friends on the microblog Twitter. (Mangan)

Some schools have gone as far as to invest tens of millions of dollars into new centers for digital media. In 2010, Columbia University, one of the oldest journalism schools in the nation, announced the opening of the Tow Center for Digital Journalism, a 15-million-dollar structure. The building was named after the Tow Foundation, led by Cablevision mogul Jonathan Tow. The Tow foundation, formed by Tow and his wife, is a non-profit which supports “innovative projects and collaborative ventures where there is a shortage of both public and private funding and opportunities for breakthroughs, reforms, and significant benefits to society” (Columbia). The center will “devise and publicize innovative methods of digital reporting and presentation, to serve both established and new media companies” (Ernst). While a 15-million-dollar structure is certainly on the high end of adapting to digital media trends, other schools are making changes too, particularly in the area of curriculum.

While the *State of the News Media* has only analyzed the news media since 2004, the discussion of digital journalism predates it by at least ten years. In 1995, David Thompson offered one of the first discussions of digital journalism, in which he argues that education was one of the most important areas in figuring out how to handle the evolution happening in the

industry. Thompson's arguments are some of the most popular in scholarly research on digital media. By educating students in digital media, he says, programs could thrive along with the industry by “challenging” their students – when schools provide digital communication education, students are “motivated by it; and they learn from it” (Thompson).

Other researchers, too, have identified journalism educators as the main forces of change in the industry's evolution. Huesca examined the two sides of the original debate over digital journalism. One side, which he titled the “reinvention camp,” “advocated the development of a new journalism that breaks away significantly from previous practices” (7). The other side, the “reform side,” he argued, was much stronger:

Far more prevalent in journalism education are books and articles that advocate the adoption of new technologies in ways that are congruent with the existing, industry practices, leaving the fundamental norms and conventions of journalism uncontested. Where journalistic writing for new media is addressed, traditional goals and forms – informing readers, telling the truth, producing conventional leads – remain intact for the most part. (Huesca 8)

This “reform” camp, according to Huesca, called for classes which were based upon the skills of newswriting, news gathering, and traditional journalism ideals, while simultaneously educating students on new and emerging technology (8). Huesca examined student reaction to these types of classes, and noted that 100 percent of students surveyed found that courses with new technology “stimulate[d] creative or critical thinking” (Huesca 13). Likewise, 100% either strongly agreed, agreed, or slightly agreed that they were “learning a great deal” (13).

In the early 2000s, Mark Deuze was one of the scholars firmly on the “re-invent” side of the argument. His research, based on 45 face-to-face, in-depth interviews with experts in journalism education, identified several fundamental threats and challenges to the success and relevance of education in journalism. A major part of his argument acknowledged the role of various cultures, nationalities, and regional preferences in selecting techniques and processes for

journalism education. In fact, he argued, the multiculturalism of society itself presented a huge challenge in defining journalism's role and therefore necessitated a reinvention of journalism. Digital journalism, as a massive globalization tool, was faced with problems of credibility, reliability, and objectivity, since it is used for quick aggregation of facts from a variety of people.

Buckingham saw the debate between those espousing traditional journalism education and those supporting digital trends, and sought the middle ground. Rather than demand a complete reinvention of the journalism classroom for digital media education, he said, a mix of hands-on, creative production (often involving digital media in the classroom) and critical reflection, which could build on students' "existing pleasures and experiences of media," would prepare students best for a career in journalism (Buckingham 112).

Still, others argue, new technology comes naturally to members of the newest generation of journalists. In 2010, Deakin University Professor Paul Bethell, citing three surveys of mobile usage of first-year students at Deakin University in Australia, notes that:

Journalism educators need to be responsive to the changing media environments and new job requirements by news media employers. It is also important that educators understand the changing skill-sets of incoming cohorts of students who are likely to use mobile phones as tools for digital newsgathering, creating and distributing news contents. (Bethell 104)

By the time Bethell completed his study, a near consensus had evolved amongst researchers that digital media would play a large part in the education of future journalists. West, Whitehurst, and Dionne observed that many of the changes ahead for journalism education are essentially forced upon it by industry:

There is little doubt that the new world of education journalism is going to be digital and interactive. While print outlets clearly are going to be part of the media universe, all of the large education newspaper outlets have invested heavily in online platforms and see future growth coming largely through digital content. The old distinction between for-profit and non-profit has broken down to

some extent because virtually all outlets are experimenting with new revenue streams and supplementing standard education coverage with paid webinars, subscription events, advertising, book clubs, news alerts, RSS feeds, chats, and blogs. (West, Whitehurst, and Dionne 19)

In 2009, Singer built upon one of the key aspects of the digital journalism industry provided by Palmer and Erickson ten years earlier: interaction with users. That interaction, she argued, made digital media different from any other form of media (376). Singer's arguments also center around the idea of convergence. Television journalism and online journalism are merging quite well heading into the second decade of the millennium, Singer argues (375). Many print newspapers are online as well, but print media may soon “diverge” from online media (375). This diversion effect stems from the essential functions of online and print media: online media are used to break the news, while print media are used to analyze it and determine its consequences (376). If an investigative report is completed, Singer says, a journalist would “break the news online, write a blog post about how he found it all out, and then write an analytical piece of the implications in the next morning's newspaper” (376).

As Singer says, an online journalist is defined by the skills he or she possesses, many of which are not regularly used by other platforms' journalists (376). For Singer, the modern journalist must be an extreme multitasker and able to produce and write for all media at once (376). Many print journalists shoot video for television or online videos, and also record audio for sound bites for the web, all while writing two stories: one for online, one for print (Singer 376). This is becoming the norm in this industry. It is important, then, to examine whether or not the new generation of journalists are being trained in the skills they are expected to possess.

There is no doubt that throughout the last 15 years, the field of digital journalism has become extremely complex and mired in the subtleties of a rapidly evolving field. Opposing viewpoints seem to be the norm: some claim that digital journalism will help print media, while

others insist that it signals their end; some say it is beneficial for society, while others lament its influence. Existing research shows us that the field of journalism is becoming more digital, and that the higher education system in the United States is responding to these changes. However, little research exists which demonstrates the rate at which these schools are offering digital media education. Likewise, there is ample proof that digital media skills are required in the journalism industry, but little research discusses whether these skills are needed from a recent college graduate looking to enter the industry. This lack of research leads to this research question: what is the relationship between an increasingly digital journalism industry and adaptations in higher education curricula?

Chapter 3

Methodology

To explore the relationship between digitalization in the journalism industry and in journalism curricula, two content analyses were performed. The first (study 1) focused on ten journalism schools' graduate course descriptions accessed between January 14 and January 21, 2011. This content analysis first found the ten programs' course descriptions – both required and optional – and sought out a total “tally” of how many of the words in those course descriptions dealt with digital media (defined below). The purpose of the content analysis was to find out how well journalism schools were adapting their educational curriculum to include digital aspects. Next, another content analysis (study 2) was performed on 165 current job advertisements, found online between January 21 and January 29, 2011, for journalists.

This research focused on analyzing graduate programs, rather than undergraduate programs. It is important to admit that, while there are many undergraduate students studying

journalism, many do not enter the industry as a career. Many find journalism a noble endeavor, but upon experiencing the reality of the industry itself, increasing numbers “burn out” (Reinardy 45). A recent study of burnout rates in journalism found that 74.5 percent of journalists 34 and under either expressed intentions to leave newspaper journalism or answered “don't know” (Reinardy 45). Since graduate programs are designed to give industry professionals the chance to master skills in journalism, this is the best place to analyze developments in the educational adaptation of journalism curricula.

The question, of course, is whether or not the programs are actually training new students on new technologies and content delivery systems in the industry. This is a particularly challenge in an age where the next technological development will likely be created next week. These two content analyses were performed in order to pin down adaptations of graduate schools' courses and demands from the journalism industry at a specific point in time in terms of determining the frequency of digital media terms in their course descriptions. This section will identify and define the units of analysis for both of these content analyses; then, one subsection for each analysis will determine the population of these studies. Their inferences and results will be discussed in later sections.

The unit of analysis for both studies was defined as a digital media term. “Term” is used to signify that a unit could consist of one word (“online”), two words (“web site”), or even several words (“web-based news stories”). In those three examples, each counted as one “term,” even if it included multiple words. In all cases, these terms were required to follow specific criteria which were derived from Palmer and Eriksen:

- the ability to support multiple media,
- the ability to support interaction with users,
- the ability to provide individualized response to users,
- the ability to allow instantaneous access,
- and the ability to provide unlimited support for distribution (33).

These five criteria define digital media, and served as a way to explicitly specify what a digital media term is. A digital media term, as determined by this study, must have dealt with some area of distribution of content which incorporated all five of these areas. Of course, for a term like “web,” this is immediately true for all five, as the basis of the Internet itself stems from those five criteria. Terms that imply use of the Internet, too, such as “blog” or “Facebook,” incorporate these five criteria as well.

Also, to count as a digital media term, they must have been terms which would not have been used before the advent of the Internet or digital communications. Thus, terms like “telecommunication” would not count as a digital media term, as this term could have easily been used in the 1970s to describe broadcast journalism. At the same time, terms such as “Twitter” or “interactive graphics” would count as digital media terms, because they are terms that would not have made sense more than a decade ago, and are only applicable to digital media. If a word appeared more than once in a single description, it was counted as many times as it appeared. For examples of types of words that registered, see Appendix B, a lit of the study 1 analysis results.

Each study measured digital media terms' frequency within the descriptions. For each description, the terms were added together to create a “score” for that description. For the first study, the scores of each individual course were then added together to represent a total indication of how many digital media terms are contained in each graduate school's program. For the second study, the scores of each individual job description were added together to represent a total across all descriptions studied.

As an example, a course description from the master's program at Columbia University reads:

[This class] seeks to blend instruction in the craft and the

substance of journalism so students will graduate knowing how to write in an accurate, clear and complete fashion, meet a deadline, gather and verify material, and understand several subject areas that are essential to reporting. They also will learn and use several **digital-media** techniques and gain experience in incorporating those skills in the reporting and publishing process.

Thus, during content analysis, this course description found one digital media term: “digital-media techniques.” If, for example, this course chose to include the following sentence: “This course will guide students in digital media production through use of blogs, webcasts, and interactive content on student-built websites,” it would have tallied five additional terms: (“digital media” “blog,” “webcast,” “interactive content,” and “website”). Note that “digital media” and “interactive content” were two-word phrases, but are counted as one term each.

Methodology: Study 1 (Graduate Schools)

The data for the content analysis came from 10 graduate schools' entire curriculum – including both required and optional courses – in order to determine the frequency of digital media terms. The population from which this sample was drawn is immense – every graduate school in the United States that has a journalism program. The largest challenge in the study was defining the sample. The goal behind the sample of schools to be analyzed was to select ten of the leading graduate programs in journalism in the nation. No current “top ten” list of graduate journalism schools exists, and this study was not intended to provide one. Two sources of ranking/rating of graduate journalism schools were consulted to find ten leading schools that this study would analyze. Within those sources, only schools which have a graduate program in journalism and displayed their program's course descriptions online were chosen.

First, the rankings of *U.S. News and World Report* (Freedman) were used. This publication is one of the highest-consulted college ranking systems. A report on its 2007 rankings of various aspects of collegiate success found that within 72 hours of the yearly release, the *U.S. News* website received 10 million pageviews (Freedman). Their normal pageviews for an entire month usually total 500,000. However, they last ranked their top 10 journalism graduate schools in 1996 (U.S. News & World Report). The schools on this list in 1996 were: the Columbia University, New York University, Northwestern University, Stanford University, Syracuse University, the University of California at Berkeley, the University of Maryland, the University of Missouri at Columbia, the University of North Carolina at Chapel Hill, and the University of Wisconsin at Madison.

A ranking provided 15 years ago is hardly recent enough to warrant any discussion in modern research about digital journalism, a field that has mostly evolved only over the last decade. While it is not evident that *U.S. News and World Report* would rank those programs in the top ten today, this served as an interesting starting point of discussion in showing how some of the most well-respected journalism schools have adapted over the last decade and a half. Many of the schools on this list, though, did not list their course descriptions online. In fact, only half of the list listed their course descriptions online, so those five were selected for this study. They were Columbia, Northwestern, Berkeley, Maryland, and North Carolina. Since only five schools were available from that list, another source was consulted to complete the list of ten.

The second source selected provided the other five graduate programs needed for this research: the Princeton Review's list of some of the top college newspapers in the nation (Reimold). While any list of top college newspapers may not be the best way to find quality graduate schools, this simply provided a list to from which research could begin. There was, though, some crossover between the Princeton Review and the *U.S. News and World Report*: the

University of North Carolina at Chapel Hill, the University of Maryland, and Northwestern University appeared on both lists. Some schools on the Princeton Review's list did not have their course descriptions listed online and were eliminated for this study. Others did not have a graduate program in journalism, also eliminating them. When those schools were excluded, the top five schools remaining were Louisiana State University, West Virginia University, the University of Florida, the University of Indiana, and the University of Wisconsin at Madison. Again, the goal of this selection is not to compile a list of the top journalism graduate programs in journalism in the nation. The selected schools are highly regarded, have a journalism graduate program, and display their course descriptions online. It is assumed that these programs would generally reflect the current status of the leading graduate schools in the country as a whole.

To complete a content analysis of each school's graduate journalism coursework, first, the program's course descriptions were accessed. The websites of each school were accessed in order to find a public listing of all course descriptions, both required and optional, for the major. Different descriptions for each course often existed, from its title (i.e. Legal Studies in Journalism); to its short description (i.e. "An introduction to journalism law"); to a medium-length description, which usually was around one paragraph in length; to a longer, or syllabus-length description of the course, often several paragraphs to several pages long. For this study, the medium-length descriptions, which were the most commonly found on graduate schools' websites, were assessed for the content analysis.

Coding for the course descriptions was performed through two trained coder assistants. Each was first trained to understand and be able to accurately identify digital media terms using a training sheet. This training sheet provided an overview of the research and some example descriptions which the coders analyzed together under supervision. Each coder was then given a

practice sheet, which they worked together to code. Next, each coder was given a test, which they performed individually, then went over as a group. All of these forms are located in Appendix D.

After each coder was trained, they were given a portion of the research done in this study to determine intercoder reliability. Each coder was given five course descriptions from each school, for a total of fifty. The samples were chosen in an attempt to give an idea of every type of description, ranging from zero terms (which served as test samples) to descriptions which were very heavy in results. These results are discussed in the Analysis section of this paper, and full coder results are listed in Appendix E.

Methodology: Study 2 (Job Descriptions)

Data for the second content analysis, which was an examination of digital journalism demands from the journalism industry, focused in on job descriptions of current openings in the industry. It followed nearly the exact same process as that of graduate schools' course descriptions. Terms were categorized as digital media terms using the same techniques as the graduate school study. The job descriptions were found on JournalismJobs.com, a site displaying positions across the country dealing with journalism. At any given time, hundreds of job openings are available from employers. These job descriptions analyzed for this research were all posted to the website between January 21 and January 31, 2011.

Only the terms used in sections detailing a position's description or responsibilities, and terms describing the desired applicant's qualifications were examined. Nearly every job description used the word "e-mail" in their "application instruction" section (i.e. e-mail a resume and clips to... etc.), but these terms were not counted. Since the intent of this content analysis was

to find demand for digital journalism skills in industry, the analysis focused solely on the position itself.

The content analysis of job descriptions focused on 165 job descriptions relating only to jobs that dealt with the content of a journalism organization. These jobs were defined largely as those positions which were in charge of creating or organizing content for the news organization. This type of content included stories, photographs, videos, even digital media packages for websites. Most often, this meant that this study focused on advertisements for editors and reporters. While the positions of “editor” and “reporter” differ greatly, they both fall under this description. A managing editor, for example, may not create editorial content, but certainly supervises and organizes it, and thus was included in this research. Many positions, such as "sports reporter" (*Southern Maryland Today*) or "opinion editor" (*Gaston Gazette*) fit this definition exactly. Positions such as a “photo editor,” for example, were considered an editorial job because, according to a job description from the *Victoria Advocate*, the editor would be responsible for creating their own content for publication, the same way a reporter does.

The samples from Journalismjobs.com were also limited to only journalism organizations. While this sounds straightforward, it again provides a debatable gray area regarding what a journalistic organization is. Descriptions from print entities such as the *New York Times*, which advertised for a copy editor, were included, as well as those from online news organizations such as an advertisement for an online editor at *newsday.com*, or a supervising features editor at *todayshow.com*. This study did not include entities that only provide news about one organization, which eliminated many of the jobs on the website that seemed to be more public relations-oriented than journalism-oriented. For example, a job opening of “director-publisher” was advertised by the North American Congress on Latin America, but was not counted because the North American Congress on Latin America is not a journalistic organization

– it is a governing organization which has need for some basic skills in journalism to perform public relations functions.

Coding for the job descriptions was performed by two trained coder assistants. They were trained and prepared in the same fashion as those who coded the graduate schools' content analysis. These two coders were each given 30 job descriptions. The samples were chosen in an attempt to give an idea of every type of description, ranging from zero terms (which served as test samples) to descriptions which were very heavy in results. Their intercoder reliability is discussed in Chapter 4, results, and full coder results are listed in Appendix D.

Chapter 4

Results

Results: Graduate Schools' Course Descriptions Content Analysis

For each of the ten selected schools, every required and optional class for a master's degree in journalism were analyzed to discover the frequency of terms dealing with digital journalism. While many programs contained several options or foci within their master's degrees, a blanket approach was taken, analyzing all courses. The results, then, are displayed in three ways: total terms across the school's program, total courses in that program, and then the average number of terms per description. The results are displayed in this manner in part to offset bias towards larger programs. Without displaying average terms per course, the schools with the most courses would likely have returned the most results just based on a larger population of course descriptions. This average number likely provides the best indicator of digital media terms contained in a school's descriptions.

Table 4-1: Graduate School Course Analyses

Graduate School	Total terms	Total courses analyzed	Terms / courses
Columbia	178	85	2.09
U.C. Berkeley	72	39	1.85
Northwestern	107	58	1.84
U.N.C. Chapel Hill	55	102	0.54
Wisconsin	25	54	0.46
Florida	12	36	0.33
WVU	18	73	0.25
Maryland	8	49	0.16
LSU	6	59	0.1
Indiana	7	68	0.1
Totals:	488	623	0.78

The programs differed significant in sizes – UNC's program had the most courses available to analyze, at 102, while Florida's program had the least, at 36. The amount of terms counted in each school differed dramatically, too: Columbia came out far ahead of any other school by registering 178 terms, while schools such as Maryland, LSU, and Indiana hardly registered any. At Maryland, for example, the total number of eight terms came from only two courses (“online journalism” and “online news bureau”). No other courses within the entire program contained digital media terms.

This data is summarized in Chart 4-1, on the following page.

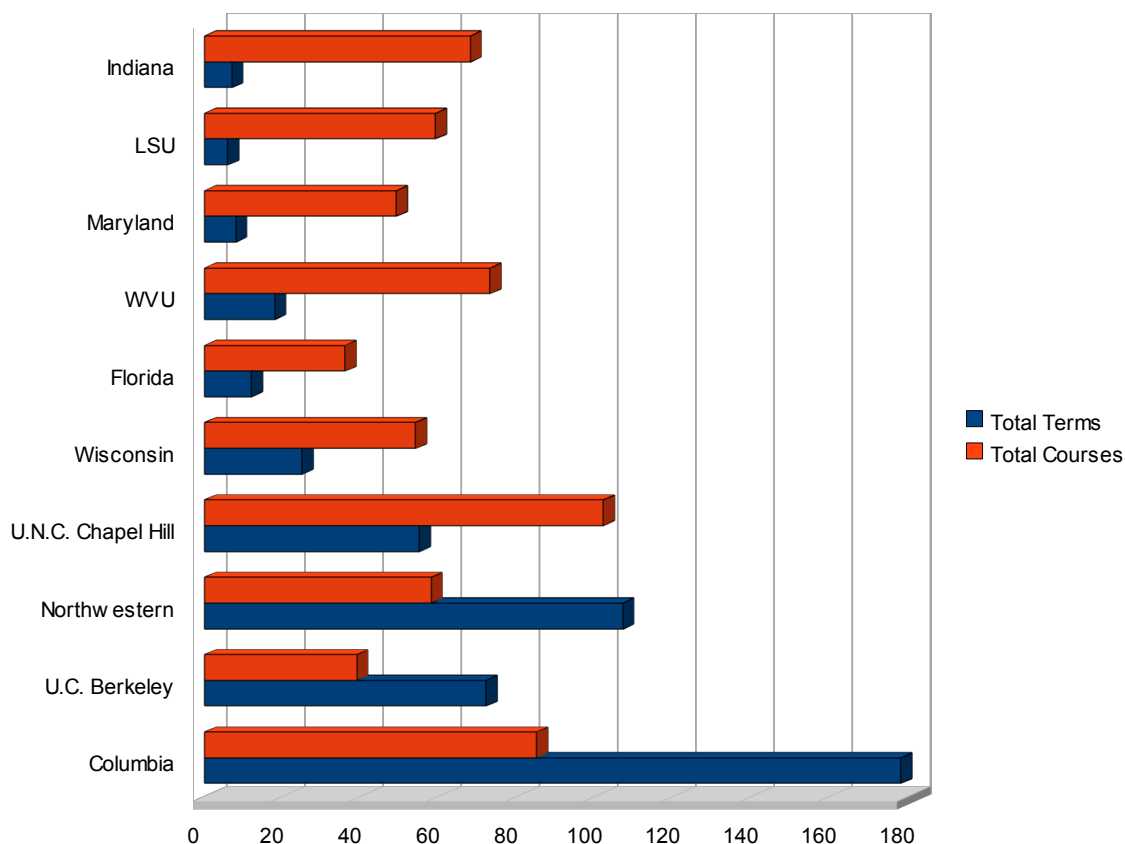


Chart 4-1: Graduate Schools' Course Descriptions Content Analysis

This graph demonstrates the total terms in each school's program compared to its total courses. If a program's total courses were higher than its total terms – such as in Indiana, LSU, and Maryland – it registered an average terms per course of less than one. The three programs whose terms exceeded total courses – Columbia, Berkeley, and Northwestern – each had an average terms per course of higher than one.

One of the most interesting results stemmed from classes which did not directly deal with digital journalism. For example, each graduate program had a journalism law course. Many of the programs did not register any digital journalism terms for this course, as the subject matter likely necessitates a discussion of such historical cases dealing with print and broadcast media, such as

NYT v. Sullivan. Some programs, however, did infuse a “digital” element to this course. For example, for the University of Maryland, which had a very low score in frequency of digital media terms, the course description is very traditional:

Legal rights and constraints of mass media; libel, privacy, copyright, monopoly, and contempt, and other aspects of the law applied to mass communication. Previous study of the law not required.

However, Northwestern University, which ranked much higher in this study, offers a journalism law class with a digital media edge to its topics:

Overview of ethical and legal issues affecting journalism. Issues address a broad range of circumstances, including relationships with sources, journalistic practices. Course also covers the basics of constitutions, statutes, rules and regulations, major court cases concerning journalism. Class references questions arising from citizen journalism and other digital publishing phenomena.

This course definition from Northwestern University counted as two digital media terms: “citizen journalism,” and “digital publishing,” as both refer to forms of communication which can only be accomplished over digital media.

Two coders were employed to establish coding reliability for this study. For each graduate school, five courses were selected for two coders to analyze, for a total of 50 courses. Each of those courses were already analyzed as part of this paper's research, and the results from the study author found 114 digital media terms across those 50 courses. The first of the two coders found 107 terms (93.8% of those found in the study author) while the second found 102 (89.4%). Many of the discrepancies in coding resulted from around one word; for example, the second coder counted the word “multimedia” regardless of context every time it appeared, while the study author – and coder #1 – did not do so. Full coder results are attached in Appendix E.

Results: Job Descriptions

The second study, which examined job descriptions, attempted to attain a sample of what the journalism industry demands in terms of digital journalism skills. As part of this study, 165 journalism jobs were analyzed. For each description, only the parts of the description dealing directly with either aspects of the position or preferred qualifications of applicants were counted in this study.

Table 4-2: Job Description Analysis

Total job descriptions analyzed	Total digital journalism terms	Average terms per description
165	395	2.39

Two different coders were given 30 job descriptions to study. In the research for this study, 75 digital media terms were found across those 30 job descriptions. Much like the coder tests given for the course description research, the coders for the job descriptions content analysis returned one high and one low score. Differently from the other study, the two coders each found *more* digital media terms than the study author. One coder found 81 results, the other 89, compared to the 75 terms found by the study author. Much of the discrepancy between the coders and the research is due to a coder accepting a word where the original research did not; often, that word was repeated several times throughout the study. For example, many job descriptions spoke of covering news in “real-time.” Conclusions differed as to whether this referred to digital media. Full coder results for this study are attached in Appendix E.

Discussions and Conclusions

Analysis of the results of this study will be broken down into two areas for each content analysis study: discussion of the research question and limitations of the study, and conclusions to be drawn from the relationship between the two studies. Further study on this type of research and on the relationship between digital journalism education and industry demand is possible, and is discussed after each of the content analyses.

Discussion: Study 1

This research was designed to answer the original research question: what is the relationship between digitization trends in industry and adaptations in journalism curriculum? The results in Table 4-2 indicate that current job openings in journalism do expect some level of digital journalism skills for new professionals. Table 4-1 suggests that graduate schools are reacting to this digitization of industry, but at varying levels. The disparity is perhaps most evident in comparing West Virginia, which ranked sixth in digital media terms per course, to Columbia, which ranked first. These two schools had a roughly equal number of courses (85 to 73), but differed significantly in amount of digital media terms (178 to 18). This suggests that Columbia's master's program in journalism includes more digital media topics than that of West Virginia University.

These results also work to offset some of the concerns regarding the content analysis methodology. First, a concern was that the schools with the most courses would necessarily “win” just based on the fact that they had more content to analyze. By displaying the data of how many terms, on average, are contained in each course, this concern was managed. For example,

Columbia (most terms per course) had over twice as many courses as Berkeley (second most terms per course), but the two still scored fairly close in their final calculations: Columbia had 2.09 terms per course, while Berkeley had 1.85 terms per course.

Across the ten schools, each website had varying levels of detail regarding their graduate courses. This led to the perhaps largest drawback seen in this content analysis approach: this content analysis seemed to inflate frequency rankings for those schools with longer course descriptions.

Some of these schools describe their programs as offering a much higher amount of digital media education than others. Keeping in mind that students are afforded a degree of freedom in choosing which elective courses they wish to take, it could very well be possible at the schools with the highest amount of digital media terms – Columbia, Berkeley, and Northwestern – to concentrate a master's education entirely around digital media. Because these schools have injected so much digital media education into their courses, it is likely unavoidable to attend a master's program in journalism without at multiple points encountering some aspect of the developing digitization of the field.

One of the most interesting points in searching through the raw data was the comparison among similar courses from different schools (Appendix B). This permitted an in-depth look at exactly how the schools are adapting differently to these changes within the journalism field. For example, while many schools offered their own courses that either dramatically increased their digital journalism terms (such as a course on Macromedia Flash at Columbia, which by itself contained 27 terms), the most accurate comparison lies in courses which almost every school offers, such as basic newswriting, opinion writing, newsroom management, or journalism law.

For example, a course on journalism law from the University of Maryland, one of the lowest-scoring schools on this list, was described with a total of 30 words:

Legal rights and constraints of mass media; libel, privacy, copyright, monopoly, and contempt, and other aspects of the law applied to mass communication. Previous study of the law not required.

This course description does not contain any digital media terms, and indicates that this law class would likely focus much more on historical applications of free speech law in the United States.

Meanwhile, a course on journalism law from Northwestern, one of the highest-scoring universities on the list, was described in a total of 49 words:

Overview of ethical and legal issues affecting journalism. Issues address a broad range of circumstances, including relationships with sources, journalistic practices. Course also covers the basics of constitutions, statutes, rules and regulations, major court cases concerning journalism. Class references questions arising from **citizen journalism** and other **digital publishing** phenomena.

This course description indicates that it will discuss current issues in journalism law, particularly those dealing with citizen journalism (counted as a digital journalism term as it implies either mobile or Internet participation). Comparing these two courses is a good way to suggest that Northwestern has included more digital media elements in its basic coursework than Maryland.

Limitations of Study 1

The largest temptation with these results is to make overreaching statements. It is possible that some courses which did not return any digital media terms does indeed have a digital journalism element to its content. This study did not analyze the syllabus-length descriptions, which are much more difficult to find and access. These descriptions may have given a more exact view of what the professor plans to teach in that course. Even if this content

analysis focused on those longer descriptions, it stands to reason that many teachers could incorporate digital media into their classroom without explicitly stating that they plan to do so in their course syllabus. Thus the only true reflection on the course content of a graduate school could only come from direct observation of the course itself.

Because this research was restricted to only descriptions, and not the courses themselves, it is possible that schools which are simply more descriptive of their curriculum end up looking like they have adapted “better” than other schools. However, it is difficult to state that some schools offer “more” of a digital media education than others. Because the content analysis analyzed both optional and required courses, it may be possible to attain a more digital media-heavy education by choosing optional courses that emphasize those elements. This is true even of the lowest schools on the list, whose digital media terms largely came from one or two courses, such as Maryland, whose eight terms came from only two courses.

It is also difficult to use the results of this content analysis to determine what portion of a student's education deals with digital media. For instance, saying that since there is 0.25 terms per course at West Virginia University is correct, on an average across all courses. It is too much of a stretch, though, to try to say that every four classes will contain one element of digital media and that, by extension, one quarter of a master's graduate's education has dealt with some area of digital media. Because of the fluid nature of the requirements for these majors – many offer a set up to five or six electives a student can take to fulfill one requirement – it is impossible to determine what portion of a student's education will include digital media aspects at any of these universities.

The largest problem in this content analysis became the classification of results. For example, the word “photography” was counted as a term regarding digital media based on context. If a class refers to photography in a newspaper design standpoint, it did not count. If a

class refers to photography in the way of multimedia packages and slideshows for a web package or site, however, it counted as a digital media term. Because of this often subjective nature of counting the terms, the exact count of words will not be identical from researcher to researcher, as demonstrated by coder results.

Discussion: Study 2

Analysis of the job descriptions results is slightly more difficult, as there were not ten sources with which comparisons could be drawn. Whereas the content analysis of graduate schools could be compared from program to program, the job descriptions sought an average across the industry as a whole. The data were still displayed in the same fashion, though, in order to find a type of “industry standard” regarding how much of a background in digital media employers expect. Across the 165 job descriptions which were analyzed, 395 terms were found, meaning that the average number of digital media terms per description came out to 2.39.

It is apparent, then, that the current journalism industry requires a knowledge of digital media skills for new hires. It is evident that news organizations expect that recent college graduates possess skills in the area of digital media before they begin working.

Limitations of Study 2

The average amount of terms per job description came to 2.39. Just as with the content analysis of the graduate schools' course descriptions, it is easy to overreach with this number (“Every single job description requires digital media education!”). By reading through the job descriptions, however, it is easier to come down to earth. Some descriptions even blatantly state that they do *not* expect or even want a digital media background in new hires, such as the *Rio Grande Sun*, a 12,000-circulation weekly in Espanola, New Mexico:

You would be joining a newsroom composed of hard news reporters with a desire to fight public records violations, corruption in government and public funds abuses. They hate it when they're assigned a story on a bridge being named after someone or the Christmas light parade. Please look at our bare bones website. We're about news, not electronic gadgetry.

The irony in this job description is that unfortunately, one digital term had to count: website. Yet, the point still stands: many publications simply do not care about digital media backgrounds. If the data can be attacked from one angle, they can be attacked as having been skewed by extremes; some jobs contained extremely high amounts of digital media terms, while many others contained either zero or one. The most common digital media term found within these job descriptions was “website,” which suggests that many journalistic entities only really expect recent journalism graduate students to be able to post a story to a website.

This could indicate that the 2.39 terms per job description only imply a basic, even cursory knowledge of digital media, but it does ensure that digital media communication will be a part of nearly every position. One would like to think that even at the *Rio Grande Sun*, a young enterprising reporter could perhaps come into the organization and lead a technological revolution within the company which would allow the newspaper to cover breaking news quickly

and with modern graphics. It would be impossible, though, if that reporter did not exit their school with a decent education in how to make that a possibility.

There is also bias inherent in any study of this type which analyzes industry openings at only one point in time. This study was conducted after two dismal years in the journalism industry, and at a low point in the American economy. It would be difficult to measure how much these factors have influenced these results. However, more so than with the graduate schools study, a poor economy and poor state of the industry may have led to less descriptions being available.

Possible Future Research

At least four areas of future research could stem from this study. First, the same research could be performed five or ten years in the future to determine how much these graduate programs have increased or decreased digital media terminology in their course descriptions. Using the raw data from this research, and the levels of graduate school adaptation in 2011, it is possible to chart the development of these graduate schools' courses, at least as provided in their descriptions, over time. The same research could be done on job descriptions, to determine if the industry requires more or less of the same skills over time.

Secondly, a content analysis could be performed on the raw data of this study. By analyzing whether or not the specific terms registered in each of these two content analyses (course descriptions and job descriptions) match up, it is possible to estimate whether or not schools' curricular adaptations are on target. For instance, if a school seeks to establish a journalism program, they could consult such a study to determine what skills the journalism industry is requesting. With any program that includes a digital media element, it will surely be

labeled by college administrators as “interdisciplinary,” as this could include aspects of communication, computer science, MIS, or even software engineering. By pointing to a content analysis of job descriptions' digital media requirements, it will be easier to explain why certain elements of the program must be included, like basic HTML skills. If the data indicate that many job descriptions do desire HTML skills in college graduates, it could provide justification for including that in a new program. Conversely, if the job descriptions analyzed do not contain the word “HTML,” it could be interpreted as an indicator that the program's resources would be better spent elsewhere.

A third area for future research could estimate whether enrollment in schools that register high levels of digital media in their course descriptions leads to higher levels of success in the journalism industry. This research could incorporate starting salaries in the field. A comparison could be drawn between salaries of graduates of schools rating high in digital journalism terms in course description and graduates of those schools with low digital journalism terms. If students who have a high level of education in digital media consistently have a higher salary – either upon entering, or after a few years of developing in the journalism field – it could serve as further justification for schools to develop a curriculum which incorporates these new technologies.

Finally, further study could be performed by studying graduates of schools with high digital journalism education, examining their success after graduation. This could be determined by tracking starting salaries, length of tenure with first job before a promotion, and even average market size of the publication for which they worked first. This data could then be compared to that of graduates of schools with lower amounts of digital journalism education. The exact relationship between attendance at a school that has more of a digital media element and success in the journalism industry has yet to be examined.

Conclusions

This study empirically demonstrates that graduate schools are including digital media elements to their journalism curricula, congruent with existing literature in the field (Mangan). It also demonstrates that the average open job in the journalism industry in early 2011 expects at least some familiarity with digital media. The idea of the "backpack journalist," while accurate in its time, may have been replaced with the concept of a "pocket journalist." These modern journalists are expected to enter the industry with knowledge of blogging, digital video and photo, content management systems, interactive graphics and features, and websites. If they are particularly skilled, they should be able to manipulate all of these areas, even from their cell phones. Simultaneously, they are expected to begin their career prepared in the basic elements of journalism that have been expected since journalism's inception: the ability to ask the right questions, interview a tough subject, track down sources, and, perhaps above all, write high-quality articles.

This research provides an interesting point of discussion which is central to the examination of the changes rippling through the field of journalism. If schools are not educating students in new media at the same rate that industry demands these skills, students are entering the industry unprepared. Indeed, according to the simple numbers associated with job descriptions in the field and the course descriptions of leading graduate schools, it seems that many schools may be behind the curve in educating students for the type of journalism industry they are about to enter.

There is a phrase that's associated with many student newspapers across the nation: "Today's news by tomorrow's journalists." With the way that the journalism industry is changing, tomorrow's journalists must be more a day ahead of their colleagues. They must be ahead of the

curve on the newest websites, social media phenomena, and mobile device capabilities in order to quickly and efficiently deliver news to a generation which, like them, expects news to come immediately, and most often, in a digital format.

Appendix A

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Appendix B

Full Content Analysis Results: Graduate School Research**Columbia University**

reporting and writing	online publications
web sites	destination out: foreign reporting off the beaten path
digital-media techniques	international reporting
reporting and writing for broadcast	online
essentials of journalism	news editing
law of journalism	online world
internet	opinion writing
business of journalism	blog posts
web	personal and professional style
ethics of journalism	social impact of mass media
internet	writing with style
history of journalism	audio storytelling
online	podcast
masters project	web
digital media	flash
digital-media	multimedia
digital-media	interactive projects
email	Flash
specialized reporting/writing electives	integrated packages
digital media	interactivity
digital media newsroom	Flash
the art of the profile	online technologies
business and financial reporting 1	investigative skills (non-Stabile)
business and financial reporting 2	advanced photojournalism
covering national politics	social-media skills for journalists
covering new york politics	social media
web sites	twitter
blogs	facebook
cultural affairs reporting and writing	linkedin
digital media newsroom 1-5	youtube
multimedia storytelling	social media
digital-media	stabo;e omvestogatove slo;;s
web page	internship
blogging	beyond borders
new media storytelling	internet
environmental reporting	book writing
feature writing 1	biz and eco reporting A & B
feature writing 2	covering education

blogs		site	
online magazine		slide shows	
covering religion		blogs	
web site		site	
coveringreligion.org		site	
documentary seminar		columbia news service	
international newsroom		web site	
web sites		website	
Yahoo		literary journalism	
site		magazine writing A	
multimedia web site		magazine writing B	
site name		producing a magazine A	
site		web site	
site name		producing a magazine B	
investigative project (non Stable)		digital content	
journalism of tomorrow		online	
blogs	50	bloggers	
blogging		citizen journalists	
citizen involvement		online	
national affairs reporting A		blog	
digital revolution		sites	
site name		web pages	
national affairs reporting B		digital media A	
reinventing TV news		multimedia production	
web		multimedia journalism	
social networking		multimedia software	
viral networking		web	
citizen-produced video		site name	
web television		digital media	
web-friendly		digital media	100
science reporting		digital media	
stable investigative seminar		multimedia packages	
writing about the arts		slideshows	
the bronx beat		interactive flash packages	
multimedia		web	
digital media		web design	
online community newspaper		flash design	
weekly online issues		podcast	
online content		iTunes	
multimedia stories		web 2.0	
web		digital media B	
multimedia content		interactive storytelling	
web		interactive	
multimedia storytelling		digital media storytelling	
digital media		interactive software	
web site		digital media	
brooklyn ink 2.0		digital media	
site title		digital media	
website		flash	
site		google maps	
log on		web technologies	
site		blogging	

basic HTML	digital organizations
packages	narrative writing
quizzes	news editing
blogs	internet-wrought demise
database mashups	opinion writing
Flash interactives	blog posts
web	Internet
interactive graphic tools	blogging
flash	bloggers
interactive design	personal and professional style
flash	politics and the press in america
database/mapping mashup tools	radio documentary
blogging	reporting advances of the modern newsroom
online community	online
podcast	web scraping
web 2.0	optical character recognition
nightly news	scripting
radio	analytic tools
webcast	intelligent web presentation
internet	entity extraction
video storytelling	mapping programs
digital media	cloud tags
advanced photojournalism	text trees
business and economics reporting	sports journalism
covering conflict	internet sites
decision making in the newsroom	stable investigativetechniques
blogging	writing, reporting, mixing for radio
blog	basic digital media skills
internet	digital media
feature writing A	flash
online	web pages
feature writing B	slide shows
websites	adv digital media skills/flash
graphics in the newsroom	multimedia
history of journalism	interactive projects
blogger	Flash
journalism of ideas	integrated packages
managing broadcast newsrooms in the digital age	interactivity
digital age	Flash
multiple platforms	online technologies
Internet	178
digital platforms	adv digital media skills/video
150	photojournalism

Northwestern University

The Magazine Innovation Project
[new magazine in] digital form

The Interactiev Inncation Project
handheld devices

interactive community
 computer science
 The Community Media Innovation Project
 Collaborative Innovation in Journalism and
 Technology
 web-based application
 5th quarter national security specialization
 global reporting residency abroad
 multimedia
 journalism methods
 chicago newsroom reporting
 urban issues reporting
 news web sites

 health and sciences reporting
 business reporting
 database reporting
 investigative reporting
 us security and civil liberties reporting
 adv public affairs reporting
 adv business reporting
 new media
 blog
 adv health and science reporting
 multimedia elements
 sports reporting
 web daily
 covering the environment
 arts and entertainment reporting
 politics and govt reporting capstone
 marketwatch.com
 politicsdaily.com
 multimedia
 multiple media formats
 interactive graphics
 web-based news outlets
 journalism methods: editing
 mag writing
 long form non fiction narrative
 online magazines
 art and craft of writing non fiction book
 interactive publishing
 website
 CMS
 wordpress
 online publications
 multimedia
 online content
 online producers
 HTML
 CSS
 PHP

online
 online
 online
 digital platform
 digital storytelling
 wordpress
 CMS
 website
 HTML
 CSS
 multimedia
 interactive graphics
 sites
 digital platforms
 flash for journalists
 interactive storytelling
 multimedia storytelling
 web pages
 XHTML
 CSS
 flash
 blogging for journalists
 Internet
 Web
 blog
 Internet
 online communities
 [online] traffic
 sites
 interactive publishing
 building networked audiences
 traffic
 websites
 online content
 web
 web
 search optimization
 social media
 online communities
 website
 digital frameworks for storytelling
 digital tools
 news graphics and design
 digital content
 broadcast producing
 video storytelling
 chicago broadcast reporting
 adv video storytelling
 web
 web
 webcasts

multimedia	web programming
	iPhone/mobile
documentary project	web apps
vimeo.com	web
politics and govt video reporting capstone	HTML
ethics and law	CSS
citizen journalism	Javascript
digital publishing phenomena	PHP
journalism by the numbers	website
smart phone	application programming interfaces
online	(API)
urban issues seminar	API
business seminar	iphone web app
health and sciences seminar	Wordpress blog
audience insight	javascript
digital formats	websites
how 21st century media work	sites
bloggers	web
global journalism seminar	freelancing
covering faith, values, religion	inside business to business media
sports and society seminar	modernmedicine.com
watchdogs in washington: investigating the	web portals
federal govt	web-first
covering conflicts, terrorism, and natl security	web-only
covering public policy	audio producing for the web
producing a news website	web
website	travel writing
web	media design research and testing
multimedia	digital content
site analytics	digital media
traffic	multiple platforms
on-air performance	
using web technologies	http://www.medill.northwestern.edu/journalism/grad/page.aspx?id=154271

Berkeley

reporting the news	adv radio
community sites: covering oakland and richmond	digital portal
multimedia	visual storytelling: adv documentary projects –
online	real eyes magazines
site	adv multimedia
sites	multimedia project
interactive	online news sites
new media	multimedia stories
community site: mission local	web sites
multimedia	multimedia presentations
photo essay	social media

- mobile devices
- online
- interactive content
- digital platforms
- MINI: proTools
- MINI: flash programming
 - flash
 - flash
 - animations
 - ActionScript code
 - dynamic text
 - timeline formatting
 - [flash] components
 - interactivity
 - web
 - programming and code
 - flash
 - actionscript
 - interactivity
- MINI: after effects
- MINI: the journalist as freelancer
 - new media
- MINI: mobile reporting
 - smartphone
 - mobile devices
 - mobile devices
 - mobile applications
 - mobile devices
 - app developers
 - mobile devices
 - interactive storytelling
 - citizen generated content
 - SMS services
 - crowdsourcing
- to catch a thirf: the good, the bad, and the ugly of business
 - social networking
 - social networking
- int'l reporting: africa, women, and agriculture – the global food crisis
- renegades, underdogs, madmen: the magazine profiles
 - spam email
- narrative writing workshop: intermediate stories
- the long fact – a workshop
- law and ethics
- investigative reporting for print/tv
 - online
 - Skype
- intro to radio: radio reporting in the digital age
- intro to radio
- reporting for TV
- documentary production
- longform TV
- history of documentary
- inside frontline: the craft of reporting and storytelling
- digital TV and the world: Korea
 - video web coverages
 - web
 - mobile devices
 - digital journalists
 - multimedia
 - web site
 - digital production
 - multimedia
 - mobile media
- masters project seminar
- internship credit
- news 21 – FOOD
 - mobile
 - digital
 - multimedia
 - multimedia reporting
 - mobile-based web product
 - web
 - digital storytelling
 - social media
 - web
 - websites
 - News21
 - site
 - site
- designing and developing online news packages
 - online content
 - motion graphics
 - grid-based web design
- tolstoy
- making a magazine
 - digital edition [of a magazine]
 - web
 - digital edition [of a mag]
 - multi-media features
- MINI: video for the web
 - online
 - webn
 - online
- covering immigration and immigrants in CA
 - web-based media
- reporting on korea: society, tensions, and states of mind
 - internet mobs
 - web sites

key issues with faculty and campus experts
entrepreneurial journalism

masters study

Maryland

law of public communication
hist of mass comm
govt and mass comm
comparative mass comm systems
media economics
mass media in society
women in the media
news coverage of racial issues
special topics in journalism
visual comm
theory of broadcast journalism
technology and the media
journalism and public comm research
public opinion research
comp assisted reporting
special topics in data gathering and analysis
advertising campaigns
literary journalism
advising student publications
policy, censorship, legal problems of student publications
typography and layout for student publications
adv techniques for student publication advisors
yearbook short course
topics in scholastic journalism
fundamentals of writing and editing
reporting for grad students
fundamentals of broadcast journalism
journalism ethics

theories of journalism and public comm
seminar in mass media history
seminar in public affairs reporting
interpretation of contemporary affairs
print news bureau
special topics in news reporting and writing
seminar in advertising comm
seminar in media analysis
online journalism
 online
 web-coding
 internet
 new-media
 interactivity [sic]
online news bureau
 online journalism
 online
 online newsmagazine
seminar in broadcast news
reporting and production
adv television news and production
broadcast news bureau
topics in broadcasting and electronic media
writing the complex story
seminar in newsroom management
readings in journalism literature
science comm
news coverage of specialized topics
special problems in communicat

UNC Chapel Hill

electronic journalism
producing television news
television news and production mgmt
electronic media mgmt and policy
voice and diction
producing radio
studio production for tv news
broadcast history

case studies in PR
crisis comm
PR campaigns
public information strategies
diversity and comm
gender and mass comm
latino media studies
process and effects of mass comm

international comm and comparative journalism
 int'l media studies
 freedom of expression in the US
 blogging, smart mobs, and we the media
 virtual communities
 network capital
 social capital
 business and the media
 economics reporting
 business reporting
 adv reporting
 adv feature writing
 sports writing
 mag writing and editing
 adv editing
 southern politics: critical thinking and writing
 comm journalism
 newsdesk
 web site
 blog
 multimedia news reports
 online
 adv advertising copywriting
 art direction in advertising
 advertising campaigns
 concepts of marketing
 ethical issues and sports comm
 media marketing
 adv photojournalism
 multimedia
 documentary photojournalism
 multimedia
 web site
 newspaper design
 magazine design
 information graphics
 special topics in mass comm
 special skills in mass comm
 digital media economics and behavior
 online
 sites
 leadership in a time of change
 medical journalism
 internet
 medical reporting for the electronic media
 science documentary
 medical and science reporting
 multimedia design
 multimedia
 search engine optimization
 eye-track testing
 interactive multimedia narratives

multimedia platforms
 multimedia programming and production
 multimedia programming languages
 documentary multimedia storytelling
 multimedia project
 3d design studio
 3d design
 animation
 mass comm ducation in the secondary school
 mass comm law in secondary school
 mass comm writing and editing in the secondary school
 design and production of secondary school publications
 special topics in advertising
 mass comm research methods

 (700+ labeled as "courses for graduates")

 mass comm research methods
 mass comm pedagogy
 qualitative methods for mass comm research
 statistics for mass comm research
 theories of mass comm
 new media and society
 digital environments
 new media
 research methods and applications
 visual comm and info architecture
 media law for the digital age
 internet
 leadership in digital media economics
 strategic comm
 PR foundations
 PR writing for grad students
 mass comm law
 readings in mass comm history
 media management
 reporting and writing news
 specialized reporting
 multimedia storytelling
 multimedia content
 multimedia presentation methods
 seminar in mass comm research methods
 seminar in the psychology of human-computer interaction
 internet
 world wide web
 seminar in interdisciplinary health comm
 interdisciplinary health comm colloquium
 seminar in PR
 seminar in mass comm law

seminar in mass comm and society perspectives	cyber medium
seminar in mass comm history	internet
seminar in international comm	site planning
seminar in comm for social change	site navigation
seminar in social and economic problems in advertising	human interface design
seminar in advertising research	usability [of a website]
seminar in special topics in mass comm	navigation [of a website]
reading and research	accessibility [of a website]
nontraditional thesis option	global impact of new comm technologies
masters thesis	interactive media
doctoral dissertation	internet
computing concepts and issues: power tools of the mind	digital comm
internet	wireless computing
world wide web	personal communication devices
writing for digital media	database and web research
new media	online
digital/online environments	Google
new media	search terms
online environments	online
interactivity	
hyperlinking	
visual comm and web design	
new media	
new visual interfaces	

LSU

Ad and PR	Independent study
Entertainment media	Proseminar
Production and performance	Research methods
Minorities and media	Mass comm phil & principles
Electronic media and society	case studies in mass comm
Elec. Media, law, reg. And public policy	public opinion and public affairs
telecommunication media [law]	seminar in comm lit
Media and the military	survey research methods
Mass media, Sports, Society	qualitative research methods
Media management	mass comm and society
Comparative media systems	international mass comm [mentions newspapers, mags, radio, television]
American media history	media industries, behavior
Mass media practices	legal problems
Field experience	media systems
Mass media principles [mentions newspapers, mags, radio, television]	changing technologies
Elec media programming	new and emerging media systems
Elec Media Management	elec media systems [only deals with cable television]
Special topics	

mass comm theory
seminar in 1st amendment law
seminar in comm policy
adv research methods in mass comm and public affairs
independent research: mass comm
special topics
thesis research
prof. Internship
p[rof. Project
public affairs externship
dissertation research
business journalism
feature writing
photojournalism
print newsgathering and editing
broadcast newsgathering and producing
advanced print newsgathering
adv broadcast newsgathering
adv reporting
mag editing and production
scholastic journalism

sports writing and production
opinion journalism
public affairs reporting
long format video production
news production for the internet
 electronic publication
 converging media technology
 news web site
adv journalism
television creative project
news workers and orgs
politican comm
media and policy professes
media politics and public
case studies in media and poli campaigns
adv seminar in poli comm
propaganda and mass comm
news media and governance
seminar in media nad public affairs theory

Wisconsin

intro to mass comm
 interlinked entertainment
mass comm practices
 online resources
 HTML authoring
 digital audio
 video editing
intermediate repprtiing
 web use
 digital audio
 web-based news stories
principles of strategic comm
in-depth reporting
 online reporting techniques
 computer-assisted reporting techniques
contemporary affairs
creative nonfiction
 electronic publications
multimedia graphics
 new media
 digital media
 digital technology
science and environmental journalism

world wide web
mags and mag editing
 internet magazine
 HTML
electronic news for web and broadcast
 electronic news writing
 world wide web
 electronic news
 webcasts
 web site
developing creative messages for media
strategic media planning
 “new” media
research and strategy for strategic campaigns
special topics in adv concepts and skills
NSAC (n/a) - advertising
public info campaigns and programs
intro to survey research
public, comm, alternative media
mass comm law
 regulation of electronic media
history of mass comm
mass comm and society

effects of mass comm	mass comm law and policy
history of books and printing	history of mass comm
comm and public opinion	political communication
mass media and youth	international/development comm
health comm in the info age	new technologies
information technology	critical and cultural studies of mass comm
mass comm and poli behavior	strategic mass comm
international comm	mass comm and the individual
mass comm in developing nations	science and environment comm
mass media and consumer	mass comm and societal institutions
comm research methods “Survey of methods for	topics in mass comm
investigating mass communication processes and	seminar-research in applied mass comm
effects. “	colloquium in mass comm
mass media and minorities	seminar – mass comm law and policy
literary aspects of journalism	history of mass comm
topics in govt and mass media	seminar – international./development comm
special topics in mass comm	new technologies
senior honors thesis	seminar-critical and cultural studies of mass
internship	comm
directed study	seminar-stregetic comm
proseminar – mass comm	seminar-mass comm and the individual
adv mass media practice	seminar-science and environment comm
comm research methods	seminar-mass comm and societal institutions
conceptualization and design of mass comm	thesis
research	

Florida

history of journalism	seminar in mass media and health
issues and the press	research methods in mass comm
journalism and literature	content analysis methods
mass comm history	qualitative research methods
electronic publishing	collaborative comm research
online journalism	new media and a democratic society
multimedia skills	internet
web sites	new communication technologies
photoshop	Internet
HTML	race, class, gender and media
CSS	survey of political comm
online media history	new technologies
Internet	seminar in political advertising
adv law of mass comm	mass comm and society
international comm	seminar in 1st amendment theory
intercultural comm	seminar – research in mass comm law
legal problems of mass comm	adv topics in mass comm law
mass comm theory	indiv work independent study
seminar in mass comm theory	indiv work supervised research
science/health comm	comm proseminar

comm colloquium
mass comm teaching
special topics in mass comm
internship
masters thesis

project in lieu of thesis
adv research
doct research

WVU

advert and society
principles of advert
advert and creativity
 interactive media
advert copywriting
retail advert
advert media analysis
advert research and media
advert strategies
advert research
direct marketing
campaigns
advert research
advert research
campaigns
intro to mass comm
journalism orientation
media writing
documentary film in america
reporting for print media
copy editing
media relations in sport
public affairs reporting
law of the news media
internship
practicum
multimedia bureau reporting
 multimedia packages
media issues and ethics
law of the news media
women and minorities in the media
multimedia bureau reporting
 multimedia packages
intro to graduate studies
mass media and society
adv journalistic writing and research
ethics seminar
teaching practicum
independent study

research
thesis
graduate colloquium
intro to PR
writing for PR
editing and design
PR writing and applications
intro to web design
 web
 HTML
 design concepts [web]
 [web] layout
 hyperlinks
 web-production software
 web server account
 uploading files
applied PR
integrated marketing comm
research and case studies
public health relations
PR campaigns
fundraising and foundation management
research and case studies
PR 559...
adv reporting
feature writing
high school publications advising
american journalism history
editorial and critical writing
adv reporting
amer. Journalism history
editorial and critical writing
adv reporting
amer. Journalism history
electronic media and society
 broadcast news writing
beginning TV reporting
adv TV reporting and producing
video production

adv tv reporting and producing
 visual journalism and new media
 digital media
 video publishing
 web publishing
 intro to photojournalism
 adv photojournalism

multimedia reporting
 online media
 software
 online reporting
 visual storytelling for media

Indiana

intro to mass media research
 public affairs reporting
 quantitative research methods for journalists
 intensive reporting, writing, editing workshop
 media and society seminar
 international communication
 international media experience
 international media experiences
 international media experiences: int'l reporting
 int'l medi experiences: media of color
 reporting HIV/AIDS in Africa
 Seminar in visual comm
 "outside constraints of traditional news
 media"
 colloquium in scholastic journalism
 digital photography and photo editing
 multimedia presentations
 high school journ. Teacher workshop
 high school journ. Teacher workshop
 reinvent and redesign your publication
 supervision of student media
 online media
 PR management
 PR campaigns
 issues in new comm technology
 new technologies
 public relations for nonprofits
 arts media and society
 science society and media
 reporting the law
 reporting the arts
 education and the media
 science writing
 teaching mass comm in college
 urban affairs reportin
 crisis communication
 framing theory
 literary journalism

principles of PR
 PR writing
 race and the media
 topics colloquium
 topics colloquium
 business of sports media
 comm for nonprofits
 foreign news coverage
 int'l reporting
 history of 20th century photography
 computerized publication design I
 computer publishing
 computerized publication design II
 theory and research
 theory and research
 press and the constitution
 ethnographic reporting and writing
 gender and media
 student press law and issues
 high school journ. Teacher workshop: mgmt of
 student publications
 mgmt of school publications
 yearbook advising
 media internship
 quantitative methods in mass comm research
 globalization, media, and social change
 online media
 online activism
 russian and east european area media systems
 history and philosophy of the media
 qualitative methods in mass comm research
 media in the twentieth century
 ethics and journalism
 comparing mass media: US & europe
 framing theory and the media
 public opinion
 topics colloquium
 topics colloquium: agenda setting

topics colloquium: statistics
topics colloquium: the global journalism
topics in comm law
got and mass media
specialized reporting project
thesis or creative project

readings and research in journ
thesis research
ph.d research in mass comm
reading and research in mass comm
advanced research

Appendix C

Full Content Analysis Results: Job Descriptions Research

High County News – Outreach Director
digital marketing methods
email
web site
social media
williamson county sun – city govt reporter
williamson county sun – features writer
milwaukee journal sentinel – multimedia visual editor
online visual coverage
multimedia for the web
web
web technology
Adobe Flash
iPhone
Blackberry
web
digital portfolio
christian century – online editorial intern
online
online culture
blogging
social networking
web-based writing/blogging
HTML
web content management systems
character recognition software
editor for in-depth reporting project, chicago public radio
web
copy editor – health care – bureau of national affairs
URLs
Hotlinks
continuous news reporter, reidsville review
web site
associate editor, the american society of civil engineers
program officer – international center for journalists
business editor – the bulletin (OR)
news editor / copy editor – the daily times, new mexico

online
online editor
copy editor – CQ roll call
posting news [online]
HTML
managing editor – arizona capitol times
online
business writer – EM Resource group
online publication
“21st century reporter” - victoria advocate
online convergence
digital delivery systems
health and social issues reporter – yakima herald-republic
online
broadcast reporter CHCF center for health reporting
digital technologies
associate editor symphony publishing
online editor – randall-reilly business media and information
sites
web design
social media (business applications)
site management
senior resident journalism advisor, democratic republic of congo – internews network
website
FTP platform
community radio resident journalism advisor – sundan. Internews network
opinion page editor / copy editor – santa clarita valley signal
legislative reporter – temporary AP
NJ newsperson, temporary AP
RI newspaerson, temporary
OH newsperson, temporary
CT newsperson, temporary AP
MA newsperson, temporary AP
reporter (SE New England weekly)
web-savvy
news online
content delivery desk editor, journal & courier (IN)
online media
online
digital offerings
reporter – sauk valley news
online
sports/gen assignment reporter – stevenson/hicks newspapers
sports editor – the sheridan press
online sports content editor – sourcemia group
social media
digital sports coverage
online content
digital products
digital editor
web writer
blogger

multimedia producer
web writing
digital content
social media
white house correspondent – washington times
website
freelance photographer – new york post
night editor – aspen times
environment health and safety reporter – BNA, VA
copy editor – the pantagraph
online
reporter – times-georgian
reporter – maryland gazette
photographer – times-georgian
digital equipment
metro editor – the washington times
govt senior health analyst – bloomberg LP
sports editor – the washington times
website
reporter – northeast times
technical writer/editor
web site
website
website
website
website
digital media
website
blog
podcast
e-mail
blogs
podcasts
website
itunes podcast
website
emails
HTML coding
web site
junior features designer – new york post
managing editor – midwest small daily
ad sales / marketing director
web site
news web site
social media marketing
copy editor/news editor – journal gazette
online editor omaha.com
website
website
online
digital taem
flash

HTML

reporter – the fresno bee

- blogging
- social media

editorial assistant – chicago - AP

- web
- RSS feeds
- social media networks
- Twitter
- Facebook
- online
- web sites
- wikis
- Microsoft SharePoint sites
- internet
- online research
- social networking

reporter – the mechlenburg times

- online publication
- social media

states and municipalities reporter – bloomberg LP

web producer – politico

- web production
- web
- web presentation
- posting video content
- site
- HTML
- CMS
- internet publication
- web publishing

personal finance staff writer – bundle.com

- web

F/T photographer – enterprise of brockton

- multiple media platforms
- online

copy editing – pocono record

- website
- news feeds (on a website)

senior editor/writer – steel market intelligene

- email
- web-based platform

staff photographer – south bend tribune

- photo glleries
- slideshows
- video

writers – baltimore/harford counties – patch

sports editor – yuma sun

- online presence
- online

wire copy editors – gannett

wire copy editors – gannett
page designers – gannett
 interactive graphics
page designers – gannett
 interactive graphics
copy editor/page designer
newsperson – honolulu
 coverage across multiple formats
ad account exec – new york times co.
 website
 online newspaper
 internet site
 multimedia
 multimedia
news editor – united methodist communications
 site
 web production
 web team
 website
 cross-platform
 social media
 internet
 web-based media
design editor – ASP westward
news reporter – observer-dispatch
 web site
 various platforms
robb report – executive assistant/office manager
states and municipalities reporter – bloomberg
reporter – nashville post
 online platform
 web stories
staff reporter – saudi press agency
graphics generator/designer – the bulletin, OR
brand editor – medtech media
 online publication
 websites
 e-newsletters
 virtual conferences
managing editor – healthcare finance news
 online
 podcasts
 video
 slideshows
 online journalism
NACLA director-publisher
 online
circulation/sales manager
 online advertising sales
 website
 online
 web

social-networking sites
 business copy editor – moneyshow.com
 online
 web
 web site
 telecommuting
 community news reporter – ballston journal
 multi-media ability
 digital camera
 flip video camera
 social media
 editor – lubbock avalanche-journal
 online
 photo editor – the advocate (LA)
 online edition
 copywriter – simpson gumpertz and heger inc
 interactive graphic designer – the baltimore sun
 interactive graphics
 online
 interactive-only standalone graphics
 converting print graphics to interactive
 online databases (graphic elements for them)
 flash
 javascript
 online CMS
 ARCview
 correspondent – bureau of national affairs
 staff writer – CSI media LLC
 features editor
 features copy editor – york daily record/york sunday news
 tech-savvy
 emerging technologies
 editor – sentinel publications inc
 web site

100 above

photo/video editor – victoria advocate
 website
 website
 all platforms
 sites
 business reporter – san diego business journal
 business and finance writers – eHow money
 website
 bloggers
 online articles
 reporter – leader-telegram
 online reporting
 social media reporting
 internet
 facebook

- twitter
- online newspaper
- editor – magazine in milwaukee market
 - web
 - social networking content development
 - search engine optimization
 - web traffic buildin
 - good design and packaging (of web)
- freelance writers – demand media studios
 - online writing community
 - digital online office
 - online visibility
 - website
 - website
 - website
 - telecommute
- copy editor – lowell sun
 - online
 - web
- online magazine hiring freelance writers suite101.com
 - online
 - online maagazine
 - writing for the web
 - social networks
 - online marketing
- blogger-reporter – progress illinois
 - blogger
 - blog posts
 - CMS
- assistant editor – rio grande sun
 - web site
 - electronic gadgetry
- managing editor for automation/manufacturing mag/web site, summit publishing
 - web site
 - e-newsletter
 - online
 - web site video cameras
 - posting to web site
 - digital editor
 - multi-media content gathering
 - online media
 - posting, categorizing, tagging online content
 - social media
 - online
 - online
- news/sports reporter – buffalo bulletin, WY
- reporter – birmingham business journal
- education reporter – chronicle-tribune, IN
- web editor, metro USA
 - web editor
 - online presence
 - online impact

website
 digital product
 website
 “maximum [online] interest and punch”
 polls
 photo galleries
 photos [accompanying online articles]
 website
 web-friendly packages
 web publishing tools
 HTML
 blogging
 social media skills
 reporter – NBC17 raleigh
 digital video cameras
 web content
 social media networking
 new media outlets
 editor – gatehouse media inc
 digital media
 website
 web
 online
 online
 web-first reporting
 online
 managing editor – detroit jewish news and red thread
 staff writer/reporter - “
 managing editor – sierra vista (AZ) herald
 web site

 freelancers – patch in montgomery and prince george counties MD
 websites
 freelancers – litosaur.com
 website
 district sales manager, the herald-journal
copy editor / content producer – NYT company
 online CMS
 multiple platforms
 web content
 health editor, about.com
 website
 online publishing
 website
 sites
 website
 website
 website
 copy editor –groupon
 site
 site editor –groupon
 site

- site
- executive producer
 - digital editing systems
 - web CMS
 - “media ingestion and storage systems”
 - web
 - web series
 - all media platforms
 - web content
 - web components
 - new media
- managing editor – el dorado news-times
- business journalist – charleston regional business journal
 - electronic products
- publisher
 - graphic designer – times community news
 - web ads
 - flash
- opinion editor – gaston gazette
 - online platforms
 - website
 - comment section
 - video forum
 - chat forum
 - social media
 - live public forums
- community media center director, manhattan neighborhood network
 - internet
 - new media
 - emerging technologies
 - technological changes in the media
- hard news reporter: the ottawa herald
 - online
- assignment/copy editor – the ottawa herald
 - online content
- reporter – modern healthcare
 - online
 - blogs
 - podcasts
 - video {online}
 - webcasts
- reporter – institutional investor news
 - web site
- web editor/postpolitics.com, the washington post
 - website
 - digital
 - bloggers
 - digital tools
 - search engine optimization (SEO)
 - digital narrative
- deputy managing editor – AP, NY NY
 - new media

mobile platforms
social media
social networks
citizen media
digital/social media
emerging platforms
iPad/tablets
smart phones
online
connected TV
gaming consoles
all formats
cross-format storytelling
new technology
facebook
twitter
myspace
youtube
vimeo
flickr
digg
google wave
buzz
linkedin
foursquare
gowalla
tumblr
mobile
social media
social media space
web analytics
social media analytics
search engine optimization
social media optimization
supervising features editor – todayshow.com
website
website
site
online news
online communities
social media
internet production
online reporting
CMS
online video
business/general assignment – beloit daily news
sports editor/reporter – carroll county news
features writer – herald bulletin
copy editor/design – times herald
website
managing editor – south florida gay news
online editor – newsday.com

- websites
- online
- website
- website
- website
- web metrics
- site programming
- (web) traffic
- web publishing
- HTML
- CSS
- mySQL
- flash
- public safety reporter – state journal-register
 - website
- petrochemical markets reporter – ICIS
 - website
- government reporter
 - digital formats
- south bend tribune – metro editor
 - websites
 - social media
- copy editor/page designer
- reporter
- contributors – las vegas nightlife website
 - website
 - web
- copy editor – fort collins coloradoan/gannett
- editorial assistant – AP in D.C.
 - web
 - social media networks
 - wikis
 - internet
 - online
 - social networking
- editor – naylor LLC (FL)
 - online publications
 - MIS
 - ezines
 - online guides
 - web content
- editor of editorial page
 - online
- EIC, peer-reviewed research journal
 - web savvy
 - on-line
 - new on-line technologies
- copy editor/designer – roanoke times
 - online
 - website
 - website
 - twitter

facebook
blogs
e-mail updates
text message
breaking news e-mail
text messages
tweets
new technology
internet CMS systems
publisher – weekly missouri paper
ad sales consultant – VOICE news
reporter idaho state journal
online
photo/video
reporter, times-picayune
online
energy journalist – energetics inc
new technologies
computer-based communication tools
general assignment reporter – southern news corp
online
sports reporter – southern maryland today
website
online
power reporter – SNL Financial

Appendix D: Coder practice, tests

Four coders were employed to determine intercoder reliability for the two content analyses. Two were used for the graduate schools analysis, and two were used for the job descriptions analysis. Coders were given three items before they performed the research noted in the Methodology section of this paper: an instruction sheet, a practice sheet, and a coder test.

The instruction sheet was read as a group, with all four coders. This sheet contained the basic idea behind the study as a whole, discussed digital media, and introduced the methodology of each content analysis.

The coders were then split up into their “teams” – two for each study – and were given a “practice” sheet with example descriptions that they analyzed based on the previously given instructions. The descriptions were then gone over as a group and discussed.

Lastly, coders were given a “test” which contained several descriptions. Each coder completed this test individually. When each coder was done, they then compared results and discussed the terms that did not match up.

These three forms are listed in this appendix; the coder results are listed in Appendix E.

Coder Instruction sheet

The Thesis

Ample proof is available showing that the journalism industry is changing. Digital journalism – defined for the purposes of this paper as reporting services conveyed to an audience over a network (i.e. Internet, mobile networks) – has significantly altered the industry. Much research also exists showing that graduate schools' journalism programs are adapting their curriculum to prepare their students for that change. However, little research exists determining the correlation between the graduate schools' adaptations of curriculum and the actual needs presented by industry.

The Study

This paper attempts to display that correlation by performing two content analyses. To determine graduate schools' specific course adaptations, a content analysis was performed on 10 schools' course descriptions to find the frequency of terms relating to digital journalism. To determine needs presented by the journalism industry related to digital journalism, several hundred job descriptions from professional journalism employers were analysed with the same study.

Performing the Content Analysis

For both data-gathering ventures, the same criteria were used to create a "tally" of how many digital journalism terms were used in that sample:

- Any terms dealing with the Internet were considered a digital journalism term (i.e. Blog, website, site, search engine optimization, Facebook, etc.)
- Any terms dealing with mobile devices were considered a digital journalism term (i.e. mobile, cell, handheld]
- The context of a term could be used to determine whether it was a digital journalism term. So, for the word "application" used in the sense "...students will use classical application of journalism law to determine newspapers' legal rights..." it would not count. However, in the sense "students will develop applications to deliver news to consumers on the go" it would count, because "applications" refers to a cell phone.
- In case of a discrepancy, the method which supercedes all others is if the term could have been used before the Internet was invented. So, "electronic journalism" would not count as a term, because that term could be used to describe a pre-Internet area of journalism.

Examples

Consider this example from Northwestern University's Medill Graduate Journalism program:

Advanced Business Reporting (JOUR 423-2).

Weekly seminar in the business reporting field with in-depth assignments. Students gain a deep understanding of the macro and global trends in the economy and business, learn alongside professional traders how to execute electronic trades at the Board of Trade, delve into substantive readings and explore their areas of topic interest. They will spend time developing each story and they will be allowed to work in their medium of choice (print, broadcast, new media.) Students publish a business blog.

This is a course description from Northwestern University. In this course description, two digital media terms would be tallied: **new media**, and **blog**. In this case, new media clearly refers to Internet media, and a blog is clearly an Internet-related term.

Another example, from the University of North Carolina at Chapel Hill:

560 Medical Journalism (HBHE 660, HPM 550) (3).

Prerequisite, JOMC 153. Permission of the instructor for students lacking the prerequisite. Prepares students to work as medical journalists for a variety of media, including print, broadcast, and the Internet. The course emphasizes writing skills and interpreting medical information for consumers.

In this course description, only one term should register as a digital journalism term – **Internet**.

We will now look at an example of a job description:

With our rapid growth, Naylor, LLC is adding a new EDITOR to our award-winning Gainesville, FL team.

Duties include editing and managing print and **online** publications while providing outstanding customer service to trade & professional association clients. Strong organizational skills are necessary to thrive in a fast-paced environment that requires handling multiple aspects of numerous publishing projects. Efficient and effective communication skills are required to convey client expectations to designers and other members of the publishing team. Strong proofreading and Microsoft Office skills are necessary to manipulate data and enter information into our MIS. The ability to set and meet deadlines is imperative.

We offer a competitive salary, performance-based bonuses and other incentives. In addition to successful prior experience in editing and managing print publications, proven experience in writing and editing **ezines**, **online guides** or other **Web content** is preferred. If you are ready to make an investment in your success and thrive in a highly motivated, fast-paced atmosphere, we invite you to apply for this rewarding opportunity.

In this job description, provided by Naylor LLC in Florida, there were four terms which were considered digital journalism terms, as bolded above: **online publications**, **ezines**, **online guides**, and **web content**. The term "MIS" was not counted because the subject of management

information systems existed long before the internet. Microsoft Office did not count because it did not insinuate conveying information over a digital medium – this paper's definition of digital journalism.

Coder Practice Sheet

Graduate School course descriptions: Practice

Example 1: University of North Carolina at Chapel Hill

714.956 Database and Web Research (3). Offered online.

For many people, including journalists, online research means going to Google, entering a couple of search terms and hoping for the best. The information you want might be there, but how long is it taking you to find it? What about the authority and timeliness of that information? Are there other sources available online (or in print) that might provide you with better or additional information? What strategies might improve the efficiency and effectiveness of your research? This course will answer those questions and others. Note: Enrollment limited to students admitted to the Certificate in Technology and Communication program and JOMC graduate students.

of terms: _____

Terms:

Example 2: Northwestern University

Blogging for Journalists (SPECIAL TOPICS JOUR 490-0)

Students learn to cover a topic or beat via the Internet, publish content on the Web in the blog format, take advantage of Internet technologies to present information and build an audience for their work. They also explore ways that journalists can tap into online communities to generate ideas and interest related to a topic and drive traffic to their sites. Readings and discussions (in class and online) explore the major trends and issues in interactive publishing.

of terms: _____

Terms:

Example 3: University of California at Berkeley

J298: Designing and Developing Online News Packages

A two hour weekly session on creating engaging online content. Touching on the technical and aesthetic, skills covered will include: color theory, typography, data visualization, motion graphics, and grid-based Web design and implementation. The course will culminate in a final project or hyper-local news package.

of terms: _____

Terms:

Job Descriptions: Practice

Example 1: South Bend Tribune

South Bend Tribune: Metro Editor

Job duties include overseeing reporters as directed, assigning and editing stories and otherwise helping to produce excellent news and feature coverage of the Tribune's circulation area. Plans and edits pages or sections as assigned by DME. Hours vary, but job will include some weekend hours. Journalism degree or its equivalent and editing, reporting and management experience preferred. Interest and ability to create and share stories through electronic platforms, including traditional websites and social media, is a plus. Sound interesting? Applicants should apply online at www.sbtinfo.com. Equal Opportunity Employer.

of terms: _____

Terms:

Example 2: The Gaston Gazette

The Gaston Gazette: Opinion Editor

Needed: Opinion editor to direct both print and online platforms of community newspaper. The successful candidate will be intently interested in local, regional and state issues and passionate about creating a lively discussion of issues and ideas with readers and online users. This position works closely with other editors and reporters to keep abreast of news and events as well as actively engages with the community to spark debate and input. In addition to writing thoughtful editorials, the editor will encourage audience involvement utilizing all the tools we have available, including print, the newspaper's website and comment section, video and chat forums, social media and live public forums. Strong writing and interpersonal skills are a must; InDesign and technical skills are a plus. Send your resume and five examples of your work to msmith@gastongazette.com, by fax to 704-869-1708 or by mail to Marlene Smith, HR Director, PO Box 1538, Gastonia, NC

28053

of terms: _____

Terms:

Example 1: South Bend Tribune

Progress Illinois: Blogger-reporter

Progress Illinois is seeking a full-time "blogger-reporter" to work out of our Chicago offices. Daily responsibilities include: pitching and producing compelling reporting and analysis, tracking breaking news stories from around the state, monitoring local and national media, editing colleagues' work, and conducting in-depth research. Successful applicants will also have work experience shooting and editing video as well as still shots.

Candidates should have a strong grasp of Illinois politics and be equipped to produce blog posts with a left-leaning perspective as well as file longer-form feature articles. Experience working with content management software is a plus. Competitive salary and benefits for qualified candidates. To apply, please email a cover letter describing your interest in the position, a resume, and two clips to the following address: jobs (at) [progressillinois.com](mailto:jobs@progressillinois.com).

of terms: _____

Terms:

Coder Test sheets

Coder Reliability Test – Graduate School Course Descriptions

Description 1: University of California at Berkeley

J216: Advanced Multimedia

In this class students will learn how to produce sophisticated multimedia projects and make use of various publishing technologies to produce content for online news sites. The multimedia stories and other projects will be produced for the various community-based news web sites created by the J200 classes. The projects will range from complex multimedia presentations, databases and map mash-ups, to use of social media, mobile devices and other platforms for delivering content and encouraging citizen participation. The class is designed to give students a solid understanding of the technical and conceptual skills needed to produce high-quality journalism online and deliver interactive content on a variety of digital platforms.

of terms: _____

Terms:

Notes (if needed):

Description 2: Northwestern University

U.S. Security and Civil Liberties Reporting (JOUR 422-0)

This combined seminar-reporting class, offered each spring in Chicago, meets one full day per week for reporting and another day that is divided between reporting and a seminar. The class will focus on homeland security issues such as terrorism, port security, bioterrorism and pandemics, but also will include a basic understanding of the role of the military, intelligence and humanitarian law. Field trips to Chicago area preparedness offices as well as to Ft. Leavenworth and/or Ft. Riley are anticipated.

of terms: _____

Terms:

Notes (if needed):

Coder test: Job Description analysis

Description 1: Lowell Sun

Lowell Sun – Copy Editor

Picky but personable copy editor sought for busy copy desk for paper AND online versions of Lowell Sun in Massachusetts. We are a news-rich market in the beautiful Merrimack Valley seeking a copy editor who is accurate, precise, a great headline writer for both paper and web, and very deadline driven. We'd like you to have a good eye for design, as well. This is a full-time position likely to work evenings and/or nights. The newsroom is typically friendly and colorful, and we'd like you to be a positive person bringing suggestions and solutions to our expanding products. This is a full-time position working evenings/nights. Must have minimum of three- to five-years documented experience and pass a copy editing and headline writing test. Please send salary expectations. Send an email to mkguzda@lowellsun.com. Put COPY ED in Subject line of email. Write no more than 350 words why you fit the job description. Send no more than five of your best headlines. Include your CV.

of terms: _____

Terms:

Notes (if needed):

Description 2: The Leader-Telegram

The Leader-Telegram: Reporter

A 25,000 circulation, seven-day morning newspaper in Eau Claire, WI, has an opening for a full-time, entry-level, general assignment reporter. This person will cover assignments ranging from breaking news to public events, meetings, and an occasional feature. Digital photography skills required. Applicants should understand the importance of multimedia in a newsroom and have online and social media reporting skills. Must be comfortable with the Internet, Facebook, and/or Twitter. This position is also responsible for working with the newsroom staff to update the online newspaper, as well as helping gather and post breaking news. Candidates should have strong newspaper writing and reporting skills and a solid knowledge of Associated Press style. We are looking for a person who can generate story ideas and work independently. Two years of experience at a daily newspaper is preferred.

of terms: _____

Terms:

Notes (if needed):

Appendix E: Coder Results

Coder results are split into two groups: the two coders who analyzed course descriptions are in the first group, and the two analyzed job descriptions are in the second.

Graduate School Content Analysis Coder Results

	NW	U.C.	UMD	UNC	LSU	WISC	UF	WVU	IU	CU	Totals
Original Research	17	7	8	15	3	10	13	15	4	22	114
Coder 1 (BB)	16	8	9	16	2	9	11	10	4	22	107
Coder 2 (KD)	17	6	6	15	5	7	8	10	3	26	105

NW = Northwestern; U.C. = University of California at Berkeley; UMD = University of Maryland; UNC = University of North Carolina at Chapel Hill; LSU = Louisiana State University; WISC = University of Wisconsin; IU = Indiana University; CU = Columbia University.

Over these fifty course descriptions, the original research for this study noted 114 terms that dealt with digital media.

Coder 1 noted 107 terms, which equals 93.8% of the amount of terms in the original research for these same course descriptions.

Coder 2 noted 102 terms, which equals 89.4% of the amount of terms in the original research for these same course descriptions.

Job Descriptions Content Analysis Coder Results

	Job Descriptions: Total results (30 analyzed)
Original Research	75
Coder 1 (AC)	89
Coder 2 (SE)	81

Over the 30 job descriptions analyzed, the original research for this study noted 75 terms that dealt with digital media.

Coder 1 noted 89 terms. The original research equaled 84.2% of the amount of terms found by this coder.

Coder 2 noted 81 terms. The original research equaled 92.6% of the amount of terms found by this coder.

VITA
Connor F. Sattely

EDUCATION

Candidate, Bachelor of Arts in Political Science. Expected date of graduation: May 2011.

Penn State Erie, The Behrend College. Minor in International Studies. Research interests: multilateral treaties, language learning. Active member, Omicron Delta Kappa National Leadership Honors Society.

Candidate, Bachelor of Arts in Communication Expected date of graduation: May 2011.

Penn State Erie, The Behrend College, Schreyer Honors College. Research interests: digital journalism, pedagogical techniques. Active member, Lambda Pi Eta National Communication Honors Society.

Level B2++, Institut de Touraine, Tours, France. Two one-month study abroad programs in Summer 2010.

Studied language skills, international relations, French literature, and French civilization. Graduated with B2++ language proficiency – intermediate advanced.

RESEARCH EXPERIENCE

Working titles only. Not to be cited without permission.

Sattely, Connor. “Increasing Digital Journalism Education in Post-graduate Studies and its Relevancy to Industry Positions.” Thesis, Schreyer Honors College for B.A. in Communication and Media Studies. Submission expected April 2011.

Gamble, John; Barber, Claire; Slomski, Bethany; Sattely, Connor. “Choice of Official Text in Multilateral Treaties: The Interplay of Law, Politics, Language, Pragmatism and (Multi)-Nationalism.” Manuscript nearly complete; submission expected Feb. 1, 2011.

Comprehensive Statistical Database of Multilateral Treaties (2010-2011). Assisting Professor John Gamble in maintaining, improving, and developing a statistical database containing information about over 6,000 multilateral treaties signed between 1500 and 2005. Research focuses on involvement of inter-governmental organization in multilateral treaties.

TEACHING INVOLVEMENT

Undergraduate Teaching Assistant, Dr. John Gamble, PL SC 003H, Honors Comparative Politics FA10.

French tutor, Learning Resource Center, Lilley Library, Penn State Behrend. Fall 2010-Spring 2011. Worked with Professor Kathryn Wolfe to assist undergraduate students in learning French language skills.

UNIVERSITY INVOLVEMENT

The Behrend Beacon. Student newspaper at Penn State Erie, The Behrend College.

2009-present: Editor-in-Chief. *Most Creative Program award, Penn State Erie, The Behrend College.*

2008-2009: Managing Editor. *Best Student Organization award, Penn State Erie, The Behrend College.*

2007-2008: Entertainment Editor. As a freshman, began and led the Entertainment section.

Student Government Association – Governing body of Penn State Behrend student population.

2010-2011: Director of Elections. Rewrote 2 pages of SGA Constitution and all election materials.

Spring 2008: Senator, Director of Elections

Political Science Society

2010-2011: Chairman. Parliamentarian at meetings; organized several voting registration drives.

College Democrats: Active member. 2010-2011.

Penn State Behrend Curriculum Task Force. University effort to evaluate, develop curriculum. 2010-2011.

Alternative Spring Break (ASB): Community service travel trip for students at Penn State Behrend.

2009-2010: Founding member of ASB Planning Committee; Participant, New Orleans, La. trip

2008-2009: Participant, Gulfport Ms. trip

Omicron Delta Kappa: National Honors Leadership Society. 2009-2011.

Lambda Phi Eta: National Honors Communication Society. 2009-2011.

Pi Sigma Alpha: National Political Science Honors Society. Charter member, 2010-2011.

2010-2011: Charter member. Began Penn State Behrend chapter in Spring of 2011.

Matchbox Players: Thespian and comedic improvisation organization.

2010-2011: Treasurer. Responsible for budgetary matters, funding requests, maintenance of accounts.

HONORS AND AWARDS

John W. Oswald Award for Journalism. Spring 2011. Pennsylvania State University.

University-wide award recognizing one senior's leadership in journalism, speech, and mass media.

T. Reed Ferguson Award. Spring 2010. Penn State Erie, The Behrend College.

Awarded annually to a junior whose scholarship, leadership, and citizenship affects fellow students through academic and out-of-class involvement.

Council of Fellows Leadership Scholarship Award. Spring 2010. Penn State Erie, The Behrend College.

Most Creative Program Award: *The Behrend Beacon*. Spring 2010. Penn State Erie, The Behrend College.

Conceptualized and implemented a program which created four newspaper sections in the student newspaper: Engineering, Science, Humanities and Social Sciences, and Science. Awarded Most Creative Program Award due to its inclusion of these historically neglected areas of the student body.

Best Student Organization Award: The Behrend Beacon. Penn State Erie, The Behrend College, Spring 2009.