Online news

A survey of instructional methods

by

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Contents

Abstract

Online journalism educators are confronted with difficult questions as the news landscape changes rapidly. They must decide whether they should teach emerging narrative forms such as blogging and podcasting, how heavily they should pursue multimedia presentations and to what extent they should involve audiences in the production of news. In addition, many educators must resolve an underlying tension between teaching journalism and teaching the skills that support production of these new forms of storytelling.

This project was an attempt to create a snapshot of practices to better help educators serve their students.

I surveyed online journalism educators at colleges and universities in Canada in an attempt to find out what they were teaching, how they were teaching it and what learner outcomes they were hoping for. I used grounded theory — a methodology for developing theory through an overlapping process of data collection, note taking, coding, sampling and comparison, not unlike the process of journalistic inquiry — to interpret the data.

I found that some educators were unleashing teaching potential and reducing the burden of skills instruction by investing heavily in collaborative content production technology. This effort equipped them to better teach emerging narrative forms and lessened the burden of skills instruction. As well, it improved student learning by prompting the educators to forgo assignments involving independent website projects in favour of ones that encouraged students to work together in the production of news.

Introduction:
Many opinions, little data on the practice of online journalism

Despite entering its second decade of existence, the field of online journalism is still a new one in many respects. Little research exists into the media industry's pursuit of online journalism or how its various forms are affecting the people who consume them.

The lack of data is compounded by the speed at which the industry is changing. Studies of the industry conducted three or even four years ago have aged as mainstream media evolve to offer broader coverage in more formats. Surveys of effects on users are limited in scope too as consumers become more technologically accomplished and adopt high-speed Internet in greater numbers.

Research into the field of online journalism education is particularly rare. Research concerning education in North America is almost non-existent.

So what journalistic forms should educators be teaching? Many workplace editors who once demanded mainly research and copyediting skills for the task of posting static text and image content now need workers who do that, as well as select video clips and manage reader feedback.

What skills should they be imparting to their students as they seek to find jobs? In the mid 1990s journalism school graduates found their degree, coupled with a basic knowledge of HyperText Markup Language, opened many doors to the young industry. Now, most news organizations use content management systems to standardize the presentation of online content and ease the technical burden on content editors. At the user level, self-publishing, or blogging, software is now only slightly more complicated than word processing software.

Indeed, students today are likely to find that many of the most engaging forms of online journalism are more than static text and pictures on a webpage.

The Online News Association honoured the Canadian Broadcasting Corporation with a 2004 Online Journalism Award in the service journalism category for a story that empowered Canadians to query a database of adverse drug reaction data with the names of drugs in their medicine cabinets. The association granted an award to the *New York Times* in 2005 for its series on class in America that included an interactive Flash-based animation to help readers apply definitions of class to their own circumstances. Awards to even small news outlets in 2005 acknowledged excellence in multimedia storytelling. The *Desert Sun* in Palm Springs, Calif. won a breaking news award for coverage of a murder case that used audio of a 911 call, video of an important news conference and a photo slide show to explain the police investigation of a crime scene.

But multimedia storytelling is only one aspect of the changing news environment.

The *Toronto Star* has a crew of reporters engaging readers with personal voices in more than 10 different weblogs on its site. The *Globe and Mail* involves its audience in online chats with reporters about their stories. In addition, both the *Globe* and Canada.com have rebranded themselves in the past year to frame news delivery as part of an ongoing conversation with audiences.

What task does this set out for online journalism educators? Unfortunately there is little research to offer suggestions.

Educators face multiple challenges, such as teaching core journalistic practices while at the same time training students in evolving technology. As Mindy McAdams, an online journalism professor at the University of Florida, summarizes:

> The opinions run the gamut from 'Just tell the students to read the Help files; don't teach software explicitly' to 'Teach them to do all the tasks they might do in an online journalism job, including writing JavaScript and editing video.' [The] decision is made more difficult by working online journalists who say, 'Just teach them how to write and get the facts straight. We can teach them the software after we hire them' (McAdams, 2004, para. 10).

Many consider multimedia to be an important component of effective online news, but multimedia production requires a considerable skill set. This poses a significant challenge for students when instructors have limited instructional time, teaching assistants and technology — a fact underlined in a 2001 study by a team involving Carleton University's Peter Johansen and Chris Dornan.

But the industry may not want students primed with the latest content production technologies. An unpublished study by C. Max Magee in the spring of 2006 found that online news managers are looking primarily for detail-oriented collaborators with well-honed skills in copyediting, not technical production.

Similarly, Ann Brill, a journalism professor at the University of Kansas, found in her 2001 study that working online journalists ranked reporting and story idea generation low on a list of key attributes for their jobs. Instead, the skills they ranked highest were news judgment, online research and engaging their audience.

The conclusions lead educators to wonder whether training students to be online reporters is even a worthy goal. Indeed, few working online journalists gather news specifically for this medium. Most are editors, combining and enhancing content from other media partners.

Robert Niles (2005), editor of the *Online Journalism Review*, argues blogging was one of the most useful exercises for aspiring online workers. He said educators should make it a key part of any online journalism curriculum.

Some advocates of participatory journalism — loosely defined as involving audiences in the news gathering process — see the online journalist evolving to become a mediator of information — an expert who manages conversations with audiences, moderates discussion forums and builds participatory communities of news readers. Author and participatory journalism advocate Dan Gillmor (2003) argues: "If contemporary American journalism is a lecture, what it is evolving into is something that incorporates a conversation and seminar" (p. 79).

The range of opinions highlights the difficulty educators face as they try to draft an effective online journalism curriculum.

Larry Pryor, an assistant professor at California's Annenberg School of Communication, states that American online journalism educators attending a Poynter Institute seminar in 2005 expressed considerable frustration with their plight. They reported that administrators were resisting their changes to journalism curriculums and were dragging their feet in offering adequate facilities. "If the group had a common plea," Pryor (2006) states, "it could be this statement: 'I want to come back with an answer that works'" (para. 7).

As the institute's Howard Finberg (2005) remarked, "In a complaint frequently heard at Poynter seminars, some teachers feel ill-equipped to teach some of the digital skills needed by today's converged journalists" (para. 21).

In short, the field of online journalism education sorely needs more research — especially the practical kind that benefits industry workers and educators.

This project attempts to provide some insight into the kinds of teaching conducted at Canadian journalism schools. It surveys educators as to the yardsticks they are using. It

will attempt to synthesize their comments into a picture of the state of online journalism education in Canada.

As the news industry moves toward more interactive models of storytelling and audience appeal this study prompts online journalism educators to reflect on their teaching and how they are adapting to this changing environment. It asks them to identify issues they believe are important to journalism and news delivery in the digital age. It seeks to answer the research question:

What do Canadian online journalism educators teach, how are they teaching it and what learner outcomes are they hoping for?

Literature Review

Consumption of online news and industry practices

Most Canadian journalism schools aim to prepare students to work in the online news industry. Many arrange internships at organizations to assist them. So, in order to discuss benchmarks for student achievement, it's important to look at the existing research into the practices of online news outlets and the research that supports them.

Fredin (1997) conceptualized online news stories as being truly non-linear documents that "through their invitational structure may bring a more flexible and profound understanding of issues than many people are currently able to get as a practical matter from existing media" (p. 39). He contended that simply offering external links in stories was insufficient to satisfy the needs of online news consumers. He envisioned narratives built in sections and associated via hypertext that blurred the distinction between traditional, stand-alone stories offered by news outlets. These narratives, he called "metastories," would include features such as on-demand glossaries of frequently referenced names and topics, and also functions that would allow users to apply their own summaries to specific story elements. The goal was to allow users to construct their own stories by choosing the story elements that interested them.

In reality, few media outlets have taken up the challenge of offering news in narrative structures as complicated as Fredin envisioned. Massey (2004) found "the practice of non-linear storytelling for daily news was rare" in a survey of 38 U.S. daily news sites (p. 100). He speculated that this could be related to findings in the Brill (2001) survey that few online journalists were producing original stories.

However, the fundamental element of Fredin's vision — narratives built from sections and related by hypertext links — is a structure that many researchers see as useful for online audiences.

Ketterer (2001) found that news consumers want more from their online publications than they can get from printed newspapers. His study found they drew significant value from being able to follow links in a news story according to their interest. He concluded that, "participants who had links [in the version of the story they were exposed to] "spent more time reading and were better informed than those who did not" (p. 11). He believed this supported a story model of layered information, where "links provide more information to those who want it" (p. 100).

Indeed, authors of online journalism textbooks frequently cite this model for online information, often attributed to the research of usability expert Jakob Nielsen. Nielsen (1997) found that online readers disliked scrolling and instead preferred background information relegated to secondary pages. He recommended authors "make text short without sacrificing depth of content by splitting the information up into multiple nodes connected by hypertext links" (Nielsen, 1997b).

Online journalism textbook authors have concluded from this research that online journalists should create stories layers or tiers. They argue this format is especially useful when authors add sidebar information, background details or multimedia elements. Ward (2002) argues, "separating the story into chunks … increases the number of entry points for the distinctive elements of online" (p. 124). De Wolk (2001) says, "The journalist can add as much information and as many layers as necessary to tell the story well" (p. 14).

However, this model of layered news stories has been poorly researched to date. And the few existing studies provide unclear endorsements.

Lowrey (2004) found that while non-linear story formats gave readers a greater sense of control of the story, they had no significant effect on the degree of perceived credibility, reader involvement or knowledge acquisition in relation to the same story presented in a non-linear format. He concluded further that, "these findings sound a cautionary note to online journalists and to online journalism instructors who have unquestionably endorsed non-linear formats for web-based news stories" (p. 93). He concluded further that "media educators should be cautious and reflective in teaching the techniques of 'chunking', 'layering' and associating linking in the production of web news" (p. 94).

Further, Van Oosendorp and Nimwegen (1998) argued that news consumers had a limited capacity to absorb linked information. They found that news readers had lower levels of recall for information they had to scroll to find a link to.

Still, researchers of online news consumers have found support for many of Nielsen's other recommendations. Nielsen's research led him to conclude people should author web pages in a format that is scannable and concise. He recommended generous use of story summaries, highlighted keywords and bullet lists. One of his main conclusions was support for a story model long used in print journalism — the inverted pyramid, whereby reporters start their story off with a general summary and then proceed to add increasingly more specific details. The arguments for this story structure online have resulted in features common on many web stories — nutgraphs, or sub headlines,

that provide a level of story summary secondary to the headline, and bolded subheads sprinkled throughout the story that aim to offer the reader further snapshots of the story.

In studying how news readers respond to stories in layers and links, researchers found that readers crave summaries of the story both on the page itself and in links connecting to it (Lowrey 1999; Vargo, Schierhorn, Wearden, Schierhorn, Endres, and Tabar, 2000). Vargo et al. (2000) concluded that readers want as much information as possible in deciding whether or not to click or reader further into a story. They argued: "It is evident that the more information they had, the more comfortably they could make that decision" (p. 52).

As well, researchers at Stanford University and the Poynter Institute for Journalism found in their 2000 study of online news readers' eye movements that eyes go first — before photos or graphics — to text that contains briefs or captions (Lewenstein, Edwards, Tatar and DeVigal, 2000). A follow-up survey by Outing and Ruel in 2004 provided further evidence that summary descriptions in news stories were popular with readers.

However, news outlets that in the 1990s featured stories consisting solely of text and static images have, for the past few years, been including multimedia elements — content with audio, video or animations coupled with text, typically in Flash format — to their stories. Still, this is a fairly recent development. At least until the early years of this decade, few online news outlets used multimedia (Dibean and Garrison, 2001; Harper, 1996; Kamerer and Bressers, 1998). However, Greer and Mensing (2004) found that two thirds of U.S. newspapers employed multimedia features on their sites.

Many online journalism textbook authors assert that multimedia is a key tool in the telling of news stories online. De Wolk (2001), for example, contends that multimedia provides the news consumer with a richer experience than text, arguing, "Multimedia is a hallmark of what will distinguish the news and information of the future. … The ability to click to see, hear and read more or to send a message to someone in the story provides the audience with an enormous amount of power" (p. 16).

Indeed Zerba (2003) found that the primary reason online news consumers clicked on multimedia packages was because they were interested in finding out more about the story — not because they were intrigued by the gimmickry of the technology.

However, other studies suggest that multimedia offers few benefits to the news consumer. The eyetrack study of Outing and Ruel (2004) found that news consumers had better recall of information in text than in multimedia graphic format — especially when the reader was unfamiliar with the topic at hand. Sundar (2000) drew a similar conclusion. Berry (2001) found multimedia in a news story didn't affect comprehension, recall or interest in the story. Further, Nielsen (2005) said eyetracking data suggests the typical news report format that includes "talking heads" — either interviewees or reporters talking onscreen — frequently bores online audiences to distraction within seconds. He used the data to bolster his contention that video, at least, needs to be used in only selective circumstances online.

As De Wolk (2001) suggested, interactivity too is a key attribute of the online experience. At its simplest, it can take the form of an e-mail link to the reporter's address, but in more advanced applications includes live chats, polls, surveys, or discussion board forums for audience feedback (Deuze, 1999; Schultz, 1999).

Researchers found that, until the beginning of this decade, few online news sites had interactive functions (Kamerer and Bressers, 1998; Massey & Levy, 1999; Schultz, 1999). Even a few years later, Greer & Mensing (2004) found that "although interactive features are significantly more prevalent today than in 1997, the only real growth in interactivity was the addition of reporters' e-mail addresses" (p. 109). They found that only 15.9 % of sites featured had any real-time interactivity and suggested that hosting successful interactive elements, such as discussion forums, remained a challenge for many news outlets.

Still, cheap, easy-to-use interactive software has fuelled an explosion in citizen media — blogs and collaborative news sites — since 2003. A study published by the Pew Internet & American Life Project in July 2006 estimates 12 million Americans keep a blog and 34% consider themselves to be journalists. The vast majority (90%) had interactive features, such as discussion areas on their sites.

Finally, Wei (2006) suggests "the news industry is undergoing a period of transformation" driven by "emerging collaborative news organizations (such as OhMyNews, Wikinews, Global Voices, Digg, Slashdot, Newsvine, and Now Public) where the degree of innovation is most dramatic. He analyzed 3,167 responses from participants in collaborative communities and found that while only a small percentage mentioned an interest in pursuing journalism, "the potential for greater integration of mobile devices promises … that even more interesting collaborative news models will emerge" (para. 672).

Methodology

Theoretical framework

This project used grounded theory, a research methodology originally conceived of by Glaser and Strauss (1967) as a means of generating theory in qualitative research.

It emphasizes the discovery and development of theory through an overlapping process of data collection, note taking, coding, sampling and comparison.

It differs from most other approaches in that it aims to help researchers grasp theory as it emerges from research, instead of using theory to test data once the collection stage is complete.

Researchers using grounded theory don't execute their research processes in a linear form. Instead, the processes of data collection, analysis and theory generation are fluid, often occurring simultaneously. As well, it conceives of researchers as social beings — not impartial observers — complete with valid previous experiences that help them better understand the subject being observed (Baker, Wuest, & Stern, 1992, p. 1357).

The methodology seemed well suited to the project because the scarcity of data on online journalism education and the newness of the field meant there were few theories to verify and little external data for comparison. It was also important to have leeway within the research method to revise and sharpen lines of questioning as sources illuminated the issues involved. Finally, it seemed most useful to the participants who requested a copy of this research that they glean straightforward insights into what was happening in their field without the top-down application of theory.

Two key components of the Glaser and Strauss (1967) model were the importance of theory emerging from data and the role of the researcher in enabling this. Grounded theory, the authors argued, requires hypotheses to be "systematically worked out in relation to the data during the course of the research" (p. 6). Further, they asserted that reading too much of other people's thoughts on a subject before acquiring data is an obstacle to this process of inquiry. In fact, they stated, reviewing literature prior to a study threatens the quality of results, arguing:

> An effective strategy is, at first, literally to ignore the literature of theory and fact on the area under study, in order to assure that the emergence of categories will not be contaminated by concepts more suited to different areas (p. 37).

At first glance, these theoretical underpinnings seem a comfortable fit with this study's subject matter and the audience for the results — journalism instructors. The methodology of journalism is, by its nature emergent, as reporters hone story ideas and interpret complex issues by researching, interviewing and corroborating. Further, the notion of the researcher aiming to begin a study with a "blank slate" of pre-conceived theories and categorizations compares favourably with the idealized aims of objectivity in reporting — "the effort to understand the reality outside our minds" (Cumming & McKercher, 1994, p. 14) and journalistic synthesis — making "it your own, rather than writing in bits and pieces of your sources' language" (Cumming & McKercher, 1994, p. 12).

Cumming & McKercher (1994), in fact, made powerful (if unintentional) allusions to key elements of grounded theory when they compared journalists to historians. The authors cited a quote by historian Barbara Tuchman as closely representing the work of journalists: "If the historian will submit himself *to* the material instead of trying to

impose himself *on* the material (italics are the author's), then the material will ultimately speak to him" (p. 22).

However, practitioners of grounded theory have pointed out shortcomings in this original model. Some have suggested the researcher requires, in fact, extensive pre-understanding of the subject matter in order to focus research effectively (Allan, 2003; Seldén, 2004). Others have called the coding process — specifically the model of word-by-word analysis advanced in later years by Strauss and Corbin, confusing, difficult to administer and overly mechanistic (Sarker, Lau & Sahay, 2000; Allan, 2003). Another has called the initial grounded theory approach rigidly positivist and unrealistic in its conception of human nature.

Charmaz (2005) argued for a constructivist approach to grounded theory that accepts the researcher as fully human with a unique view of reality. She believed researchers must firmly locate themselves in the real world, not try to divorce themselves from it. She saw data analysis as an interpretation of reality, not an objective reporting of it. In short, she argued:

> A constructivist grounded theory adopts grounded theory guidelines as tools but does not subscribe to the objectivist, positivist assumptions in its earlier foundations … It does not assume that data simply await discovery in an external world or that methodological procedures will correct limited views of the studied world. Nor does it assume that impartial observers enter the research scene without an interpretive frame of reference (p. 509).

Glaser (2002) took issue with Charmaz (and her earlier writings on the subject), contending that his initial conception of grounded theory fully incorporated constructivist approaches. "Let us be clear," he argued. "Researchers are human beings." However, he immediately maintained that personal bias and interpretations needed to be "rendered

objective to a high degree by most research methods and grounded theory in particular by looking at many cases of the same phenomenon …to correct for bias" (para. 44).

But it's Glaser's treatment of "data as something separate from the researcher" and his implied aspiration to entirely neutral analysis that Charmaz (2005) saw as problematic (p. 510). "What we know shapes, but does not necessarily determine, what we 'find,'" she argues (p. 510).

Indeed, Charmaz's view of grounded theory seems a better theoretical fit for this study. It parallels Cumming & McKercher's (1994) conception of a more appropriate and nuanced ideal of journalistic impartiality — that reporters simply try to be objective about their subjectivity. As well, it accommodates a key factor of this project — that I am already immersed in the field of online journalism, by nature of my full-time job. I have read extensively on the subject. I have well-formed opinions on some of the questions I pose in the study. I've had previous professional dealings with one of the participants. In short, while I aim for a neutral analysis, my biases may not be correctable; my past experiences may shape the study beyond my ability to understand their full implications.

Charmaz further argued strongly for a critical approach to grounded theory — one that would apply lenses of power and privilege to the subject matter. The study's findings certainly opened the door for exploration using this approach. For example, the demands and challenges cited by participants prompted inquiry into:

- the reasons why many courses are taught by part-timers
- whether institutions' requirements for tenure (extensive professional experience and academic certification) worked against the hiring of instructors who could teach effectively in a still new and rapidly-evolving field driven by young audiences
- whether the structure of the courses (duration, scope, etc.) set instructors up for failure in teaching multi-media production — especially when many institutions

dedicate whole courses to the production of content in a single medium.

However, a critical approach didn't seem to address the fundamental topics I was interested in exploring — the nature of teaching methods and their success with students. That is, I was less interested in the plight of the instructors themselves, than in how educators conducted their instruction. An interpretative approach seemed likely to yield the most useful data.

Finally, some other research methods seemed initially attractive but had shortcomings. Investigation of a single issue inherent in a phenomenological approach was simply too restrictive. An ethnographic study would have yielded rich data, but on-site interviewing and observation were impractical within the circumstances available for this study. An action research approach would have been useful too in exploring this community of practice, but, again, the available circumstances made involving participants in the research process difficult. And lastly, longer case studies might have been ideal in providing richer description of teaching practices. But ultimately, the circumstances of the participants were quite different and sampling a broad range of perspectives seemed likely to yield optimal results. Using fewer, shorter case studies seemed a solid alternative.

Research procedure

This project consisted of phone interviews with instructors at English-language Canadian colleges and universities who taught a practical course in online journalism, new media writing or reporting. The Association of Universities and Colleges of Canada and the Association of Canadian Community Colleges list 16 such institutions in the

country. I sought to find faculty members who required their students to produce a form of journalism or narrative opinion online for their course in 2005-06. I did not include instructors who taught solely Internet research or production skills, or instructors who taught a lecture or seminar devoted exclusively to the discussion of new media issues. This study aimed to capture the experiences of instructors teaching students how to produce journalism — not discuss it or master the mechanics of publishing it.

I found the instructors by browsing each institution's website to find suitable courses and contacts. I contacted the schools by phone or e-mail if they didn't appear to offer a suitable course or didn't provide current contact details for their instructors. The aim was to interview 10 to 15 instructors for the project.

I introduced my project in a personal e-mail message to prospective participants and directed them specifically to a website about the project <http://www3.ns.sympatico.ca/tcurrie/project/>. If they indicated an interest in participating, I asked them to reply to an e-mail consent statement that outlined the terms of the research (see Appendix B) and suggested times for a phone interview.

The interview consisted of 16 questions (see Appendix A) — some of them multi-part. Four questions were factual and aimed to extract information about the instructor's circumstances. Four dealt with the instructor's goals for students. The final eight concerned the content and methods of teaching. I also asked participants to send me a copy of their course outline.

The interviews lasted between 40 minutes to an hour. I contacted a few participants a second time via either e-mail or phone to prompt them to clarify or expand upon their comments.

I recorded the interviews and used grounded theory to extract themes and sub-themes from our conversations.

Finally, I sought approval from three to use their comments and identities as case studies of approaches to the study of online journalism. I assured all of the other participants they would remain anonymous.

I selected participants for the case studies primarily according to the depth and range of the subjects' responses. As well, I attempted to choose interview subjects from different environments (large/small institution, college/university, type of course taught) who addressed different issues in online journalism education.

I chose grounded theory because the scarcity of data on online journalism education and the newness of the field highlighted the need to examine it without the constraints of pre-determined analysis. This field is still so new that prospect of discovering emerging themes seemed likely to yield clearer results than attempting to place it in a greater theoretical context. It was also important to have the leeway to pursue divergent avenues of questioning with the participants, because their circumstances were dissimilar in important ways. This is, in part, because academic institutions are still experimenting with how to teach courses that are, in many cases, only a few years old. Further, it seemed most useful to the participants who requested a copy of this research that they glean straightforward insights into what was happening in the field without the top-down application of theory.

I applied grounded theory by taking notes during the interviews. My comments noted insightful responses from the participants, posed further questions to them and referenced comments from other instructors. Immediately following the interview, I

began the process of coding by briefly summarizing the participant's situation, their aims and approach at the top of the collection of notes for each participant.

I then transcribed the interviews into an electronic document, adding memos in coloured text beside the participant's comments that highlighted relationships to issues addressed by other participants.

I continued the coding process by re-reading the interview transcripts and categorizing responses in a separate document according to emerging themes. I then used these themes as a basis for re-reading the interviews a third time and examining participants' responses in the new context. I returned to reading the interviews a fourth time as I began the process of writing this report and describing the themes in greater detail.

Findings

Data set and considerations

This survey involved 13 instructors at 12 Canadian colleges and universities.

There are, in fact, 38 institutions offering journalism programs in Canada — 29 institutions offering diploma programs listed by the Association of Canadian Community Colleges and the nine universities offering degree programs recognized by the Association of Universities and Colleges of Canada. Two are French-language programs, which fell outside the scope of this study. Of the remaining 36 institutions, 18 did not offer a course in online journalism. One offered a seminar in new media issues, but this course too fell outside the scope of the study. Another institution was in the process of implementing a course for 2006-07 but did not offer it in 2005-06.

At the remaining 16 colleges and universities, three instructors either did not respond to requests to participate or were unavailable to participate within the timeframe of this study.

With the 12 institutions that participated, it's important to note that the online journalism courses, the programs they are part of, and the institutions themselves are quite different. Consequently this diversity poses a challenge to comparing them directly.

One obvious issue is the inclusion of both colleges and universities in the study. According a definition provided on the Association of Universities and Colleges of Canada website (2006), undergraduate degree programs "require three or four years of full-time study" and may offer an honours degree involving "a higher level of concentration and achievement within the honours subject" (para. 1). Community

colleges offering diplomas tend to offer one and two-year programs and, according to the

Association of Canadian Community Colleges website (2006), "share the primary

functions of responding to the training needs of business, industry [and] the public

service sectors" (para. 3). Logically then, instructors' teaching aims are likely to be

coloured by the role of the institution.

While this study did find that college instructors tended to emphasize job training

and university teachers stressed the broader role of the journalist in society, this

distinction wasn't at all clear-cut. One of the instructors most focused on journalists' role

in their community — and least focused on teaching technical skills — taught at a

college. Conversely, one university course was among the most focused on website

creation skills.

Similarly, a crucial distinction between institutions is their online journalism

offerings were not all part of undergraduate programs. The study included three

universities whose instructors taught the course within a master's program. Clearly this

meant these instructors aimed to meet a higher academic standard than the others.

However, the general aim of the student work — journalism presented in an online form

— was comparable to the other institutions.

Another consideration is the varying sizes of the institutions and their scope. Some

of the universities have more than 200 students enrolled in their journalism programs and

appeal to students with aspirations to work in Canada's national online newsrooms. By

contrast some of the college programs are strictly regional in their appeal with as few as

10 students enrolled at a time. An instructor at one program, for example said he prepared

students to lead the web operations of small community newspapers, while also helping

produce the print product.

Finally, the existence of complementary programs at larger institutions frequently meant an instructor had greater teaching resources than others. For example, two instructors benefited from the assistance of staff and faculty in a graphic arts program at the same institution. These instructors said they had more time to focus on journalistic matters, having expert help with the technical aspects.

Courses and the instructors

Of the 12 institutions that participated in this study, nine offered a single course in online journalism. The remaining three institutions offered at least two courses. Two institutions concentrated heavily on online journalism, offering it as either the sole component of their program or as a stream of courses within it.

The courses typically had names such as Online Journalism, Introduction to Online Journalism, Online Writing and Introduction to New Media. In every case the institution offered the course over a single term or semester, although courses at three institutions led into a second single-term course.

All of the 13 instructors were at different institutions except for two, which taught different online journalism courses at the same university. All of the other instructors were the sole online journalism teacher at their institution.

Ten instructors were either full-time faculty or a contract equivalent. Three were part-time instructors.

Most taught between nine and 20 students in their online journalism course. But three typically had between 30 and 50 students.

Seven institutions offered the course to students as an elective. The other five required their students to enroll.

All of the courses had a lecture or seminar component in addition to substantial lab time. Most instructors pegged the practical component at 50-70% of available class time.

Course content

Many of the educators taught an elective course that introduced students to the topic midway through their program of study. Others taught their course as a senior-level production workshop that functioned like a working newsroom. Still, the instructors stressed common themes in describing the content of their courses. They frequently mentioned topics in the following list, although no single person addressed them all. Core elements of their curriculums included:

- understanding the nature of the medium
- writing for the web
- constructing pages using Hypertext Markup Language and Cascading Style Sheets
- using software for webpage creation, image editing and uploading
- grasping the fundamentals of website design
- gaining familiarity with emerging narrative structures such as blogging and podcasting
- comprehending technologies such as headline syndication (RSS) and content sharing (tagging)
- experimenting with non-linear story forms, including multimedia
- discussing current issues in journalism and society
- debating ethical issues

All of the educators said they didn't teach core journalistic skills in the course but expected students to reinforce the skills they acquired in other courses.

Three educators described their courses as following a "print plus" model, in which students take content prepared for print and adapt it for use on the web using basic

interactive elements and a format pleasing to web readers. "The trick is to get them

thinking beyond journalism as writing for a newspaper," Instructor 4 said.

Instructor 12 described her aim this way:

What I try to do with students is to teach them to think about more bang-for-your-buck kind of news coverage. We teach them that all stories — no matter format they are initially found on — can be transferred and posted on a website in a far more interesting manner. So they add links, they add sidebar stories, they add a photo gallery if it lends itself to that. [And then at an advanced stage, perhaps stream some video].

Educators' typical objectives were getting students to write a short, punchy narrative

with a hard news lead and formatting that attracts readers with short attention spans.

Instructor 10 made her first assignment an online rewrite from a published newspaper

story:

I'm looking for bold subheads, a proper headline for the story that can speak to an audience that is not [local]. And at least some external links — not to other news sites but to relevant websites that are not their homepages. So that's the first thing to put into practice: writing basics, breaking up the text. It's a short, simple story, about 350-400 words — adapt it for the web.

Three educators asked their students to critique a website in terms of how the

authors presented the information. They said critiquing aspects such as user navigation

was important in helping students understand the concerns of online readers.

"I get them to go to cnn.com and I ask, 'Where does this site break down?'" said

Instructor 10. "At what point don't you don't know where you are?"

Three other instructors asked their students to create a subject-specific website — or

zine. This was a website, created either independently or in collaboration with others, that

involved original reporting and served as a means of testing students' assimilation of

course objectives, including online writing and design.

Many of these educators structured their assignments to assess students' grasp of course goals in sequence. Other educators opted to offer concentrated technical instruction at the beginning of the course and then to have students undertake similar reporting assignments each week. The goal was to structure their course as a working newsroom.

"We treat it as a professional workshop," said Instructor 8. "We're kind of beyond instructional stuff and beyond class assignment stuff. We treat it as, 'We're now providing you with an opportunity to produce professional work and publish it for the world to see.'"

This same instructor said her curriculum borrowed heavily from the broadcast model. She said much of the student work was still text-based, but she required them to augment their stories with multimedia content such as interactive maps, audio slideshows and timelines. As well, she taught them they should phrase the text itself like a radio or television script.

> You have to understand that people are going to read the material and pay attention to grammar and style and capitalization and all the things that broadcasters don't care about in their scripts. But the writing has to be much more like broadcast writing than print writing. People really scan and glance and get impressions from layout and visual presentation and all that stuff as opposed to words on the page or on the screen.

Another faculty member said one of her primary goals was for students to consider ways to package stories using a diverse range of media. In particular, she said she wanted students to think about the medium they can use to tell the story most effectively.

> [I] push them to think in terms of the needs of the story and being creative about pursuing 'let's throw a raw audio clip in here of the interview' or 'what this story really, really needs is an interactive map.' I mean that kind of lateral thinking across media is probably the most important thing. (Instructor 13)

Two college instructors, as well, stressed the importance of producing multimedia

journalism. "The one thing we stress to them about the web world is that it requires a

multi-dimensional approach to how they cover a story," said Instructor 12. Another made

the final assignment for his course a multimedia project that prompted students to

produce either an interactive audio slideshow or piece of video.

One university professor structured his course so that students gained experience in

developing journalism for mobile devices. His instruction focused mainly on podcasting

this year but he ultimately hoped it would include creating content for mobile devices

such as cellphones and personal digital assistants.

He required his students write short reports for text-based devices — just web

browsers at this stage — and also to author an associated podcast that explored the same

story in an audio environment. The goal, he said, was for his reporters to take cues from

the sports and entertainment industries in an effort to capture the attention of young

people:

> I ride the bus to school and I see all the students. And I would say roughly 80% of
> them have headphones on – so the question becomes how do you get inside their
> head? Entertainment media producers, largely in the United States, are specifically
> creating programs for the iPod. It's a small little screen, there are small earbuds and
> they're developing new storytelling motifs and styles — narrative structures that are
> appropriate. And it seems the news business ignores this at its peril. (Instructor 5)

A college instructor too placed heavy emphasis on preparing students for society's

broad adoption of web-enabled mobile devices. For her though, the most important skill

students could learn was non-linear storytelling — segmenting stories into logically

arranged, multi-level narratives that users could consume on small screens. She says it's

critical that students understand storytelling in the digital age is like designing a museum

exhibit that patrons enter from different galleries.

> On an abstract level, I'm trying to get them to understand that as a storyteller, instead of us having one path up the mountain — that's what the newspaper, or the TV or the radio is — there are many paths up the mountain. And you have to learn how to write story that provides each of those pathways up. So a person can come in at your story at different angles. That's what the Internet really represents. (Instructor 10)

Two educators saw blogging as an effective means for students to digest the course

content and form their own opinions. As well, they saw it as a way for students to

experiment with interactivity, without requiring a lot of technical skill. The two

instructors set up course blogs so that students could comment on the issues covered by

the course. One professor didn't post comments himself at all. The other, regularly

prompted students to consider the themes he was raising:

> Ideally I wanted them to react to what I was writing; it was part technical and part theoretical in terms of what I thought this means for journalism. And to get them to respond to that. And the other part was I was hoping they would contribute interesting things they had found; ideas they had about what this meant for journalism. (Instructor 7)

Neither instructor made blog participation a requirement of the course. Instructor 6

simply hoped the experience would be addition to their skill set that some employer

would find appealing: "So they can say to an employer, yeah, I'm familiar with blogs,

I've been blogging for half a year now."

Case study: Metadata — Mark Schneider, University of British Columbia

"Everything has a history. Every story has a pedigree. Our effort was to push it to the extreme to see what it looks like."

Mark Schneider's enthusiasm for the capacity of technology to assist in "rehabilitating" the news is infectious.

"I see nothing but opportunities," he says, eagerly describing some of his many research interests.

But his optimism for the news industry wasn't always so steadfast.

The visiting lecturer in the master of journalism program at the University of British Columbia in 2005-06 has a long career as a broadcast journalist and producer at CBC and CTV. He also has extensive experience as a new media editor.

Over the course of his career, he says he became increasing disillusioned over newsroom practices for verifying information.

"It's fair to say that, as a journalist, I began to get very, very discouraged by the process that I had seen develop over my career."

As an editor, he says he often questioned material from other news providers that crossed his desk. He says he frequently couldn't confirm the veracity of the people

interviewed for a story. And he had no way of confirming facts with the story's original

author. Still, he felt obliged to approve such information on a regular basis.

"There was no way of checking it out," he says. "There was this whole sense of

delegated trust that just because another news organization has reported it you can use it

without question. It's so un-journalistic.

Reflections on this experience brought him this past year to work with students on a

way to improve the quality and transparency of information that appears on the web.

He is intrigued by the capacity of authors to use emerging technologies to describe

online content so that news consumers can better see what it is and where it came from.

The process is called tagging information with metadata — data about data — to enable

users to better see linkages among pieces of information. Schneider says the poor

connection of information in most current news hinders audiences from gaining a full

understanding of a story's origins and its relation to others.

"In this day and age where news seems so disconnected from any kind of historical

perspective, everything seems new and surprising and baffling," he says.

Schneider's attempt to improve the situation was to require his students to put "food

labels" on their stories describing the "ingredients" they used. It was an effort to create

what he dubbed "100% free-range organic news" on the school's student-produced news

site, the Thunderbird <http://www.tojr.ca>.

As a starting point, he required students to declare their information sources. If they

had referenced any online news releases they had to provide a link to the text of those

documents. They had to keep a faithful list of every online search they had conducted.

Further, they had to declare whether they had negotiated any aspect of the news gathering

process — for example, whether they had interviewed people and agreed to withhold their names from publication, or whether they had received embargoed material. He also required them to declare their personal biases.

With help from technical assistants he placed fields for the ingredients list inside the publication's content management system so students could tag their stories as they authored them. He says the list, which appeared alongside every published story, forced students to consider the basic premises of their journalism.

However, he says it wasn't an easy sell.

"I was a constant nag on my students at this," he says. "I can't say it was a pretty process. A lot of the students thought, especially in terms the tagging exercise, that it was adding an unnecessary burden of work. "

Still, he says, many students adopted it with gusto. And he adds quickly that the learning value of the exercise, coupled with a lofty aspiration to "rehabilitate the news and recover the trust of news consumers," was worth every minute.

"I guess the conceit is that if the journalist will actually share the process, including the inadequacies of the journalism and the contradictions and some of the difficulties of the journalism, then that itself would indicate a superior kind of journalism."

He describes the exercise as a part of a broader effort in the academic community to help authors label information so readers can distinguish quality information from mediocre information online. He says a popular example of the possibilities can be found on Wikipedia, the online encyclopedia, which allows readers to identify an author and track revisions to an article.

He envisions a system in which a content management system captures much of the information as a reporter collects and enters it.

"A lot of it could be done very elegantly if it was integrated into the news process. I mean, I don't know a journalist today who doesn't use Google or any kind of a database. It would be nice if you had a protocol that automatically stored everything you had done and stored it into a RSS (headline syndication) feed or a structured database that chugged along and followed you like a valet, keeping track of what you had done."

This process of applying meta-data to journalistic practices, he says, is still in its infancy.

"I know of no other news organization that is doing this, with the exception of the NewsML project that is being largely developed by Reuters in Europe that is to create an XML tagging system for news products," he says.

He adds that the exercise this year was highly experimental and, in many ways, impractical. He says its primary purpose was to examine the possibilities for future news production and to encourage students to think about their stories as a process, not just an end product.

"Everything has a history. Every story has a pedigree. Our effort was to push it to the extreme to see what it looks like."

In the end, he says, the effort could ultimately help create a stronger community for news.

"I see this as a huge issue of trust. That's the main purpose of all of this — developing a trust relationship between journalist and news consumer."

Course aims

Most instructors described the aim of their course as generally requiring students to

grasp the fundamentals of the medium and apply core skills to produce journalism with

an element of interactivity. Two college instructors gave summations that were typical of

many. Instructor 9 said:

> The aim of the course is to equip students to go into the workforce with an
> understanding of this new medium, to be current on the latest developments and to
> have at least the basic skills to function in this new medium.

Another, Instructor 12, said:

> We want them to graduate with a complete understanding of how you would write
> for a website, how you would approach packaging for a website, how you would
> make something interesting to a user, and to be completely familiar with the
> terminologies and the technologies and how they affect media. And also teach them
> to think a little bit out of the box.

Three educators stressed the importance of grasping website design as a means of

recognizing how people consume online content. Two college instructors said

understanding how users navigate a site was crucial, with Instructor 10 arguing:

> They have to learn the basics of web design and good navigation. Journalistically if
> you have the best story in the world and you don't have a good website that you can
> easily use, it's lost.

The other (Instructor 3) concurred, saying it was important to "focus on user-centred

design and understanding your user population when you are creating content online."

But he used the navigation issue as a springboard to assert that a crucial goal of an online

course should be to help students understand online communities so they can help an

employer build theirs:

The primary thing is that it's all about conversation and community. One of the problems they are going to run into if they actually get work at a television station or radio station or newspaper is that most mainstream media don't know how to use the web effectively ... They are not really that interested in engendering conversation. They are more interested in highlighting the show that is coming up tomorrow.

Two university professors described the aim of their course as ultimately being similar to those in other courses. They said their emphasis was on storytelling and core journalistic practices, with Instructor 13 asserting plainly:

We want to graduate good journalists … The online wrinkle is that they should have the facility to work in a converged atmosphere and to be able to handle the slightly different requirements imposed by things like breaking news.

One university professor (Instructor 1) said her main goal was to free some creativity in students and grasp the idea of openness and innovation on the web. However, the technical aspect of authoring a page was a key part of that. For some students, she said, the simple act of creating a personal webpage represented a quiet triumph over technology. She said the fear some students possessed about web technologies was a mental barrier that often blocked other learning:

Even though this is the generation that is supposed to be comfortable with technology, a lot of them are actually very afraid of it. When you see something online it looks so impossible and out of reach. To show them you can self-publish; there is something quite empowering about that.

Criteria for student excellence

In describing their criteria for student excellence, all of the educators said a starting point for their evaluation of a student story was good journalism. Factors they said were

crucial for a successful story included: solid research, appropriate interview subjects,

lively writing, accuracy, spelling, grammar and application of style.

Beyond that, one university educator (Instructor 6) gives an extensive list:

If the stories come up to a good minimum level, then I look at what they've done online. Have they absorbed the lessons of the class? Have they put some thought into functioning as a team? Have they effectively laid out their stories? Have they modified their writing to accommodate the demands of online? In other words, for example, are their initial story blurbs below the headline on the homepage compelling? Are they information packed? Do they make sense? Or have they broken all rules I've told them about -- you know, is it filled with a stupid pun that no one can figure out? Do they use links well? Have they figured out that hyper-linking between stories is important? Have they done that willy-nilly or have they organized themselves well? In other words, have they utilized all of the potential of the web in their stories? The third category is the 'what else?' Maybe someone has done a photo gallery or somebody has done a blogging diary of a drug addict. Maybe some people have added some audio clips from an important meeting. Then I use that as icing on the cake.

Another university professor (Instructor 13) defined the "what else" as an

innovative approach to content creation — a quality echoed by four other educators as a

crucial component of a good online story.

I think that excellence online, really comes back to creativity for me. Have they thought about some really interesting and out-of-the-norm link that they can include? … Have they thought about a really specific question to throw out for an online chat? That's the kind of thing that would earn a student an A.

One college instructor (Instructor 11) said one of his students could theoretically

earn an A for an excellent journalistic story that looked much like a newspaper and didn't

contain many online-friendly features. But, he says, "The thing is, they would have to

defend for me why they didn't do that. And it would have to make sense within the

context of the theories that we teach."

Two final characteristics, mentioned by only one university professor (Instructor 5), were courage and intimacy. He said successful interactivity demands these qualities from online journalists:

> The courage in taking risks — do you have the courage to confront your ignorance? Creativity in looking at these new authoring tools and figuring out how to use them creatively and push them to their limit. The third thing was in terms of the kind of intimacy created in their product. Have you managed to narrow the distance between the know-it-all journalist at his bully pulpit from the poor, unwashed, ignorant masses? That's the standard model. How close could you get to your news consumer? How inviting could you be?

Case study: Community-building — Wayne MacPhail, Mohawk College

"I stress understanding the community-building aspect of online. If you don't create a sense of community around your content, via feedback or discussion forums or audio feedback, then you're really not effectively making use of the web."

When Wayne MacPhail first taught the Online Writing courses at Mohawk College in Hamilton, Ont., some students wanted to build their own websites for the main course assignment. He was skeptical of the learning value, but he agreed to see what they could produce.

"It was a mistake," he admits dryly. "As students who are first experimenting with the web tend to do, they produced sort of ransom-note sites. Dreadful colours — it was really awful. They wasted their time on it."

The experience strengthened MacPhail's resolve to turn students' attention away from graphic design and focus it on text and interactivity based on text. The result is a

course in which students produce all of their assignments with only about 20 minutes of software instruction.

The students' collaborative websites don't have Flash content or video clips. Even photos are optional.

"I'm very focused on the words in the classes," he says. "We're designing a site in a usability and information architecture sense. So we're paying attention to the words we use for navigation buttons and links, and for heads and subheads. We're not worrying about colours and pictures."

MacPhail's focus draws from an extensive career as an educator and consultant, not from any lack of experience with content creation tools. He has an extensive work history as a newspaper and magazine editor. His experience in the online news industry includes content production for organizations including CANOE and Sympatico-Lycos. In addition to his part-time teaching at Mohawk, he runs a communications company that targets the education sector.

MacPhail instructs the students in using a powerful piece of collaboration software — a wiki [user-editable website] called Project Forum. The product has an extensive set of community-building features that allow content creators to activate discussion forums, track activity and syndicate headlines.

He urges his students to use tools such as these to pursue the course's primary goal of engaging a community and using the relationship to produce superior journalism.

"I stress understanding the community-building aspect of online," he says. "If you don't create a sense of community around your content, via feedback or discussion

forums or audio feedback — if it's a podcast, whatever — then you're really not

effectively making use of the web."

The students complete only a single assignment for the course, but MacPhail grades

them on stages of their preparation as they conceive of their project and ultimately

execute it. He begins the course by describing the differences between online content and

print content. He engages them in discussing effective uses of text in headlines, subheads

and quotations. He then progresses to such topics as site usability, building a prototype

and testing it from the user perspective.

The course instruction is preparation for a seven-week assignment that involves

creating an interactive website of at least five stories focused on a target community.

MacPhail says an important part of the assignment is for students get outside of their own

experiences. So he requires them to focus on a community they aren't part of.

"I really stress that — and get them early on building a website for a specific target

audience." he says. "They come up with a list of survey questions that they either do in

person or online. They ask the user base, test the assumptions that they have about them

and start learning about [the kind of site the community] would be interested in seeing

designed."

MacPhail says the students learn a lot when they finally "wash" the results of their

interviews with their early assumptions. He says the assignment and the class discussions

are effective lessons in acknowledging diversity and responding to a community. He adds

that a crucial part of the assignment is for students to demonstrate that they have learned

from their interactions with the audience.

"What are you going to change about how you communicate with that group based on what you now know?" he asks the students. "I need to see that growth and development — and then see that translated into actual language and information architecture that makes me realize that they've talked to this group."

Currently, MacPhail expects students to use fairly traditional means of expressing data generated from their research. As an example, he says a typical website topic uses text to explore the experience of Muslim students attending Mohawk College. ("So, what would be of interest to Muslim students? What mosques are available in town? Or Halal foods?"). But next year he says he'd like to experiment with journalistic applications of Web 2.0 tools. Using interactive technologies such as mapping software the students could chart the mosques in Hamilton and then link the data to an overview of Muslim sects to determine how far various communities must travel to attend prayer. Or create an interactive map of Halal meat stores in town.

"There is tremendous potential in terms of mapping technologies, discussion forums, shared pictures and tagging, and RSS feeds. Most students, apart from what tools they know about from [social networking site] MySpace[.com], really aren't aware of things like folksonomic tagging [user-generated categorizations of content] or Rich Site Summaries [headline syndication]. It's not in their vocabulary," he says.

Right now his teaching eschews production skills such as HTML in favor of enhancing students' ability to collaborate effectively online.

"Those are things like the ability to moderate a discussion forum without bias — and also an understanding of what libel online is in terms of due diligence required by discussion [moderators]," he says.

And if that means student websites continue to have little visual flash — including

Flash — that's quite all right with him.

"They look very plain vanilla and that's exactly what they are meant to look like."

Workplace preparation

For many instructors, the topic of course goals was tightly bound to the issue of

preparation for jobs in the workplace. Some said they were not preparing students this

way — and had strong opinions as to why they weren't. In fact, nearly all the educators

had well-considered comments on the issue and many said their stand on this issue

fundamentally shaped the way they approached their course instruction.

The responses broke down roughly along the divisions between college and

university, with most colleges saying they were preparing students to step into online

positions and most university instructors saying they weren't.

For one college educator (Instructor 10) the task was actually to prepare students for

journalism jobs the industry hasn't adopted yet:

> I think my students are learning to be leaders in the workplace. My students are
> prepared to walk into the newsrooms and a) understand the technology and b) be
> some people with vision. The news industry isn't necessarily [putting] a lot of
> thought into 'What the heck are we doing?' and 'What are we trying to achieve?' To
> me that's what the journalism school should do.

Another college educator (Instructor 12) said the program was structured so that

students could step not just into a field, but into an actual job.

> Yes, we do [prepare them for the workplace]. We're actually teaching all kinds of
> news and news coverage … So they can actually tailor their course of study in the
> second semester to a specific medium if they want to, or a specific job within the

field.

One university professor (Instructor 5) disagreed wholeheartedly, arguing tailoring a

course to industry jobs was energy diverted from instructing students in fulfilling their

obligations to the news consumer:

> My main purpose can't be to try to prepare students for the industrial side. My job is
> to really get them thinking about the nature of what their sacred duties are and a
> sense of how to use these new developing tools to deliver these sacred duties.

Another university educator (Instructor 6) concurred, saying, "No … I don't job-

train them. I'm not saying we're going to focus on making sure you're absolutely ready

to walk into *Toronto Star* online and take a job as an online editor."

He said he had polled online editors and producers and found that most intended to

train their workers on their own technology anyway. Clearly, he said, industry workers

want people who are familiar with computers, but he said they really want students who

can master core journalistic techniques.

> They want journalists. They want news judgment, intelligence, familiarity with the
> news, the ability to work quickly, to edit, to make changes, to chase stories, to do
> interviews and to have a good sense of what they're doing; especially if they're
> going to be part of a team that runs a live news site. Again and again I kept hearing
> — those are the skills they want.

Instructor 1 agreed, saying:

> When I bring in industry people and ask them to tell my students what they're
> looking for, they say we're looking for really smart, analytical minds who are good
> researchers, who have basic skills but who are willing to be flexible about where
> those ideas go. So you don't necessarily have to come with a complete
> Dreamweaver technical ability, but are you a good researcher? Are you a good
> interviewer? Can you think on your feet?

Still others came down in the middle. One university educator (Instructor 2) said he taught with the aim of students getting a job in the field, not any specific position.

> Not a job in particular, but a job in general. Given two students coming out of journalism school who are identical in every respect, the fact that one them can help out with the magazine or newspaper's website and the other can't — I think that's a big advantage.

In fact, a number of instructors said their students are getting their foot in the industry by stepping through a back entrance, not the front door. One community college instructor said his students tended to find work at community newspaper and many of those needed help in becoming more sophisticated. Another said most students get their initial job not at a large media outlet, but by helping someone build a blog — or doing primarily non-web work at a media outlet but helping it periodically with its website content.

Indeed, the issue of student employment illustrated a complex tension that many educators saw between their curriculum and its application to the workplace.

For instance, some instructors said they aimed to prepare their students for a coming era of media convergence and wireless access to news. They said editors and reporters would need to tell stories using new narrative forms and a variety of media.

One educator (Instructor 10), for example, was clearly focused on her students mastering the practice of non-linear storytelling. Still, she acknowledged that the practice was limited in Canadian newsrooms.

"Are a lot of places chunking out stories? No. Do I think it's the way of the future? Yes."

Such comments exemplified some educators' desire to prepare students for the cutting edge of news delivery formats — even in the absence of jobs to support them. A number said that they would be cheating their students if they prepared them for the relatively small number of existing jobs where they could practice online journalism full time.

"I'm not disillusioning anybody about it," said one university educator (Instructor 2). "As pessimistic as I am about any of them actually about making a living at this, I say if you can make a living, great, but don't expect to get rich off it."

Another college educator (Instructor 3) concurred, saying, "I'm not imagining any of them will get a full-time web gig out of it, for sure."

For Instructor 6, the prospect of graduating increasing numbers of online journalism graduates was worrisome.

> I know several universities … are experimenting with a whole stream of this. I find that unbelievable, frankly. One, how many fucking jobs are there in online journalism, starting tomorrow across Canada? So you're teaching a full complement of your students one area where the number of jobs in many cases in declining? And in most cases has never reached the potential that anyone thought it would.

Another university faculty member (Instructor 13) acknowledged the issue but saw signs of improvement in the industry.

> I think, especially when I was hired five years ago now there were some people saying 'Will there actually be jobs for these students?' Is this something that we should be setting up in terms of expectations?" Luckily the tide has shifted a little bit over the last five years where you can now see that employers want people with some of these skills and there are definitely positions open.

Further, two educators — one at a college and another at a university — said their reluctance to focus on skills resulted directly from their experience in national

newsrooms where young online journalism grads found themselves unhappily stuck

doing repetitive technical work on the website not the multimedia journalism they

expected. Instructor 3 put it this way:

> I stress not having the HTML skills because it would be very easy for somebody to think they were getting a journalism position and end up getting a very, very low-level — what's called a front-end programming — job. And then they're going to be stuck in that rut for a long time without really much chance for advancement. It's a really bad ghetto to get into. So what I'm preparing them for is to have a better understanding of how to effectively make use of the web in whatever job they have.

Skills instruction

Ten of the 13 respondents said they gave their students a primer on Hypertext

Markup Language, but none said they spent more than a single class on it. Many

instructors echoed the comments of one college educator (Instructor 7), who said, "The

software is becoming increasingly easy and it's becoming clear that in-depth HTML or

Dreamweaver or Flash skills aren't what's needed for online journalism."

Another, Instructor 13, said:

> For me it's like owning a car. I don't need to know everything about how to fix the engine; I do need to know how it works, so I don't get snowed. So I want students to know basically how HTML works, how Flash works. To know basically how RSS feeds work so that they can be a productive and helpful member of team. But it's all about journalism. Because in 10, 15 years the software will be different but the needs of storytelling will be the same.

Concerning specific software packages, nine used Adobe Dreamweaver for

webpage creation. Seven used Adobe Photoshop for image editing and one used Adobe

Fireworks. Five taught some level of Adobe Flash for interactive content. Five said they

used a database-driven content management system to store story elements and publish

online.

Only one educator had students making Flash presentations from scratch. The

others, if they used Flash, supplied templates or had instructors assist in the content

creation.

Four educators said their website content management system lessens the technical

burden on students. Instructor 6 said further that since he implemented it for student

production, he had more time to concentrate on journalistic issues — which students

crave.

> [Students] come from areas like poli sci and history and other places, and their
> interest in technology is low. And they say, 'I didn't come here take tech; I came
> here to learn journalism — so why am I doing all this crap?' So the CMS offered a
> really nice saw-off. They have to be familiar with how HTML works. They have to
> understand the process and the issues. But they don't necessarily have to become
> very technical.

In characterizing the relationship between the instruction of journalism and

technical skills, all the educators said journalism counted for at least 50% of their efforts.

At one end, a community college educator (Instructor 9) said he "came down pretty much

50-50" in his instruction, saying, "We graduate people who we expect to be able to go

into a newsroom and function fully on the job."

A university educator (Instructor 1) concurred, saying the technical skills are of

little use if the instructor can't use them effectively for journalism. Still, she said, the

students crave the skills instruction:

> That's a difficult one, actually. Because you're dealing with students who don't
> necessarily want to engage in the theory or the principles. They are very impatient
> to learn the technical skills. So personally I really feel like it's 50-50.

Still, almost all characterized the content of their course as overwhelmingly journalistic in nature. Only one instructor said the aim of his course was primarily to teach production skills, not journalism. Three said explicitly that their students' role in the workplace was to supply ideas — and they needed only an understanding of the skills to be effective. One university educator (Instructor 13) said:

> I try to tell them is that, particularly if they are working in a large organization, they will have the technical support. Their job is to be the storyteller and the idea person. To be able to think creatively about saying what we really need to tell this story about the bombing in Lebanon is an interactive map and what I want is to see if there are any webcams in that quadrant and how can we use GIS [geographic information systems] to map this.

Another of the three, a college educator (Instructor 12), said journalism schools have to do a better job of resisting the demands of the employers in order to serve their students best:

> I work with a lot of the smaller newspapers that are just trying to save a buck. They want their web writer, but they want that person to be a journalist and an HTML expert. And it's just not going to work. I think we have to stay true to what our programs are about and stick with the editorial training more than we do the production training.

Case study: Multimedia storytelling — Mary McGuire, Carleton University

"When you engage people online using Flash you keep them at your site longer and they're more likely to get the information you have gathered."

For the past eight years, Mary McGuire has taught the Online Workshop at Carleton University in Ottawa as a cross between print and broadcast. But in 2005 she looked at the assignments she was giving her students and realized their structure looked less like a cross of the two media streams than a set of parallel tracks.

For a number of years she had required one team of students to produce print-based stories with photos each week. Then she had a separate team produce a multimedia section on the same topic. But she realized students weren't effectively connecting the two content areas. And, as well, the makeup of the assignment simply didn't ring true to her extensive experience in radio journalism.

"I felt that we had a publication that was separated into the multimedia section and then the print stuff online — and I wanted to integrate that more," she says. "So I thought, well, why don't we have them working in pairs more the way you do in broadcast?"

So the students began producing their stories in groups of two — a reporter and a producer. The producer is responsible for coming up with interactive elements for the print-based story.

All of the students in the course now rotate through a variety of editorial positions during the term. The students publish their site, *Capital News* <http://www.carleton.ca/jmc/cnews/>, every two weeks — or five times over the 14 weeks. One student is a senior editor for an issue; another produces the multimedia team for the edition; other students work in the story pairs as either producer or reporter.

McGuire has an extensive career at CBC Radio and also as a print reporter. As well, she is co-author of the *Internet Handbook for Writers, Researchers and Journalists*. She has taught at Carleton for 16 years.

She doesn't know of many media organizations that have structured their reporting teams the way she has, but she says the approach clicks with her students.

"You know there's no rulebook or guideline for any of this. You just read a lot of stuff online; you kind of watch how news organizations are doing things and you get ideas," she says. "I think no two places are operating the same way — unlike newspapers or local television stations."

McGuire teaches the course of 20 students in both a seminar and lab format. She starts the workshop off with an introduction to online journalism, including recent developments in the industry and analyses of award-winning online news projects. The preparatory classes include instruction in Adobe's Dreamweaver and Photoshop, and also in using digital video and still cameras. She says a main goal is to get students thinking about presenting material in a multi-dimensional way.

The course then moves into its production phase during which students spend most of their time editing and reporting. They produce the multimedia content in Flash with the help of a technical assistant who adds and edits the content. The assistant is available to help the students on the day before *Capital News* is published. But before that stage, the story producer assembles the raw multimedia content and proposes a way to present it as a package. McGuire has three teaching assistants available to her on production day: a copyeditor, a photo editor and an editor for the multimedia section.

McGuire doesn't actually teach the students Flash — she just introduces them to the principles of it. The students work with templates that the technical assistant has pre-assembled. So, even though they don't edit the multimedia themselves, they can plainly see the structure of interactive features such as audio, video, timelines, slideshows and audio slideshows in order to prepare raw content for assembly on production day.

"They have to storyboard it — they have to draw on paper how they would like it to appear," she says. "Then they bring that to our web producer. He talks about what's possible and what's not. So they are working hand-in-hand with him, but they are not building the Flash."

She says one of her upper-most concerns is keeping students focused on honing core journalism skills — but adapting them to the online medium.

"We want them to go out and identify stories, go out and do the research, come back and present that story instead of just as a print story," she says. "So they have to think creatively about how to communicate the story they have researched."

Still, if she had more time, McGuire says she would like to teach the students how to use Flash. She says a textbook written by her friend and colleague Mindy McAdams is

a good primer in journalistic applications of the software. But she says the University of Florida professor's book, *Flash Journalism: How to Create Multimedia News Packages*, would be useful at Carleton only if she had more time with her students. McGuire says most journalism schools that teach Flash spend a whole term producing one project. She says, in the time she has available, her students gain more benefit from a bi-weekly production schedule of *Capital News*.

McGuire sees Flash as being an effective means of marrying the best qualities of print and broadcast, with the added benefit of interactivity. She says when people can pick and choose the story elements they want to read as opposed to being forced to digest news in a linear way they are more likely to stay engaged.

"I think Flash is the best tool that has come along to allow the presentation of information in interactive ways," she says. "I think when you engage people online using Flash you keep them at your site longer and they're more likely to get the information you have gathered."

Effective teaching tools

The educators had a diverse range of exercises and assignments that they said have proven to be effective tools for teaching aspects of online journalism.

For example, instructors at two community colleges said they have organized groups of students to provide multimedia coverage of a single event. They believe the assignment gave students a sense of the deadlines inherent in live coverage and also the relationship of content across media.

One college educator (Instructor 11) arranged students to cover election debates for each of the last three municipal votes.

> We streamed video and audio and created an interface where people debated what was going on in the hall. So what we had in Alumni Hall was three mayoralty candidates; we had some TV students shooting it, we took that, we digitized it; and we pumped that across the 'Net. We had about 150 people show up in the room and we had over 400 come online … it was very exciting and very original.

Another educator (Instructor 4) had students covering college basketball games and delivering the content as a live webcast supplemented by text-based content.

> They'd be directing, they'd be shooting, They'd have on-air people doing interviews and play-by-play and then the print students would be doing summaries of the game that had to be done within 15 minutes of the end of the game. And that was a neat experience for them. It is experimenting with it [convergence] in a way, but it is also trying to get them into the frame of mind that that's the world they're going to be working in.

A third college educator (Instructor 10) tested students' grasp of non-linear story structures by having them take a 1,200-word feature story originally published in print and adapt it for use online in a non-linear story construction.

The students had to identify the important facts required for each tier of the story and rework the narrative under deadline. The instructor said it was a good exercise in news judgment and editing.

"There are six facts that I'm looking for that have to be on that home page, and some of [the students] really struggle with that," she said. "It's a good assignment. It tests them. It really makes them think about a story and realizing that there are many doors."

One university professor (Instructor 13) said a simulated breaking news assignment provides a solid test of editing, news judgment and speed. Over a 50-minute class she sets up a pretend newswire where an event unfolded and students had to write updates to their

story as sketchy facts become clearer. A missile attack turned out, in fact, to be an

earthquake.

> It challenges their sense of attribution, assumption — core qualities we want to turn
> out regardless of the stream, but it's somehow heightened when they are working in
> that fast pace [for online].

Six instructors cited group tasks as the assignments that provided the most

educational value. Two instructors said collaborative research assignments they likened

to the "Indepth" (backgrounder) section of the CBC.ca website were effective.

"It's a real education for students to learn how to work effectively in groups," said

Instructor 3.

"The best online stuff works because it's a collaborative effort," said Instructor 10.

"I really emphasize that all online work is teamwork; there is no way you can be a

lone wolf," said a third, Instructor 6.

One university professor (Instructor 8) said at one time she critiqued student work

herself in class following publication of each edition of the student website. She now has

the students drive the discussion.

> We now assign a pair of students to a story they *didn't* do. And they have to come to
> the post-mortem and dissect that story, critique it. Post-mortems used to be me
> leading the discussion — what worked, what didn't, why it did, why it didn't.
> People tuned out and did all the things people do. So has that ever worked well.

Of the two educators who had students do collaborative blogs, Instructor 6 said it

was, at times, an excellent means of reinforcing course themes. He didn't require the

students to participate and he didn't grade them on it — but these features were part of its

appeal, he said:

In some years I'm happy to say the blog has been a lot about the course; about

issues, about stories people find, about controversies that well up, interesting stuff that they stumble upon. What has been fascinating about that is – some people have been very good — they post pictures, they post links, they post almost daily or two or three times a week — and some of the blogs have continued [after they graduated].

Still, he said, in other years the blog has been "stupid" — mainly about student gossip and romances.

The other instructor said his goal for the blog was to get students reacting to his teaching, and contributing ideas and opinions about issues they had come across. But "it didn't quite work out" (Instructor 7).

"Ideally it was going to be 60% written by me and 40% written by them — it turned out to be almost 100% written by me," he said. "I'm going to have figure out how to make it attractive to get them there and keep them there."

Another college educator said students responded enthusiastically to a communications theory video he used to illustrate humans' limited comprehension while focusing on a task. The so-called Opaque Gorilla Video by Daniel J. Simons shows a group of students passing a ball in a room. Observers are asked to count the number of times certain members pass the ball. In an average test group, few observers notice that a woman in a gorilla suit walks into the middle of the players, beats her chest and walks out.

This educator (Instructor 3) sums up the experience:

I ask how many of them saw the gorilla. Maybe three or four of them out of a class of 40 raise their hands. Then everybody looks at them and says, 'what gorilla?' Almost nobody sees it … That's exactly the same as a user coming to a website — say their husband has just had a stroke and they're looking for information to help them cope with that. They don't have time to see your gorilla.

Other instructors used alternative narrative styles to illustrate the possibilities of storytelling in the digital age. One college instructor used theories of myth-telling to put journalistic stories in context. Another used Janet H. Murray's book, *Hamlet on the Holodeck: The future of narrative in cyberspace*, to envision a future model for news. Murray's book explores how novelists, playwrights and filmmakers use interactive tales, stories as games, and games as stories to enliven a narrative.

For one university professor (Instructor 5), simply using new language was an effective way of getting students to consider a fresh approach to online presentation:

> We used a different vocabulary. I didn't talk about leads or nutgraphs anything like that. We talked about invitations and contracts. We talked about headlines in an online environment as the invitation to come in … The second is the kind of contract that you establish with your news consumer — that you clearly put out what you are going to deliver. And then deliver on that.

Challenges

The educators in the survey identified a number of challenges to teaching online journalism. But the two mentioned most frequently — by nine of the 13 respondents in total — were the difficulty of teaching technical skills to students of varying abilities and the lack of time to teach them more effectively.

Seven of the 13 instructors said that, in addition to teaching journalism, they also provided the technical instruction. Two faculty members had instructors from complementary programs at the same institution teaching software and design skills. One professor had teaching assistants help with editing and production at certain times in the

course. Another three hired students part time to either help with website development or

act as a technical resource for other students.

As Instructor 6 said, the stresses of teaching production skills were significant:

I would say time is the biggest challenge and the learning curve. I have people who, honest to God, I guess they know how to work a computer, but you could hardly tell — up to people who have done full Dreamweaver courses, have their own website, who are very confident with the technology. What do you do? How do you teach a class that doesn't completely terrify the less knowledgeable students?

Other university instructors echoed the same experience.

"I think many of us operate under the illusion that our students are very techno-savvy," said Instructor 13. "Some of them are, but I have a lot of students who are very phobic coming into that intro to online [course]."

Instructor 9 added: "We'll have some people who are almost able to look at

Dreamweaver to be a able to use it. We have others who really plod, who find it really

difficult. That is challenging — it's very, very challenging."

"Everything on a computer always takes as lot longer than you think it's going to

do. So it's time-consuming," said another (Instructor 8).

Teaching skills may be a challenge for the instructor – but it's clearly greater for

some students. One college faculty member (Instructor 3) stated said it was frustrating

not being able to serve them as well as he wished:

One of the realities of group work — especially around anything technical — is that the students who aren't technically minded will find the nerd-boy or nerd-girl in the group and they end of doing all the nerd work. The class stratified into people who had grasped the technical thing and those who hadn't. So the people who couldn't might have felt a little left behind.

One university educator (Instructor 1) expressed outright exasperation at the

expectations placed upon her:

You couldn't run a television lab without a TV broadcast technician. But somehow with the idea of the web being so accessible there is this sense that you don't need a technician. [Online educators] are supposed to be all knowing. It's a bit frustrating. The lack of technical help was really difficult.

The other concern — a familiar refrain to all instructors — was the lack to time to spend on the curriculum. Six instructors mentioned this as another key challenge.

"Number two is just not enough time to do everything really well," said one university professor (Instructor 6).

"I find it tough," one college instructor (Instructor 10) added as well. "It's just a lot to cram in and I have to determine 'Am I skimming too much off the surface of things and not going deep enough?' I mean the struggle for an online journalism instructor is to determine how deep you go."

Mentioned by a few instructors was just the general demand of keeping current in such a fast-paced emerging field. Some said they had to redraft many of their lectures each year. Instructor 6 said he was still concerned about the demand for online journalists in the industry, given current practices and technologies, saying, "I don't know really how fruitful an area this is out in the workplace. I'm always questioning what's happening out there. And what we should be doing."

Future instruction

Three participants said they hoped to pay more attention in the coming year to so-called Web 2.0 tools, a phrase that represents a variety of web applications used to "mash" data on the web and support collaboration.

For one college educator (Instructor 12), it was time to devote attention to narrative

forms that have emerged over the past couple of years:

> There is a whole shift in what's happening in the web that I think [pause] I think, we
> have to pay attention to. And that's the whole blogging, podcasting, interactive
> journalism, where people are taking part in the development of your story.

Another concurred, saying she intended to have students stage a group debate over

whether blogging is journalism.

For another college instructor, it was increasingly important that he devote

instructional time to discuss tagging [user-generated categorizations of content] or

[geographical] mapping.

One university professor (Instructor 6) said he would like to be able to support

students next year who wanted to create a podcast. But his ideal would be to undertake a

journalism project whereby students would truly interact with a target community.

> I'd love it — just talking dreaming for a minute — if the course and the year
> allowed for a site to be built where students could connect with the community and
> actually experiment with a community-based participatory journalism site. I think
> that would be fantastic …Instead of us sitting around jawing about issues, they
> could actually live them. You know, maybe people sending in digital photos from a
> student protest. And then someone files a story. Is the story accurate? How do they
> know? And should they trust the citizen journalist? Do they have to double-check
> the source and get a second source from the student protest? Or if they allowed
> blogging, how would they deal with flamers and people posting libelous information
> All of these things would be really real for them and it would be really neat.

One college instructor said she would like to teach video and audio editing but

probably couldn't with the time and resource conditions under which she taught.

A university professor said she wanted to find some way to replicate the 24-hour

news cycle.

Two university instructors said they simply wished to have more time to devote to core journalistic skills:

"Honestly, what I saw in terms of the quality of stories was there could have been more time spent on the actual reporting skills and writing skills," said Instructor 1.

Another concurred, saying, "I often think, God, we could have spent more time on interviewing, on story structure" (Instructor 6).

Finally, two educators said they hoped their institution would eventually restructure the program to remove the distinction of online journalism and begin to recognize the emerging online characteristics of "traditional" media.

"Ideally what I'd like to see is online media integrated into all of the journalism course we teach," said Instructor 7.

Another (Instructor 9) said, "I think more and more online publications and utilizing online are going to start to become embedded in other courses as well. The distinction between journalism and online journalism — that line is starting to blur."

Discussion

The research question addressed in this survey had three components to it. Answers to two of them — the contents of the educators' instruction and the learner outcomes they hoped for — were factual, requiring a summary of the results of open coding the interview transcripts.

However, more in-depth coding and analysis was required to reveal answers to the final component of the research question — the nature of the instruction. At an early stage in the research, it became clear that educators were identifying a common dilemma that ran as an undercurrent to their teaching. Selective coding of the interviews highlighted it further.

The participants said that prompting students to leverage the characteristics of the medium usually meant requiring them to assume ever-greater technical burdens. In short, the further students moved away from replicating the content of a newspaper online, the more technology they had to assimilate. This was a clear challenge to most of the educators. All of them said they spent 50% or less of their time teaching production skills. But a majority commented that they spent considerably more time on this aspect than they wanted to. Educators' near-unanimous assertion that their course aim was to teach journalistic skills, not technical ones highlighted this issue further.

What are they teaching?

Participants expressed a broad consensus as to the basics of a standard online journalism curriculum — elements including web writing, research and design. The vast

majority subscribed enthusiastically to the scannable text model proposed by Jakob

Nielsen and others. As well, many incorporated instruction in website navigation as

means of increasing students' understanding of how users use online content.

Beyond that, some participants are incorporating so-called Web 2.0 tools in an effort

to increase interactivity and explain complex issues better to news consumers. Other

instructors too commented that they intended to expose students to these tools next year.

About a third of educators concentrated on podcasting, meta-content and

collaborative blogs. And even though the instructors reported mixed results with some

exercises, they were encouraged by their potential for collaboration and creativity.

Other educators, even if they weren't able to incorporate interactive tools, were

thinking about them, as exemplified by one instructor's belief in the importance of non-

linear storytelling.

As well, a majority was instructing students in the use of multimedia elements,

despite mixed evidence of its usefulness to online news consumers in the research

literature.

Concerning technical instruction, there was a general consensus among educators

that Hypertext Markup Language is no longer a core skill that journalists need to possess.

Most of the participants said students needed familiarity with its basic structure — but

that was all.

The main reason, they cited, was that web publishing software was getting easier to

use.

Still, despite a desire to incorporate new approaches, there was recognition that

students still needed practice in core journalistic techniques of research, writing,

reporting and editing, and that their courses needed to support those skills as much as possible.

What learner outcomes are they hoping for?

The participants were roughly split as to whether they were preparing students for specific jobs in the workplace. Those who said they were tended to focus on skills more acutely. But many of the educators said their goal was to graduate students with the know-how to consider broad questions of engagement with news consumers — not solve specific technical issues. At least half said key attributes for positions in online newsrooms were creativity or innovation.

A number of educators said having students understand the importance of interactivity was also a major course aim. Some asked students to simulate, or in a couple of cases, implement, polls and discussion forums in their work as a means of interacting with their audience.

But one university educator (Instructor 6) cautioned his students, saying they would mislead their audience if they encouraged them to interact, and then abandoned them at the end of the course:

> I say I can't really have you doing too much interactive stuff because you're going to disappoint people. It's unfair to the user. If people do come to the site, they are going to wonder why you're not answering their e-mails, why you are not on the message boards … It is a fiction and I know it's wrong, but I don't know how to solve that.

Clearly, the issue of educating students in the importance of interactivity was challenging to many educators.

Participants also clearly had concerns about where their students were going to practise the skills and approaches they were learning in their programs. About half said they were preparing their students for jobs in the workplace, but most of those said that "job" may, in fact, be more of a task or a contract appointment than a full-time position.

How are they teaching it?

The two most important questions in the survey prompted participants to name their most effective teaching tools and to identify the challenges they faced in teaching their curriculum. The aim was for participants to evaluate the best parts of their curriculum and to assess the areas in which they struggle.

Open and selective coding of their responses revealed two clear themes.

The first was that faculty members who pursued the most innovative curriculums were the ones least challenged by technology. I define innovative approaches as being ones that reflect practices the recent literature identifies as important to the delivery of online news. As well, innovative teaching prompts students to produce content furthest in nature from a newspaper replicated online. The instructors most active in pursuing community interaction, blogs and syndicated content for mobile devices, for example, either had use of sophisticated collaborative publishing software that greatly lessened the burden of teaching skills. Or they had adequate technical assistance to relinquish teaching the mechanics of the technology. In many cases, they had both.

Indeed, the two educators using the most powerful publishing tools were the two most adamant that they not focus on skills instruction. As well, they were the two who identified themselves most strongly as not being technically savvy.

Controlling technology was a central theme among almost all of the participants. Many observed that they spent time with technology that they wished they could have spent teaching journalism. As well, many said they saw a significant portion of their students struggle with it but they didn't have adequate time to assist them. Not having enough time, of course, is a common complaint among educators. But a number of participants commented that they faced two unique challenges: having to incorporate a broad range of skills — such as text, image, audio and video editing — in a single course and also having to keep current in an emerging field that changes almost daily.

The second theme of the participants' responses was that their most effective teaching exercises stressed group learning. Roughly half of the study participants said the most effective exercises were group assignments. Many said they paid almost no attention to individual website creation, opting instead to have the students produce stories in small groups.

Some educators, however, indicated they conducted their most effective teaching assignments away from the computer, saying other environments were at least as useful in sparking creativity and discussion. Indeed, the one educator most focused on community interaction had his students go out and get an audience by personally meeting with them, phoning them and surveying them, using traditional means at times, in order to engage them before launching the students' site.

Still, the most innovative educators involved both themes in their instruction. These educators seemingly managed to unleash teaching potential and lessen their burden by investing heavily in collaborative technology.

Five of 13 educators said they used a collaborative publishing tool for storing and publishing student work. The divide between educators who had adopted one, and those who hadn't, was, perhaps, illustrated best by the comments of one college educator (Instructor 10):

> I'd love a content management system but that's the same thing CBC wants and it's costing them a million bucks to build. How do I stay up to speed on such a limited education budget?

Of course, even a good content management system can't solve all the challenges of teaching production skills — especially multimedia creation — an assertion made by at least one participant. But the use of such a collaborative publishing system, or not, was clearly an important factor in determining how instructors taught their course. The educators split roughly evenly between those who had students present their journalism as individual website projects, often with the students simulating interactive content, and those who used content management software to create collaborative news sites with interactive elements.

Implications

The profound changes affecting the news industry are evident in the results of this study. As online journalism educators we are taking solid steps in preparing students for more interactive models of news in the future. But the pace of change is mounting considerable challenges to those efforts.

There now seems little doubt that communities of readers online will exert much more influence over the delivery and content of news in the future. The *Globe and Mail* hosts regular online chats with reporters. The *Toronto Star* encourages readers to

bookmark and share descriptions of its stories on the site del.icio.us. Big Media is already

investing heavily in social networks: Rupert Murdoch's News Corporation purchased

upstart online community MySpace.com for $580 million US in 2005 to drive traffic to

Fox TV sites. While the implications for journalism are not clear, the move points

strongly to a future in which audiences play a more influential role than they do now. The

move in this direction is not linear. Participatory journalism advocate Dan Gillmor issued

a humble assessment of the shortcomings of his San Francisco-area venture

Bayosphere.com in January (Gillmor, 2006). But for every failed experiment in citizen

journalism this year there were many more upstarts trying to find the key to collaborative

newsgathering.

So what does this mean for us as journalism educators preparing students for this

environment?

First, we have to find better ways of engaging the audiences for student work. Many

participants in this study acknowledged that even though students published their stories

online, the primary audience for them was the instructor. They considered it a bonus if

interview subjects commented on a published story via e-mail or other web surfers

stumbled on the stories and posted feedback. Instructors can discuss the importance of

online news communities in class, but this level of actual interactivity is likely inadequate

for effective teaching. The university instructor who acknowledged the interactivity on

the student site as largely "a fiction," simply stated clearly what others alluded to.

Interactivity is, and will increasingly be, the hallmark of online journalism. Having

a legitimate and loyal audience for student stories is probably the only way we can teach

students some of the skills they will need in online newsrooms of the future. As Grier

(2006) states:

"As more newspapers use the Web to engage with readers, rather than treating the

medium as just another publishing platform, their reporters will need to learn the skills

necessary for interacting with the public (para. 1) … Newspapers cannot expect reporters

to be able to immediately intuit a form of conversational media where the manner of

interaction appear to run counter to the ethics journalists must uphold in their reporting"

(para. 17)

These skills include dealing with complaints about their journalism and involving

audiences in the development of stories — from generating ideas to finding sources to (in

some cases, even) reviewing a draft.

Attracting and holding an online community is, of course, a difficult job. Who on

staff would take responsibility for this initiative? How realistic would it be when

academic courses end a few weeks after they start and site content quickly becomes

stagnant? The answers are not easy and they pose profound challenges to the level of

technical and administrative support in journalism schools and the overall structure of

curriculums.

One possible option is creating a website portal for student work (authored

originally for online or not) with content fed into it regularly from different courses

throughout the year. One journalism school is already planning to experiment with this in

the coming year. Another option is working with a local media outlet to feature student

stories and drive readers to the student publication.

At the very least, we should strive to provide opportunities for audiences to comment — ideally publicly — on every story published online so students can appreciate issues of engaging an audience.

A second implication of the changing news environment is that our journalism schools will have to integrate online journalism more broadly across the academic curriculum. Many participants in the study indicated that their course was an elective. This study didn't attempt to find out the extent to which instructors in other courses addressed issues of online journalism. But comments from participants suggested that discussion of important issues such as ethical behaviour in chat rooms and verification of online sources — as well as introductions to emerging news delivery technologies such as syndicated headline (RSS) feeds — occurred mainly in their courses.

The implication was that students taking other electives likely missed out on discussions of important issues such as who can call themselves a journalist in the age of easy self-publishing. The particular issue is important in light of comments from many educators in the survey who said they expected few graduates to get full-time work in online journalism. Thus the new journalists were likely to be primarily "old" media workers who pick up side projects in new media. Most students, educators said, would drift in and out of web work — and indeed journalism itself — as a freelancer, a contract worker project assistant, or even blogger.

The suggestion, then, was that many graduates might not define themselves as journalists but might act journalistically at points in their careers. So how are we preparing students for this type of role? We might want to restructure our curriculums to discuss such issues more aggressively early in our programs. As well, we might want to

consider integrating advanced-level online journalism education with other media streams later in the program to minimize the increasingly fuzzy distinction between online journalism and traditional media.

A third implication of the new media landscape is that our journalism departments need to provide better support for our teaching practices in order to help us stay relevant to young students.

Prensky (2001) argues that many educators today are failing students because they use outdated teaching methods that don't reflect the way young people learn in the digital age. He says the so-called "digital natives" today respond best to learning environments that simulate online games. They crave learning in multi-task environments, want graphical representations of subject matter, thrive on instant gratification and enjoy networked, random access environments. In short, he states:

> The single biggest problem facing education today is that our Digital Immigrant instructors, who speak an outdated language (that of the pre-digital age), are struggling to teach a population that speaks an entirely new language (para. 9).

A number of the educators in this study acknowledged that many students have their own blogs and participate daily on social networking sites. This has certainly been my experience. The students thrive in this environment even if they don't possess the conceptual frameworks to understand it. Most educators, including myself, however, don't participate online to anywhere near the same extent.

Prensky's comments raise the issue of whether tenured online journalism instructors, many in their 40s and 50s, and acculturated in a era of non-interactive journalism, can truly thrive as educators on their own. Sure, we are experts in the literature and we maintain professional ties to the industry. But whether we can

effectively teach interactivity to students who use it as second nature and adapt with ease is an important question.

Nonetheless, it points to a need for educators to constantly upgrade their teaching methods and for administrators to support them in it. Attending teaching workshops, education retreats and educators' conferences may be more important in online journalism education, which is driven uniquely by technological culture.

Finally, on a personal level, I was heartened by the comments of other instructors who said they felt their courses operated at the periphery of the program's curriculum. While administrators and colleagues supported their work, some didn't understand it entirely and didn't see the importance of moving aggressively to integrate online issues into the broader curriculum. Clearly we still need to push online journalism education into the mainstream.

Similarly, I was encouraged by the number of participants who pointed out that the community of practice in online journalism is not as strong as those that exist in traditional media streams. Perhaps this is because many educators are hired as sessional instructors. But nonetheless, many participants expressed hope that we can strengthen it.

Lastly, I was fascinated by the innovative teaching practices occurring across the country. Few educators were using textbooks — most had developed unique and exciting curriculums to engage students. A few had truly visionary ideas for the future. It was humbling to consider them colleagues.

Directions for further research

This study asked educators how they were preparing prospective journalists for the online news environment. Many instructors had strong opinions as to how journalists *should* author content for news consumers. But an obvious avenue for further research is to find out how working journalists *are* creating content for their audiences. Research on this topic is either incomplete or out of date. Most news organizations keep extensive data on the behaviour of their audience — what they consume, where they find stories on the site and how they react to those stories. So what skills do employers need in their newsrooms? And what do they expect from new employees? Are these skills the same ones educators are offering? Are skills gained from blogging really transferable to actual newsroom tasks? Do stories authored in non-linear chunks result in any measurable increase in satisfaction for daily readers of online news? How do site statistics (concerning most-read stories, for example) drive the newsroom agenda for reporting?

At the very least such research could shed light on the discrepancy between many employers' stated preference for critical thinkers and the extensive technical skill set these same employers request in their job ads.

Another subject for further research is the application of emerging technologies. One of the conclusions of this project was that educators were beginning to assign importance to so-called Web 2.0 tools. This catch-all phrase for emerging web technologies refers broadly to applications that "mash" data together or support collaboration. Some participants in the study suggested students could use these tools to map their some of their findings geographically. The students could also tag (describe) their completed stories so readers could more easily interpret specific elements.

However, this is such a new field that there is likely no research into journalistic applications of these tools. There are, however, many questions. How useful are such maps to online audiences? Is tagging a good use of a reporter's time? What characterizes stories that use these tools effectively? How would a newsroom go about compiling such presentations on a regular basis?

Finally, a third research project suggested by this study is to track how graduates actually make their way into the industry. The existing data is largely anecdotal. Graduates' actual work experiences could have considerable implications for the kind of education they require. A number of participants in the study said few students actually got online jobs with established media outlets; most began by participating in small online projects initiated by print or broadcast information providers. So, the skills online media workers use after graduation may not be those Big Media deems most important. Indeed, the most influential bloggers and podcasters are perhaps most likely to work independently or in small groups that operate under a looser definition of journalism.

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Appendices

Appendix A: Interview Questions

About the course
1. Tell me about the course?
   a. name,
   b. # of students
   c. duration
   d. form (lecture/lab?)
   e. required or elective?
   f. how long have you taught it? Do you know how long your school has taught such a course?
2. What's involved? What do you do with the students?
   a. What assignments do you require your students to complete? (eg. Do they produce original stories, research topics in the news, edit a news digest, maintain a weblog, manage audience feedback?) Describe.
3. Do you have a technical assistant to help students in their work? If so, what are the primary duties of this person?
4. Do the student assignments form an online publication? If so, what is its URL?

About learner outcomes
5. What's the general aim? What do you want students to come away with?
   a. Further to above -- I'll ask about technical skills in a minute – but what journalistic skills do you want your students to grasp?
   b. How are these skills different, if at all, from those acquired as part of a general journalism education?
   c. Is there a way of thinking that you want them to "get"? How do you try to do that?
6. Do you emphasize interviewing, research, reporting to the same extent that instructors would do in other streams (radio or newspaper)?
7. How do you judge excellence in student work? What's the criteria?
8. Are you preparing them for specific kinds of jobs in the workplace?
   d. If so, how do you know you've prepared them well?
   e. What percentage are getting jobs in the online field? (ie. are many students taking the course for interest, or for job training?)

About the teaching
9. Which assignments have proven to be effective teaching tools? Describe. Why?
10. If the students produce original stories for the course, what are you grading them on?
    a. What narrative form are you expecting? What "online-friendly" elements do you expect in a story?

11. Do you ask students to produce that aren't traditional stories (blogs, photo galleries, multimedia essays?). If so, describe.
12. What technical skills do you teach? (Eg. HTML, image editing, audio editing, video editing, image/text animations)
    b.   How has that changed, if at all?
13. What specific software programs do the students use? (List software titles)
14. How would you characterize the importance of teaching journalistic principles versus teaching production skills?
15. Is there something else you would like to teach them that you aren't currently teaching? If so, why not?
16. What are the challenges in teaching this course? Why? How do you aim to overcome them?

Optional:
Do you use a textbook? Which one?
Anything else?

Please submit a course outline with your response to this survey.

Appendix B: Consent Forms

To:
From: Tim Currie
Subject: Online Journalism Educators Survey

Hi _____:

This is an invitation to participate in a study I'm conducting on online journalism education. It's a survey of educators at colleges and universities in Canada. I'm trying to find out what they're teaching and how they are teaching it. What works and what doesn't. I sense there is wide spectrum of debate as to the level of skills training we should pursue, the narrative forms we should teach ... and even whether reporting is a key skill for students entering jobs in online newsrooms.

I've contacted you because you teach a course in online journalism or new media editorial skills at a journalism school listed by the Association of Universities and Colleges of Canada <http://www.aucc.ca/>.

The survey would require 30-45 minutes of your time on the phone and perhaps a few minutes more answering a couple of supplementary questions. You can read more about it at <http://www3.ns.sympatico.ca/tcurrie/project/>.

Please let me know if you are interested in participating. I look forward to hearing from you.

Best,
Tim Currie

To:
From: Tim Currie
Subject: Online Educators Survey -- Consent Form

Please indicate your agreement in the top line of this message when you reply.

I consent to participate in the research study "Online news: A survey of instructional methods" conducted by Tim Currie, a candidate for a MA in Communication and Technology at the University of Alberta.

This is a survey of Canadian online journalism educators about the courses they teach, their instructional methods and their goals for student achievement. The aim of the study is to help educators improve their instruction. A description of the study can be found at <http://www3.ns.sympatico.ca/tcurrie/project/>.

Most participants in the study will be anonymous in the final report. The researcher will use their comments mainly to extract general themes from the body of responses. So the majority of comments will be analyzed and described in the aggregate. Some of the participants' individual comments may appear as direct quotations in the report, but the researcher will attribute them only to an instructor teaching at a small, medium or large Canadian college or university.

The researcher will further ask three or four participants explicitly to attach their identities to their comments for use as a case study. This too is voluntary. The researcher will choose this smaller group of participants based on the diversity of their instructional environments and their teaching approaches, and also the insight they offer into particular issues of online journalism education.

Participants agree with the following statements:

1) I understand that my participation in this study is completely voluntary.
2) I understand I can withdraw from this study at any point up to two weeks after my interview with the researcher (or two weeks after any subsequent verification of comments). If I do withdraw, the researcher will immediately destroy transcripts of my comments.
3) The general approach to this study is clear to me.
4) I understand that I will remain anonymous in the final report unless the researcher contacts me beforehand to solicit my specific consent to the contrary.
5) I understand that a separate version of the final report may be published elsewhere.
6) I understand that my comments will be recorded and transcribed, and will be retained until 2010.
7) I am satisfied that there is no apparent or actual conflict of interest on the part of the researcher.

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education and Extension Research Ethics Board at the

University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the board at (780) 492-3751. All subsequent reporting of this research will comply with these standards.

To:
From: Tim Currie
Subject: Online Educators Survey -- Disclosure Consent Form

Hi _____ :

Thanks for the interview for my study, "Online news: A survey of instructional methods."

I thought your comments were particularly insightful and I'd like to use some of them with your name in my final report. If you agree, I will use your comments as a case study of an approach to online journalism education. And I will identify you and the institution you work for.

This case study will be one of three or four I intend to use in my report, each focusing on the responses from a different participant. It will take the form of a narrative representing a combination of your responses. So, I won't itemize your comments, but I will use a few direct quotes that illustrate important points you have made.

I have selected you because you've offered some perceptive comments on the nature of your teaching and the environment you work in. As well, you teach in a different educational setting from the other case study participants I have chosen. I've attempted to select a range of perspectives and circumstances, such as size of the institution, whether it's a college or university, and the nature of the course taught.

Please note that agreeing to include your name with your comments is completely voluntary. If you don't wish to be the subject of a case study I will use your comments only in aggregate with other anonymous responses.

I'm attaching a Microsoft Word file that contains excerpts of the interview and summaries of some of your comments. Please take a look at it.

Let me know if it accurately reflects our conversation and if you agree to me using your comments and name.

Tim