

WhichWayNC: A Model for Mobile Media Development

Journalism & Mass Communication Educator
2015, Vol. 70(3) 251–263
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sagepub.com/journalsPermissions.nav
DOI: 10.1177/1077695815600733
jmce.sagepub.com



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Abstract

This student newsroom ethnography examines the emergent culture and values of a group-created news and information content with a mobile-first focus. Using semi-structured interviews from 12 participants working on a mobile-optimized summer news project, the study provides insights on the work practices of the digital student newsroom. Validated through the use of textual analysis and member checks, these findings offer four key values that are applicable as part of a reflexive pedagogy in student digital media production. This study offers insights that can be scaled for a journalism program of any size.

Keywords

mobile journalism, digital media, journalism pedagogy, scholastic journalism, experimental

Creating Mobile Media: A Common Challenge

In mid-2014, NiemanLab's Joshua Benton declared that “engaging people on smartphones is the next big challenge to news.” Just as newsrooms had grown more comfortable responding to the demands wrought by the introduction of Internet technology, mobile devices such as smartphones and tablets have introduced another disruptive factor into the content-production process. News product developers, such as Stacy-Marie Ishmael, editorial lead for BuzzFeed News, say, “Mobile is yet another way to get in front of sophisticated, interesting, demanding audiences . . .” BuzzFeed News (O'Donovan, 2014), like other newsrooms, she notes, is trying to figure out how to create a “delightful news experience” for the modern, on-the-go audience.

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Engaging the Active Audience

Nearly two thirds of U.S. adults own a smartphone (Pew Research Center, 2015a). Of that number, 68% use their smartphones to occasionally keep up with breaking news, and another 58% use it to keep up with community events or activities (Pew Research Center, 2015a). Leading the change in audience formation are Millennials, the segment of the U.S. population born between 1980 and 2000. Eighty-five percent of Americans aged 18 to 29 own a smartphone (Pew Research Center, 2015b). As more and more young people rely on their phones and other mobile devices to access news and entertainment content, newsrooms must adapt their production processes to provide content for mobile users.

An Opportunity for Development

While the literature is rich with studies of newsrooms making the transition to a digital-first mind-set, there is a dearth of contributions about a mobile-first orientation in the newsroom. Student newsrooms face a particular challenge in their task of preparing students for working in a newsroom setting far different from the ones that trained their professors. Recognizing this challenge, the University of North Carolina at Chapel Hill used a US\$4.1 million bequest left by an alumnus, Reese Felts, to create an experimental newsroom where students could develop the essential tools and skills required to emerge as competitors in the modern media environment. One of the first projects created in this space was WhichWayNC, a mobile-first reporting platform that covered politics in North Carolina during the summer before the 2012 election. Since that time, the experimentation model developed during that project has served as a frame of reference for news and information tools developed by students in the lab, including CapitolHound, an app that allows users to track the progress of bills being considered by the North Carolina General Assembly.

This ethnographic research explores the emergent culture and practices of a digital student newsroom at the University of North Carolina at Chapel Hill as its workers created a mobile-centric news platform. Operating from a theoretical framework of self-efficacy and a conceptual focus on reflexive pedagogy, this study used collaborative ethnographic methods, including participant observation and in-depth interviews, and sought to assess students' perceptions of their abilities to create a mobile news product. The students applied classroom knowledge, previous work experience, and willingness to fail in a non-threatening setting (i.e., no grades were assigned for their work). The research questions guiding this ethnography were as follows:

Research Question 1: What values emerge from the cultural practice of content creation in the digital student newsroom?

Research Question 2: What insights do the cultural habits and reflexive practices in this student newsroom offer for journalism instructors?

Literature Review

Digital Newsroom Culture

In the first decade of the 21st century, Internet technology changed media anthropology's scope by forcing a re-examination of the roles of news workers in a digitally connected world. Paterson and Domingo's 2008 and 2012 volumes on ethnographic examinations of digital news media present the most comprehensive works on the subject, covering topics including newsroom convergence, old and new work routines, the shift to participatory journalism, and the functions of blogging and social media in modern newsrooms. Researchers have since focused on topics, including the use of digital technology in the newsroom and the intensification of monitoring and imitation among competing outlets (Boczkowski, 2009), and journalists' vision of their audiences (Anderson, 2011).

Additional research about the newsroom impact of new media technology has explored the effects of pressure to converge as newsrooms move from a print-to-online focus (Robinson, 2011). Contemporary media anthropologies have also used ethnography to explore how digital technology created a networked site, where traditional and non-traditional content producers interacted to create new media offerings that offset the deficiencies of cash-strapped legacy media organizations (Anderson, 2012).

However, there remains a gap in the literature on digital technology's influence on the culture of the scholastic newsroom, the space where future journalism professionals reinforce their classroom lessons and develop the knowledge, skills, and self-efficacy necessary to navigate professional newsroom settings. The dearth of research dedicated to this portion of journalism technology underscores the laggard pace in building new media theory that includes the educational experience. Contemporary ethnographies have focused on the Internet's effect on journalism in the professional domain, allowing scholars and researchers to draw insights that are best suited for the world of work and the market forces that shape it. However, the scholastic journalism environment has a different set of needs. Its workers are just beginning to practice their skills and learn newsroom culture; they have classes and external work experiences that may give them conflicting ideas about digital- and mobile-media content-creation processes. For institutes of higher education, a study of student news media culture in the digital age is a step in creating theory-based, experiential approaches to developing relevant journalism curriculum in the 21st century.

Student newsroom as a site for examining self-efficacy. The immersive approach to instruction is a critical factor in journalism education. The student newsroom is an exemplar of this approach—a site where journalism students learn by doing. It exists as what Marcus (1995) refers to as a situated site, a place where multiple sites of activity—in this case, classroom education, internship and external working experience and faculty mentoring of students—converge to shape the learning experience. Irby (1995) positioned the student newsroom as a learning context that educators should examine more carefully, and cited the absence of a theoretical basis or rationale for student report/

instructor editor collaborations. This gap is easily addressed through self-efficacy theory, which measures an individual's perception of his or her competency to perform a certain task based on prior education, experience, and encouragement (Bandura, 1977). Several scholars in journalism education have used Bandura's theory of self-efficacy to measure students' self-perceptions of their abilities to apply key skills in the classroom (Collins & Bissell, 2002; Maier & Curtin, 2004; Poindexter, 1997).

The scholastic newsroom setting is a site ripe for exploration of students' education, experiences, and encouragement where journalism is concerned as it essentially functions as a testing ground where these three factors intersect. As Gutsche (2010) writes,

It is only by combining research studies about the student college newsroom experience with research about how students experience the college newsroom experience that we can begin to fully understand how student journalists experience college and of that dominant newsroom environment for their personal development and future experiences. (p. 64)

Studies such as this newsroom ethnography help educators "build a bridge between journalism scholarship and student development theory" (Gutsche, 2010, p. 64).

Within the student newsroom setting, self-efficacy can be examined through exercises in collaborative efforts in both faculty effectiveness and student learning. This form of reflexive pedagogy, a simultaneously individual and social learning process that promotes individual discovery and collaborative learning, encourages both students and instructors to integrate the intellectual frameworks and identities of their academic and professional practices, and provides an opportunity for dialogue and development based on self-observation (Garnett & Vanderlinden, 2011). Critically reflexive pedagogy encourages learning in small-group settings and requires that participants identify their roles and how those roles fit into the larger production process (Kawalek, 2007). The process can untangle hidden issues in the cultural practices of the newsroom workers and bring into the open issues that might otherwise be hidden (Kawalek, 2007).

Reflexivity is particularly useful as faculty seek to test and develop relevant, experience-based curriculum in journalism education that reflects the changing demands of the digital news environment. It is designed to provide students and instructors with real-time, introspective feedback about what works in the learning process. This approach is novel for student newsroom settings; it is a practice that newsrooms born out of the public journalism newsroom, such as IndyMedia, use to critically reflect on how changes in technology impact the culture of work (Anderson, 2011). Higgins (2014) has developed a series of questions for students to use as part of a reflexive learning practice, particularly where digital storytelling and media are concerned. The questions, which require students to recall a specific instance and probe the occurrence for additional thoughts and material, are similar to the weekly blog posts the Reese News workers wrote to reflect on their newsgathering and development techniques.

Method

This exploratory ethnography used semi-structured interviews, member checks, and interpretive analysis to triangulate findings on the culture of the digital student newsroom. Institutional review board (IRB) approval was granted for the study. The researcher, who had prior contact with the executive and assistant directors of the lab, but no prior relationship or contact with the students, observed 10 students and two faculty/staff members in a digital, experimental newsroom as they worked on a reporting project over the course of 10 weeks. Based in the journalism school of the University of North Carolina at Chapel Hill, the summer project focused on political coverage of the battleground state's electorate in the lead-up to the 2012 presidential election. The project was designed to produce mobile-optimized content on state politics.

In the initial set of interviews, the researcher asked participants questions about their educational and work backgrounds, their career plans, their roles in the newsroom, and their work routines. In keeping with Lassiter's (2005) tradition of collaborative ethnography, participants were asked to read and provide feedback on the researcher's interpretation of newsroom interactions and their own individual interview responses in a subsequent set of interviews. Field notes, interview transcripts, and texts created by the participants were open coded and analyzed for emergent themes. Prior to the final day of the project, the interviewer presented her initial findings to the group for confirmation and validation as part of a practice known as member checks (Creswell, 2007).

Findings

The bequest left to fund the lab afforded students participating in the summer project a significant measure of economic freedom in that it freed the students from concerns about costs for salary, materials, and equipment. The "start-up" costs that might be acquired with a new, unfunded project were eliminated. In addition, students had significant editorial freedom over their projects. The executive and assistant directors did not sit in on story pitch meetings but weighed in on development ideas for the pitches that were accepted by the group. These two factors are critical in understanding the function of the project.

Learning to Think Mobile-First

Every decision made during the project was subject to a single core criterion: "make it mobile." The mobile-first orientation was championed by the lab's executive producer; he returned to the maxim repeatedly as students discussed their ideas. Returning to this central theme helped the students focus their attention on developing a mobile-first mind-set rather than grappling with questions about how to scale a particular feature to work on a desktop and then re-configure it for a mobile device. Throughout the project, students would spend time engaging in reflexive learning exercises, including writing weekly blog posts about their developments and explanatory notes on how certain editorial decisions were made. These notes became the basis for an

e-book edited by the associate producer that the students published at the end of the project. The book, designed to provide insights for other student newsrooms, was drawn upon as additional data that contributed to the formation of the key themes presented here.

Four key themes in this digital newsroom emerged from the data. Based on conversations with the student news workers, they are presented as values applied to the newsroom structure and its function. Each of these values was modeled as part of, if not the product of, the newsroom's flat-leadership structure. They include the workers' mobile-first orientation, the push for personalization, a sense of editorial collaboration, and sharing.

Flat-leadership structure. The team-based leadership structure marks a departure from traditional newsroom hierarchies (Sylvie, LeBlanc, Hollifield, Lacy, & Broderick, 2007). By the participants' observations, this approach not only encouraged shared responsibility but also hindered a certain sense of leadership. The flat-leadership structure was modeled by group production of content and the election of a team captain. On any given day, the team leader could be seen at her desk, editing content, asking about deadlines, and collaborating with other members of the team to produce content for the site. She joined her colleagues in the field, reporting from the nearby capital on legislative issues and traveling throughout the state to cover a story on community colleges.

The executive producer said that the flat-leadership structure was a choice made before the project began: "With 10 people, what kind of structure do you put in place? I didn't want to have to worry about hierarchy of 10. It's not a one-man sport. . . . The greatest players are only one third of the team" (personal communication, June 19, 2012).

This leadership approach was characterized by a few struggles—the students initially protested having to elect a leader after only 2 days of working together. Ultimately, they determined that the team leader's role was to be last read on most stories and content. However, in the first few weeks, her job was focused on getting the group on the same page:

We have a lot of people who are vocal in their ideas. I thought it was going to be easy, we'd say, "we're going to have this talk," and everyone would bring their ideas to the table. That's not always the case. Looking back, I probably would have been a little more vocal about certain things. I see [being team captain] more as an idea-bouncing role, talking about what we think is best, we're going to do, how we're going to cater to our use cases. (personal communication, July 17, 2012)

Her comments reflect a dimension of self-efficacy that was tested by the project—her ability to be a more influential leader for the team. In contrast to the classroom learning, where groups may split labor roles according to their strengths and the use of traditional editorial hierarchy in student newsrooms, the team leader's ability to coordinate function of a rather nebulous team became an initial test of self-efficacy in

management. Once the leadership function was set in place, the team had only 6 days to create the first iteration of its mobile-based content delivery platform. Keeping a mobile-first mind-set was key to the students' choices on which tools to use and how to deliver information to the audience.

Mobile-first/mobile optimization. The adage “make it mobile” was repeated everywhere from pitch meetings to publicity materials. Mobile-based functionality was one of the two criteria for the project. The team set a target of having mobile consumers as 30% of its audience (field notes, July 10, 2012). The developers and graphic designers focused on building a mobile platform and adapting it for alternative storytelling. Several of the student workers commented on how thinking and working from a “mobile-first” perspective was a challenge. On the design side, the graphic designers started their work by scrapping the initial template for the site altogether. In 2 days, they replicated and combined elements from diverse sources, including the Boston Globe, Domino's Pizza's PizzaTracker, and Pinterest to create an interactive mobile platform that would allow users to view photos and videos, read text, and respond to polls on their mobile phone or tablet devices. Upon reflecting on their design choices, the team demonstrated a degree of confidence and competence in their abilities to identify, select, and apply the design principles they had learned in the classroom, and to integrate effective design strategies they had used in everyday life. Together, these efforts to develop the interface exemplify what Gerber, Martin, Kramer, and Braunstein (2012) refer to as innovation self-efficacy, a measure developed to evaluate how the foundational theory applies in the context of applying novel and useful processes, products, or procedures to a new domain (West & Farr, 1990).

The mobile focus of the project was the most salient concept observed and recorded during the study. Each of the team members mentioned it in their respective interviews; through the process of member checks, they unanimously agreed that it was the top value guiding their work on the project:

Here, we're more of an incubator of journalistic ideas that people will be implementing after we tried it out first. We're mobile-optimized; we're mobile first. What can we do to experiment with that? Our values are more on the tech side. We're trying to make politics personal on a responsively designed site. (Team leader, personal interview, July 17, 2012)

Personalization. The students were responsible for every dimension of their project, including its slogan, “making politics personal” (original text, July 10, 2012). This value builds on the concept of “impact” in traditional news values and the “emotional impact” dimension of updated news values (Yopp, McAdams, & Thornburg, 2009). Operating on the belief that mobile news and information usage is a more intimate practice than reading print or desktop-based publications, the students created use cases, a technique used in computer science, to focus content development (Adolph, Cockburn, & Bramble, 2002).

The personalization theme extended from the mobile-first strategy to more traditional practices, including source development. One student described the value of

“making politics personal” as the process of including self in the development of the content. Self-awareness in the content-creation process marked departure from legacy media practices that hold objectivity as the standard, where the gatekeeper has previously been conceptualized as an observer whose experiences are not to be considered in gathering and disseminating information (Gans, 1979). The students’ commitment to “making politics personal” also required them to complete weekly reflexive exercises in which they documented their progress and reported on shortcomings. By their own admission, the students struggled to integrate their own experience into basic reporting duties:

We ask ourselves, why would [our use case¹] read this? Why would I read it?

How can we make sure (the story) pulls on heartstrings, but is just, un-sensationalized? . . . Traditionally, journalism is completely neutral. It’s been difficult for us to accept that it’s OK to have a voice, as long as we’re not ignorant. We must be fair. It’s a personal process. We make choices about what to cover. The subconscious hint of opinion in choosing quotes, etc., has been interesting to deal with when we work with the personal aspect. It’s extremely difficult to make it impartial—I’d say impossible—when you get that personal. (Student newsroom worker, personal communication, July 12, 2012)

The personalization value was central to linking the concepts of reflexive practice within the theoretical framework of self-efficacy. Each personalization decision required the students to examine their processes of topic identification, source selection, and presentation mode in multiple stages of content development and to defend these decisions based on exposure to previous material and work experience. These decisions were tested within the dynamic of editorial collaboration among team members.

Editorial collaboration. The process of editorial collaboration across different skill sets began with team-building exercises during the first 2 days of the project, when students worked in groups to complete tasks such as storytelling through Legos and building human-sized paper airplanes. The editorial collaboration process extended to the creation of pitch meetings to decide what to cover and how—through graphics, multimedia, interactive or text-based storytelling. The pitch meetings, in which everyone submitted a story idea, were criticized by several students as a hindrance to moving valid, doable story ideas forward. The team leader, who had 3 years of experience on the campus newspaper staff, and the programmer, who had never taken a journalism course, were particularly critical.

I guess it’s the rule of commons. One person will bring something, others will sit quietly or fall back on “I’m a programmer, so I do this.” I’m not the kind of person that would say, “oh, I’m the team captain, so we should do this because I said so.” I thought it’d be a discussion-based environment where the difference in what I do is having the final read and working on this . . . project. (Team captain, personal communication, July 17, 2012)

The team added daily SCRUM meetings to keep all 10 members abreast of what everyone else was doing each day. The SCRUM meeting is a practice borrowed from computer science and has found utility in other collaborative work sessions, such as academic working groups (Hicks & Foster, 2010). The team leader described the process as a 15-min meeting that “we have each morning to find out what each person is doing; what updates they have. I could say ‘I’m working on this project, I need help, so let’s branch off and work on this’” (personal communication, July 17, 2012). In comparison with news meetings, where the practice brings together only the respective heads of different parts of a news organization, the SCRUM meetings reinforced the flat-leadership structure by bringing all the contributors to the table.

Sharing. “Sharing” is an exchange of ideas that are central to the development of content produced for the site. This is a multi-faceted concept that includes conceptualization, design, and appraisal. The sharing concept was modeled through the students’ choices in applying suggestions from guest speakers, using exemplars from other media products for elements of site design, and emailing feedback on prior performance. The concept of sharing began with the creation of use cases to use for the site’s design. The programmer brought this concept to the group and described it as a tool used to put a face on the audience: “You pick people from your target audience, decide on their basic age range, tech savvy and social-media use. Everything should start and end with the user” (personal communication, July 12, 2012). The students conceptualized their use cases within the first few days of the project and used them throughout the duration of the project as a reference for story development.

Sharing also extended to the students’ ability to teach one another new skills while creating content. The executive producer was adamant on his position about newsroom preparedness:

I don’t teach skills in the newsroom. I want students to learn to solve problems, think creatively. A student who is good at one skill is a better mentor for another. They learn from their colleagues. This set-up takes students’ self-proclaimed deficiencies and forces them to learn and apply what they’ve learned to their next, subsequent assignments. (personal communication, June 19, 2012).

The concept of sharing is modeled by the e-book the students created through the use of their self-reflective blogs, notes, and conversations. Published in late 2012, the e-book “News on the Go” (Peach, 2012) consists of five chapters of first-person essays that describe the project’s work. The book ends with a case study on creating an innovative newsroom. As Clark (2010) describes it, this type of portfolio pedagogy allows students to see their work in a larger context and to apply the skills they learn in other environments.

Discussion

As convergence, multimedia and other technology-oriented takes reshape contemporary journalism education, programs throughout the nation face the task of updating

curriculum and practicum to provide students with the education and exposure necessary to produce content for the world's growing mobile audiences. The student newsroom is a site for development in teaching and reinforcing not only the skills but also the culture and mind-set necessary to train students in creating mobile-centric coverage of the world's news and events.

The dominant values of production in this particular newsroom included a mobile focus on a culture of sharing. The last pages of the e-book produced during this particular project close with an invitation for suggestions from readers. It was created as a living document that will change as new information becomes available. The sharing concept is novel to the experience of content creators who grew up in the digital age. The value of sharing illustrates a new approach to media production. Unlike the imitation that Boczkowski (2009) observed among media outlets in Latin America, sharing can be a cooperative process, one that uses the best resources and practices available to avoid squandering time with completely original prototypes for developing new media products. The value of sharing is useful to journalism schools that are working to develop mobile journalism courses and labs.

Reflexive Learning on Display

The examples of cultural formation detailed in the field notes of this study are also recorded in the students' own voices as part of their e-book. Together, these works offer researchers and teachers a unique perspective on using thoughtful, introspective techniques to build salience in new media practices. Through their reflections, the students reinforced their skills and developed informal progress reports that helped them understand how to build upon skills deficiencies. In the group setting, reflexivity allowed the students to quickly assess which ideas and projects were working and kept them from spending too much time on an idea that may not have worked because of time, resource, or other constraints. In the student newsroom setting, particularly an environment where experimentation is encouraged and expected, reflexive practices can provide a system of checks to keep a group on-task.

Reflexive practices as part of mobile journalism pedagogy also offer scalable strategies for program development. Rather than having to wait for the development of a textbook about mobile journalism, students can learn from one another about their experiences attempting to develop content for consumption via mobile devices. Through blog posts, social-media updates, e-books, and other electronically based tools, programs of virtually any size and funding level have the ability to connect with one another, flattening barriers to information-sharing. These insights can be customized based on the size, scope, and aims of diverse student newsrooms. They may even be extended to a classroom setting as part of a mobile-news development practicum.

Conclusion

With reference to studies of how the Internet prompted changes in the culture and work habits of print journalists thrust into the digital age, newsroom managers and journalism

educators alike should anticipate mobile's impact on education, training, and practices of students who plan to enter the newsroom in the coming years. The values that emerged from this ethnography are of note as student newsrooms increasingly develop content for mobile dissemination. These values were developed through a process of applying the three dimensions of self-efficacy—classroom learning, previous experience/exposure, and encouragement—within the scholastic newsroom. The Reese News Lab is a unique setting—one that, through independent funding, could encourage innovation by liberating students from traditional newsrooms and suspending their fear of failure.

This research presented the argument that the experimental, digital-media-based student newsroom offers insights into mobile-focused content-production and journalism education that cannot be drawn from professional newsroom studies. The student newsroom is characteristically different than its professional counterparts; its workers have far fewer hours to dedicate to their work, and they are still learning the skills that will allow them to enter the workplace. Insights drawn from this study are of use to students and educators in adopting and adapting journalism practices to a mobile-centric standpoint. This study illustrated how a group of students who were self-diagnosed with skills deficiencies in several areas worked together to produce a viable, sustainable, mobile-based news product. The core values of the group, which emerged from their daily practices, are useful in replicating similar, scalable successes in new media production. They are broad enough to permit other groups with greater or fewer resources to use as a starting point for content development, yet narrow enough for a manageable focus.

Acknowledgments

The author wishes to thank Reese News Lab's Executive Director John Clark, Assistant Director Sara Peach, and the lab's 2012 summer staff for their participation in this research.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Note

1. A use case is a possible sequence of events between a user and a system (Adolph, Cockburn, & Bramble, 2002). In this situation, the students created several individuals to represent potential readers and the needs they sought to have gratified via the mobile site. The profiles of these imaginary users were colloquially referred to as "use cases."

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