



### Introduction Listening before thinking ahead

Ten months ago, when the John S. and James L. Knight Foundation asked me to track down the best ideas I could find about what journalism education should be and do in 2025, we agreed on a few basic rules of engagement:

- This was not a research project in the social-scientific manner of traditional academic research. Its interview and survey subjects would not statistically represent any particular group or population; in fact, I would talk to anybody I thought might have something interesting to say.
- I would record every conversation. I'd then return to each of the interview subjects to confirm that their words were not simply what they had said—after all, I had the recording on my iPhone—but what they had actually intended to say. In other words, my interest is in presenting what they really think.

Having only a few rules seemed to fit the expansive nature of the assignment. Think of what journalism students will need to know to be successful graduates of the Class of 2025. It immediately brought up a larger question that I did not wish to take on alone or without preparation: How do we educate students for a media world we honestly can't imagine?

The following report offers, I hope, a way to begin to look at the challenges ahead. This brief introduction is followed in section 2 by an overview of the state of American journalism in 2014, followed in section 3 by a summary description of the state of journalism education. Before leaping ahead, it seemed helpful to provide context by aggregating much of the best reporting on the relevant issues (with clear pointers to the sources).

The substance of the work is presented in section 4. There, the people who

contributed their time and energy to this project speak, largely for themselves. My questions were open-ended; their responses ranged from discussions of economics and civic engagement to audience metrics and "What's wrong with just teaching students the basics and letting it go at that?" No matter how hard I tried to balance synthesis with snippet, grouping those disparate discussions into themes was a challenge. It's my hope that curious readers will spend time with the interview transcripts in the Appendices.

Section 5 contains my conclusions and a set of proposals for the future of journalism education. They will surprise some readers. I hope they also will spark discussion, commentary, criticism and yes, even well-considered rejection by those with ideas better than my own.

What do I think? I've been a journalism faculty member and a communications school dean; I'm currently a **college president**. So it would be easy to see the world through the lens of the familiar: tweak here, adjust that, bolt on, and reorganize, and, as the defenders of the status quo say, our students will graduate with the foundational skills they'll need. It's a tempting notion, and it's less work than blowing everything up. But it's not an idea to which I can subscribe.

Evidence is building that the "good enough" approach is, in fact, not good enough. A **2013 Poynter Institute study of journalism education** raised a troubling divide between academics and professionals over the value and quality of a journalism degree:

• 96 percent of journalism educators believe a journalism degree is very important to extremely important when it comes to *understanding the value of journalism*. Only 57 percent of media professionals agreed.



- More than 80 percent of educators but only 25 percent of media professionals say a journalism degree is extremely important when it comes to *learning newsgathering* skills.
- 39 percent of educators say journalism education *keeps up with industry changes a little or not at all.* Editors and staffers are even harsher, with 48 percent saying J-schools are not keeping up with changes in the field.
- Thinking back to the last person their organization hired, only 26 percent of media professionals say the person had "most" or "all" of the skills necessary to be successful.

Given that scorecard, it should come as no surprise that enrollments in journalism programs seem to be stagnating or on the decline. Lee Becker, lead author of the study of journalism education conducted annually by the University of Georgia's James M. Cox Jr. Center for International Mass Communication Training and Research, reported in August 2014 that his data showed journalism school enrollments were down in 2013 for the second year in a row—precipitously so at some of the country's most prestigious graduate programs—even as they're up in most other disciplines.

Scant progress in postgraduate employment was reported in 2012, and that stalled in 2013, as did the numbers of new graduates who expressed satisfaction with the quality of their education: Fully a third of new graduates surveyed said they wish they hadn't studied journalism in the first place, 40 percent said they had spent the time and investment to earn a journalism degree but weren't prepared for the market, and 30 percent said they didn't have the necessary skills to succeed in the profession. Of those employed, 75 percent said they were dissatisfied with their jobs. Hardly a sustainable state of affairs.

Michael King **reported it this way** in the American Journalism Review:

At the prestigious Missouri School of Journalism, enrollment fell 9 percent over a recent two-year period, then rebounded after the university moved aggressively to boost financial aid to attract more incoming students into all majors.

Enrollment declines have been steeper at other schools—falling 33 percent over five years at Columbia College Chicago, for example, and 20 percent over five years at Indiana University-Bloomington, according to data collected by the Georgia team. At Indiana, the journalism program is merging this summer with related fields in the arts and sciences college.

Are students voting with their feet? Are declining enrollments enough of an incentive for journalism education to take stock and make real change? Do the apparently rapid drops at some schools—tempered to some extent by increases at others—portend a

fork in the road for journalism education?

Some journalism educators are not inspiring confidence in the market value—present or future—of a journalism degree. Jay Eubank, director of career services at the University of North Carolina School of Journalism and Mass Communication, told the Daily Tar Heel, UNC's student newspaper, that "journalism is an industry that's just crying out for innovation" and acknowledged that the growth in students studying PR and advertising—up to 60 percent of total enrollments at UNC—had buoyed overall enrollment in the school.

The same reporter asked Becker to explain the decline in journalism education's place in higher education. **His response** bears inclusion here:

I think if you ask most young people if journalism is growing, they would associate journalism with newspapers and say it's a dying field. To an extent, the term "journalism" is dragging us down.

The purpose of this 10-month project has been to gather and share the best ideas about the future of journalism education. My listening tour collected the perspectives of an array of professionals, nonprofit entrepreneurs, journalism educators, recent graduates and current students—each deeply committed to the critical importance of journalism in a democracy, and all eager to transform journalism education into a pursuit that lifts us up, rather than dragging us down.

Reports such as this tend to have a relatively short shelf life. But if it serves as an assigned reading in an intro journalism class; if it drives traffic to reports from the **Tow Center for Digital Journalism, Nieman Lab, EducationShift, Pew Research Center, Knight Foundation's blog** or Eric Newton's **Searchlights and Sunglasses**; if it inspires even a single assistant professor to create a different kind of class or program; or if it rouses a single program to launch a new degree, it will have made the contribution it was designed to make.

- **Dianne Lynch** is president of Stephens College, past dean of the Park School of Communications at Ithaca College, and founding executive director of the Online News Association



### The State of American Journalism

New faces and a new frontier

On Oct. 1, 2014, the **New York Times announced** that it was eliminating about 100 newsroom jobs—about 7.5 percent of its newsroom staff—first through buyouts and then, if necessary, through layoffs. The move marked the fourth cut in its traditional newsroom operation since 2008, for a total of 330 jobs in six years. At the same time, the Times reminded its employees that it continues to hire new staff who have the talent and experience to help drive its digital strategy.

The move came five months after the abrupt ouster of executive editor Jill Abramson and the unauthorized release of the Times' internal Innovation Report, an assessment of its impact and competitive edge in a rapidly changing news ecosystem. That report – described by the Nieman Lab as **"one of the key documents of this media age"** – provided an intimate analysis of the Times' growing struggle to maintain its competitive edge and market share. Widely available online, the report reads as an anxious but insightful primer of the current state of the American journalism landscape and proposes a new set of strategies, structures and skill sets its writers assert are essential to a competitive news organization in the digital age.

The Times report is an apt place to begin a discussion of the state of the news and information industry at the beginning of 2015. As the Times downsizes its print-centric newsroom to make way for the hiring of digital players who can lead radical change, it sets forth for the industry (and the institutions of higher education that serve it) the premise that digital-first journalism is more than bolting digital practices onto a traditional system. "The newsroom of the future is not the current one dragged into it," John Paton, the CEO of a local newspaper chain now called Digital First Media, told the Times. "It is going to be re-built from the ground up."

Media buzz in 2013 and 2014 suggested that such rebuilding is underway. Headlines about the exodus of celebrity journalists to digital startups funded by venture capital

and philanthropy helped create an impression of a sea change in the way journalism is being practiced and paid for in today's marketplace. Though the data don't support that conclusion, there has been little doubt for more than a decade that the advertising model that traditionally supported an industrial-age news-and-information system is evaporating.1

While much remains the same in the legacy world of American news media, an emergent sense that transformational change is upon us is widely reflected across the communities of practice associated with journalism and its future. The 2014 annual report of the Pew Center on the State of the News Media speaks with caution but clarity about the evolution of "digital first" practices redefining the news-and-information ecosystem. The Nieman Lab's daily tracking of all things journalism reflects an optimistic embrace of the potential of the transparent, data-driven, and inclusive collection, curation, production and distribution of information for the public good-in short, of digital journalism. The Tow Center for Digital Journalism at Columbia University, under the direction of media innovator Emily Bell, has in the past three years produced reports that serve both as road maps to the future of postindustrial and data-based journalism and as the historical record of the passing of a journalistic era. And writers and reporters of all types, perspectives, audiences and competencies across the Internet have weighed in-some on a daily basis-about the transformations of journalistic practice in a digital age. Examples include the Huffington Post's collection of posts on the subject; the future journalism project (thefip.org) on Tumblr; the Creators Project as it relates to immersive storytelling and journalism; and Knight Foundation's blog.

Former Harvard president Lawrence Summers in January 2012 described the radical disruptions occurring in the higher education marketplace and cautioned those who eschewed predictions of a revolution in the works: "A good rule of thumb for many things in life," Summers opined, "holds that things take longer to happen than you think



they will, and then happen faster than you thought they could. "Fifteen years after the launch of the Online News Association—the first professional organization of American journalists grappling with the implications of digital technology in their profession and practice—legacy journalism may have finally reached its tipping point.

This report is not intended to duplicate the currently available research on the status of the news industry. Think tanks, universities and nonprofit media organizations have published dozens of substantive, comprehensive reports that bring to bear great resources and research expertise sufficient to answer the questions of any interested reader. I have drawn on that work to provide a succinct but intentional overview in order to contextualize this project's discussion of the future of journalism education: What should journalism schools be and do in order to prepare graduates to contribute to the ecosystem of news and information in 2025? Educators have much to learn from the conclusions and insights of the profession as it struggles to prioritize and reengineer its policies and practices to become more nimble, more competitive, more audience-centered ... in other words, to become digital first.

#### The State of the News Media: A Summary

The Pew Research Center's annual report on the State of the News Media is the most complete capture available of trends in the production, distribution and revenue of the American news-and-information industry across media platforms. Published each year since 2003, the report provides analysts a longitudinal, data-driven view of the ways in which print, television, radio/audio and online media have shape-shifted in the past decade. These data effectively challenge commonly held assumptions about consumer access to and use of varying types of media. Key findings in 2014 include:

- People are watching television news, especially in the morning: Network news viewership was up 2.3 percent in 2013 over 2012, and morning news viewership was up 6.7 percent over 2014.
- Newspapers are reporting minor increases in circulation, but that's a reflection of changes in how they are now allowed to count circulation to include distribution of Sunday circulars to nonsubscribers.
- People are still not buying news magazines at the newsstand. Sales were down 2 percent in 2013, and a total of 43 percent since 2008.
- Americans are listening to online radio, even while driving (up from 17 percent in 2012 to 21 percent in 2013), and satellite radio was up from 23.9 million to 25.6 million, over the same period.

Pew reports six major trends, many of them good news for the industry:

• Digital news organizations like Vice, BuzzFeed, Quartz, and the Huffington Post are investing in international bureaus, the first increase in global coverage since legacy newsrooms cut their international staffing by 24 percent between 2003 and 2010.

- While digital-native news startups haven't developed new models of revenue production, they have pioneered creative and effective new approaches to reporting and building audiences.
- Mobile devices exponentially expand the universe of citizen reporters and audiences, many of whom contribute to and "bump into" news on social media sites.
- Video is playing an increasing role in the presentation of online news, but YouTube and Facebook are already major players in the space; YouTube alone garners 20 percent of video ad revenues.
- Local television experienced massive consolidation in 2013, with sales driven by significant increases in the retransmission fees that cable companies must now pay to local broadcasters for re-airing their content.
- Increasing audience diversity—particular among Hispanics—will drive the creation of more diverse news operations.

In sum, television remains powerful, print publications are declining even as their online versions grow, Americans are still listening to the radio online in their cars, digital startups are introducing new strategies and increased globalization to the media landscape, and audiences are bumping into—rather than seeking out—the news on social media and specialized sites like YouTube and Facebook. That's not all you need to know about the news-and-information ecosystem in 2015, but it's a pretty good basis for understanding why things are changing—and why they are not.

#### Where Most of the Money Still Comes From

Whatever the trends, it's indisputably true that the traditional business model for general news remains the only viable business model to date. More than two-thirds of the \$63 billion in domestic news revenues generated in 2013 were still derived from advertising, and legacy media remained the largest recipients of those advertising dollars. Daily newspaper advertising (print and online) generated about \$25.2 billion in revenue in 2012, while about \$12.8 billion went to national and local television (a consequence in part of sharp increases in political advertising).

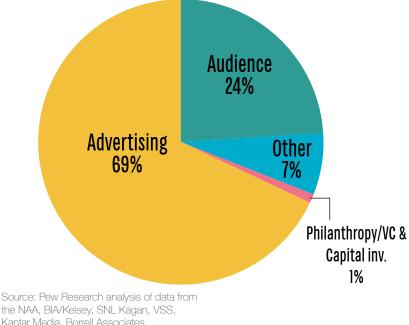
That's not to suggest that the status quo is sustainable. Newspapers used to get 85 percent of their revenue from advertising, and the decline continues. The Newspaper Association of America reported in 2014 that newspaper revenue dropped an additional 6.5 percent in 2013, to \$23.57 billion, with print advertising declining by 8.6 percent. Mark Perry, a blogger at the American Enterprise Institute, reported that print ad revenue had dropped to its lowest levels since 1950, when the NAA began tracking industry data and the U.S. population was less than half its current size. "The dramatic decline in newspaper ad revenues since 2000 has to be one of the most significant and profound Schumpeterian gales of creative destruction in the last decade, maybe in a generation," Perry wrote.



At the same time, the **NAA reported** that the number of online newspaper readers jumped 18 percent between August 2013 and 2014, that 80 percent of U.S. adults online in August visited a news site, and that mobile users now exceed computer users among overall unique visitors. But online traffic, ads and subscriptions aren't replacing print revenue. "The problem isn't simply that growing digital ad dollars can't replace disappearing print money fast enough; it's that digital ad revenue is barely growing at all," **concluded Slate's business correspondent** Jordan Weissmann.

### **Financial Support for News**

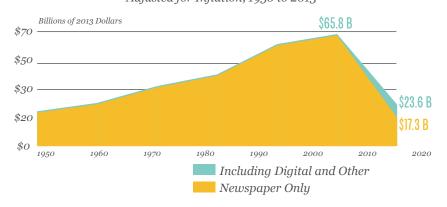
% of total news dollars generated by key sources



the NAA, BIA/Kelsey, SNL Kagan, VSS, Kantar Media, Borrell Associates, RTDNA/Hofstra University, Public Media Futures Forum, and other publicly available data.

The Revenue Picture for American Journalism, and How It Is Changing, P.2

Newspaper Advertising Adjusted for Inflation, 1950 to 2013

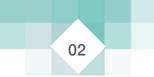


Creative destruction: Newspaper ad revenue has gone into a precipitous free fall, and it's probably not over yet Source: Newspaper Assosication of America.

Table: 2013 Newspaper Media Revenue		
	\$ Billions	Pct. Change
Total Revenue	\$37.59	-2.6%
Advertising Revenue	\$23.57	-6.5%
Newspaper Print	\$17.30	-8.6%
Digital Advertising	\$3.42	1.5%
Direct Marketing	\$1.40	2.4%
Niche/Non-Daily	\$1.45	-5.8%
<b>Circulation Revenue</b>	\$10.87	3.7%
New/Other Revenue	\$3.15	5.0%

Newspaper Media Industry Review Profile 2013

KNIGHTFOUNDATION.ORG



#### Market Disruptions: Bigger than the Sum of their Parts

None of this is breaking news; the trends have been apparent for more than a decade. What wasn't so widely apparent in the interim is that legacy answers to revolutionary questions would not suffice. Clay Shirky's **2009 blog post**—an aeon ago in Internet time—summarized succinctly the ideological divide between those who recognized the revolution and those who did not or could not. Viewed in the context of the current rush to embrace "digital first," it was prescient in fundamental ways:

Revolutions create a curious inversion of perception. In ordinary times, people who do no more than describe the world around them are seen as pragmatists, while those who imagine fabulous alternative futures are viewed as radicals. The last couple of decades haven't been ordinary, however. Inside the papers, the pragmatists were the ones simply looking out the window and noticing that the real world increasingly resembled the unthinkable scenario. These people were treated as if they were barking mad. Meanwhile the people spinning visions of popular walled gardens and enthusiastic micropayment adoption, visions unsupported by reality, were regarded not as charlatans but saviors.

When reality is labeled unthinkable, it creates a kind of sickness in an industry. Leadership becomes faith-based, while employees who have the temerity to suggest that what seems to be happening is in fact happening are herded into Innovation Departments, where they can be ignored en bloc. This shunting aside of the realists in favor of the fabulists has different effects on different industries at different times. One of the effects on the newspapers is that many of their most passionate defenders are unable, even now, to plan for a world in which the industry they knew is visibly going away.

Viewed as revolution, the contemporary chaos of the news industry is at least understandable. Viewed through a disruptive innovation lens, however, the authors of the Times Innovation report argue that the current state of the domestic news industry can be viewed as a **classic archetype** of Harvard Business School professor Clayton Christensen's model of from-the-margins market disruption.*NYTimes Innovation report, P.16* 

Christensen's model asserts that new competitors typically come into a market by using technology to provide cheaper and lower-quality options to consumers. Incumbents acquiesce the "undesirable" portion of the market to the disruptors, who use it as a foundation upon which to build new products and enhance quality, eventually encroaching on incumbents' market share. Textbook examples of market disruption include Kodak's response to digital photography, Detroit's response to Japanese car manufacturers, and higher education's failure to recognize the market threat of for-profits, such as Phoenix and Capella universities.

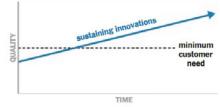
In 2013, market disrupters like BuzzFeed, Huffington Post, Vox, First Look Media, Circa, Flipboard, Medium and Quartz **represented a measly 1 percent** of total

investments in the news industry.

But their aggressive incursion into legacy media's market share, driven by a clearer understanding of the digital news environment and its consumers, has prompted even the industry's standard bearers to stop and take notice. Pew reported in 2014, for example, that news sites native to the Web **saw audience figures competitive** with those of major traditional news organizations: between April and June 2013, Huffington Post (founded in 2005) reported 45 million monthly unique visitors, BuzzFeed (founded in 2006 but actively engaged in news only since 2012) reported 17 million monthly unique visitors, and The Washington Post (founded in 1877) reported 19 million monthly unique visitors. The numbers for all have increased substantially since 2013, but the point is still the same: Digital natives are contenders. According to Pew's **revenue report**:

These companies are digital natives. They understand technology and succeeded there first, offering other kinds of content before moving into news. In addition, they are free of the costly infrastructure of legacy platforms like print and broadcast television, and can potentially allow for some failure and loss during experimentation. What is not

**1.** Incumbents treat innovation as a series of incremental improvements. They focus on improving the quality of their premium products to sustain their current business model.



For The Times, a sustaining innovation might be "Snowfall."

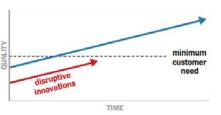
**2.** Disruptors introduce new products that, at first, do not seem like a threat. Their products are cheaper, with poor quality — to begin with.

For BuzzFeed, a disruptive innovation might be social media distribution.

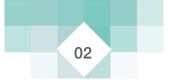
**3.** Over time, disruptors improve their product, usually by adapting a new technology. The flashpoint comes when their products become "good enough" for most customers.

They are now poised to grow by taking market share from incumbents.

NYTimes Innovation Report, P. 16



TIME



known yet is the style and quality of journalism this revenue will produce.

A handful of celebrity journalists are betting their careers on the new model's sustainability and commitment to quality. The departure of high-brand reporters Nate Silver, Glenn Greenwald and Ezra Klein and editors Jim Roberts and Bill Keller from major legacy newsrooms to all-digital startups—widely and woefully reported by the very media organizations they were leaving behind—triggered a ripple effect across the industry, creating a zeitgeist of optimism that genuine change had arrived to transform a moribund profession.

Here again, the data don't support the conclusion. Through interviews and email outreach, Pew's 2014 **study reports** that an estimated 500 digital news organizations have created an estimated 5,000 new jobs in recent years—hardly a sea change in light of the 16,200 newspaper newsroom jobs lost between 2003 and 2013 (and more since), and the remaining 38,000 daily newspaper journalism jobs in 2013 still being funded by legacy companies.

What the departures do show, however, is that digital natives unfettered by the operating assumptions (or organizational expenses) of a legacy press have entered a marketplace that is now open to disruption. As the economic model for media shifts to one defined by individual access to production and consumer content creation, competitive startups may be more closely attuned to the practices and power of audience building; aggregation; user-, crowd-, and machine-created content; and the powerful synergies between talent pools on both sides of the traditional editorial/ advertising divide. As C.W. Anderson, Emily Bell and Clay Shirky conclude:

If you wanted to sum up the past decade of the news ecosystem in a single phrase, it might be this: Everybody suddenly got a lot more freedom. The newsmakers, the advertisers, the startups, and, especially, the people formerly known as the audience have all been given new freedom to communicate, narrowly and broadly, outside the old strictures of the broadcast and publishing models. The past 15 years have seen an explosion of new tools and techniques, and, more importantly, new assumptions and expectations, and these changes have wrecked the old clarity.

Many of the changes talked about in the last decade as part of the future landscape of journalism have already taken place; much of journalism's imagined future is now its lived-in present. (As William Gibson noted long ago, "The future is already here. It's just unevenly distributed.")4

Across that uneven landscape are a wide variety of emergent strategies for producing and distributing new kinds of information, at least some of it produced for and by systems. "Automation of process and content is the most under-explored territory for reducing costs of journalism and improving editorial output," asserts the Anderson, Bell and Shirky report.5

### **Capital, VC & Philanthropy**

% of financial support for news

Source: Pew Research analysis of data from the NAA, BIA/Kelsey, SNL Kagan, VSS, Kantar Media, Borrell Associates, RTDNA/Hofstra University, Public Media Etures Forum, and other publicly available data.

Companies such as Automated Insights, Narrative Science and Palantir are developing and refining algorithms already capable of automating the production of basic journalistic narratives out of raw data. This kind of "robo-journalism" has been greeted with derision and anxiety by the journalism profession and its associated members in the academy, but it is nonetheless an inevitable and highly efficient new player in the media landscape of 2015.

#### Data Journalism

Stories automated out of data are not far removed from stories as data. Since Grace Hopper used a primitive mainframe computer to predict the result of the 1952 presidential election, journalists have used computers to process data to inform their

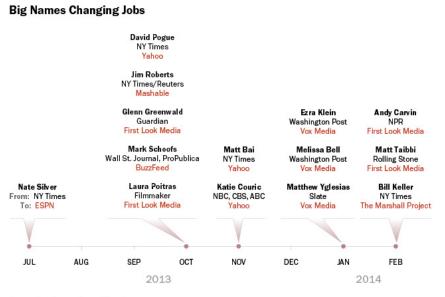


reporting. The emergence and evolution of computer-assisted reporting in the early days of the Internet morphed into what is now commonly called data journalism, a far more sophisticated process of data collection, organization, visualization and publication/distribution that at its best allows readers to interact with data in ways individualized to their own interests and experience. "At their best, news applications don't just tell a story, they tell your story, personalizing the data to the user," says Alexander Howard of the Tow Center.

In his comprehensive report on the history, status and future of data journalism, Howard concludes that the ability to access, process and publish complex data in useful and transparent ways is already a core skill for digital journalists:

As more and more people access the Internet and consume media on mobile devices, adopting a data-centric approach to collecting and publishing journalism will only grow in importance. The need to flexibly deliver content to multiple platforms and formats means that applications' programming interfaces that can supply data to any platform will continue to be a smart investment for organizations, particularly if they seek to be digital first.

That transformation will present new challenges in maintaining the integrity, security and accuracy of the data upon which stories are constructed; those new challenges



Source: Pew Research analysis of press accounts

#### PEW RESEARCH CENTER

The Growth in Digital Reporting

will, in turn, demand that working journalists develop and exhibit greater expertise and depth of understanding in the social sciences, statistics and data analytics. "This is not a new idea, given how deeply Philip Meyer's 'precision journalism' is grounded in applying social science to investigative reporting," Howard says, "but everyone who wishes to practice and publish sound data journalism is going to need to understand it."

As new tools emerge to simplify data processing and visualization, journalistic expertise and understanding about how to ethically, accurately and transparently interrogate and present data stories will be of ever more pressing importance.

#### The State of American Journalism: Summing Up

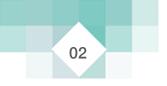
The news-and-information ecosystem in 2015 is awash in new forms and types of news and information, produced by professionals who make their living as journalists; by amateurs and crowds leveraging the availability of capture and publication tools and platforms to collect and distribute content; and by systems designed to hold, process and deliver information in multiple formats, upon command or according to schedule, and without human intervention. All three communities of practice are evolving in parallel, shaped by rapid iteration, assimilation and adaptation—and without the underpinnings of a tested or widely replicable business model.

While the advertising-and-subscription model that long sustained traditional news organizations continues to evaporate, legacy news organizations have yet to develop sufficient alternative revenue streams. A recent trend-defying revival in the fortunes of local and national television stations (through increased retransmission fees and increases in political advertising) may have prompted some unrealistic hope that similar revenues could find their way to newspapers, but no such windfall has been forthcoming. And ever-increasing competitive pressures are pushing news organizations to create a digital-first culture that contests or disregards many of their traditions, boundaries and operating assumptions.

The nature of digital business is well understood by Mark Andreessen, the coauthor of Mosaic, one of the first widely used Internet browsers, co-founder of Netscape, and co-founder of VC firm Andreessen Horowitz, whose portfolio reads like a "Who's Who" of successful Internet startups. In February 2014, Andreessen wrote a blog post about the future of the news business, a missive that began with an extraordinary statement of exuberant optimism: "I am more bullish about the future of the news industry over the next 20 years than almost anyone I know."

He went on to describe an industry ripe for disruption, growth and reinvention, one in which traditional business models had become obsolete but market demand would drive growth:

Right now everyone is obsessed with slumping prices, but ultimately, the most important dynamic is No. 3—increasing volume. Here's why: Market size equals



destiny. The big opportunity for the news industry in the next five to 10 years is to increase its market size 100x AND drop prices 10X. Become larger and much more important in the process.

Successful news organizations will need to seek out diversified revenue streams and expanded business models, including conferences and events, crowdfunding and micropayments. And it will take new kinds of leadership to instigate radical change, one that privileges vision, scrappiness, experimentation, adaptability, focus, deferral of gratification and an entrepreneurial mindset.

Bloggers and pundits had a field day with Andreessen's optimistic view, but what they didn't recognize or acknowledge is perhaps the best advice I've seen or heard throughout this project to journalists who believe in the value and importance of what they do and why it matters:

All of this requires abandoning the past, something that admittedly is very hard but necessary to move forward. Today's news organizations are spending 90% of their effort and resources on playing defense. They are protecting the old artifacts and business model, rather than going on the offense and making the future. Even newspapers and other media outlets that are just now making it across the digital chasm would be much better off today if leadership had shifted resources and focus harder and sooner. Without a strong offense, and a view forward rather than back, a bad result is inevitable in the long run.

Sound advice to any organization, but particularly relevant, perhaps, to those entrusted with the training and education not of yesterday's journalists, but of tomorrow's.

- 1. Anderson, C.W., Emily Bell, and Clay Shirky, "Post-Industrial Journalism: Adapting to the Present," Tow Center for Digital Journalism, Columbia Journalism School, 2012, pp. 11-15.
- 2. Pew Research Journalism Project, State of the News Media 2014, http://www.journalism. org/packages/state-of-the-news-media-2014/ accessed December 11, 2014.
- 3. "Schumpeterian" refers to Austrian-American economist Joseph Schumpeter, known best for his theory of economic innovation and the business cycle, in which he described "creative destruction" as the process by which the economic structure revolutionizes and re-creates itself from within. Perry, Mark, "Creative destruction: Newspaper ad revenue continues its free fall in 2013, and it's probably not over yet," American Enterprise Institute, April 25, 2014. http://www.aei.org/publication/creative-destruction-newspaper-adrevenue-continued-its-precipitous-free-fall-in-2013-and-its-probably-not-over-yet/
- 4. Anderson, C.W., Emily Bell, and Clay Shirky, "Post-Industrial Journalism: Adapting to the Present," Tow Center for Digital Journalism, Columbia Journalism School, 2012, pp. 1-2. http://towcenter.org/research/post-industrial-journalism/

#### 5. lbid., p. 25.

6. Howard, Alexander, "The Art and Science of Data-Driven Journalism," Tow Center for Digital Journalism, Columbia Journalism School, and the John S. and James L. Knight Foundation, 2014, p. 16. http://towcenter.org/blog/the-art-and-science-of-data-drivenjournalism/

7. lbid, p. 73.

8. lbid., p. 74.

9. Andreessen, Marc, "The Future of the News Business: A Monumental Twitter Stream All in One Place," http://a16z.com/2014/02/25/future-of-news-business/.



# The State of American Journalism Education

Of multiple missions and basic skills

The relevancy and necessity of a journalism degree has been debated since the establishment of the earliest journalism schools. Today, the question continues to prompt a polarizing response that may reflect deeper concerns about change, quality and measurable outcomes, as well as the place of journalism schools within the academy.

Once among the "cash cows" of many campuses, journalism schools in recent years have experienced new challenges in recruiting and retaining qualified students. The annual analysis of trends in journalism education by the University of Georgia's Grady College of Journalism and Mass Communication reported in 2014 that enrollments were down 9 percent between 2011 and 2013 at the University of Missouri School of Journalism (established in 1908) until the university boosted financial aid to attract more students; down 33 percent over five years at Columbia College Chicago, and down 20 percent over five years at Indiana University-Bloomington (where the institution has merged journalism, communications, telecommunications and film studies into a single school).

While enrollment has declined at many undergraduate schools of journalism at a time of overall enrollment growth at their home institutions, graduate schools in journalism appear to be even harder hit. One dean described a program forced to increase its rate of admissions from 40 percent to 85 percent in a single year to fill a class; student profile, success rates, satisfaction and job placement all declined as a result. "This is the only place where people on Twitter are saying they can't believe they are going to this famous journalism school five weeks before they arrive, and five weeks after, the same students are asking to meet with the dean as a cohort," he said. "I said to the faculty that you cannot anger students like that in five weeks. It's impossible. But it wasn't."

Lindsey Cook, a 2014 graduate of the University of Georgia and a former AP-Google scholar who is now working as a data reporter at U.S. News & World Report, would probably agree. "I considered going to Stanford and Columbia for their graduate programs, but I couldn't see wasting those two years' worth of income and life to get another journalism degree when I can get a similar job now that pays around the same."

#### Philosophical Divides and Big Bets on Specialization

Iconic representations of the identity spectrum of graduate journalism education may be embodied most clearly in the high-profile journalism programs located in New York City: Columbia University, The New School, New York University and the City University of New York (CUNY).

Each of the New York institutions leverages its particular strengths and market niche, one administrator observed. "I think that people are starting to recognize that enrollments are going to be soft for some period of time, and we'd better be known for something," she said. "So people are starting to really specialize: Columbia has placed a really large bet on computer science and big data and the intersection of those two things. New School is going to really focus on design, and game theory and interactivity. NYU has the verticals, and they do really well with that, I think they'll stick with that. And CUNY is trying to carve out this entrepreneurial and social space—like USC Annenberg, which is doing a lot of very similar things."

While each program enjoys its own strengths and high-profile programs, the contrast between Columbia and CUNY may be the most telling in terms of the academy's varying perspectives on the role and mission of graduate journalism education.



To the north, at Broadway and 116th Street, sits esteemed and wealthy Columbia University (with an endowment of \$8.2 billion in 2013), whose graduate school in journalism was established in 1912 with funds from newspaper magnate Joseph Pulitzer—though it took the institution a decade to agree to accept the funds, too late for the program's namesake to see it enroll its first class of students. Columbia is home not just to the **Tow Center for Digital Journalism**, which produces some of the best and most insightful analyses of the new media ecosystem, but also to a slate of deeply focused specialization programs (see table below), and a new, widely recognized dualdegree program in computer science and journalism whose grand goal is to "educate a new generation of people who can refine and create news gathering and digital media technologies to redefine journalism as we know it."

Concurrently, Columbia is widely recognized as the institution most publicly determined to meld graduate journalism education with a rigorous program in the liberal arts. Under the direction of President Lee Bollinger and Nicholas Lemann, the dean at the time, the school in 2005 launched a Master of Arts degree program deeply embedded in the intellectual life of the university and open to experienced journalists who sought academic and theoretical depth rather than skills training. Today, the Master of Arts at Columbia operates in concert with its more traditional skills-based Master of Science degree, offering students the opportunity to study such subjects as science, economics, politics, health, and arts and culture.

Little surprise, then, that Lemann joined journalism scholars and former administrators Jean Folkerts and John Maxwell Hamilton in October 2013 to publish **an historical analysis and set of recommendations** about the place and purpose of journalism graduate education within academia. Funded by the Carnegie Corporation as part of the Carnegie-Knight Initiative on the Future of Journalism Education, the 84-page analysis opens with a well-known 1997 quotation from Carnegie President Vartan Gregorian:

Journalism schools are teaching journalistic techniques rather than subject matter. Journalists should be cultured people who know about history, economics, science. Instead they are learning what is called nuts and bolts. Like schools of education, journalism schools should either be reintegrated intellectually into the university or they should be abolished.

The authors point out that there are today 115 accredited schools of journalism and mass communication and more than twice as many unaccredited programs, most of which are dedicated to undergraduate education. But their report focuses firmly on graduate education and the need for the kind of reintegration into academia that Gregorian proposed 18 years ago:

Journalism schools have tended to orient themselves too much toward the profession and too little toward the university, and this is not the best way for them to realize their full potential or to live happily inside the institutions that house them. ... Research is crucial. Most journalism schools live inside research universities, so it is essential that journalism faculty members be engaged in ambitious research, as well as excellent teaching, throughout their careers. ... The career paths for journalism faculty members, which in many programs need to be defined more carefully, should equip them to conduct ongoing research as well as to teach.

... Understanding the contexts in which journalism takes place should be just as important in professional education as is mastering the prevailing norms of journalistic practice at the moment a student happens to be in school; what many journalists have long derided as "media studies" and "theory" in fact should be an essential part of a working journalist's education.

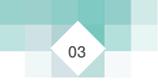
In summary, the report argues that graduate journalism education should include gathering and processing information, writing well and conveying information accurately and quickly. But just as important, journalism students should develop expertise in media history and law, cultural competence, and substantive analysis through researchbased methodologies. To claim their rightful place within the academic enterprise and in the eyes of their university administrations, journalism faculty must become more deeply engaged in contributing to the currency of the academy: traditional research that brings funding, visibility and prestige to the institution, that informs teaching, and that creates knowledge that illuminates and is of use to the profession.

That notion of a more traditionally academic graduate degree program embedded deeply in the traditions of the university, whose curricula are informed and sustained through collaboration with its other world-class disciplinary programs, stands in stark contrast to the new graduate degree program located 60 blocks south at the City University of New York (CUNY, where the total 2013 reported endowment for the City College was \$215.3 million). Just under a decade old, newly accredited by the ACEJMC (Accrediting Council on Education in Journalism and Mass Communications), and settled into new spaces on two floors of a building just off Times Square and right next door to The New York Times, the CUNY program prides itself on its commitment to traditional journalistic values, dynamic journalistic skills training, and a diverse faculty and student body. Its mission is unabashedly pre-professional, the antithesis, perhaps, of the kind of master's degree program envisioned by those who ascribe to the Lemann-Folkerts-Hamilton version of journalism education:

The CUNY Graduate School of Journalism prepares students from a broad range of economic, racial and ethnic backgrounds to produce high-quality journalism at a time of rapid change.

We are rooted in the core skills and ethics of journalism: strong reporting and writing, critical thinking, fairness and accuracy.

We teach new technologies and storytelling tools across media platforms to engage audiences and promote a broader democratic dialogue.



We serve our local and global news communities by sharing our reporting, research and facilities.

We serve our profession by graduating skilled journalists, diversifying the voices in the media and encouraging innovation and entrepreneurship to help build a sustainable future for journalism.

Dean Sarah Bartlett, who came to CUNY by way of BusinessWeek, The New York Times, and Oxygen Media, in fact takes issue with many of the trappings of academia from the institution of tenure to the accreditation standards that privilege tenured Ph.D. research faculty over working professionals in the field. Her perspective, **clearly articulated in an essay included in the Appendices**, challenges the academy's assumption that academic credentials and full-time, tenured status are the metrics of quality for journalism faculty. In fact, Bartlett prides herself on the number of adjuncts who comprise her teaching faculty, all of whom work professionally and bring their experience in the industry into the classroom.

To keep our curriculum and teachers current, which is vital if we are to remain a useful source of newly minted journalists, we need to constantly add new courses, remove old ones and shuffle our teaching staff accordingly. At the CUNY J-School, in the heart of the nation's media capital, that has led us to augment our full-time faculty by tapping New York's reservoir of highly skilled professional adjuncts

Yet the world of academia devalues that approach: "Good" programs are deemed to have higher percentages of courses taught by full-time professors than professional adjuncts. Unfortunately, the tenure system can create a permanent class of teachers who may not feel much pressure to constantly refresh their skills or renew their curricula. In theory, university administrators can create a climate so stimulating and ambitious that they drive out slothfulness. But based on comments of professors and administrators far more experienced than I, vibrant academic cultures like that are rare.

Bartlett and her associate dean, digital media wonk Jeff Jarvis, have just pushed through New York state's sometimes-Byzantine educational system the approval of a new master's degree in social journalism, as that term is writ large. Beyond the application of Facebook, Twitter and Instagram to news and information, the degree is designed to "recast journalism as a service that helps communities meet their goals and solve problems, using a wide range of new tools and skills involving relationship-building, data, social media, and business." Bartlett sees the new degree as an innovative step toward a new kind of journalism education, one that responds effectively and quickly to a rapidly changing market environment and that focuses on journalism's higher purposes: "Social journalism is about more than producing 'content' and filling space," the program description reads. "It is also not just about social media, although we think it is vital for today's journalists to understand and master these tools. Social journalism is first and foremost about listening."

Rather than embracing the longstanding traditions of academia and the power politics of higher education, Bartlett says it's time for journalism schools to free themselves of

practices and policies that no longer serve students or communities well. "We have a very hands-on approach, we're a professional school, we're all about doing it. I feel like we need to get out of the academia of all of this. My responsibility as the dean of the only publicly supported graduate school of journalism in the entire Northeast is that our students can get jobs. We have to teach them whatever skill sets they need to be able to go out and be successful in the profession."

Consider how these program descriptions reflect the differences between Columbia and CUNY in both mission and style:

### Columbia

CUNY

The Arts: Through a combination of extensive reading, case studies, site visits, and teaching collaborations with scholars, artists, and other leaders in the arts, students consider the formal and emotional force of the arts as well as the ways they function as commodities in a global marketplace.

#### Business and Economics: The fall term

stresses three attributes of excellent economics reporting: a firm grasp of basic economic theory and institutions; hands-on knowledge of data for measuring economic performance and assessing the validity of economic arguments; and the ability to find and report compelling stories. The spring term provides students with the analytical skills to conceive and execute stories about the business sector.

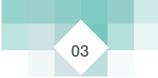
#### Science, Health and the Environment:

Experts take the Science class on a whirlwind tour of some of science's most compelling subjects, including contemporary physics, the ethics of public health, epigenetics, climate change, the history of industry, and trends in conservation biology. Students learn to deconstruct scientific studies, to retain skepticism, and to bolster health and science stories with context, history, and the careful use of data. In the Arts and Culture Reporting Program, the five boroughs serve as our classroom. Students learn how cultural institutions work. They analyze the economics of the culture industry. They explore contemporary and historical issues such as copyright, censorship, and branding that provide context for reported stories. They write reviews and critical essays, study critics from Walter Benjamin to Anthony Lane, and explore the aesthetic and ethical considerations that make for fair and informed critiques.

Business and Economics Reporting: Money is at the center of every human endeavor and crucial to every area of journalism—whether politics, government, foreign affairs, social issues, the arts, or sports. The Business & Economics Reporting Program at the CUNY Graduate School of Journalism teaches journalists how to cover money no matter what their ultimate specialty.

#### Health & Science Reporting: Science

journalists cut through jargon and hype to convey information that's genuinely useful to the public. They concern themselves with food and nutrition, exercise, acupuncture and meditation, and psychology. They cover toxins that we unknowingly ingest, through lipstick, water bottles, and the ink on microwave popcorn bags. They cover controversies, such as athletes' use of performance-enhancing drugs and the theory that vaccines cause autism. They cover trends, such as medical marijuana use and the high incidence of post-traumatic stress disorder among Iraq War veterans.



#### Undergraduate Journalism Education

The Grady School's annual survey reported that about 198,000 undergraduate students were enrolled in the nation's 480 journalism and mass communication programs in the fall of 2013; of those, about 27 percent were studying journalism. Roughly 7,000 faculty and 5,000 adjuncts and part-timers made up the teaching force. While curricula across programs inevitably varies, educators and professionals seem to agree that the basics remain relevant: Journalists still need to be able to tell compelling and accurate stories, to ask insightful questions, to understand the values and principles of the craft and its place in the history of a democracy, and to use the tool kit of the profession, however one defines or describes that.

In hopes of capturing the insights of the educators responsible for journalism education in our nation's colleges and universities, I worked with Jennifer McGill, executive director at the Association for Education in Journalism and Mass Communication, to send an online survey to its entire membership. It arrived in May 2014, just as the spring semester was ending, and it asked respondents to answer a short set of open-ended questions about what journalism is today and will be in 2025, and what journalism schools should do to produce graduates prepared for that new media environment. It was, in other words, not a quick-response kind of instrument. While 44 respondents started the survey, only 20 completed it; of those, three asked that I report their views only in the aggregate. A hard-copy letter went out to all of the member institutions of the Association of Schools of Journalism and Mass Communication in July; I received three additional survey responses from that effort. I attended the AEJMC convention in Montreal in August, where I had the opportunity to interview several faculty and administrators. While this was never intended to be a representative or statistically valid sample of the country's journalism educators, it has turned out to be little more than a random smattering of the opinions of a small fraction of educators willing to take the time to share their perspectives - even in brief. From those respondents emerged a general consensus that the fundamentals of journalism haven't and won't change, though students are now expected to master a more complicated set of technology skills.

A subset of their responses (printed here with their permission) includes the following:

#### Jon Bekken, Albright College:

The key qualities [of a journalist] are an ability to listen, a sense of empathy, careful observation, curiosity, and the determination not simply to accept things as they seem to be but to pierce the veil, ask the difficult questions, reflect upon what voices are not being heard and whose interests are being ignored. In short, to pay attention. The key skill set revolves around making sense of the information. The journalist needs to not be afraid to ask questions, to work with the information until she understands it, and to present it to the public in ways that are not only coherent but interesting, that make the connections between public life and the reader clear, that activate and engage.

All else is technique. A software program can be learned in a day or two, if one has a message to tell that needs that technique. Editing video or audio is simply a matter of practice, once one knows the story one burns to tell. Writing, which is the paramount skill but which is fundamentally about observing and thinking about the material and one's audience, too, is learned through doing, and through actively engaging with one's publics.

# Dane Claussen, former faculty member at Point Park University and visiting professor at Shanghai International Studies University's School of International Journalism:

I will say here that journalism programs need to be much more selective about who they admit, much more intellectually rigorous, and much more difficult to get a degree from. Probably half of the 475 or so journalism programs in the US could be shut down without damaging either the media industry or higher education (universities would still get those students' tuition dollars, but through other majors) ... Contrary to the new Indiana study concluding that U.S. journalists are "overeducated," the fact is that most of them are as dumb as a brick. Many of them are lazy. Some are dumb and lazy. ... It worries me that ACEJMC is permitting more journalism technical courses and fewer liberal arts courses to make a better-rounded person. So are we turning out technicians and reflecting more of what trade schools do instead of providing a true university education with all its implications?

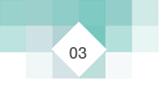
#### Huntly Collins, La Salle University:

Journalists need: 1. Insatiable curiosity about everything; 2. Specialized knowledge in at least one thing; 3. Ability to interview everyone from saints to whackos; 4. Ability to closely observe people and scenes; 5. Ability to plumb public documents; 6. Ability to report and write accurately, fairly and completely; 7. Ability to tell a story in a powerful way; 8. Understanding of how to use technology to tell stories; 9. An understanding of technology's limits as well as its potential; 10. An ability to make the case for public funding of a public good—fair, accurate and complete stories about issues of public importance.

#### Audrey Wagstaff Cunningham, Hiram College:

Students need hands-on, real-world experience. Instead of having every student write the same story for a journalism class, each student should have to chase down his/her own story and have the opportunity to see it in "print." Many journalism classes (at the secondary level) are no longer producing newspapers and the like. Their programs have been cut because of budgeting concerns or because of administrative censorship. This is detrimental to the educational process because students are not able to see their work in print. The editing, publishing, and distribution process is central to a journalism education. Thus, students' work needs an outlet.

Students also need a deep understanding of media law and ethics. They should



understand major legal principles and how to apply them to their work. In addition, they should know about administrative censorship of the student press and the law(s) that guide it (e.g., Hazelwood). And, just as students should know what they can and cannot do in terms of journalism, they also should know about the ethical principles guiding the craft. This may be done in concert with legal instruction, but should include deep discussion of case studies and real-world examples of ethical pitfalls and the like.

#### Don Heider, Dean of the Journalism School at Loyola University:

Writing, reporting, copy editing, photography, video shooting and editing, gathering and synthesizing information, verifying facts, communicating ethically, using social media to find and disseminate stories, coding, Web design, page layout, headline writing, search engine optimization. That's a start.

#### Karen Houppert, Morgan State University:\*\*

A journalist in 2025, like journalists today, should know how to collect news and information through interviews and research, critically assess the value and reliability of the material gathered, know how to consolidate, condense, organize, and artfully present it to the public. Those are the basic skills needed for successful journalism today—and they will also be needed in 2025.

#### Jeff McCall, DePauw University:

A journalist must be a civic-minded person who wants to serve the public interest by informing citizens about matters that affect those citizens' lives. The key understanding a journalist at any time in history must have is to be able to define what is news. Then, that journalist must be able to use the language and channels of communication in ways that effectively distribute that information. The main skill sets are the ability to reason and effectiveness in using the language.

It seems to me that too much emphasis in journalism education is being put on new technologies. Understanding of technology is important, of course, but at a certain point technology becomes incidental to content. Plenty of students can easily become tech competent, but still not understand what news is, how to find it, or how to express it.

#### Lawrence Pintak, founding dean of the Edward R. Murrow College of Communication at Washington State University:

In my view, a journalist is someone dedicated first and foremost to reporting facts accurately and fairly. S/he is not someone who is—first and foremost—using media to selectively present information for the purpose of advancing a political agenda. By that definition, some of the Arab bloggers who emerged in the first decade of this century made the transition to the status of journalist while the rest remained digital activists adept at using the tools of the media to advance their cause. That became vividly apparent during the so-called Arab Spring, when many of those bloggers were leaders of the opposition.

For [Jeff] Jarvis and those who have drunk his Kool-Aid, everyone is a journalist "now that anyone can perform an act of journalism." I don't buy that. A 12-year-old girl with an iPhone can "perform an act of journalism" by shooting a car crash, but that does not make her eligible for legislative press credentials. And while the Iranian president's blog might arguably "serve the end[s] of an informed community" (or, at least, elements of the Iranian political community), it sure as hell isn't journalism.

As I wrote in a **2009 article for CJR** [Columbia Journalism Review]: "[J]ust because you put words on paper—or a computer screen—does not make you a journalist. After all, Iranian President Mahmoud Ahmadinejad is one of an estimated 100,000 Iranian and Arab bloggers. For journalism rights groups to defend anyone with a keyboard or cell phone camera on the basis of press freedom dangerously muddies the waters. ..." It is unlikely that in this evolving media landscape an ironclad definition satisfactory to all can ever be created. Journalists spend much of their careers trusting their instincts, and at the end of the day, defining who is a journalist likely comes down to that. Personally, I like the definition offered by my 19-year-old daughter: "A journalist puts information in context."

#### David Pritchard, University of Wisconsin-Milwaukee:

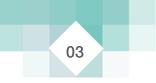
If I were hiring journalists, I'd favor those who (a) understood the difference between the public interest and various private interests, (b) were relentlessly curious about how the world works, and (c) had a passion to share information with the rest of the world. I would also favor those who spoke at least one second language comfortably, who had a solid grasp of how to develop stories out of quantitative data, and who could write clear, concise English prose. Some of those things can't be taught at the university level, and others are not taught by most journalism programs in the United States.

#### James Scotton, Marquette University:

A journalist 1) gathers information, 2) synthesizes/analyzes that information and 3) distributes it to a wide/mass audience on various media platforms. Journalism is a collection of individuals who do that. Journalism will be the same in 2025.

We have a struggle going on between those who believe we should spend more time on 1 or 2 or 3 above. Newer/younger teachers want to spend more time on No. 3. Older teachers want to spend more time on No. 2, with an emphasis on writing but not much on real analysis. Professionals have always complained that journalism graduates from both schools are weak on No. 1.

The best practitioners at the most prestigious outlets seem to lack journalism degrees. The best education for a potential journalist is probably a liberal arts degree with a semester internship with a tough editor. A law degree is not a good idea for a journalist—it makes her/him too cautious. To find the ideal journalists, we perhaps



should do what basketball coaches do: send scouts to inner-city neighborhood schools, find bright prospects and bring them to our programs with industry scholarships.

#### Bruce Swain, University of West Florida:

[A journalist is] someone who gathers and reports news, through any medium, to any number of people. By 2025 it will be the same definition, although the methods of distribution and research may have evolved considerably. ... Familiarity with the nuances of the English language will continue to lie at the heart of news writing, whether it be print, broadcast or multimedia. And the style rules peculiar to our trade cannot be neglected in our teaching or eventual practice, either.

#### The shifting tides of journalism

Other members of the journalism academic community are somewhat less convinced that the sea change washing over the industry isn't altering the landscape of journalism education as well. Daxton "Chip" Stewart, associate dean of the Bob Schieffer College of Communication at Texas Christian University, talks in terms of action rather than status: "A journalist is anyone who commits acts of journalism, gathering and sharing original pieces of information with an emphasis on truth and verification in the interest of serving social justice and transparent democracy," he says. By 2025, much of that activity will be programmed or automated, with bots or drones collecting the information that journalists will use to inform the public. And the reporting enterprise-once fiercely individualized and independent-is likely to become a team effort that draws on the talents and expertise of multiple players: "I could foresee a journalism team being built around a photo/video person, a graphic artist, a hacker, a programmer, a lawyer/ advocate, a boots-on-the-ground reporter, and a storyteller. Some people may share those roles, but I think it's unrealistic to expect one person to do all of those things at a high level. Think of it as 'Ocean's Eleven,' but instead of breaking into a casino vault, they're uncovering corruption or corporate malfeasance, one mission at a time."

Those teams are far more likely to include practitioners who have never studied or even practiced journalism before, says Michael Marcotte of the University of New Mexico. As a result, common parlance is likely to shift away from professional status to describe activities and outcomes:

It seems clear that journalism and practitioners of journalism are finding themselves among a much broader cohort of people doing something journalistic, and this changing identity is likely to continue. The result is that we will develop more exact terms for the roles performed under the vague heading of journalism. We will be more likely to refer to acts of journalism and products of journalism than we will label people as journalists—though I suspect the heart of that term will continue to refer to reporters. Reporters, themselves, would seem to require more specific titling as the general assignment reporter is likely to give way to specialty roles as required by topic focus, platform focus, curation versus production versus distribution roles, etc. So, yes, it's likely to be quite different because of the many new forms information will take.

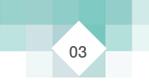
Journalists will also need to be better able to communicate to and about much more diverse audiences, says Maureen Croteau of the University of Connecticut:

Students will need to be able to recognize and tell the stories of people who are unlike themselves. Those are skills that must be learned. As our population becomes more diverse, the skills will be even more important. Diversity, in this sense, includes not only ethnicity, race and gender, but social identifiers such as age, economic status, education, political affiliations, physical impairments, emotional health, mental abilities, appearance, citizenship status, living conditions, criminal history, etc. Journalism educators need to make sure that students get outside their comfortable social milieus. With all of the wonderful things that technology provides journalists today, this remains an area that is best learned through human interaction.

#### Going beyond the core skills

Given the widespread consensus that journalism graduates need "basic skills-plus," it's probably no surprise that at least one journalism school has decided to let students choose what that "plus" experience is going to look like. The E.W. Scripps School of Journalism in the Scripps College of Communication at Ohio University has a new curriculum that requires four basic courses — The Future of Media, Multiplatform Reporting and Writing, Communication Law, and Ethics, Mass Media and Society — and leaves the rest of the journalism coursework to student choice. Robert Stewart, director of the Scripps school, calls it a "boutique degree." Some students make choices that produce the same kind of traditional journalism degree the school offered a decade ago, he says; others combine news-and-information courses with strategic communication to create a journalism degree grounded in audience analytics and engagement. "What I really love about our program as it is currently structured is that students take the classes that make the most sense to them," Stewart says. "We're saying, 'Here's the menu, it's a la carte, you've got four years, and you pick what you want to do."

Many of the students at Scripps College are choosing to work with professor Michelle Ferrier, who says she is building "an ecosystem of entrepreneurship and innovation." Through a network of laboratories, competitions and courses, Scripps is offering students the opportunity to learn to think like entrepreneurs, she says. "Pitching ideas, teamwork, being able to do an environmental scan to see where opportunities are ... these are the kinds of skills our students need. I don't think most programs set out to teach those kinds of skills to students," she says. "When students learn the entrepreneurial way of thinking, they are able to analyze content in front of them, they are able to look forward to see opportunities and are able to position themselves, their companies or a startup in a place so it can be successful. That's really lacking in our



current journalism school curricula."

#### Ferrier continues:

I think that a key skill entrepreneurs develop is the constant scanning mode where they are looking for potential for growth and development. Another key skill is environmental scanning: Is your idea viable? How do you test an idea and continue to iterate? It's not just about having an idea, but about evolving an idea. ... I would say that entrepreneurial environments teach things that our students don't get in the classroom and that's how to fail gracefully and get back up and do it again. ... In the startup and entrepreneurship environment, failure is seen as learning, from which you change your idea and pivot.

Programs can make room for entrepreneurship by eliminating some of their skills courses, she suggests. Students need to learn how to learn, and that should begin with software self-instruction. "Students need to learn how to learn it on their own, because they'll be doing that for the rest of their lives. Whether it's a new camera, new software, new design software or analytics, they will have to learn how to learn it."

In programs without faculty expertise in entrepreneurship, outside expertise can deliver modules on specialized topics without disrupting a course or a curriculum. Ferrier created a two-week module on mobile apps and asked faculty members to build the time into their syllabi; she brought in a mobile-app expert to deliver the modules. "This was my sell to the faculty: If you implement the mobile module in your class, this two-week module, I would have an expert come in and teach that module in your classroom. I am not delivering PowerPoint slides to [faculty] and asking them to deliver this new content. I'm going to .... let you sit back and be a student and learn from the expert so you are able to teach it the next semester."

That's the kind of flexible delivery and focus on market skills that Ferrier says will be essential for journalists in 2025: "I think we are going to see more and more smaller, geographically or niche-located media that are serving the long tail in the marketplace," she says. "They are not going to be the big blockbusters that serve millions of eyeballs and going to attract the online audiences. I think we have already seen those and are now seeing the proliferation of the long tail. You can survive and thrive with a very small fan base. However, I think we have not taught our students the skill sets to operate in that space."

Students at the Walter Cronkite School of Journalism at Arizona State University may have more of a prescribed curriculum, but their choices within that curriculum include a network of what Dean Chris Callahan calls "teaching clinics" that—with the program's recent acquisition of the state's largest public broadcasting entity—are growing into a system of working newsrooms and laboratories that he says comprise a genuine "teaching hospital."

inflammatory phrase with some people, but we talk about the analogy of the teaching hospital," he says. "... Now, for the first time, we have a critical mass of these programs where we are going to make it a requirement for all of our undergraduates [it is already a requirement for graduate students]. You know, we've talked and talked about a teaching hospital, but we didn't have a hospital, we had small clinics. The acquisition of Arizona PBS has given us a hospital, taking all these professional programs all under a single umbrella and making one news organization."

That system will draw students in the school's television, radio and multimedia advanced classes into a single newsroom, with shared news meetings and collaborative outcomes. "From a learning environment perspective, they're not just producing journalism on multiple platforms, they're working with other students who are working across platforms, and they're learning how it's different, how the thinking from one platform to another is different," Callahan says. "They're doing that by being all in one news entity. It will be much more robust an educational experience and, quite frankly, we think they'll be producing better, deeper, more engaging content."

That experience provides challenging preparation for today's marketplace, but Callahan says the school also sees itself as a site of experimentation and innovation. It's preparing to hire a "chief of disruption"—he's not sure about the exact title—responsible for developing new partnerships across the campus that produce new synergies and opportunities within the "teaching hospital."

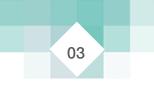
Callahan has been in academia long enough to understand the challenges of attracting his colleagues into his program, but he's optimistic that the partnership has something to offer them: public profile. "These are people doing fascinating work, but they all believe the same thing: They have fantastic people, great students, innovative programs, and they all think that they are not nearly as well-known as they should be, both internally and externally, and we can bring that to them. That's a real, actual, tangible benefit."

In the face of massive investment and growth, Callahan says the core values of journalism still drive the school's mission: "Forget the forms, forget the technology, forget everything else," he says. "I think the core values of journalism need to be held and held firm. We can come up with a media model that I'm sure will be successful, but if it's not performing those primary functions of journalism in a democracy, then to what end?"

Lindsey Cook, the U.S. News & World Report data reporter, agreed that "the whole concept of a journalism school being separate from the rest of the university is very antiquated and is terrible for us. ... If you are going to hire someone to teach your students computer science, you should hire a computer scientist. If you are going to hire someone to teach your students about politics, you should hire a Ph.D. in political science, an expert."

"We talk all the time about this, and I realize that it has become a sort of an

That said, Cook would not try to get everyone into the "hospital" but would send



students out across campus to study at the feet of the masters. Asked what she would do if she could start a journalism school from scratch, she challenged the premise that journalism schools are relevant or necessary. "I would knock down the barriers across campus that keep students from accessing the faculty experts in the areas they're interested in studying," she says. "I would never start a journalism school."

#### The demands of an evolving model

As it has since the turn of the 20th century, the debate over journalism education rages on—from no J-schools to the teaching hospital, from the next version of a liberal arts degree to the cutting edge of technology. Jay Rosen, media critic and director of the Studio 20 graduate journalism program at New York University, says that the symbiotic relationship among journalism schools, universities and newsrooms worked well for 50 years, but it isn't working anymore.

"For the last four or fives decades at least, what the news industry wanted from the J-school was simple: "Send us people we can plug into our production routine tomorrow," he says. "That was the contract that governed journalism education. And when I say 'tomorrow,' I mean that literally. The industry and the journalism professionals who did the hiring wanted people who could sign the forms from HR and learn where the bathrooms are today, get put on an assignment tomorrow, and return with a finished story that could run."

Newsrooms loved it because the university was doing their training for them. Universities loved it because it established positive relationships with the local media and enrollments were strong. Parents loved it because their kids were studying a practical skill. Professional faculty loved it because they could retire from the newsroom and impart the wisdom of their experience to eager students. Scholarly faculty loved it because they were left alone to focus on the sociology of mass media. And students loved it because they got jobs.

But, says Rosen, "what happens when all of a sudden the production routine has to change because technology is changing the way people get news? What happens if, suddenly, research and development becomes a big priority because the news industry needs new products, new business models, and new work flows? What if a thin and underdeveloped learning culture suddenly becomes a massive liability in a craft struggling to adapt? What if people for whom innovation meant a new food section have to reinvent their workplace? Are they going to be able to turn to the J-school for help? That, to me, is the challenge in journalism education right now."

Ibid., pp. 65-70.

Folkerts, Jean, John Maxwell Hamilton, and Nicholas Lemann, "Educating Journalists: A New Plea for the University Tradition," Columbia Journalism School, 2013, p. 4. http://www.journalism. columbia.edu/system/documents/785/original/75881\_JSchool\_Educating\_Journalists-PPG\_V2-16.pdf.



04

### Interviews from the Field

What They Said

If anyone can speak with authority about the best of American journalism and the newsrooms that produce it, surely it is Marty Baron, executive editor of The Washington Post. Baron's journalism career spans nearly four decades, all of them in five of the nation's most prestigious newsrooms: The Miami Herald, Los Angeles Times, The New York Times, The Boston Globe and The Washington Post. Under Baron's leadership, the Herald, the Globe and Post collectively have won nine Pulitzer Prizes, including two for public service. **Baron's colleagues say** he "may be the best newspaper editor working on this side of the Atlantic." The late David Carr, in a glowing New York Times commentary about Baron and the Post, wrote in October 2014: "Sometimes a single person, arriving at the right time, can change the fortunes of an organization."

Baron arrived at the Post the year before it was purchased by Jeff Bezos, founder of Amazon and pioneer of a digital-first market mentality. Bezos has charged Baron—a sometimes curmudgeonly traditionalist when it comes to the core values of journalism in a democracy—with moving his news operation into the digital age without sacrificing its longstanding legacy of journalistic excellence and impact. Toward that end, Baron has turned to some of his startup competitors in search of new models, different approaches, and a more expansive definition of news.

"Our view is we don't have to be other people, but we do have to learn from other people," he says. "... We don't intend to be BuzzFeed, but how can we learn something that can enhance our brand and adapt it to our newsroom instead of replicating it? That's what we are looking for."

That merging of traditional and contemporary journalistic practice represents a sea change in the culture and tenets of mainstream American journalism. While still the generators of 98 percent1 of the industry's revenue, legacy newsrooms (in print,

television and radio) are eager to learn from their more nimble digital counterparts not to become them, but to poach their digital-first strategies around everything from audience engagement to user-generated (free) content.

That starts with hiring, training and retaining reporters who can "write for the Web," says Baron. What does that mean, exactly? Great Web content is imbued with authority, immediacy, interactivity, aggregation, and a conversational, accessible and entertaining narrative style. The Post's new blog, PostEverything, is a case in point. Written by "outside contributors," Baron says it's drawing some of the heaviest traffic on the site. He described one of its early successes, a story called "This is what happened when I drove my Mercedes to pick up food stamps." "It hit all the right sweet spots," Baron says.

The Post has also transitioned away from journalism's longstanding "first or nothing" scoop mentality. "It's very different now," Baron says. "It used to be that everything we did had to be unique; if somebody already had it, there was no point in our doing it. ... Bezos has talked about using the gifts of the Internet. There are newsrooms all over the place doing good work; we don't have to invent them here. Let's find those, let's do the reporting, let's get additional context, let's write it better." The Post has a team of reporters on every shift whose job it is to scour the Web for great or breaking stories and to do the reporting and rewriting necessary to remake them into Post-quality content.

That strategy for creating new stories out of existing information doesn't mean the Post is going to abandon its commitment to its own investigative reporting, Baron says. "It's part of our mission, part of our identity and our brand, and people expect it of us. We invest a lot of money in it. I don't expect investigative reporters, nor the long-form narrative writers that are part of our brand, to produce the same kind of site traffic that



someone covering a beat should produce. So the expectations are different. But it's all part of what we do."

#### Journalism needs to be redefined for the 21st century.

Baron's observations about the current and future state of American journalism—and the consequent shifts in the skill sets necessary to meet its requirements—reflect many of the recurring themes that emerged in my conversations with journalists, entrepreneurs, educators and students over a six-month period in 2014. While transcripts of the question-and-answer sessions are included in the Appendices of this report, this chapter excerpts and summarizes many of those perspectives.

Interviewees said:

- Journalism's core purpose hasn't changed. What's new is the way it is being produced, distributed and monetized (or not).
- Journalists must be technologists, entrepreneurs and "intrapreneurs," and community builders and mobilizers at least as much as they are writers or storytellers.
- There is today no consensus on a proven, sustainable business model for commercial journalism in a digital marketplace.
- Journalistic content is no longer the purview or product of a single trade, craft or profession. Today, it is:
  - produced by working journalists (with all of the attendant privileges and access that position has inhered) for distribution to mass audiences;
  - produced by mass audiences for distribution through social media and other digital channels to mass audiences; and
- produced by working journalists and mass audiences for submission to computer systems that will at some future point relay, configure and repurpose that content for instantaneous distribution to audiences of all sizes (including an audience of one).
- Journalism education is not keeping pace with the news-and-information industry it is dedicated to serve. But it may have an opportunity to claim a more central role in the academy as the purveyor of "liberal arts +" for the 21st century.

#### Journalism's core purpose hasn't changed.

If there is anything about which the interview subjects agreed, it is that journalism remains essential to an informed, effective, and sustainable democracy. James Duff, former CEO of the Freedom Forum and the Newseum, in 2014 helped to create and launch the Civics Renewal Network, a national consortium of nonprofits dedicated to improving civics education in the nation's schools. He speaks passionately about the

need for improved civics education to protect the nation's First Amendment freedoms and the role of a free press in a strong democratic society:

Without an engaged and informed citizenry, as Jefferson called it, we are at risk of losing the freedoms we have. ... A free press is crucial as a watchdog in keeping [the balance between national security and civil liberties] in check, in keeping government in check and the public informed. It's crucial that we have a free press and an informed public, so they understand the role journalists play in maintaining our freedoms.

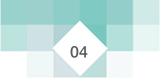
Just across town from the Newseum, Jeffrey Rutenbeck, dean of the School of Communication at American University, is considering the same kinds of issues and questions. Rutenbeck is an historian who believes that academia has an important role to play in defining and protecting the role of journalism in a democracy: "We've got to have some friction here because if we just left the industry of journalism to find its own way, game over. We have to restore some of the conversation about why journalism and accountability matters, why we should think about journalism as an activity instead of an industry."

Journalism—as an activity and a discipline—should be focused on "five pillars" of concern or priority, Rutenbeck says—none of them associated with technology for its own sake. They are engagement design (the art and science of why anyone should pay attention to journalism in the first place); the management of complex systems and processes in an environment that is increasingly networked; analytics and the measurement of impact; transformative storytelling; and leadership and accountability.

"Through all of this, what everyone still values most is a good story told, an important story told, a personal story told, told well and told with impact," Rutenbeck says. "Journalism—as its sheds its ball and chain of objectivity and gets back to the realization that journalists are trying to influence the world like everyone else—is like the Oklahoma Land Rush. Everyone is lined up there at the starting line: Journalists are right there with high school kids and the housewife in Mumbai, and they all have stories to tell."

What's new is the way journalism is being produced, distributed and monetized (or not). Journalists must be technologists, analysts, entrepreneurs and intrapreneurs, community builders and mobilizers, and innovators as least as much as they are writers or storytellers.

While everybody agrees that journalists need to have technical skills and understandings, there is much less consensus about the depth or level of tech mastery necessary for success. On one end of the spectrum are educators like Howard Schneider at Stony Brook, Jeffrey Rutenbeck at AU, Bradley Hamm at Medill/Northwestern, and Robert Stewart at Scripps in Ohio (and many of our survey respondents, quoted in Part 3), as well as professionals like Jessica Lessin, founder of the digital-first startup The Information. They argue that journalists must have some



understanding of various kinds of digital tools but the traditional fundamentals of journalism—reporting, writing, history, law, ethics, news literacy—will trump the tech tool kit every time.

"You need to be dynamically attentive to two things at the same time: the changing landscape and the constants. So you keep your eye on both things," says Schneider. "What's constant? Reporting, writing, critical thinking, serving your audience are all constants. None of that will change or be altered dramatically by technology or different jobs. The hard part is not losing your core values, your nerve, your courage, and not abandoning all of that on the basis of what's trendy. " After extended discussion and debate, the new curricula at the Scripps school at Ohio University retained a decidedly liberal-studies breadth. "When we went through the

curriculum change, we voted on how many courses we would require in each area," Stewart says. "That took a long time because of the detail involved. For example, faculty didn't think we could have students take only one history course instead of two. We had a calculator to show what the total was to stay within the quota, but every decision was voted on and it worked. We ended up with a product that has a strong liberal arts orientation. I'm happy with it."

Hamm suggests that the core has remained constant—and it's a solid preparation for a wide variety of careers. "If I were the czar of curriculum," he says, "I would put history back into every journalism curriculum. I don't believe an educated person can leave a journalism program and not know about journalism history. ... if I were to say that you brought in a Medill student and said they've had law, ethics, history ... the ability to understand the skills of writing and visual communication. ... You match that with professional experience, internships, student media, with study abroad and other leadership opportunities, and in an accredited world with a second major or minor or special emphasis, I think it's as good a degree as you could possibly get, whether you choose to go into journalism or not."

Jessica Lessin says building community can also be about building profit. Founder of The Information, a subscription site whose masthead asserts its role as "the most valuable source of news about the technology industry for the world's professionals," Lessin says the challenge is to build an experience that readers value and can't get anywhere else. For The Information, that means writing great stories and building strong communities around them. "To me, that's the critical ingredient to surviving in today's media. The brands that people follow are the ones that they have a real relationship with, the ones that have a differentiated value are the ones that stand out."

Lessin says tech skills are an organizational competency, but "what we're looking for are great journalists... And J-schools have swung too far toward the tools, toward spending classroom time doing things like editing videos. You have to care about doing the legwork to make sure your stories are getting in front of the people who want to read them, but I think the organization has to do a lot of that work so the reporters can do what they do best....I worry because I see J-schools emphasizing that jack-of-all-trades model. But at the end of the day, the opportunities for original thinkers and writers have never been greater."

On more middle ground are professionals like Baron of The Washington Post; Stephen Engelberg, editor-in-chief and co-CEO of ProPublica; Chris Persaud, former Palm Beach Post intern and staffer, now freelancing; Catherine Cloutier of BostonGlobe. com; Robert Rosenthal of the Center for Investigative Reporting; and Lindsey Cook at U.S. News & World Report, who say working journalists need to understand and use digital tools for data analysis and visualization, for example, but they don't have to be experts or engineers. Collaboration, adaptability, a penchant for change, and the ability to value and recognize (if not tell) a story are just as important to a journalist's success.

"I think we are becoming much more of a technology industry," says Baron. "I think people will need to have much more of an understanding of computer engineering than I do, for example. It does not mean, however, that they have to produce an app. There will be someone to produce an app if that's the future. It's sort of like saying that to be a successful bus driver you have to be the mechanic. You don't need to be the mechanic. Or that to be a successful pilot you have to be able to build the plane. You don't need to know how to build the plane. On the other hand, you want to have familiarity with the technology to know how it works. As the driver, you want to understand what the steering wheel does, and if something goes wrong you have some sense of what it might be."

Everyone who goes to journalism school doesn't need to code, says Engelberg, but everybody does need to be able to talk to the coders. "Not everybody who can write the code can also be a reporter and a writer, but I think putting the two worlds together and creating more of both is a very viable goal for journalism."

Increasingly, those two worlds come together because journalists new to the profession—digital natives—bring a different mindset to their work. For them, figuring out what you need to know—through online tutorials, experimentation and practice—is as much a part of their professional responsibility as interviewing and writing stories.

The Online News Association's 2014 conference in Chicago was packed with journalists whose operating assumption is that you learn what you need to know. Chris Persaud, who at the time was a staff reporter for his hometown newspaper in Palm Beach, Florida, and Catherine Cloutier, a data journalist at BostonGlobe.com, have created their careers around that assumption. Persaud earned an undergraduate degree in urban planning from Florida Atlantic University; Cloutier studied English at Boston College. Both learned reporting and journalistic writing at their campus newspapers.

Cloutier decided to get more formal training at the University of Southern California graduate school journalism program: "USC-Annenberg gave me a fellowship to go there, so for me it was a good opportunity to learn a new skill set and not have to pay. And I got to move to LA from New England," she said. "It was a complete life change. I



loved LA. It was a great experience that way, in that it opened my worldview a lot, too. I reported a lot about South Central [Los Angeles], so it gave me a passion that I didn't have prior, which is writing about poverty and the issues associated around it."

Persaud took a job right out of college at Bankrate.com. After several months, he resigned to work as a freelancer and to create a commercial Web site, RichBlocksPoorBlocks.com, that presents census data on household occupancy and income at neighborhood scale. Users pay \$50 annually to access the data.

Persaud knew very little about coding or data analysis when he decided to create the site. He spent three to four months tracking down tutorials online and learning Excel, Ruby, Python and PHP. "I think you can do fine teaching yourself if you have the time and you know where to go and where to look. I just Googled around 'coding for journalists," he says. So Persaud's pretty significant data and coding skills are all selftaught? "I don't think you can say that," he says. "I found a good tutorial, and I learned from it."

Cloutier says she honed her reporting and writing skills in grad school: "I can write a basic news story... I can edit video in Avid and Final Cut. I can edit audio in Audacity and Audition. I can do audio slideshows, which I've never done. A misconception in journalism academia is that people do audio slideshows. I can do basic HTML and CSS. I can build a basic website using WordPress and adjusting templates to certain specifications. Infographics in Illustrator and Photoshop. It was a wide range of tech skills, but I was in the online journalism track. Had I not been, I probably would have had fewer online journalism skills coming out."

After graduation, Cloutier worked for 10 weeks as a News21 intern and wrote her multimedia thesis, an investigation of Watts. From there, she took her first job at the daily newspaper in Erie, Pennsylvania—where she sat down with every one of the reporters to help them open a Twitter account. After a year, she applied for a job at Boston.com, doing hyperlocal coverage of Boston neighborhoods.

In February 2013, the Globe announced that it was splitting Boston.com and BostonGlobe.com and moving the journalistic elements of Boston.com to the Globe site. Cloutier's job was eliminated, but her seniority level meant she would be reassigned; eventually, she was moved to the BostonGlobe.com site to become a data journalist, something for which she says she had little preparation or skill. "It has been challenging," she says. "I didn't even know much about Excel, to be honest. I have taught other people how to do pivot tables and in doing so, I've taught myself how to use them. It's been a lot of Googling. It's a lot of trial and error."

Cloutier says she has mastered the basic tools she needs to do her daily work, and she works with more experienced and skilled designers and coders on the staff when she's producing larger or more complicated stories. "I do some basic data visualization, we have some producer tools that are easier to use, basic charts and graphs. I use some other software, like Highcharts, for interactive charts that are easy and quick to do. I'm putting in the data and doing basic CSS [Cascading Style Sheets] work to make it look right, but I'm not coding. ... When I do big projects I usually pair up with a news app developer to do the interactive coding for me."

Persaud took an internship at the Palm Beach Post, became a data interactive reporter and now is a freelancer. While he can code, he says, most of the journalists in his newsroom don't need that skill set—especially the more senior reporters who have the significant networks of sources and deep experience in reporting that he doesn't have. "Let's say someone who is a courts reporter should know a little bit to do the stuff they need, like going through a big spreadsheet of court records. I don't think they need to know Ruby or Python. I guess the answer to your question is that first of all, reporters should be reporters. Everyone should know the basics of coding."

Journalists now have more tools in their tool kits, says Persaud, and new ways to access complex information easily and quickly. "I guess back then, they taught you how to do the regular stuff, like how to talk to people, so today you could add in how to find specific information," he says. "Say you are working in city reporting and you need the budgets. In the past you would have to go through someone to get the copy of the budget. Is that right? And nowadays, it's on the Web. Even for the little towns. I go on their website, flip through it and determine what departments could be cut. Technology has made getting the information very easy, where in the past there was a roadblock to that."

Persaud's dream job? "I would work at the local newspaper, whether it's the Palm Beach Post or somewhere else. ... [New York is] a nice place to visit, but I don't know why I would leave the beaches of Florida to move to New York. I don't see the point of it when we have a great newspaper right here. I think if The New York Times tried to compete with us, they'd lose."

Even the newsrooms that say they want tech-savvy journalists who know how to code don't understand the difference between necessary skills and unnecessary mastery, says Lindsey Cook. Good enough, she says, is good enough.

The job descriptions that people write for entry-level data visualization jobs are "completely ridiculous," and that's why they can't get applicants, she says.

If you look at some of these descriptions, they have more things listed on them than a Ph.D. in human-computer interaction would know. ... I think possibly the hiring managers don't know what skills you need, so they list everything. The lists I saw were listing an insane amount that no one coming out of school could be expected to know. You don't need it. If you're in data visualization and you know some JavaScript and D3, you know some programming fundamentals and you know the fundamentals of data, you can learn the other things as you need them. The word "expert" is used a lot. I applied to one job and they wanted you to know Flash for a data visualization job. Flash hasn't been used in data visualization in almost a decade. They are making the barrier way too high. I think that's the



reason that a lot of people who know but didn't study computer science are apprehensive about applying for these jobs.

Across the country, in the San Francisco offices of the Center for Investigative Reporting (CIR), Robert Rosenthal says today's journalist doesn't need to be a technologist as much as a team builder and collaborator—inside and beyond the newsroom. But he does believe that having the knowledge and perspective of the technologist in the organization is a necessity. "As a journalism school, you can't assume the student can do everything well. They're going to have a range of skills, including knowing how to produce radio, video, online," he says. "One of the things that we've done [at CIR] is to honor and understand the value of the different skill sets. Not everyone is going to be a great reporter, or a data analyst, or a great storyteller. So how do you create an organization where there is collaboration around the creation of great content? And how do you create external collaboration with other media companies for distribution? And how do collaborate with the audience for distribution?

"Culturally, I think journalism schools have to think about collaboration and partnership as a huge value; the concept of exclusivity no longer exists," he says. "If you really want to leverage your work for impact and reach, especially in an investigative nonprofit space, it's all about distribution, traditional and nontraditional unique storytelling, and creating a culture where impact is thought about and valued."

On the far end of the tech-essential spectrum are journalism nonprofits such as the Center for Public Integrity, the Center for Investigative Reporting and ProPublica, and for-profits like Narrative Science, which define journalism in data-centric terms.

Gordon Witkin, executive editor of the Center for Public Integrity, says CPI needs interns and new employees who have a broader, deeper group of skills than he was asked for when he came out of journalism school in 1977. "It's multimedia, being able to work on the Web ... do video, shoot pictures, do podcasts, create interactive graphics, code maybe, data visualization is huge, things like interactive graphics, interactive games even, and ... what we do with data is computer-assisted reporting. It's taking big vats of data and being able to work with, massage, manipulate and analyze that data to come up with strong, unshakable, journalistic conclusions. If you think about all that, it's a whole group of skills, but I guess, having come from a different generation, my big asterisk is that's a lot, and you're asking all of that. However, particularly for a place like this, or for any place, you're still expecting for them to have the basic who, what, where, when, why reporting skills."

At ProPublica, stories start and end with data: Journalists can now develop, test and prove hypotheses with statistical validity, says Paul Steiger, the founding CEO and executive chairman. "Then what you have to do is go back and get the anecdotes. It's the anecdotes that help people grasp the story and make people care." But even compelling anecdotes that humanize aggregated data aren't as valuable to an audience as a story that is personalized and immediate. So many ProPublica investigations include a data set that, where possible, can be manipulated to provide

every reader with information about his or her own experience. "Not only will we tell you about a lot of doctors, but we will tell you about your doctor," says Engelberg. "That's a very different way of doing journalism. ... We need more great writers, we need more great number crunchers, and we need more people who can visually display it on the Web in a way that's compelling."

#### Journalists must be ... analysts, entrepreneurs and intrapreneurs ...

At journalism schools around the country, students in entrepreneurship classes are engaging in the processes of a media startup—idea, iteration, testing, execution of a new product—often in collaboration with the campus business or engineering school. While most of those students will not pursue careers as app developers, the takeaway lessons from those experiences include teamwork, design processes, and an enhanced understanding of the business of media-product startups. That's one kind of entrepreneurship, and faculty like Jan Schaffer at American University and Michelle Ferrier at Ohio University believe it's a critically important aspect of a journalist's tool kit.

But entrepreneurship or intrapreneurship can be as much a state of mind as it is a product-development process, a set of new operating assumptions that prompts journalists to assume ownership of the impact of their contributions on the growth and success of their news organizations. That means greater responsibility for what happens to a story after it's written and published.

Marcia Parker, former assistant dean of the University of California Berkeley Graduate School of Journalism, has spent the past decade helping media companies develop better user engagement and audience-development strategies. She says journalists don't understand the business side of their own industry, nor do they expect to be held accountable for it. "In the traditional organizations, journalists are still not exposed enough to that side on every level," she says. "And then in the newer startup world, often they are, but they didn't come in prepared, so they not only don't know what a business plan is, they don't understand road maps, they don't understand product requirements, they don't understand what partnership and strategy is all about, and how revenue is actually generated. ... We don't really train anybody in these things, but this is the language of our industry now."

Most journalists understand the value proposition around using social media to drive traffic to their news sites (which is not to suggest that most know how to do that effectively). What they resist, says Parker, is being held accountable for audience metrics on their content. "Now you're being judged on metrics like community engagement, time on site, time on section, time on story, how much are you seeding and engaged in conversation. ... If your social media doesn't sing and doesn't get response, you're going to be marked down for that." In addition, she says, journalists have to concern themselves with the distribution of their content beyond their own news organizations, and with use of that content for marketing or commercial purposes.



While those are the skill sets most in demand in the marketplace, they're not the skill sets being taught in journalism schools. "I feel like we should just reverse the whole thing [about journalism education] and start over," Parker says. "We should figure out all the skill sets required to produce, manage and publish editorial content. It would be much broader than what programs are doing now. I'd hire content-strategies people, and then you could start breaking down the skill sets you need to be able to do that. You'd have to help students figure out what is the business strategy of the organization you're going to work for—and that includes the LinkedIns of the world and the Salesforces and CIR and all of those different things.

"Just as schools are trying to figure out what's going on and how to do this, there are all these players coming into the media space. They are doing it because they think they can take the skills that they have, and apply them and reimagine them, and they know that there is value in content," she says. "I think that's where that skill set needs to start: What's the revenue model for the startup? And you need to know there are a whole bunch of those out there, and you need to be thinking about it from day one. This is our industry, this is how it's changing, and it's really like learning a different one. We don't teach that in journalism schools ... we barely even mention it."

The Washington Post has long distributed its news analytics to managers and editors, and it has recently begun to share it with some individual reporters. But traffic metrics aren't the only measure of success, says Marty Baron. All newsrooms are looking for journalists who actively generate new ideas and opportunities that can help move the organization forward, he says. "There is no future for people who think they are going to be merely cogs in the wheel, employees who aren't coming forward with initiatives or proposing things we can do that will be successful."

Kevin Davis, CEO and executive director of the nonprofit Investigative News Network, says journalists are poorly prepared for that future. Most of the students entering journalism schools today will never work in a traditional news organization, he predicts, and they'll need entrepreneurial business skills to survive—skills they won't have. "They're at schools where things like self-promotion, activation and social media are considered to be, at best, a dilution of the purity of the journalism function," Davis says. "... I know of no other medium ... where so much work is put into producing a product or service without any understanding, guidance or money put toward the marketing, distribution or activation of that content. It's just insane."

#### Journalists must be ... community builders and mobilizers.

Everything "still starts with core journalism," says Marcia Parker, "because there's no way you can do a good job without having the core commitments to what journalism is and does. But then on top of that, there's everything else, there's user engagement, communicating with your audience, using social media to expand and extend your audience. ... It's really about seeding conversation, engaging in conversation, keeping a conversation going—not just because you have to improve time on your site, but because users are now in the habit of really engaging with stories."

## There is no consensus today on a sustainable commercial business model for journalism in a digital marketplace.

While multiple models exist—from subscriptions and pay walls to display ads, native advertising, venture capital and philanthropic funding—the **2014 Pew Report** suggests that the journalism marketplace is still struggling to identify revenue streams sufficient to sustain an industry reeling from the sharp declines in print advertising:

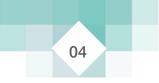
Advertising, at least for now, still accounts for the majority of known news revenue—a little over two-thirds, by this reckoning. But the advertising-supported business model is in a state of churn. Print advertising continues its sharp decline. Television advertising currently remains stable, but the steady audience migration to the web will inevitably impact that business model, too. Digital advertising is growing, though not nearly fast enough to keep pace with declines in legacy ad formats. And, while new forms of digital advertising gained momentum in 2013, the online advertising market seems to favor a scale achievable only by few.

The whole paradigm of advertising is disrupted online, where advertising space is available in infinite quantities. "There are a certain number of page views worldwide, it's a very large number, which is the advertising inventory," the Post's Baron says. "What's our answer to the need to make more money? Generate more page views. As we generate more page views, the supply of available inventory goes up and rates go down. The results are you aren't making any more money, and you may make less. I liken this to being on a treadmill, and you're going, but you're not going anywhere. Then someone speeds it up and you're going faster, but you're still not going anywhere. Then someone speeds it up more and more until you collapse because you can't sustain it anymore. In many ways, we are on that treadmill, and no one knows how to get off.

"The business model is unsettled. I don't think anyone knows what the business model is yet. The business model right now it is try a lot of different things to see what works. We have very difficult economics right now in the industry."

Historically, journalists didn't have to worry about the business side of their profession, Baron says. "We used to just do the journalism, and the business side will be taken care of. ... That was false security for us because we thought people were coming to us for certain reasons, but they were in fact coming because they didn't have other choices. Now they have other options, and we are getting a better sense of the real world. That may lead to a situation in which journalists only do the things that make money, and then what happens to the stuff that doesn't make money?"

Baron says he doesn't have the answer to that question, even as he sees growing gaps in the coverage of local, state and federal governments, in journalism's role in holding the powerful accountable. But he's optimistic one will emerge: "At some point, I'm confident, there will develop a model that will provide the information people need," he says, "but it hasn't happened yet."



Journalistic content is no longer the purview or product of a single trade, craft or profession. Today, it is:

- produced by working journalists (with all of the attendant privileges and access that position has inhered) for distribution to mass audiences;
- produced by mass audiences for distribution through social media and other digital channels to mass audiences; and
- produced by working journalists and mass audiences for submission to computer systems that will at some future point relay, configure and repurpose that content for instantaneous distribution to audiences of all sizes (including an audience of one).

It's clear that journalism is in a state of rapid evolution, from a traditional system of trained, professional gatekeepers identifying and distributing news and information through a very limited number of media outlets, to the current network of reporters (trained and not) sharing information across a multimedia web of distribution channels. One of those channels—sometimes derisively referred to as "robo journalism"—is produced by an artificial intelligence system that translates data input into explanatory narrative.

In journalism circles, Narrative Science is probably best known for the stories it generates for news sites like Forbes—evidence, it is argued, that it is trying to replace or eradicate journalism as we know it. Kris Hammond, the company's co-founder and chief scientist, acknowledges that there's some overlap between traditional journalism and the content that its platform, Quill, produces and distributes, but says the mission of Narrative Science is only tangentially related to journalism as a practice or an industry.

In fact, he says, his company's vision is far grander and more inclusive: Rather than aspiring to provide news to consumers, Quill's mission is to create narratives that draw upon the world's data to meet the information needs of every citizen. Its goal is to educate the world, one person at a time.

"We do narrative generation," Hammond says. "That means I first need to understand what's happening in the world, and what's important about what's happening in the world. Then I need to know what's interesting about what's happening in the world, and then I need to know what you—you as an individual, as a person—need out of all of that. And I will use that insight to craft the narrative. Not just a sentence or whatever. I will use that to explain these things to you in a way you understand, in a way that's meaningful and impactful specifically to you."

That's very different from journalism as we know it, he says. Stories produced by even the most experienced and talented journalist reflect only what that individual reporter knows or can know—which pales, he says, in comparison to the capacity of an artificial intelligence system to collect, process, filter and present deeply informed narrative.

"We're creating a system that does the one thing that differentiates us from beasts," Hammond says. "Communication. We have a system that actually models communication. ... We will make people smarter through the application of technology to generate stories about the world based on data." Storytellers of the future will need to understand how to capture, collect, aggregate, and submit (or channel) relevant data to systems like Quill, which will store and relay that data in multiple forms, for multiple purposes, over time.

# Journalism education is not keeping pace with the news-and-information industry it is dedicated to serve.

The Poynter Institute's 2013 study on the future of journalism education is a touchstone for the question of journalism education's currency; even those closest to the academic enterprise acknowledge that it is not keeping pace with the changes in the profession. Anecdotally, journalists and educators alike wonder aloud whether there's a realistic way to bring together two cultures so out of sync with each other in terms of process and pacing.

"When people think of J-schools, they think of institutions that are churning out people who are being taught by people who aren't reflecting the reality of the market today," says the Investigative News Network's Kevin Davis. "It involves community organizing, activation, reflection, engagement, social, business acumen, technology skills. ... As we shape the information systems for the next hundred years, in my opinion, it's unlikely that we will see anything or anybody that is supposed to be a publicly traded conglomerate media organization. It's more likely that we will have news coming as a tangent out of something that is intended to do something totally different, like Facebook, Twitter or YouTube. ... We need a lot more content and information entrepreneurs."

## Journalism schools may have an opportunity to claim a more central role in the academy as the purveyor of "liberal arts +" for the 21st century.

Howard Schneider, founding dean of the Stony Brook University School of Journalism, may be the most visible spokesperson for the role of journalism schools in educating media consumers to recognize journalism as a source of reliable information in an increasingly crowded mediated world. Stony Brook offers every student on campus the opportunity to take a News Literacy course in fulfillment of one of their general education requirements—an option that more than 10,000 undergraduates have selected over the past seven years. Schneider describes the course as "critical thinking as applied to news. But it's also civic education at the same time."

Journalism schools have an obligation to educate the audience as well as the



producers of news and information, he says, "if we are going to have a robust, successful press and a successful democracy. Charlotte Grimes at Syracuse says all the time that journalism is an act of citizenship. It is. If you embrace that, then you need to embrace both sides of the equation. I think that's absolutely the role of a journalism school."

Like several of his colleagues, Schneider believes that journalism schools have a compelling opportunity to claim a more central place in the academic mission of their colleges and universities.

Journalism schools "are no longer professional schools residing on the fringes of great research universities," he says. "If you look at the revolution we are living through, it is the job of the journalism school to prepare all of the students on the campus for this tsunami of information and disinformation that is descending upon us. It is a core competency in the 21st century, a civic competency, and it is the role of the journalism school to fulfill that. ... This is an opportunity to grow and be expansive and to think differently about ourselves and to become central to the mission of a major research university in the 21st century."

And that's the golden opportunity today's journalism educators—who are still struggling to claim a place at the academic table on their campuses and in the eyes of their academic administration—are missing, according to Jan Schaffer, executive director of J-Lab at American University. Schaffer is convinced that journalism education should be seizing the day—and the central power position of the liberal arts—in the higher education landscape of the digital age.

I think we have a bigger role to play, in higher education and society at large. The opportunity is right here, but we can't see it: Journalism schools, in my view, should be recasting themselves as a gateway to just about any career a student wants to have. If it happens to be in journalism, that's fine. But, we need digital and reporting skills in the nonprofit sector; we need them in the diplomatic sector; we need them in the for-profit sector; we need them, at large, in government. Journalism skills are a great baseline for medical, law or business degrees.

Journalism schools have a moment in time when they could create the new liberal arts degree, but with a more pronounced value proposition. They should be trumpeting how the overlay of digital, writing, and research skills makes the right journalism degree much more valuable than a classic liberal arts degree. It's a degree that really will prepare students for a menu of jobs. Some of them will be journalism jobs, but even now journalism school graduates are migrating far beyond the field of journalism. We just don't always want to crow about that reality.

Schaffer, who speaks eloquently about journalism education reshaping its mission to

focus on making "the media we need for the world we want," is insistent that journalism education should expand its value proposition to become a gateway to professional work—of all kinds.

"I think journalism/communication schools should be totally rebranding themselves as giving students incredibly useful gateways to the world," she says. "It's a much more meaningful and marketable construct. Liberal arts programs can't really say that students will come out with a set of skills that can be used in almost any job they encounter. A genuine Gateway Degree will allay parent concerns. It will give students jobs. It will bring you better, more grounded alumni who can actually feed back into your programs. I think it's a missed opportunity."

#### What They Said: Summing Up

The purpose and promise of this project was to collect the best thinking and innovative ideas of as many people as possible about the future and shape of American journalism and journalism education. The goal was not to filter or critique, but to present and share within a framework in which those disparate and wide-ranging commentaries could be situated in some reasonable context.

Given that charge, it's no surprise that the comments and proposed solutions are as far-ranging as the nature of journalism itself: from resituating journalism education as the 21st-century liberal arts to reconceptualizing journalism as a system of data channels through which technology produces individualized content. One of the key takeaways from every conversation, however, is the degree to which the professionals, students and academics involved in the conversation care passionately about the value and purpose of journalism in a world ever more in need of the kind of accurate, substantive and insightful information upon which a democracy—and a culture depend. While there are no easy answers about how to shape an academic system to educate those who will create that information, and a market system that will pay for it, there is no question or debate about the fact that it must be done.

Holcomb, Jesse and Mitchell, Amy. "Revenue Sources: A Heavy Dependence on Advertising," State of the Media, Pew Research Center, March 26, 2014, http://www.journalism. org/2014/03/26/revenue-sources-a-heavy-dependence-on-advertising/, accessed online January 31, 2015.

"Intrapreneur" is defined by Merriam Webster as "a corporate executive who develops new enterprises within the corporation." BusinessDictionary.com defines "intrapreneurship" as the "practice of entrepreneurship in an established firm."



# Conclusions and Recomendations

Journalism Education for a Digital Age

Since the turn of the 20th century, the nation's colleges and universities have successfully prepared American journalists. From high-brand Columbia University, to entrepreneurial Arizona State, to the personal-touch liberal arts of Hiram College, academia has in diverse but effective ways adapted to meet the changing needs of the profession it serves. But as the news-and-information ecosystem morphs to digital first, many of the nation's most prestigious programs are scrambling to keep pace.

"We have played almost no part in the transition," said Medill's dean, Bradley Hamm. During transitions in the business world, "you could have picked up the phone as a CEO and called business professors who you knew were experts and you would have brought them in to work with you. ... When [the digital-first shift] hit our world ... Were you calling anybody in journalism education to help you? If you wanted to have thought leadership, in my opinion, you would have gone to the students."

Even today, there exist no campus-based journalism education equivalents to the digital-native upstarts that are transforming the professional media landscape. A handful of university programs have evolved in recent years as the sector's outsiderinnovators, including the graduate program at the City University of New York under the leadership of Sarah Bartlett and, at a different scale, Christopher Callahan's entrepreneurial, ever-growing program at Arizona State University. CUNY has established a master's degree in social journalism, and Bartlett insists that professional, part-time faculty are critical in keeping her curricula current. Callahan has created a combined news operation that rivals any other in the state and plans to hire a "chief of disruption" to recruit his campus colleagues to join his "teaching hospital." But both are innovating within existing constraints, and such incremental change is unlikely to produce radically new, disruptive models.

Joichi Ito, director of the MIT Media Lab and a Knight Foundation trustee, says it's time to innovate at the boundaries of those traditional systems. "I'm on the board of

The New York Times, so it's not that I don't think there's a place for good, traditional journalism," he says, "but I think the J-schools are like newspapers: They have faculty, a structure, and a system that train people in a traditional way. It's OK to have some of that, especially until we figure out what we're going to do next. But it feels like it's time to start experimenting with new faculty and new students, with innovation on the edges of where we used to be.

"I think more and more of the really interesting journalists aren't coming from J-schools. If you start thinking about where people are coming from and how they learned what they learned, you have to ask, 'Do we need J-schools?'"

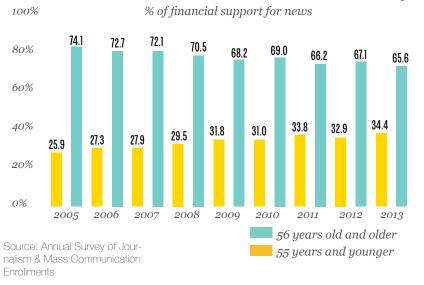
Slow turnover among longstanding, tenured faculty can make it more difficult to bring fresh perspectives, innovation and currency into higher education in general, he says. "Nothing against our senior people in the field, but like any other academic discipline, journalism programs are challenged by a tenure system that, unless you increase the number of faculty slots, requires more traditional senior faculty members to retire before you can bring in new people who think differently about all of this. The field is just moving more quickly than the speed at which senior faculty retire. And that's a challenge."

The data confirm it: A 2013 study by Fidelity Investments reported that 74 percent of current full-time faculty aged 49-67 say they plan to delay retirement until after age 65, or may never retire at all.

Another study by the National Science Foundation found that, since the 1970s, only 28 percent of higher education faculty retired by the age of 65.

A 2013 national survey by the University of Georgia shows that more than a third of





the full-time journalism faculty were aged 56 or older; a meager 202—or just under 3 percent—of the 7,446 full-time journalism faculty retired in 2013.

This 2013 survey by Lee Becker and his team at the University of Georgia shows the aging of full-time faculty in journalism education.

The solution, Ito suggests, is starting something entirely new, where you "go out and get the Jonah Perettis and the Nate Silvers and you're done."

"Maybe you change the model altogether," he suggests. "The Media Lab grew out of the Architecture Machine group in MIT's School of Architecture and Planning, and now has faculty members who are scientists and engineers, but we don't report to either MIT's School of Engineering or School of Science. And we have a director who is a college dropout. It's about creating a journalism school that's kind of a hack. It's about creating a journalism school that is nontraditional."

#### Conclusions

What should journalism educators today be doing to prepare students for the media world of 2025? After six months of listening to some of the most experienced and thoughtful journalists and educators in the world, I offer three observations. As assertions, they appear self-evident; as starting points for discussion and debate, they

beg critical consideration of what Ito's journalism school hack might be and do.

Those guiding principles are:

05

- 1. Currency is the new core value.
- 2. Faculty cannot teach what they do not know.
- 3. Accreditation standards should value educational outcomes rather than institutional traditions.

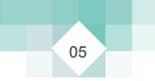
#### 1. Currency is the new core value.

A recent and frustrated graduate of a prestigious graduate journalism school said it best: "Journalism education needs to be about discovery, about constantly learning how to learn," he said. "Everything you teach should be the next thing, and the next, and the next after that. You have to have a culture of no sitting down, no resting, you always have to be pushing it out the door. There's no longer a persistent or permanent model of journalism that can be passed on from one generation to the next, or even from one graduating class to the next. And if you're not up for that as a faculty member, you really should go find something else to do."

There is no debate that journalists today still need to know "the basics": how to ask insightful questions, collect and verify complex information, and operate under deadline pressure. But journalism schools have no monopoly on that skill set and (as noted in Part 4), the ages-old argument rages on about whether the liberal arts provides better preparation). And there are as many assertions about what else a journalist needs to do and know as there are people willing to offer an opinion.

Stacie Chan, a partner operations manager at Google News, graduated from Stanford University in 2010 and says her connections from grad school opened the door at Google. But her ability to "stop on a dime and pivot" is what makes her successful there. "The definition of journalism is changing all the time," she says. "It's still valuable, relevant, timely information, but the presentation of that has been completely deconstructed." Journalists who parachute in to cover a breaking news story don't have the same authenticity as the citizen on the scene who posts a live feed to Twitter, Chan says. "We used to have very explicit gatekeepers. If you didn't work for an accredited institution, you weren't credible. But that's not how it works anymore. Today, we have a very egalitarian, democratic approach to journalism. My only concern is that people aren't educated about who has credibility and who doesn't."

Like many of her counterparts, Chan isn't convinced that the common curricula of journalism schools remain as relevant as they need to be. "With the birth of citizen journalism, it's important to know how to use people on the ground as a valuable resource, how to vet tweets, or how to vet people who write in to offer photos or quotes. Part of journalism now is being able to discuss what's going on with other people interested in the space and figuring out this new model.



"Journalism schools need to be open to looking at [those] different models, to realizing that it's not the same as it was 20 years ago," Chan says. "We need a fresh perspective every time we look at different news sources; new startups are investing in different kinds of business models about how to present news in meaningful, engaging ways. Journalism schools probably need to be much more like business schools."

Lindsey Cook, who graduated in 2014 from the University of Georgia with a major in journalism and a minor in computer science, is now a data journalist at U.S. News & World Report. She says journalism is, by definition, a changing profession, yet "a lot of publications aren't changing as quickly as they should, and there are a lot of areas of journalism that haven't changed as I would have expected them to."

While Cook chose to begin her career at a legacy news organization, she says that's no longer the career goal of every young journalist. "It used to be that every journalist wanted to work at The New York Times, but now people are going to these small startups," she says. "That means ideas are moving around in a way they didn't before. It's great for journalism and great for training journalists. We should be excited there is no end of the rainbow anymore. As a journalist, there's no point when you are going to say: 'I'm done, I've made it to The New York Times, and now I am going to retire because there is nowhere to go from here.' That doesn't exist anymore, and that is exciting."

Paul Grabowicz, director of the New Media Program of the University of California Berkeley Graduate School of Journalism, echoes Ito's suggestion that it's time to create a journalism school that can evolve at the speed of media.

"I would tear the whole thing down. ... The whole curriculum and the way it's structured do not make any sense. ... You have to just blow it up," he says. "You have to be saying that all we are thinking about here is how the kids are going to work in digital—not in newspapers, not in broadcast. ... Part of [the new industry] we already know, and part of it will always be evolving. It's not like the old days when you didn't have to pay attention to that. You can't plant your flag in the old world and then add the digital stuff on after as a layer. It's got to be digital first."

Journalism schools have for decades structured curricula around the core journalistic values of truth, commitment to the public good, editorial independence, watchdogging the powerful, effective storytelling, and objectivity and balance. Schools hired faculty with the appropriate expertise to teach both content and skills courses grounded in these core values, and that expertise, once established, enjoyed long staying power.

Today, currency—the capacity to identify and master emerging market trends and media technologies and to integrate them quickly into journalistic work—is as critical to credible journalism education as command of Associated Press style and the inverted pyramid used to be.

Legacy journalism schools have long taught "the basics": newswriting, reporting, editing, law, history and ethics. Content courses have been delivered in large lecture, typically by tenured faculty with academic degrees; skills courses have been taught by an array of instructors, including graduate students, working or retired professionals, and depending upon the institution, full-time faculty. Occasionally, new specializations such as computer-assisted reporting or citizen journalism have prompted flurries of conference presentations and professional training seminars. But for the most part, faculty have been comfortable teaching what they know, semester after semester, year after year, decade after decade.

Those times are behind us. Today, many faculty acknowledge that it's all but impossible to teach the tenets of a digital-first news culture they have neither experienced nor studied. At a 2014 conference of journalism educators, one faculty member pleaded for help. "Why don't the foundations just give us the resources we need to retrain us all?" she suggested. But training for the new environment isn't an event; it's a never-ending process. And many faculty have neither the energy nor the capacity to recalibrate their careers and take on that kind of continuous challenge.

In fact, a full 39 percent of journalism educators in a 2013 Poynter Institute study acknowledged that their programs are not keeping up with the changing industry.2

Despite that glum self-assessment, an astonishing 80 percent still asserted that a journalism degree is very to extremely important to understanding newsgathering skills. The industry is less generous: nearly 50 percent say academia isn't keeping up (little or at all), and only 25 percent think a journalism degree is important to newsgathering skills.

"Some of [my colleagues] are pathetic," said one media-savvy professor. "They ask me to help them, and I don't even know what to say or where to begin. The learning curve is so steep for them that I don't know what to do. Most of them have come around to do it, but it's too late. I thought about whether we could do a 'train the fossils in academia' sort of model, give them the basic level of this stuff so they can add enough to their classes so the students are getting something from them. It's not enough, but it's more than they are getting now."

Our students deserve better. But even educators who acknowledge the problem argue that they cannot be expected to become masters of every new tool, approach or strategy emerging in a radically disrupted profession.

"I do think that the next thing on the list we will be asked to do is cure cancer," Robert Stewart, director of the Scripps journalism program at Ohio University, says caustically. "I think it's a little irrational to think that we can keep teaching how to write a lead and a great headline that is clickable, and do big data and do video and all these other things, and be a good citizen."

2. Faculty cannot teach what they do not know.

Recent graduate Lindsey Cook says journalism faculty don't have to know all of that-



but students do. "If you are going to be a political reporter or a coder, for example, you shouldn't be taking all of these ethics and law classes [in journalism school]," she says. "I think I took three or four in my degree; I'm totally down with that, but I don't think I needed all of them. At the same time, I had to drop my CS [computer science] major into a minor because of all the problems of trying to major in two separate schools. ... There are a lot of educational barriers that are preventing people from being better journalists. They can't do political science and journalism to be a political reporter, or computer science and journalism, and journalism is about all the connections between the different fields, so that doesn't make sense."

Other academic systems are just as troubling, according to Sarah Bartlett, dean of the new CUNY Graduate School of Journalism. Bartlett wrote an articulate and deeply thoughtful essay about her first year as dean, in which she takes exception to the systems of higher education she says hamper innovation and adaptability:

I worry whether, over the long term, academic graduate programs can be counted on to provide the education and training that is so desperately needed for our profession to thrive. Do our structures and systems, including the reverence for tenure and professional accreditation, allow us to be responsive enough to industry change to train the next generation of journalists? Or do they tie our hands so much that we cede that ground to other more nimble competitors in the for-profit sector?

Perhaps Stewart, Cook and Bartlett are all correct: The solution rests not in the retraining of every legacy journalism faculty member, but in the creation of new ways to deliver expertise to our classrooms. It's time for Ito's journalism school hack: a startup, digital-first program with all new systems, structures and operating assumptions, designed to ensure that all faculty, in every classroom, are teaching what they know.

## 3. Accreditation standards should value educational outcomes rather than institutional traditions.

The Council for Higher Education Accreditation says the accreditation process is "like a very hard test. It requires every part of a school or program to be examined and judged by experts." The Accrediting Council on Education in Journalism and Mass Communication (ACEJMC) echoes that theme: "Parents want to know that their children will have an educational experience of high quality that will help prepare them for a career. ... Practitioners seeking to hire entry-level or more experienced candidates know that accredited programs prepare students with a solid professional education and a firm grounding in the liberal arts and sciences." Accreditation is supposed to provide assurance that a program's graduates are liberally educated and prepared to succeed in the professional marketplace.

Of the nine standards of accreditation, eight focus on institutional structures, processes, and systems. Only Standard 2 centers on the quality of a program's curriculum and instruction, and of the 12 relevant metrics, only one refers to

technology and "the digital world": "Apply current tools and technologies appropriate for the communications professions in which they work, and to understand the digital world."3

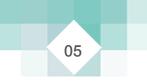
Acceptable evidence includes faculty resumes and teaching awards, but there is no mention of job placement, employer satisfaction data, or external professional assessment of new graduates' skills or competencies. Standard 4 speaks to the professional and scholarly expertise of the faculty, which must be "kept current through faculty development opportunities, relationships with professional and scholarly associations, and appropriate supplementation of part-time and visiting faculty." Simultaneously, however, the standards require that "full-time faculty have primary responsibility for teaching, research/creative activity and service."

Today, the ACEJMC Council comprises 31 members. Of those, 17 are academics and 14 are either public members or representatives of legacy media and nonprofit organizations. No digital-first companies or nonprofit investigative news organizations are represented. The ACEJMC institutional membership includes representatives from 11 professional organizations and six educational associations. The Online News Association, the largest professional association for journalists working in digital news, is not among them.

Of the 480 journalism degree programs in the United States, less than 25 percent are accredited. Those who have invested the time, effort and expense to acquire that disciplinary stamp of approval have been required to produce massive documentation about their governance, diversity, community service, facilities and faculty. What they have not been asked to do is to make their case to a team of evaluators as well versed in the dynamics of a digital-first media marketplace as they are in the policies of a faculty governance handbook. Nobody has asked them to define success—not for their institutions, programs or faculty, but for their students—or to provide significant evidence that it is being achieved.

Bartlett's essay describes CUNY's accreditation process as both inspiring and troubling, and she concludes that "the professional accreditation process reinforces the biases inherent in academia. The Accrediting Council on Education in Journalism and Mass Communications (ACEJMC) is the body that sets the standards for undergraduate and graduate journalism programs. It has nine standards that it has developed over the years to help discern which programs deserve to be accredited. Two of those standards explicitly endorse a more theoretical approach to journalism education and the primacy of full-time faculty."

The CUNY Graduate School of Journalism was accredited on its first try, and Bartlett says the faculty found the process helpful and informative. "But at the end of the process, when it came time for the council to vote," she writes, "it became clear that some members strongly disapproved of our approach. We were criticized for not having enough theory courses, relying too heavily on adjuncts, and lacking Ph.D.s on our teaching staff. The message I took away was that we were not academic enough."



That message was both surprising and frustrating, she writes. "I still struggle to understand how encouraging a professionally oriented school to pursue a more theoretical, academic program would be helpful at a time when our profession is undergoing such sweeping, real-time transformation. ... The fact that many of the members on the accrediting council who were questioning our approach were from the public relations and advertising disciplines made me wonder how much they knew about the specific challenges facing our industry. Yet this is the body that decides what signals to send to this country's 200-plus graduate journalism and mass communications programs."

It is commonly assumed that accreditation signals to a journalism school's stakeholders that it has met the rigorous and relevant standards that are the hallmarks of educational excellence. After two years of soliciting comments, the ACEJMC updated the standards in 2013 to allow eight more credits within the major (requiring 72 credits to be completed outside the major, down from 80); it also revised the standard by requiring students to apply "current" tools and technologies appropriate to their professions, and added the phrase "to understand the digital world." Accredited programs also must post to their websites data on graduation, retention and job placements (difficult or impossible to find on many school sites). The revisions did not address the rapid changes occurring in the profession, nor their impact on faculty competencies, budgets, student satisfaction, enrollments, or outcomes. As journalism education changes in response to the transformation reshaping the industry, so, too, must the standards and metrics against which it is measured.

#### Recommendations

Currency, expertise and relevant assessment are the pillars of a commonsensical, widely replicable new model of journalism education. Its curriculum would combine full-time faculty expertise with rapidly iterating, immersive skills instruction, melding academic depth and digital-first professional adaptability.

The following three recommendations offer a practical, effective option for schools dedicated to preparing the next generation of digital-first journalists:

- 1. Establish a digital-first academic startup, the educational equivalent of the ProPublicas, FiveThirtyEights and Vox Medias of the news-and-information marketplace.
- 2. Leverage the disciplinary expertise of the full-time faculty while creating new delivery structures for skills-based learning.
- 3. Create a mission-specific accreditation process for programs that define as their core mission the preparation of 21st-century journalists.

#### 1. It's time to create a digital-first journalism school.

In October 2013, three of the academy's best-respected scholars issued a treatise

aptly titled "Educating Journalists: A New Plea for the University Tradition." Focused largely on the status and role of journalism schools within academic institutions (and in the eyes of their administrators), the report concludes that graduate journalism education has drifted too far into the realm of professional practice. As it confronts the challenges of profound change, the authors assert, journalism education has a rare opportunity to refashion itself as a more balanced enterprise committed as deeply to scholarly research as it is to quality instruction and students' professional preparation.

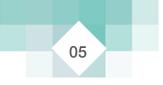
A rigorous degree program in any academic discipline can—and often does—serve as the grounding of a successful journalism career. Schools focused on faculty publication and the disciplinary hierarchies of their home institutions may have much to offer students interested in a broadly theoretical, liberal education. Some of the profession's most successful and revered practitioners take pride in their degrees in the humanities and sciences. But as Bartlett suggests, the demands of preparing students for a newly dynamic media environment may require a reconsideration of the classic professional-scholarly debate: What is the mission and purpose of professional journalism education? And does achieving that mission in a digital age require systems and structures different from those of the more theoretical schools imagined by Folkerts, Hamilton and Lemann?4 What kind of professional instruction are we talking about in the first place, and what place within the larger university might a hyperprofessional focus take?

It is the assertion of this project that there is room in the academy for a more nimble, innovative, intentionally disruptive and hyper-professional journalism school. Such a digital-first school would define success in terms of its measurable contributions to and impact upon the profession it has reinvented itself to serve. As a startup—like its digital-first media counterparts—it would actively depart from the structures, processes, assumptions and outcomes of its legacy predecessors and peers. It would by definition require different types of university-wide connections.

Structured to facilitate rapid iteration and continuous revision, a digital-first school would foster the skills and habits of mind critical to journalism in the 21st century: self-instruction; numeracy; data analytics; human-centered, iterative design; active curiosity; and early adoption. And its mission would unabashedly be the exceptional preparation of journalists for an industry it can neither anticipate nor imagine.

Such a degree program would be a dynamic hybrid of existing immersive programs such as Matter, NUvention and Studio 20,5 mimicking the MIT Media Lab's "separatebut-symbiotic" relationship with its home institution. Designed to meet academia's credit-hour and faculty governance standards, an accelerator journalism program would nonetheless be exempt from the scheduling, staffing and organizational systems and structures of the academy. It would be a true "journalism school hack," current by its very design. And it would simulate the dynamics, challenges, iterative culture and operations of the profession for which it prepares its graduates.

#### 2. A digital-first journalism school would integrate the disciplinary expertise of



# full-time faculty while creating an adaptable and dynamic delivery structure for skills-based learning.

The digital-first model would observe the most basic boundaries of institutional accreditation, faculty governance and available resources. It would be of the academy, and yet freed from academia's constraints; grounded in a discipline-based and liberal arts education, yet immersive and current in its professional training. Happily, other professional schools—including medicine and teacher preparation—have long-established programmatic structures that serve as a ready model.

A digital-first journalism school would:

- Be structured at the undergraduate level to distribute the degree program's traditional content credits, taught by full-time academic faculty, throughout a student's academic plan. Common curricula would likely include reporting, editing, law, history and ethics (15 credits); specializations by media platform or subject area (12 credits); and two internships (2-6 credits). Similarly, at the graduate level, students would devote one full-time semester (or the equivalent distributed over a more extended period) to discipline-specific and subject-area coursework;
- Include an immersive, semester-long experience free from the distractions and interruptions of other coursework. Just as education majors plan their lives around their student-teaching semester, and residents give over their lives to the teaching hospital, so, too, would journalism students be expected to devote full-time attention to the program—thereby eliminating the need to schedule learning experiences around the rigid course grid of an academic institution;
- Invest in a system or cadre of highly qualified professional instructors who would either physically or digitally deliver relevant short-courses or immersive workshops during the immersive semester;
- Be re-created every semester through active engagement with professionals, incubators, accelerators and faculty to design boot camps, lectures, seminars, workshops, field trips, and self-taught tutorials designed exclusively to meet the learning needs of students now;
- Mimic the immersive, focused, integrated experience of an accelerator, directed not toward the creation of new products but toward the preparation of 21st-century journalists;
- Partner with a professional advisory board whose expertise would guide the accelerator's curricula each semester;
- Enlist faculty from computer sciences, business, art and design, law, mathematics, political science and other on-campus disciplines to deliver short

courses, evening lectures or intensive workshops, enriching student learning without requiring faculty colleagues to commit to semester-long courses; and

• Include a revenue-generating "training track" for visiting faculty.

At its best, a digital-first approach could be adopted by any journalism school in the country—as an additional option at major and well-resourced institutions with multiple tracks and program choices, and as an affordable, manageable and sustainable strategy at the hundreds of less-resourced schools of journalism struggling to find a way to retain their qualified faculty and still integrate 21st-century skills and understandings into their programs.

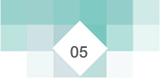
For some programs, a digital-first approach would refine rather than replace current practice. For others, it would be revolutionary, requiring faculty to fundamentally rethink their entire curricula and delivery systems, their professional networks, and their core obligations to their students.

"There are all kinds of challenges, cultural challenges, to make this work," ProPublica CEO Paul Steiger7 says about a "teaching hospital" journalism school. "There are also advantages. What do universities have? They have office space. They have computers. They have lawyers. Things you need. I'm defining away the problem. If there were a will to do it, you could take resources that previously were underused. There was underemployment in the journalism education domain. You could have a faculty that was built more on people that come from the cutting edge of the practitioner track as opposed to the theoretician track."

That kind of immersive journalism program would be well poised to take on major journalistic projects that would benefit the profession and industry as a whole, says Stephen Engelberg, ProPublica's editor-in-chief and co-CEO. "We all know that the greatest need right now is people in the world of journalism who are not innumerate," he said. "And we know when you train people in those fields, they will have jobs. … What if there was a program whose purpose was to create important data about a state? What if the journalistic execution of that involves some combination of students and local journalism institutions?

"It's a great model because each of those projects and data sets requires a different journalistic skill. Each story is going to teach you how to report a story, what's a fact, how to write a story, how to transform data into something that people actually read. You then get a hybrid of what The Texas Tribune does for Texas and what we do for the nation. It seems like if you combine these skill sets of traditional journalism professors with the new data journalism—programming, numerate thinking—everyone may benefit."

3. A disruptive, digital-first journalism school needs a disruptive, digital-first accreditation process that establishes measurable metrics of programmatic success and impact.



Journalism schools that choose to apply for accreditation through the Accrediting Council on Education in Journalism and Mass Communication say it provides a public "stamp of approval" for their stakeholders: institutional administrators, parents and prospective students. For some, the current accreditation standards are a good match for their own values and practices: They adamantly agree that full-time faculty should have primary responsibility for their program's teaching, research/creative activity and service, and that full-time graduate faculty should teach the majority of professional master's degree classes. Other schools and programs disagree, believing that the staffing restrictions keep them providing students with access to current knowledge, including the ever-changing digital-first skills.

Just as troubling, as discussed earlier in this section, is that the accreditation standards focus largely on the internal processes and structures of academia, with little attention to educational outcomes, currency or faculty adaptability. For programs whose articulated mission is the professional preparation of the next generation of journalists, a new and more focused accreditation process would provide substantive review of the extent to which they are meeting their goals. Like the current process, such a system would involve peer reviewers; unlike the more traditionally academic process, however, a professional accreditation process would engage a team of highly qualified digital-first journalists to help review a program's curriculum, assess its currency, measure its outcomes and confirm its quality.

The benefits of such a program are obvious: Every institution collects outcomes data, and those with the greatest credibility and market position know well the placement rates of their graduates. If accreditation is a badge of honor and a brand builder, surely one that attests to excellence in the interdisciplinary professional preparation and relevant job placement of graduates has enormous value. Additionally, journalism schools that reach out to their professional colleagues to engage them actively in the evaluation, planning and improvement of student learning would build partnerships that would produce better-prepared graduates—a plus for the institution and for the profession.

#### A Final Word

Over the past several months, it has been my privilege to watch and listen as experienced, dedicated and creative professionals and academics wrestled with the challenges and opportunities emerging in journalism and journalism education. Out of that process evolved a core set of common themes, a slate of conclusions and observations expressed in diverse ways but speaking to the same issues and questions. This report has attempted to bring those insights together in the hope that it will trigger a larger discussion about the future of journalism education.

Its recommendations propose a "journalism school hack" outside the structures and constraints of a standard academic enterprise, but well within its regional-accreditation and budget requirements; 25 years as a faculty member and academic administrator

have honed my capacity to discern credible options from illogical what-if's.

My takeaway from six months of listening is that the common concerns of professionals and academics alike can, in large part, be attributed to the rigidity of an academic system inadequately designed to provide and support the flexibility, immersion, iteration and professional currency that are such necessary attributes of the professional preparation of 21st-century journalists.

An accelerator journalism program (and the accreditation program designed to appropriately assess it) isn't the answer for every institution, nor is it the only solution to the problems and challenges before us. It is, however, a model that has the potential to upend some of the constraining operating assumptions of academia—about everything from scheduling and staffing to core curricula and learning outcomes—that contribute to the truly troubling current state of affairs. It may have the potential to move journalism education forward.

Importantly, the proposal does not suggest particular curricula, beyond assuming a grounding in the core competencies of traditional journalism: writing, reporting, history, ethics and law. It is instead a model of innovative systems and structures, designed to be adaptable to the strengths, capacities and opportunities unique to every journalism program and its faculty.

I am grateful to Knight Foundation for the opportunity to engage in truly inspiring and enlightening conversations, and to the scores of professionals, students and educators who shared their biggest and best ideas with me. Their perspectives were as diverse as their newsrooms, programs and experiences. Some argued that new tools don't alter the core skills of journalistic practice, and the basics are still relevant and sufficient. Others suggested that social media has created a digital network of attention and impact that journalists have not yet begun to manage and leverage. And still others say we are heading rapidly into an era in which journalists will feed content into data systems that will tell the world's stories—about us and to us.

Providing news and information to communities has always been the mission and purpose of journalism, says the MIT Media Lab's Ito, and that hasn't changed—even as everything else about it has. "I think the business model will be very different, the way that people become journalists will be very different, and the tools will all be different," he says.

"Journalism is a field in the process of reinventing itself, and where and how people learn to become journalists is being reinvented. The real question is whether journalism and education will be able to reinvent themselves together. ... I think there will be some optimal moments similar to this, when we can create a new kind of journalism school—one that is practice-oriented and interdisciplinary."

Perhaps that moment is now.



Fidelity Investments "Three-Fourths of Higher Education Baby Boomer Faculty Members Plan to Delay Retirement, or Never Retire at All," Fidelity Investments press release, May 17, 2013. Accessed online Nov. 8, 2014 http://www.fidelity.com/inside-fidelity/employer-services/three-fourths-of-higher-education-baby-boomer-faculty-members

Similarly, about 40 percent of journalism graduates responded to the Becker survey that they were not adequately prepared technologically for the job market.

By comparison, Standard 1 (with five measures) describes a program's mission: its mission statement, strategic plan, faculty handbook, minutes of faculty meetings, and the ways in which the administration is evaluated by the faculty. Standard 3 focuses on diversity and inclusion (five measures); Standard 4, full- and part-time faculty (five measures, including the assertion that "Full-time faculty have primary responsibility for teaching, research/creative activity and service," and "The faculty has respect on campus for its university citizenship and the quality of education that the unit provides"); Standard 5, scholarship and creative work (five measures); Standard 6, student services (five measures); Standard 7, resources and equipment (five measures); Standard 8, public service (five measures); and Standard 9, assessment of learning outcomes (five measures). Taken together, the nine Standards of Accreditation reflect a comprehensive overview of the traditional practices, systems and structures of academia.

Folkerts, Jean, John Maxwell Hamilton, and Nicholas Lemann, "Educating Journalists: A New Plea for the University Tradition," Columbia Journalism School, 2013. Accessed online October 2014, http://www.journalism.columbia.edu/system/documents/785/original/75881\_JSchool\_Educating\_ Journalists-PPG\_V2-16.pdf.

Matter is the San Francisco media accelerator funded by Knight Foundation and KQED that provides media entrepreneurs with a five-month immersive development incubator and \$50,000 in seed funding. NUvention is Northwestern University's interdisciplinary entrepreneurship course that engages students in product, customer and business development activities across six market segments, from analytics and the arts to nanotechnology and the Web. New York University's Studio 20 master's degree program, designed and directed by Jay Rosen, engages students in Web development and innovative problem solving in collaboration with media partners.

Federal standards stipulate that a credit hour is awarded for an amount of work that approximates one hour of classroom instruction and a minimum of two hours of out-of-class student work each week for approximately 15 weeks or the equivalent for laboratory work, practica or studio work. An 18-credit accelerator semester dedicated entirely to on-site experiential learning would require 150 minutes (three hours) per credit hour per week, or 2,700 minutes (45 hours) of classwork per week.

ProPublica has won two Pulitzers and a MacArthur Foundation Award, among scores of others awards, since its launch in January 2008. Steiger, its founding CEO, is a member of the Knight Foundation Board of Trustees.



### Appendix

Essays and interview transcripts

Under the ground rules of this project, I recorded and transcribed every interview. I then returned to my sources and asked them to review and edit as they wished both the transcripts and the text that cited or quoted them. Nearly all returned the materials with minor corrections or clarifications. I am certain that the end product is of higher quality as a result. While I did my best to integrate into the text the most insightful or relevant observations or opinions of these professionals and educators, it was of course impossible to include them all. Rather than reducing the complexity and imagination of our conversations to a few brief paragraphs, I have decided to include as appendices the transcripts—edited for clarity and accuracy—in their entirety. They are presented in alphabetical order by last name. In addition—and presented first here—is an essay written by Sarah Bartlett, dean of the CUNY Graduate School of Journalism, which poses provoking questions about the state of American journalism education. I have quoted it extensively in the text, and I include it here with her permission.

To print the transcripts or create PDFs of them, please follow the links below to the individual interviews or essays.

- Marty BaronJoichi ItoSarah BartlettJessica LeBill BuzenbergDean MillsChristopher CallahanGlenn MorrStacie ChanMarcia ParCatherine CloutierChris PersaLindsey CookJay RosenKevin DavisRobert RosMichelle FerrierJeffrey RutRich GordonJan SchaffrPaul GrabowiczHoward SoBradley HammPaul SteigeKris HammondRobert Ste
  - Joichi Ito Jessica Lessin Dean Mills Glenn Morehouse Olson Marcia Parker Chris Persaud Jay Rosen Robert Rosenthal Jeffrey Rutenbeck Jan Schaffer Howard Schneider Paul Steiger, Stephen Engelberg & Richard Tofel Robert Stewart