PROJECT INFORMATION LITERACY

HOW STUDENTS ENGAGE WITH NEWS

FIVE TAKEAWAYS FOR EDUCATORS, JOURNALISTS, AND LIBRARIANS



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Introduction

As soon as their days begin, news finds them. A CNN alert flashes across a smartphone screen, a tap to a Feedly icon pumps out a steady flow of top stories, and a Facebook check brings up a meme with a satirical twist on a Congressional debate. In an early morning class, an instructor uses a breaking news story from *The New York Times* to start a discussion on election meddling, and over lunch, two friends pore over news of a school shooting.

For many college students in America today, the news is an overwhelming hodgepodge of headlines, posts, alerts, tweets, visuals, and conversations that stream at them throughout the day. While some stories come from news sites students choose to follow, other content arrives uninvited, tracking the digital footprints that many searchers inevitably leave behind.

But news consumption for most students is not entirely random or passive. In the course of any given day, some may take a deep dive into a story that piques their interest. They may spend hours Googling a topic to learn more. Others will explore a current controversy and may get different sides of an argument from a YouTube clip and then validate information with a search of a mainstream and reliable news site, trying to figure out what's credible, what's true. Most recognize that engaging with news requires effort to assemble, evaluate, and interpret news content as it's delivered in the 21st century. Although many make this extra effort, others do not.

News plays a critical role in helping students navigate and understand the world, engage with social and learning communities, and participate in a democracy, but few studies have examined how college-age students find and use news. Today, choices for news are profuse and objective coverage is increasingly mixed in with a deluge of poorer-quality online content and misinformation, making the need to understand news access and engagement behaviors even more urgent.

In the small but growing pool of research literature, two studies stand out. There is the much-discussed study from 2016 of college students and their inability to differentiate "fake news" from "real news." The following year, the Knight Foundation conducted qualitative research on how young people find, verify, and ultimately, trust, the news. Many questions remain, however, as to what role news plays in students' lives and how they stay current, if they can, in a world where news never rests.

Three questions guided this research study:

- 1. How do students conceptualize what constitutes "news" and how do they keep up, if they can?
- 2. How do students interact with and experience news when using social media networks?
- 3. How do students determine the currency, authority, and credibility of news content they encounter from both traditional news sites and new media sites?

Project Information Literacy (PIL), a national research institute, investigated these questions in a mixed-methods study conducted during 2017 and 2018. A sample of 5,844 respondents returned an online survey administered at 11 U.S. colleges, universities, and community colleges. Thirty-seven follow-up telephone interviews and write-in responses to an open-ended question from more than 1,600 survey respondents provided qualitative data about their opinions and perspectives. A computational analysis of Twitter data from 731 survey respondents and a larger Twitter panel of more than 135,000 college-age persons provided observational data about news sharing behaviors.^{3,4}

^{1.} Sam Wineburg, Sarah McGrew, Joel Breakstone, and Teresa Ortega, "Evaluating Information: The Cornerstone of Civic Online Reason," Stanford History Education Group (November 16, 2016): https://purl.stanford.edu/fv751vt5934

^{2.} Mary Madden, Amanda Lenhart, and Claire Fontaine, "How Youth Navigate the News Landscape," Knight Foundation (March 1, 2017): https://www.knightfoundation.org/reports/how-youth-navigate-the-news-landscape



The purpose of this study was to better understand the preferences, practices, and motivations of young news consumers, while focusing on what students actually do, rather than what they do not do. As a demographic group, college students are an important subset of the adult cohort of news consumers. To a large extent, the news habits young adults have today will determine the future of news production. Understanding how journalism will fulfill its role in the service of democracy rests on a deeper knowledge of how young people gather, assess, and critically engage with news now and what role news plays in their lives.

Most significantly, this study's findings suggest the news diet of young news consumers is both multi-modal and multi-social; news comes from their peers and professors about as much as from social media platforms during a given week. Most students know a free press is essential in a democracy, and, yet, the deep political polarization occurring in this country has made them suspicious of biased reporting. Some question the proliferation of "fast news" — oversimplified and fragmentary coverage spewed across social media platforms. And, for many, engaging with news has become hard work, requiring students to evaluate everything they hear or read for truth and objectivity, whether it's from a Facebook post, a conversation with a friend, or a news tweet on their smartphones.

Findings in this report are presented as five research takeaways, rich in quantitative and qualitative details. These takeaways are meant to inform readers about the practices, challenges, workarounds, and frustrations of young news consumers. They are also the basis for six actionable recommendations for journalists, educators, and librarians, as well as other stakeholders in the information industries, as they grapple with the challenge of credibility in the current media environment, and consider possibilities for making today's students more effective and efficient news consumers. To explore the implications of this study's findings, a small group of leading thinkers in education, libraries, media research, and journalism, provided concise commentaries that are featured at the end of this report. ❖

^{3.} Since Twitter has an API and user data is accessible (and Facebook does not), we are using Twitter data in our computational analysis.



Five Research Takeaways

Takeaway #1: There are many pathways to news — not only on social media.

News is woven into the fabric of college students' lives.⁵ It often arrives in a variety of ways at a moment's notice from a news feed, a Facebook post, or in a conversation with a classmate. More than two-thirds (67%) of the survey respondents had received news during the past week from five of the *pathways* to news⁶ listed in Figure 1.⁷ Not all of these methods for receiving news, however, were used with equal frequency. Among respondents, the most common way of getting news was discussions with peers (93%) whether face-to-face or online via text, email, or direct messaging on social media. Many had also become aware of news stories in college classes; seven in 10 said that in the past week they had learned of news in their discussions with instructors or professors.

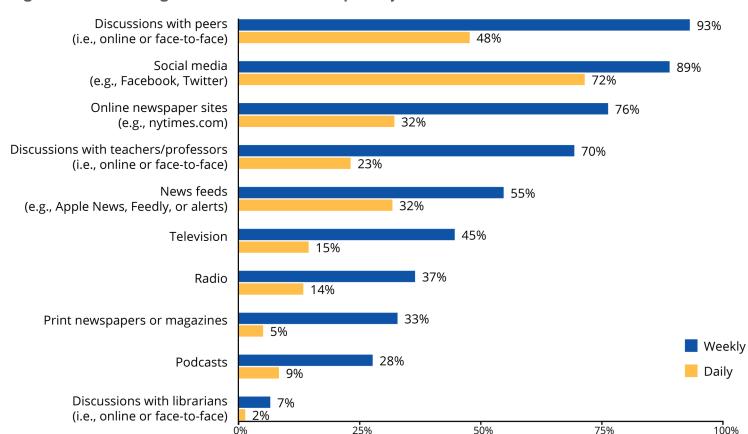


Figure 1: How students got their news from different pathways

Percentages are calculated per category based on the total number of respondents that provided an answer.

^{5.} Prior research from Project Information Literacy found survey respondents (*N* = 8,353) enrolled at 25 U.S. colleges and universities had searched for personal news in the previous six months more than for anything else. Alison J. Head and Michael B. Eisenberg, "How College Students Use the Web to Conduct Everyday Life Research," *First Monday*, 16,4, (April 2011), https://firstmonday.org/article/view/3484/2857

^{6.} The phrase "pathways to news" was used by the American Press Institute in its 2015 report on millennials and news seeking, "Millennials' Nuanced Paths to News and Information," American Press Institute (March 16, 2015): https://www.americanpressinstitute.org/publications/reports/survey-research/millennials-paths-to-news-and-information/ and by Pew Research Center in their 2016 report about news seeking: Amy Mitchell, Jeffrey Gottfried, Michael Barthel, and Elisa Shearer, "The Modern News Consumer," Pew Research Center (July 7, 2016): https://www.journalism.org/2016/07/07/pathways-to-news/. Similarly, the phrase is used in this report to avoid confusion with terms like "platforms" and "sources" to describe students' methods of getting news.

⁵



Like so many other young news consumers today, almost all of the students in this study (89%) had picked up news during the last week from social media. About three-quarters (72%) had gotten news from their accounts at least once a day. In this richly social realm, students logged on to find their feeds included a jumble of bite-sized headlines and images and videos from friends, interest groups, traditional media institutions, or all content distributed by algorithms, i.e., computer programs that govern information flows. In the words of one social and behavioral sciences major, "I get all my news from social media. When I hear about news from people, I've already heard about it from my feed, people are like my secondary news sources."

When asked specifically which social media networks they had gotten news from during the last week, seven in 10 (71%) students said Facebook (Figure 2). Almost half as many of the same respondents (45%) had gotten news from the social network behemoth at least once a day. Social media networks primarily featuring visual multimedia (still and moving images) also had some draw; at least half of the respondents cited YouTube (54%), Instagram (51%) or Snapchat (55%) as frequent pathways to news in the past week. To a lesser degree, students had gotten headlines or links to news stories through Twitter (42%), while far fewer (28%) had received news on this platform on a daily basis.

71% Facebook 45% 55% Snapchat 27% 54% YouTube 24% 51% Instagram 27% 42% **Twitter** 28% 18% Reddit 10% 15% LinkedIn 4% Weekly 12% **Pinterest** Daily 3% 12% Tumblr 5% 100% 25% 50% 75% 0%

Figure 2: Social media networks as pathways to news

Looking across these different platforms, the findings suggest that young news consumers are "multi-social" in their access and pathways to news on social media. Nearly two-thirds (65%) said they got news last week from three of the social media platforms listed in Figure 2. This finding speaks to the likely scenario that young adults have diverse pathways to news, and choose from a diverse menu of items that they regard as newsworthy. In other words, no one social media company's

algorithm or curation strategy appears to entirely dominate the total news experience of most young news consumers.

Percentages are calculated per category based on the total number of respondents that provided an answer.



In stark contrast, very few survey respondents (1.6%) had not received news from any one of the nine social media platforms listed in Figure 2 during the preceding week. Some had never signed up for a social media account. Once they were in college, though, such abstainers learned they were at a "disadvantage," since they were unfamiliar with news from social media their classmates and professors discussed. Others were adamantly opposed to using social media; as one interviewee put it, "news on Facebook is like junk food for the brain."

But news gathering did not end with peer and class discussions or social media. Three-quarters of the respondents (76%) had received news from online newspaper sites in the last week, with far fewer (33%) getting news from print newspapers or magazines. In their comments, students mentioned using a stable of the same news sites that were a mix of traditional outlets, such as *The New York Times*, *The Washington Post*, or CNN, and news packaged for a Web-centric audience, such as *BuzzFeed* or *Politico*. Some had read news stories on sites such as these after learning about news items on social media; others turned to news sites to track local news about their town.

Almost half (45%) had received news from television in the last week, whether it was real-time programming or segments posted on YouTube or elsewhere on the Web. This finding confirms prior research about the decline of younger adults watching news programming, a go-to for students only a couple of decades ago.⁸ Even fewer (37%) had received news from radio news broadcasts.

Some students (28%) received news from podcasts in the preceding week. While podcast usage may seem low compared to the other pathways to news listed in Figure 1, listening to podcasts came in substantially higher in this study than recent studies have reported.⁹

In their interviews and comments, students mentioned tuning in while commuting to and from campus and listening to shows, such as "Embedded," "Democracy Now!" or "Pod Save America." Podcasts, such as these, let students dig deeper into stories, both their context and implications. In the words of one student, an arts and humanities major, "It's almost like the mainstream media lies by omission, so I prefer to listen to podcasts, especially shows on NPR, which are the most credible news sources."

In Focus: News in the classroom



Seven in 10 college students in our study had received news from professors in the past week. A student's course of study was a telling factor — more than three-fourths of those majoring in arts and humanities (77%) said they learned about news in online or face-to-face exchanges with their professors.

Also near the top of these results were students majoring in the social and behavioral sciences (76%), education (76%), and business (74%).

Some students mentioned times when their professors had changed lesson plans to discuss breaking news, such as a school shooting. In other cases, students said discussing and debating the news was equally informative and instructive as the established curriculum. As one first-year student recounted in a follow-up interview:

"I just recently found out that news can be fake—you really have to look for credible sources. I've had a lot of assignments where we've had to look for where sources come from, so that's helped me learn a lot and be less naive about the news. Professors have taught me how you have to read through the whole article, look at the source, see where your news is coming from before you make any assumptions; they enforce that, so I'm seeing it becoming more of a habit for me."

Survey respondents majoring in STEM subjects, such as computer science (51%), engineering/architecture (49%), or math (43%), were least likely to discuss news in class or in online or in-person exchanges with their professors. But, as one engineering major said, news had a place in their classrooms, too, particularly when it was about "course assignments and looking up information about new technologies and FDA approvals." *

^{8.} Katerina Eva Matsa, "Fewer Americans Rely on TV News: What Type They Watch Varies by Who They Are," Pew Research Center (January 5, 2018): http://www.pewresearch.org/fact-tank/2018/01/05/fewer-americans-rely-on-tv-news-what-type-they-watch-varies-by-who-they-are/; Laura Hazard Owen, "Here's Who Gets News from TV: The Elderly Again, Pew Finds (Again)," Nieman Lab, Harvard University (January 8, 2018): http://www.niemanlab.org/2018/01/heres-who-gets-news-from-tv-the-elderly-pew-finds-again/

^{9.} The Pew Research Center has reported that 17% of Americans 12 and older had listened to a podcast during the past week, "Audio and Podcasting Sheet," Pew Research Center (July 12, 2018): http://www.journalism.org/fact-sheet/audio-and-podcasting/



Multimodal and multi-social

Two major trends emerged from Takeaway #1. First, the survey findings challenge the simplistic and pervasive opinion that today's students¹⁰ are "news-less."¹¹ Instead, students in the sample reported receiving news from a range of different pathways to news on a weekly basis.¹² Second, the interviews and comments suggest that the common experience with news involves engaging with intertwined layers, sometimes with variations on the same story popping up in multiple pathways and platforms. As one student, a social and behavioral sciences major, said during an interview:

News finds me through alerts on my phone and on social media. Like today, Trump announced he wasn't going to meet with Kim Jong-un and I got a lot of alerts about that. There was a CNN alert and once I opened Facebook it notified me too. Sometimes if I have time in the morning I'll watch "CBS This Morning," and occasionally, I'll look at my Facebook updates. Today, I had at least five different posts about the same Trump story on Facebook. I also read the Washington Post and the New York Times and the Boston Globe, because it has news about local politics that I'm interested in.

As such sentiment suggests, and the survey findings confirm, many students have a news diet that is distinctly "multimodal." Their news is a blend of headlines, stories, and video clips from social media networks, smartphone alerts, and online news sites, as well as from discussions with friends, classmates, and professors. Likewise, they are "multisocial" in their access to news on social media, getting their news weekly from several social media platforms rather than just one.

This portrait of today's young news consumer is revealing. It describes news seeking as an activity that involves both online and face-to-face interactions. Some students said they had heard about news through exchanges with professors, and actively dug deeper after class to learn more about a topic on their own or to complete an assignment.

Others said they had compared snippets of a news story posted on social media with a more detailed account they had found online with a Google search that linked to news sites. They often clicked a link to a mainstream news site they trusted and "considered reliable," such as *The New York Times* or *The Washington Post*, and others, to validate the stories they heard or read, searched YouTube for footage or used Snopes, an independent and reliable fact-checking site.

Still others said they cross-referenced news they thought was credible with a site that had different political leanings from their own, like Fox News, Breitbart News Network, or *The Huffington Post*. In doing so, students were consciously choosing to explore different sides of the same news story. Students like these often claimed that a multi-step verification process was necessary given the threat of misinformation in today's political climate, when the country is deeply divided between those who support the president and those who do not.¹³

^{10.} Of course, not all young people attend college or university, and the authors of this report acknowledge the limits to the demographics of this study's cohort. However, it is worth noting that about two-thirds of this generation now enter post-secondary education of some sort in the United States after high school: "College Enrollment and Work Activity of Recent High School and College Graduates Summary," U.S. Bureau of Labor Statistics (April 26, 2018): https://www.bls.gov/news.release/hsgec.nr0.htm. In this study's exploratory analysis of high school seniors (N = 205), this percentage was higher, with 80% saying they planned to attend college right after graduation.

^{11.} Mark Mellman, "The Young and the Newsless," *The Hill, 27*, 1 (January 27, 2015): https://thehill.com/opinion/mark-mellman/230946-mark-mellman-the-young-and-the-newsless. However, two research studies have disproven this claim, see: Op. cit "Millennials' Nuanced Paths to News and Information," in *How Millennials Get News*, American Press Institute (March 5, 2015): https://www.americanpressinstitute.org/publications/reports/survey-research/millennials-paths-to-news-and-information/

^{12.} The researchers for this study acknowledge that the survey sample was self-selected and students who did not follow or care about the news may have decided not to take the survey.

^{13.} It is important to note that the political composition of this study's sample, however, did not mirror the country as a whole. More of the respondents – 50% – identified as liberal or very liberal; 26% said they were moderate; 13% said they were conservative or very conservative. Judging from students' comments and interviews their political affiliations were not necessarily set in stone. As one student summed it up, "I grew up Republican but identify socially as a Democrat, but I still have a lot to learn and prefer not to strongly identify as any one thing until I fully educate myself."



Notwithstanding their efforts, students still found the pathways to news they used were vulnerable to bias, misinformation, and a blurring of opinion and facts. One student, a political science major, recalled how a mainstream news site focused on "Trump coming to save blue-collar coal miners and the coal industry," but when she explored further she found that the coal industry was suffering long-term economic problems for many reasons.

Most young news consumers, like this one, knew they needed to invest time in critically evaluating, assembling, and interpreting news from different pathways to news in order to get the full story. As one student majoring in life and physical sciences summed it up, "I spend more time trying to find an unbiased site than I do reading the news I find."

Takeaway #2: News knows no personal boundaries, so students follow selectively.

Students live in a world where news never sleeps. Whether passively or actively engaging with news, students, like so many of the rest of us, are inundated with a stream of print and video snippets, many from questionable and ambiguous pathways to news whose sources they cannot identify or recall.¹⁴ The sample of students in this study was no different — more than two-thirds (68%) said the sheer amount of news available to them was overwhelming, and half (51%) agreed it was difficult to identify the most important news stories on any given day.

Most students were frustrated by the fire hose of news that they found — and that found *them* — on their mobile devices. In an interview, for instance, a biochemistry major described being so "shocked" by a news alert on her phone about North Korea's missile testing that she and her lab partner immediately stopped their experiment to read the news. Another student, a life and physical sciences major, said she resented the intrusive news posting on her Facebook account:

News interrupts my life a lot, especially when I'm on Facebook and I'm looking at friends' pictures and enjoying myself and then there's videos about violence in Gaza and I think, "Oh God, I can't avoid news!" I've read that news like this can desensitize us and we have to compartmentalize all these images that are just thrown up on social media; I just wish there were more warnings or you could choose to view it or not.

Very few students (8%) in this study reported that they did not follow news. As a junior at a large public university advised: "A low-information diet is incredibly beneficial if you are trying to remain focused on goals — news is stressful and has little impact on the day-to-day routines — use it for class assignments, avoid it otherwise." While a few students like this one practiced news abstinence, such students were rare.

Keeping up

Out of necessity, many more students said they had developed strategies and techniques for navigating the news landscape and managing the onslaught of a never-ending news cycle. During the interviews, students said they relied on news digests to keep current, such as the Skimm, *BuzzFeed's* "Top Five," or updates provided by Snapchat, Apple News, or "smart" devices like the Amazon Echo.

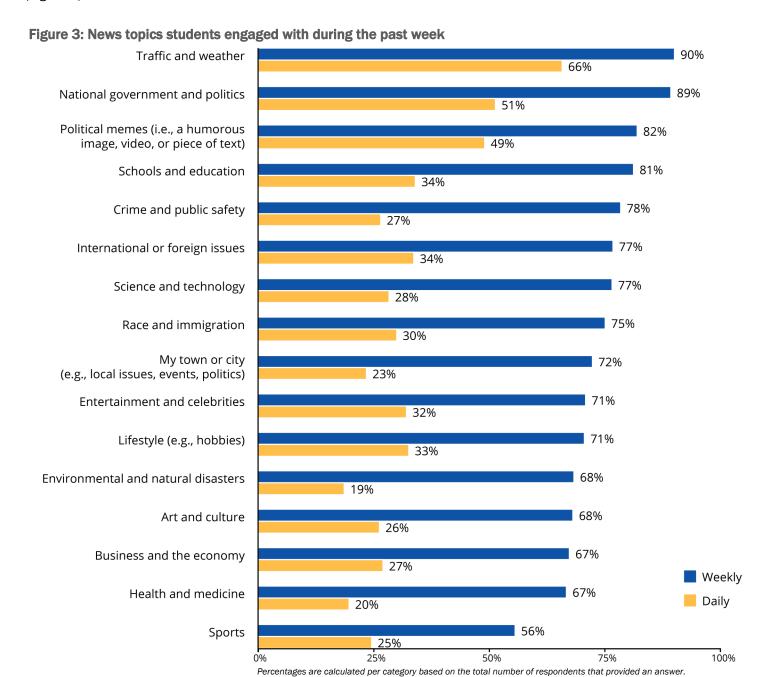
News digests, they said, were trusted gatekeepers that filtered and identified the most important stories (at least as identified by the providers) and kept them aware of what was happening in the world around them, in case news came up in discussions with friends or in class. As a senior majoring in social and behavioral sciences explained:

A digest of top news stories is definitely in our formula of what makes a good news source, since we often just feel so inundated with all the information that's available on the Web - all the different news sources we can go to. But to have news in a small, simple, digestible form where if you're interested in a story you can go and read more



about it and if you're not you just go to the next item. Digests are a more accessible format and allows you to consume the news and feel like you've gotten a full, 360-degree understanding about what's going on in the world in a very short amount of time without having to thumb through some newspaper or get lost on Google looking for the top stories of the day, like the New York Times does a morning briefing — I try to read that every day.

Students, as a whole, were interested in a range of news topics, but most ignored stories that did not serve their individual needs or interests on some level.¹⁵ More than anything, survey respondents had read updates about the traffic and weather (90%) during the preceding week, with two-thirds (66%) of the same students checking this information at least once a day (Figure 3).





Nearly as many respondents had followed news about national government and politics (89%), while more than half (51%) had checked on political news at least once a day. Roughly eight in 10 students took in political memes (82%), humorous images, videos, or text, because they appreciated the amplifying quality of satire about certain political events. ¹⁶

At the same time, students had followed stories on crime and public safety (78%), international issues (77%), local news about their town (72%), or environmental and natural disasters (68%). As one student explained:

I'm looking for news that really affects me, that's what I seek out, that's what prompts me to click a link. When I see something about Planned Parenthood is trending, that's something that as a woman, is important to me, so I'll want to read more about it. If I see something like a global crisis or something like the Flint water issue, I'll read more stuff that shows how I can help because that's important to me, too. But I don't care about sports, they're just boring, it's not necessary to know.

During the months when this survey was administered, many students were interested in coverage about race and immigration (75%) — and so were many others outside of this study's sample. A 2018 Gallup survey found more Americans had identified "dissatisfaction with government/poor leadership," "immigration/illegal aliens," and "race relations/racism" as the most important problems facing the United States. 17

Together, these findings help to explain why so many respondents agreed with statements that news was "information useful to me in my life" (83%) and that "[news] helps me understand the world" (73%). At the

In Focus: The dynamics of the political news cycle



n 2015, when an American Press Institute study asked a sample of people in their 20s whether they regularly followed news about national politics, more than two-fifths — 43% — reported that they did.* Three years later, 89% of the survey respondents in this study said they had followed political news during the preceding week, more than double this earlier figure.

One explanation for this result is there is more coverage now related to their lives and concerns, such as gun violence, school shootings, and the fate of their fellow DACA students, according to our interviews.

In this study, the accelerated pace of the news cycle combined with an influx of constantly changing national and international issues had led students to read or view more news than ever before. As one film major said:

"The speed of news is changing; it really has increased with the amount of news that's out there. There is always something going on with our new president, and news stories happen and appear so quickly. Someone will release information within the hour of the occurrence. It used to be you had to wait a day before you got the news, but now it is so quick, it's a lot to sort through. We talk about current events in my classes, and I feel a little pressured to know what's going on."

This student's suspicions about the meteoric rise of political news is confirmed in recent research from Thomas Patterson, the Bradlee Professor of Government and the Press at Harvard Kennedy School. When the media scholar analyzed the political coverage of Donald Trump's first few months in office, he found television and print coverage of the new president accounted for 41 percent of all news stories — three times more than any previous president.† "Even by that standard," Patterson concluded, "Trump's first 100 days were a landmark." *

- * Op. cit "Millennials' Nuanced Paths to News and Information," in How Millennials Get News, American Press Institute (March 5, 2015): https://www.americanpressinstitute.org/publications/reports/survey-research/millennials-paths-to-news-and-information/
- † Thomas E. Patterson, "News Coverage of Donald Trump's First 100 Days," Faculty Research Working Paper Series, RWP17-040, Harvard Kennedy School (September 2017): https://www.hks.harvard.edu/publications/news-coverage-donald-trumps-first-100-days.

^{16.} Throughout our pre-study focus groups, students in each discussion brought up political memes as "news" that they engaged with and followed. While this definition did not comport with our original survey plans, we revised our survey to collect data about which topics students considered "newsworthy," so we could better understand how they defined news today. We acknowledge that political satire has been around forever. Some 2400 years ago, Aristophanes ridiculed Athenian leaders and their conduct of the Peloponnesian War. Benjamin Franklin was, perhaps, one of this country's first popular satirists. See Chapter 3, "News Parody, Satire, Remix," in Adrienne Russell, Networked: A Contemporary History of News in Transition, Polity: Cambridge, 2011.

^{17. &}quot;Most Important Problem 2018," Gallup (2018): https://news.gallup.com/poll/1675/most-important-problem.aspx



same time, students often looked for news related to their academic interests. Education majors, for instance, appear to view education news more frequently than students majoring in other fields. More than half of the education majors (51%) had viewed news on schools and education once or twice a day, while less than a third of math majors (29%) had read about the same topics over the past several days.

One explanation in the interest in following education and schools may be increased coverage about gun violence and schools; many students mentioned school shootings in their interviews. But the trend of students keeping up with news related to their majors was consistent beyond event-driven and breaking news stories. For instance, more than two-fifths of the computer science majors (44%) had gotten news about science and technology on a daily basis in the preceding week, while arts and humanities (24%) or education majors (21%) had viewed STEM stories far less often.

One of the more intriguing results from the survey was the lower percentage of respondents -56% - that had followed sports news in the preceding week, relative to how much respondents followed other news topics listed in Figure 3. Notably, a higher percentage of males (63%) in the sample followed sports than did females (53%), which supports the popular stereotype of more males being avid sports fans.¹⁸

An explanation for the relatively low percentage of sports news fans may be that interest in traditional sports coverage is experiencing a downturn. In the follow-up interviews, both male and female participants said they did not follow sports news so they could conserve time to use elsewhere in their busy lives. ¹⁹ As one student stated, "I just don't have time, but say I do have 10 extra minutes, I'm going to look up news about pressing issues beyond my major about foreign policy news rather than sports."

Others said they followed sports news only when a championship was happening, like the World Cup, Olympics, Super Bowl, or NBA Finals; others followed humorous things that had happened on the playing field or sports controversies that overlapped with news about politics, race, or social justice. As a female student enrolled at a private college said:

I'll watch the Super Bowl but mostly for the commercials. The only time I'll really engage with sports news is when it's not really about sports, so like the NFL players kneeling during the national anthem. But that's more of a political protest than sports, so that's probably why I find it interesting.

Defining news broadly

It is clear from the findings presented in Takeaway #2 that this generation of young news consumers defines "news content" more broadly than previous generations. Prior to the Web, news was divided into distinct categories of newsprint and straight network broadcasts. News placement was vetted by journalists to reflect its importance, with the biggest stories of the day telegraphed with larger fonts and headlines that are "above the fold" in print newspapers.

But on the Web, stories of all kinds can show up anywhere and information and news are all mixed together. Light features rotate through prominent spots on the "page" with the same weight as breaking news, sports coverage, and investigative pieces, even on mainstream news sites. Advertorial "features" and opinion pieces are not always clearly identified in digital spaces.

^{18.} According to one study's results, males were twice as likely as females to be involved in and interested in sports. Part of the reason is that of 235 sports open to males, only 50 were also played by women around the globe. See Robert O. Deaner and Brandt A. Smith, "Sex Differences in Sports Across Gender in 50 Societies," Cross-Cultural Research, 47, 268-309 (2013): http://www4.gvsu.edu/DEANERR/Deaner%20&%20Smith%202013%20Sex%20differences%20in%20Sports%20across%2050%20Societies.pdf

^{19.} Dan Singer, "We Are Wrong About Millennial Sports Fans," McKinsey and Company (October, 2017): https://www.mckinsey.com/industries/media-and-entertainment/our-insights/we-are-wrong-about-millennial-sports-fans; Alex Evans and Gil Moran, "L.E.K. Sports Survey — Digital Engagement Part One: Sports and the 'Millennial Problem'" (March 15, 2017): https://www.lek.com/sites/default/files/insights/pdf-attachments/1912 Sports Survey Part 1a.pdf



Students' engagement with news content reflected this anything-goes news landscape in the 21st century. On the whole, in interviews and comments, they mentioned an assortment of topics that qualified as being newsworthy to them: Kim Jong-un's missile testing, political memes, daily traffic and weather reports, the "March for our Lives," and Roseanne Barr's 20 racist tweets.

While many college students appeared, on one level, to be idealistic about the role of news in society, it was revealing to learn what types of political news they engaged with on social media. In the preceding week, most students (82%) had viewed a political meme — humorous images, satirical videos, or pieces of text that often connect a current event with pop culture. For many, political memes provided a much-needed dose of humor in the midst of news about the world's serious problems and tumultuous times.



A collection of widely circulated memes in 2018 were inspired by a photo of Donald Trump and Angela Merkel at the G7 Summit in Quebec in June 2018 (Photograph: Jesco Denzel/AFP/Getty Images. Used with permission, Getty Images).

As one student, a health sciences major, explained, "Political memes, while crudish, begin important conversations." Others considered memes a natural springboard for "researching fact vs. fiction or opinion vs. reality." Still others, though far fewer, avoided political memes all together since they saw they as dangerous and powerful weapons for spreading misinformation.

Whatever their motivations, many students considered political memes "newsworthy" on some level. These findings suggest satire is an integral part of the college students' lives, as reflected in many students' comments referencing Stephen Colbert, John Oliver, and Trevor Noah, and their late night shows.²¹ Some students recognized, however, that not everyone appreciates satire in the era of alternative facts. In the words of one political science major, "My grandmother, and most adults her age, think news is something very serious; she really doesn't appreciate the humor as much as someone my age does."

Takeaway #3: Tension exists between idealized views of journalism and a distrust of news.

A new vernacular of media terms, from "tweets" and "likes" to "citizen journalism" and "clickbait," exemplify how dramatically news distribution has changed in just a decade, or two. But this change is not only in how news is spread, but also in how it is reported. Technological changes have come to news production at a time of shrinking newsrooms. There are fewer reporters and diminished newsroom capacity.²² Moreover, these changes are all happening precisely at a moment of increased scrutiny from the White House and political factions questioning the veracity, relevance, and possible journalistic bias of news coverage.

^{20.} The story about Roseanne Barr broke in May when we were conducting follow-up interviews, not when we were administering the survey.

^{21.} We acknowledge that political satire has been around forever. Some 2400 years ago, Aristophanes ridiculed Athenian leaders and their conduct of the Peloponnesian War. Benjamin Franklin was, perhaps, one of this country's first popular satirists. See Chapter 3, "News Parody, Satire, Remix," in Adrienne Russell, Networked: A Contemporary History of News in Transition, Polity: Cambridge (2011).

^{22.} Adrienne Russell, Networked: A Contemporary History of News in Transition (Cambridge: Polity, 2011); Jeffrey C. Alexander, Elizabeth Butler Breese, and Maria Luengo (eds.), The Crisis of Journalism Reconsidered: Democratic Culture, Professional Codes, Digital Futures, Cambridge: Cambridge University Press (2016).



Despite this profound shift within the news industry, the long-standing core principles of journalism — truth, accuracy, independence and fairness — resonated with students in this study. Most survey respondents agreed that news was important in a democracy (82%), while another three-fifths agreed that following the news is a civic responsibility (63%). As one science major explained:

The news makes people talk about what is going on in life, and even fake news creates conversations! Talking is the hallmark of democracy, and the news makes people talk about important issues. Who would speak for the community and marginalized groups if the news wasn't present? People should follow the news, they should know what is going on in the world.

When asked what constitutes "news," about two-thirds agreed with statements that news "consists of objective reporting of facts" (65%) and is "factual stories that grab my interest" (67%) (Figure 4). In their interviews and comments, some students discussed the importance of knowing "good from bad news sources," while others said they looked for news from "trusted sources" with an established history of reporting news in "a decently fair way."

These findings suggest many college students have a strong allegiance to an idealized version of journalism. And because of this perspective, one distinctly revealing thread running throughout this study was the persistent dissatisfaction students had with the quality of news available to them. During the interviews, one student's comment captured the ambivalence that many others expressed about the quality of today's news: "It is really hard to know what is real in today's society; there are a lot of news sources and it is difficult to trust any of them."

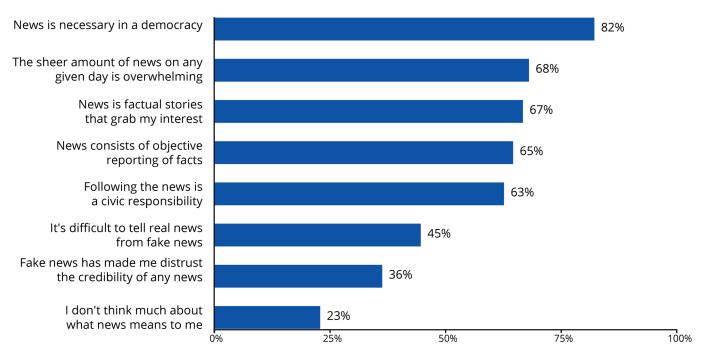


Figure 4: How students define the role of news in their lives

Responses of "strongly agree" and "somewhat agree" have been conflated into a category for "agree."

Percentages calculated per category, based on the total of number of respondents that provided an answer.



Exploring this topic in the follow-up interviews and survey write-in comments, several factors, as students described them, drove a significant minority's distrust of the news. More than anything, students mentioned the "fake news" phenomenon²³ in their comments and interviews, particularly its far-reaching impact on people's ability to distinguish truthful and accurate news coverage from misinformation and outright lies. A few referenced "fake news" as being part of an agenda linked to spurious comments made by the White House about journalists being the "enemy of the people." Many more echoed similar concerns saying they "took news with a grain of salt."

Some (36%) said they agreed that the threat of "'fake news' had made them distrust the credibility of *any news*." Almost half (45%) lacked confidence with discerning "real news" from "fake news," and only 14% said they were "very confident" that they could detect "fake news." While many acknowledged that "fake news" is not new, and propaganda and misinformation have always been a component of news content since the early days of journalism, many mentioned other forces at work eroding the quality of news today during their interviews and write-in comments.

Social media backlash

Beyond "fake news," some students were highly critical of an increasing avalanche of news that appeals to news consumers' emotions rather than conveying credible facts. Some questioned the technologies that enabled, even encouraged, the rapid spread of lower quality online content and misinformation. As one student majoring in business administration explained:

The pace of news has definitely changed and it began with the 2016 presidential election. People were throwing out opinions as fact, left and right, about Clinton and Trump. Thousands of comments would appear within minutes of the pictures or videos that were posted online about both candidates. We saw how fast social media can work in that arena and how it can really divide people, too. People unfriended friends and got into terrible fights because of the posts. It got so crazy and people talked about things they might not normally talk about, like abortion and politics.

Other students voiced their concerns about getting their news from social media platforms, and they recognized the limitations of the likes of Facebook or Twitter as a news delivery system. There was considerable distrust of news items posted on social media as they were incomplete and disembodied from the originating source.

Almost three-fourths of the survey sample (72%) agreed that without knowing the source of the news — where a news item originated — they could not trust a news item. When making decisions about credibility, students were far more likely to use the media source as a proxy for quality rather than the individual journalist. As one arts and humanities major said in an interview, "The fact that people consider news on social media as news is the most troubling fact, I mean nine times out of ten, a headline is only designed for 'clickbait' for ad revenue — I don't use or trust news on social media." And as another student in an occupational training program put it, there is "a blur between credible and opinionated sources, making social media a strong platform for spreading opinion and entirely false news."

Still others critiqued the pace of the news cycle or what one student called, "fast news." Fast news, according to one first-year student, was the minimalist presentation of news and information on social media that oversimplifies and omits critical information while feeding to the spread of fragmentary news coverage:

^{23.} For purposes of this study, "fake news" is defined as patently untrue and made-up news created with the intention of deceiving others, often for monetary or political gains, or both. We recognize that the term "fake news" is highly problematic. But we use it because the term is commonly used in public discourse and its wide usage affects the attitudes of news consumers, even if its definition is politically fraught and imprecise from a social scientific perspective.



We live in this time where our attention spans are even less. Think of Snapchat: we look at an image about the news for 10 seconds and then it's gone. Instagram stories? You can find something and it disappears in 24 hours. Vine started out by posting seven-second videos. People expect things to be funny really fast or interesting really fast, and same with news — teenagers want news that's quickly interesting, quickly eye catching. That's so detrimental to news and the culture of news right now. It takes time to be well-informed and to get the whole story. Fast news oversimplifies. It cuts out a lot of the important details, especially when news coverage tries to be like a social media post.

At the same time, other students were dissatisfied with an increased bias in news reporting. While two-thirds (66%) of the respondents agreed with the statement that "journalists make mistakes but generally try to get their news stories correct," many were still suspicious of news organizations that injected bias into stories solely for profit; as one student said in a write-in comment, "Their end goal is selling advertising."

Many of the students who were interviewed said they gave little credence to journalists. Most had little regard for bylines or who individual journalists were, and almost half of the survey respondents (49%) agreed that journalists deliberately inserted bias into their stories. As one student said in a write-in comment, "It's the umbrella organization that gives the news legitimacy. I don't really care about who's writing the story." Another said, "I never pay attention to the specific author of a news story, but I definitely avoid sites like Fox News."

As a matter of recourse, some students in the study "read the news *laterally*," meaning they used sources elsewhere on the Internet to compare versions of a story in an attempt to verify its facts, bias, and ultimately, its credibility.²⁵ When they were deciding whether to share news sources on social media, more than a third of the sample said they first compared news with different sources (37%) or read or viewed an entire news story from start to end (46%). As one student, a film major, said during an interview:

25. For a discussion of lateral reading, see pages 38 - 40 of Sam Wineburg and Sarah McGrew, "Lateral Reading: Reading Less and Learning More When Evaluating Digital Information," Stanford History Education Group Work Paper No. 2017-A1 (October 6, 2017): http://dx.doi.org/10.2139/ssrn.3048994

In Focus: Previewing Next-Gen news consumers



or the youngest of young consumers in this study, Snapchat was a go-to for news. Drawing on an exploratory analysis of survey responses from 205 seniors enrolled at six U.S. high schools, we found that 46% of the sample had picked up news at least once a day from Snapchat. But when college students in this study were asked the same question, far fewer -27% – had reportedly used Snapchat daily.

High school students mentioned using the Daily Mail, Discover, or Stay Tuned as places on Snapchat where they got news. As one senior said, "Finding news is very easy on Snapchat – I don't really read newspaper articles anymore."

Part of the appeal of Snapchat may be that it offers teens a perceived adult-free social venue. While Snapchat gives users the option to view and interact with "Stories." Discover hosts interactive news that produced by sources such as *CNN* and *The New York Times*. Notably, Discover originally departed from the algorithm-driven model of news feeds such as that of Facebook. As Snapchat's CEO Evan Spiegel put it: "Social media companies tell us what to read based on what's most recent or most popular. We see it differently. We count on editors and artists, not clicks and shares, to determine what's important."* More recently, however, it was reported Snapchat began to use algorithmic curation of news, too.†

Clearly, models for delivering news on social media are getting more visual and interactive, while offering more control to users. So, where does that leave the social media giant Facebook? Our findings underscore the broader migration from Facebook to Snapchat that is underway among teens.‡ While almost half the college sample (45%) in this study had gotten news from Facebook on a daily basis, far fewer of the high school seniors in the smaller sample (23%) reported using this behemoth platform for news. ❖

- * John McDermott, "5 (more) things we learned about Snapchat Discover," DigiDay (January 28, 2015): https://digidav.com/media/5-things-learned-snapchat-discover/
- † Kurt Wagner, "Snapchat's Redesign is Baffling Publishers," Recode (March 2, 2018): https://www.recode.net/2018/3/2/17068038/snapchat-discover-redesign-algorithm-traffic-publishers
- ‡ Natasha Lomas, "Teens favoring Snapchat and Instagram over Facebook, says eMarketer," TechCrunch (August 22, 2017): https://techcrunch.com/2017/08/22/teens-favoring-snapchat-and-instagram-over-facebook-says-emarketer/



I really don't trust any news source and that is why I talk to my peers and professors to see what others think and to see if it might be a bogus story or not. People have to fact check and not accept or trust one news source as the end-all-be-all, they need to create their own view of the news. No news source is entirely credible but I think you can piece it together if you pull from enough different news sources.

For most students, the traditional journalistic values still mattered, although many distrust certain pathways to news, particularly social media. When students struggled with these conflicting viewpoints, news content was all the more complicated for them to process — and made engaging with news more work than a leisurely pastime.

When looking more deeply at why today's students were dissatisfied with journalism, three primary factors emerged from the Takeaway #3 data. First, the ongoing presence of a so-called "fake news" phenomenon and cases of misinformation and outright lies threatened many students' ability to tell "fake" from "real" news, and contributed to their distrust of news content. Second, the rise of fast news was considered a particularly pernicious influence on the quality of news available today. Third, students expressed concerns about news organizations injecting bias into coverage and playing on news consumers' emotions as a way to increase profits.

As a whole, the findings suggest that many students felt betrayed with news falling short of their ideals; they lamented that their trust in news had been eroded. In one student's words: "I don't trust the news anymore. It all fills an agenda — that's a fact."

Takeaway #4: Students share news on social media as stewards of what's important to know.

Growing up with the ability to share and broadcast on social media is a characteristic that distinguishes this generation from others before them. Young news consumers are the first generation of students who have spent all of their adult lives with the full power of mass self-communication²⁶ and with the speed, ease, wide choices, and socially optimized and shareable content afforded by contemporary social media.

At colleges and universities throughout the country, campuses are filled with students empowered, and sometimes perplexed, by their individual broadcast capacity and multifarious channels for access and engagement. While most college students get a lot, though not all, of their news from social media, how they engage and share news from social media platforms is less known.

Data from Twitter accounts provided voluntarily by survey respondents (N = 731) and from a larger panel dataset (N = 135,891) were analyzed in this study to measure and contextualize how college students consumed and shared news.²⁷ These data have the advantage of allowing for observation-based insights, and therefore greater context, generated independently of the self-reported survey results.

In this study, almost three-fifths of the survey respondents (58%) said they had shared or retweeted news in the preceding week about one of the 16 topics listed in Figure 5, and almost a quarter (23%) had shared news on a daily basis from social media. These results suggest just how broad and common the practice of sharing news may be, but the data also cast some

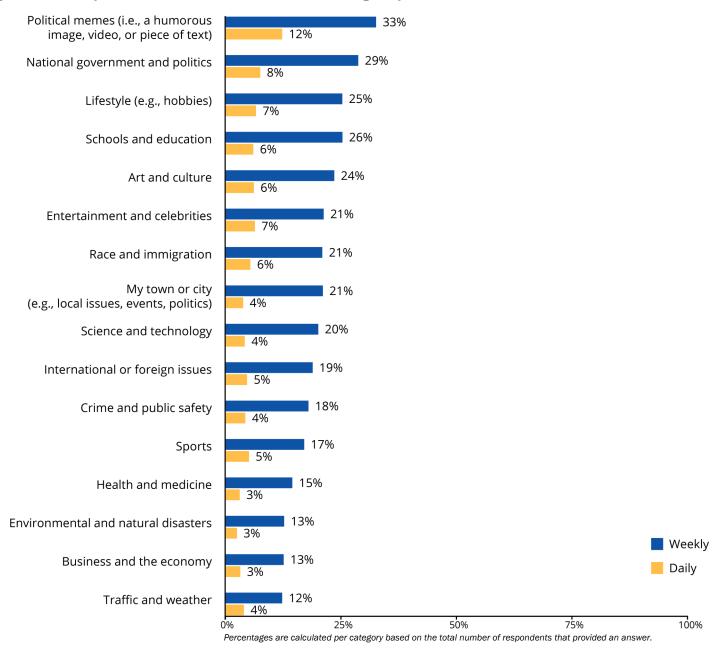
^{26.} Manuel Castells, "Communication, Power and Counter-Power in the Network Society." *International Journal of Communication*, 1, 238-266 (2007): http://ijoc.org/index.php/ijoc/article/view/46/35

^{27.} As mentioned, because Twitter has an API and user data are accessible (unlike Facebook), we are using Twitter data in our computational analysis. While 731 Twitter handles were collected from survey respondents, a subset of 663 were Twitter users who had shared news at some time since they had an account; 68 Twitter users (9%) were "non-sharers." We acknowledge that Twitter's user base is smaller and less generally representative of the population than that of Facebook. Yet Twitter's user base does highly skew toward ages 18-24, which is exactly the target demographic of our study. See Aaron Smith and Monica Anderson, "Social Media Use in 2018," Pew Research Center (March 1, 2018): http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/



doubt on the prevalent stereotype of all students sharing dozens of news items a day. There are many who abstain, even if that is not the majority pattern.²⁸

Figure 5: News topics students shared on social media during the past week



^{28.} Notably, the differences between their sharing activity on social media in the past week – 58% – and high percentage of students who identified discussions with peers as a pathway to news (93%). It may be that as these discussions with peers are less public and one-to-one, so they involve less risk than sharing news through social media as one-to-many broadcasts. In our survey questions, we did not differentiate between peer-to-peer messaging apps that are tied to social media platforms, such as Facebook Messenger and WhatsApp, and social media more generally. We acknowledge, however, a rise in the sharing of news through messaging apps. See Nic Newman, "News in Social Media and Messaging Apps," Kantar Media/Reuters Institute for the Study of Journalism (September 2018): https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2018-09/KM%20RISJ%20News%20in%20social%20media%20and%20messaging%20apps%20report%20_0.pdf



More than anything, students in this study had shared political memes (33%) and news about national politics (29%) in the preceding week. News on schools and education (26%) and lifestyle/hobbies (25%) were also shared. Fewer students had shared news about entertainment and celebrities (21%), local news (21%), race and immigration (21%), or sports (17%).

Drilling down beyond the general level, results suggest that certain individual and demographic factors may have shaped and influenced sharing behavior for the students in this study. There were variations associated with political affiliation and gender. For example, in the survey data, respondents who identified as liberals shared twice as much news (28%) than did conservatives (14%) during the past week.

When looking at the data from Twitter accounts provided by survey respondents, specifically, at the top 25 news sites shared by females (N = 472) and males (N = 180), clear gender differences emerged.²⁹ First, more females (72%) than males (27%) shared news on Twitter. Second, more females shared news from sites such as buzzfeed.com, huffingtonpost.com, abcradio.com, or eonline.com. More males shared news from politico.com, twitch.tv, nba.com, or economist.com.³⁰ Overall, females shared more celebrity and entertainment news, while males shared more gaming and sports news.³¹

Sharing and sharing alike

Sharing on social media can involve young people in the public sphere in a variety of robust ways. Most notably, sharing can allow networks of friends to be more aware of one another's political and social values than they might otherwise be — or want to be. When students were asked why survey respondents shared news, their motives varied: One survey respondent shared news to entertain, provoke, and shape the views of his peers; another shared news to have a voice about larger causes in the world (Figure 6).

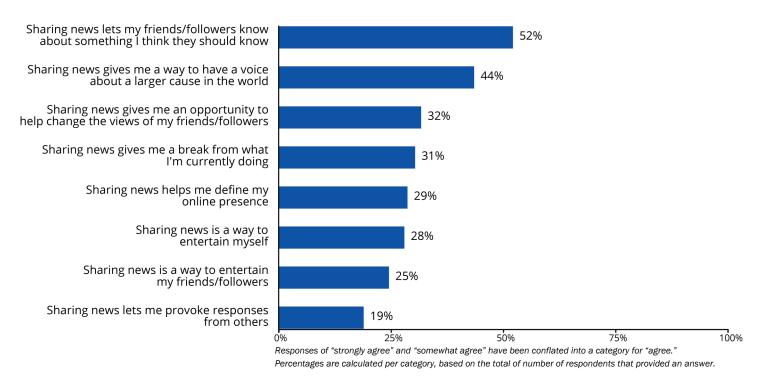
^{29.} In this computational analysis of gender and sharing behaviors, the timeframe of students' news sharing behavior is from the time they had first signed up for a Twitter account through May 2018. The analysis considered students that had shared at least one news link during this timeframe. The total N for this analysis is females (N = 472) and males (N = 180) with the remaining 1% of the respondents identifying at "other."

^{30.} One of the most central complex tasks in this analysis has been defining "news" in order to examine sharing behavior on the social media platform. Of course, social media platforms, such as Twitter, allow for all forms of content to circulate. To identify news sites, PIL researchers hand-coded a list of randomly generated sites. Krippendorff's alpha (KALPHA), the most rigorous means of testing intercoder reliability, was used to test the consistency of reviewers' coding decisions. These results were used to verify a classification based on the sites indexed by Google News, which curates verified news sites. This allowed for focusing on news sites and volume shared with higher accuracy.

^{31.} Notably, these findings confirm respondents' behaviors for following sports news during the last week, i.e., when respondents were asked about whether they followed sports news in the past week, more males (63%) had than females (53%).







Importantly, more than half (52%) said their reason for sharing news on social media was to let friends and followers know about something they should be aware of; nearly half (44%) said they agreed that sharing news gives them a voice about a larger cause. About one-third (32%) agreed that sharing news gives them an opportunity to change the views of their friends and followers.

Yet, as altruistic as these reasons may sound, some students were suspicious about such motivations for sharing news. As one life and physical sciences major summed it up in an interview: "These students share information to reinforce existing viewpoints that make them feel right — even if it's not true."

Of course, other motives were present as well for sharing: a quarter of respondents (25%) said they shared to entertain their friends or just entertain themselves (28%); almost one in five (19%) said they shared to provoke responses from others. Fewer than a third of those surveyed (29%) said they shared news as a way of defining their online presence; few reported being very conscious or intentional about their self-presentation and construction of identity in this regard.

More frequently, sharing is seen as a form of service to others, and based on the interviews, some students saw themselves as policing the truth in the public sphere. In the words of one physical sciences major, "I don't know if other people are good about detecting fake news, like on Facebook, people just share anything, even something that has no backing, they don't even take a minute to see if it is true, or not."

While sharing news may foster a sense of agency and power, it also may be accompanied by reputational risk. Given many students' admitted lack of confidence in being able to evaluate true from false news, the potential for embarrassment remains real. As one student, a life and physical sciences major, explained, "I have fallen victim to fake news before and my friends will have to say, 'Oh, that's not true. You have to read this other story that proves that's fake. You're being ridiculous.' And I've felt stupid, but it happens."

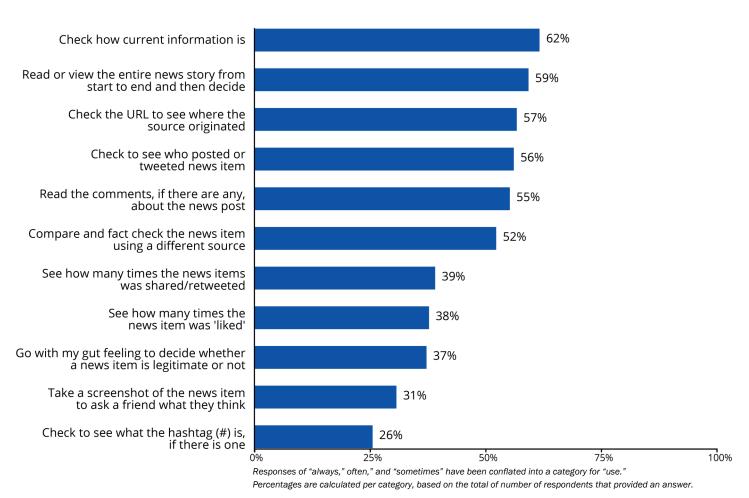


Another student, enrolled in an occupational training program, said:

There have been multiple times when I thought the news was reliable and believed them, only to find out it was not accurate. I am not one to overshare my beliefs and opinions on social media, unlike most people. Not being able to distinguish whether news is accurate or not is a part of why I do not share on my social media platforms.

Some respondents, though not all, did evaluate the veracity of news they shared on social media. More (62%) said they checked to see how current an item was, while 59% read the complete story before sharing and 57% checked the URL to see where a story originated (Figure 7). Fewer read comments about a post (55%) or looked to see how many times an item was tweeted or shared (39%).

Figure 7: How students evaluate breaking news they share



Far fewer checked to see how many times a news item they thought about sharing had been liked (38%), took a screenshot of the page to show someone for advice (31%), or checked on for a hashtag (26%). This is not to say that a few students did not try to get better about critically scrutinizing the validity of news. An arts and humanities major said:

I think looking for news for academic purposes has influenced how I look at news for personal use. I've started looking at dates and sources much more, as well as recognizing what sites tend to have biased news, like HuffPost vs. Breitbart. After doing assignments that require research, I've developed some methods of determining whether a source is credible and before I believe it or share it online.

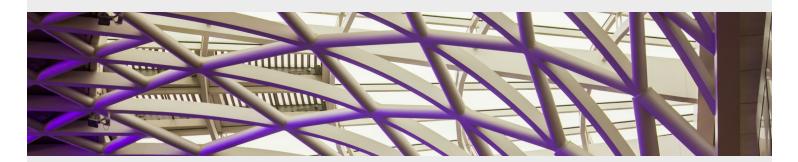


In the absence of comparable studies of other demographics, it cannot be said whether college students are evaluating more or less than other age groups. But what is clear from the data presented in Takeaway #4 is sharing news is a widespread practice among many young people. While it is not constant or consistent for every member of this young cohort, it is a surprisingly common practice, a kind of baseline dimension of the cultural milieu among young persons.

From the beginning of the rise of social media, one of the central research questions has revolved around motivations and self-understandings as they relate to sharing behavior and interactive exchanges in networks, among the largely younger cohort of platform users.³² The data presented in Takeaway #4 give a strong indication of why young persons share news and what they expect from sharing. They often see sharing as a way of informing their network and circulating things of interest that they believe others should be aware of; at the same time, many see sharing news as linked to a form of agency in the public sphere, a way of "having a voice" in larger issues.

News content in its many forms, therefore, is both a kind of currency and a form of fuel. News fuels networked activity and thereby the formation of social capital, fostering mutual recognition, knowledge, and discussion. For young persons, news is a vital tool of social exchange and community building.

In Focus: Patterns of sharing



Are Twitter users and their news-sharing behaviors from this survey sample of college students like others around the same age in the Twittersphere?

To provide a broader view of Twitter sharing trends, we used a large-scale, national panel of Twitter users as a point of comparison with the Twitter data associated with our survey respondents.

While the two datasets are not comparable as far as time frame of shares, the age range of both groups of Twitter users are the same. Our analysis reaped highly useful results that connect this data from this PIL study to a broader population of Twitter users, so that potential trends in this smaller survey-based sample can be better understood.

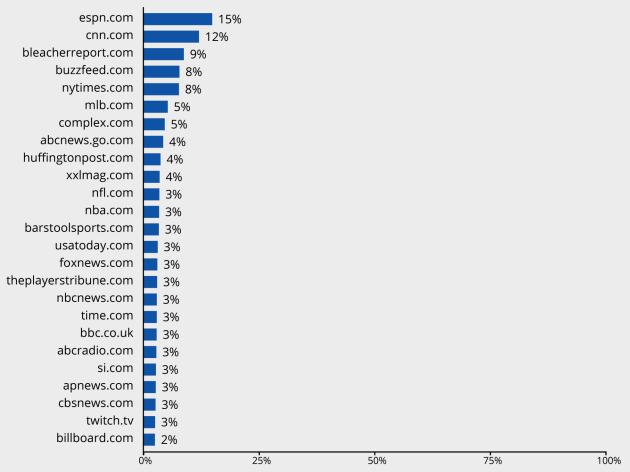
The results indicated that the large-scale panel of Twitter users tended to share more news from sports sites than did our survey respondents on Twitter. And, though these Twitter users from the broader population also followed ample hard news sites, they did so to a lesser degree than did the college students in the survey (Figure 8).

The large-scale Twitter panel and the sample associated with the survey respondents shared news from many of the same sites.



In fact, four of the top five news sites shared by survey respondents, female and male users combined, were also in the top five from our larger panel dataset (Figure 8 and Figure 9). These sites included cnn.com, buzzfeed.com, nytimes.com, and espn.com.

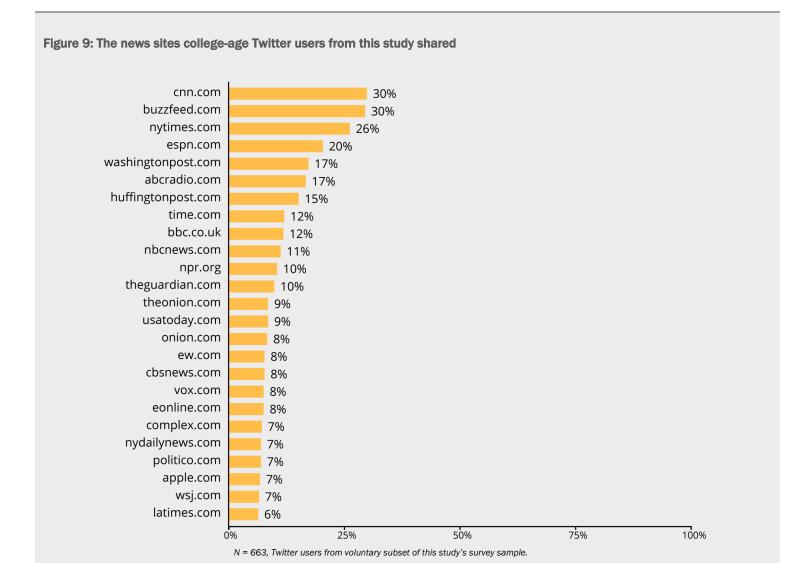
Figure 8: Which news sites the large-scale panel of Twitter users shared



N = 135,891 Twitter users from existing large-scale panel of college-age persons.

At the same time, many of the top links shared by college-age Twitter users in the large-scale panel do not go to news platforms but to other social media platforms, such as YouTube, Facebook, or Vine. These social media links typically do not point to news content on these other platforms, but rather feature forms of interpersonal communication, entertainment, lifestyle, or cultural content.





In the smaller sample of Twitter users from this study, this trend held true as well. These users also shared ample content from platforms such as Vine, Facebook, and YouTube, for example, in addition to the news they shared. One explanation for this circular sharing behavior may be that it fulfills a stewardship role, helping to explain why a majority of students in this study agreed with the statement: "Sharing things lets friends and followers know about something they should know." *

Takeaway #5: Traditional standards for evaluating news are increasingly problematic.

Currency and authority are two of the most pressing issues in our "post-truth" times. In the era of "alternative facts," misinformation, "fake news," partisan attacks on the mainstream press, and volatile news cycles, many students in this study, like so many news consumers, 33 were challenged by evaluating news content for the different uses in their lives.



When survey respondents were asked about which sources they relied on for news for particular purposes, their responses were revealing. Findings suggested a gulf between students' academic and personal news-seeking habits (Figure 10). The majority of students relied on library databases (66%) and professors (62%) to fulfill academic assignment requirements, while for everyday needs, social media networks (56%) or relatively newer media sources (55%), such as *BuzzFeed* or *Politico*, were more popular.

56% Social media networks 6% Non-traditional sources 55% (e.g., BuzzFeed, Reddit) 4% 54% Apps on mobile devices 16% 42% Television broadcasts 18% 38% Professors' recommendations 62% 36% Radio broadcasts 14% Print newspapers 38% Personal Use 17% Don't rely much on the news Academic Assignments 7% Library databases (e.g., ProQuest). 100% 50% 0% 25%

Figure 10: Sources of news for fulfilling academic vs. personal needs

Percentages are calculated per category, based on the total number of respondents that provided an answer.

Fewer students relied on news from print newspapers (38%), news apps (16%), or radio broadcasts (14%) for academic assignments; even fewer used news from social media networks (6%), or non-traditional sources like *BuzzFeed* or Reddit (4%). When it came to getting news for their personal lives, very few used library databases (7%), but a fair number did rely on television (42%) or radio (36%) broadcasts. According to the interviews and write-in comments, students had lower standards for getting news for use in their personal lives than they did for finding news for academic assignments. In the words of one life and physical sciences student, "I don't typically look for news in my daily life, it kinda pops up on my computer sometimes and if it has a good interesting title, I read it."

The results from the survey suggest students who know what is demanded from them academically, used library databases to meet the expectations of their professors. In the open-ended survey question, more than 35% of the survey respondents referenced using different strategies for personal and academic news gathering.³⁴ In the words of a survey respondent, a business major, "Often for school assignments, I use library databases to find news stories, and for personal use, I tend to go the less time-consuming way and just use what is right in front of me, such as social media and news apps."

Despite the implied ease of using social media for staying up to date, the chronology of news stories could be difficult for students to verify on the open Web compared to neatly organized library databases. When students got for the latest news



for personal or academic use, some found it daunting to figure out when a source was first published, a traditional step most took for evaluating information quality commonly taught to students in information literacy workshops, guides, or during high school.³⁵

The frequent presentation of old news as breaking news was a further source of confusion. The 24-hour cable news programs from stations such as CNN compounded these problems. Stories were repeated without much updating, although they were treated like breaking news at the top of every hour.³⁶ For study participants, as for most Web users, there was an assumption that everything posted on social media or on cable news had to be brand new, when in many cases it was not. A political science major summed it up during an interview:

I'm overwhelmed by the news that comes out during the day and then I realize that the morning news and evening news, well, they are still showing the same story. It's like journalists are repeating themselves, I mean the news outlets have identified that these are the stories people are going to read and listen to, so they just keep repeating it. I get that it's about ratings and stuff, but it annoys me, I already heard this, I just want to hear new things!

Determining authority

For many students, the traditional standard of authority was equally vexing. On the surface, three-quarters of the respondents (74%) agreed they trusted sources produced by traditional outlets with professional journalists more than social media sites that allowed anyone to post news. And, further, when a news source was well-defined and known, like *The New York Times* or *Washington Post*, or explicitly recommended by their professors or librarians, determining authority and assigning trust was fairly automatic for many students.

In Focus: What's a librarian to do?



n our age of factual recession, librarians are trusted frontline knowledge professionals, experts at finding and evaluating news and information sources. And yet, it was revealing to learn only 7% of the students who responded to the survey received news through discussions with a librarian in the preceding week, the last in a list of 14 pathways to news.

In survey responses and during interviews, only a handful of students mentioned turning to librarians for finding articles needed to fulfill course assignments. Many more, however, relied on professors for recommendations of news sources to use on assignments. Students also relied on library databases to find news for assignments. In the words of one business student from a large public university:

"I always start by talking to professors first because they'll point to articles or resources that are relevant and that you know are credible, and then I'll go to news sources and see what's out there, see if there's primary stuff that comes directly from politicians or journalists, and then I'll go to the official databases from the university and from the business school. I'll talk to the librarians to help me search their academic resources that the library has — but I've never thought of asking librarians for news resources."

A closer examination of the data yielded interesting insights into how students' use of librarians for finding news. More undeclared majors (12%), who were fulfilling their general education requirements, had discussions about news with librarians in the past week than other respondents (7%). Students majoring in computer science (5%), math (5%), social and behavioral sciences (5%), or life and physical sciences (5%) were least likely to get news from librarians in the preceding week.

Notable, however, were results from respondents enrolled at a college or university that had a required information literacy course taught by a librarian for a full term.* Twice as many of these students (16%), compared to the others in the sample (7%), had learned of news in discussions with librarians during the preceding week. These findings help confirm an earlier finding from this study — students learn about the news from ongoing discussions in their classes. ❖

 * Two out of 11 of the institutions in our sample - 18% - had an "information literacy" course requirement for all students to graduate; these courses were for a full term.

^{35.} For a general discussion of the standards for assessing the information quality of research sources, see U.C. Berkeley's LibGuide, "Evaluating Resources" $\frac{http://}{guides.lib.berkeley.edu/evaluating-resources}$

^{36.} David Weigel, "How Breaking News Broke the News," Slate (April 20, 2012): http://www.slate.com/articles/news and politics/politics/2012/04/ cable tv and the internet have destroyed the meaning of breaking news .html



Professors are key influencers in their students' lives, according to this study's findings and previous research.³⁷ Almost two -thirds of the survey respondents (62%) said they depended on news stories their professors recommended for academic assignments, and 38% relied on professors' news suggestions in their personal lives.³⁸ Unsurprisingly, some students said they deferred to a professor's recommendation for the reward — the good grade — they would get in return. In the words of one arts and humanities major in a write-in comment on the survey: "I tend to trust whatever news sources that my professors assign or trust, regardless of these source's political affiliations or perceived biases."

But there were others who said they distrusted sources that came up in class and were recommended by a professor. They dismissed these news sources as being "too liberal" and "slanted," citing the *Huffington Post* and *The New York Times* as examples. Others questioned "Big Media" and the reliability on mainstream newspapers, whether perceived as liberal or conservative. As one student said during an interview, "The *Washington Post* tends to have great reporting but it's owned by Amazon which is strange, and thinking about these giant media conglomerates, how accurate can their business reporting be if Jeff Bezos is at the top?"

Still other students trusted their own abilities to critically evaluate news they had found online. The findings suggest these students had far more self-efficacy³⁹ in social media environments. Some students were confident they could navigate the digital news landscape, often far better than their professors, whom they saw as out-of-touch. In the words of one business administration major:

Professors often believe that news that comes from print sources or large media outlets tend to be more reliable. While this may have been true previously, there are some lesser known or smaller creators, like those on YouTube or vigilant "civilians," that have quickly become either more reliable or diverse in their reporting, and these sources should be considered more seriously in course assignments, though it should be asked, by professors, that students think critically about the source and try to use multiple sources from any platform.

Not all students agreed with assessments like this one about the use of social media for academic assignments. These students questioned the legitimacy of who had posted a news story, what viewpoints were represented, and what expertise that author had about a given subject. Such attributes and dimensions, they felt, were rarely defined with any transparency with regard to news on social media. According to one arts and humanities student:

It's tragic because with the Internet and social media we have an incredible platform where we can get to more people and more people can get involved if they want to be involved, or become reporters, but what this does is it takes away from legitimate news sources, legitimate journalists, and established news sources. The quality of news is diluted, everyone twists news and manipulates it and then redistributes it, and though we get a lot more quantity on social media, we get a lowering of quality and credibility because anyone can post news.

Clearly, the data presented in Takeaway #5 indicate that there is little crossover between most students' academic and personal news-seeking habits. These findings challenge the view that there is direct transferability between the traditional standards for evaluating information in academic contexts and evaluating news from the open Web. Moreover, the findings suggest professors, and even some librarians, may be sorely outdated in their ability to coach students with acquiring the

^{37.} See findings and the discussion about the role of instructors as research coaches on pp. 28-30 of Alison J. Head and Michael B. Eisenberg, "Lessons Learned: How College Students Seek Information in the Digital Age," Project Information Literacy, Passage Studies Research Report (December 1, 2009): http://www.projectinfolit.org/uploads/2/7/5/4/27541717/pil/fall/2009/finalv_yr1_12_2009v2.pdf and pp. 21-22 of Alison J. Head, "Learning the Ropes: How Freshmen Conduct Course Research Once They Enter College," Project Information Literacy, Passage Studies Research Report (December 4, 2013): http://www.projectinfolit.org/uploads/2/7/5/4/27541717/pil/gull/aportv2.pdf

^{38.} This result of 62% is based on 5,844 students responses to Question 11 in the survey instrument.



self-efficacy and skills they need for navigating news on the Web since so much of students' news now come from volatile environments on social platforms – Facebook, Snapchat, Instagram, Reddit, and Twitter.⁴⁰

A decade ago, educators and librarians needed to accept the fact that students use Wikipedia, and they use it effectively for getting explanatory context and further readings about topics for their courses. 41 Educators and librarians are at a similar crossroads today. Students' practice of getting news from social media will only continue once they graduate. It is why students must be better prepared for navigating and critically evaluating news in a social media environment. *

^{40.} While we have grouped different social media platforms together in this comment, and elsewhere in the paper, based on students comments about "social media," we acknowledge individual platforms are unique unto themselves.



Conclusion

Our report represents one of the largest and most comprehensive studies of youth media engagement, participation, and evaluation in the digital age. We received responses from nearly 6,000 college students and a select group of high school students from across the United States, and followed up with 37 interviews. We examined the Twitter activity of a sizable sample of our survey respondents, and used computational techniques to compare our survey-based dataset with the sharing behaviors of tens of thousands of other young adults on Twitter.

This research was conducted in the wake of the 2016 U.S. election, when the world was consumed by talk of misinformation and "fake news," and when media and political polarization were particularly acute. It must be acknowledged though that "news content" covers much more than politics and national debates; certainly the students we surveyed incorporated a wide variety of topics into their daily and weekly news routines. They recognized that news is a vital element in how people understand the world, prioritize their time and resources, and participate in a democracy. Crucially, news helps to socialize citizens in particular ways — conditioning habits, values, learning, and civic responsibilities.

Importantly, we found today's students are "multimodal" news consumers on a daily basis. About two-thirds of the students in our survey got their news, headlines, briefings, and stories, from five pathways to news; not all of those pathways were through social media. Their news access, consumption, and engagement strategies are complicated, often confounding prevailing expectations and employing idiosyncratic and hybrid methods: a bit of news from social media. A radio broadcast here or there. A feed from a professional organization on Facebook. A class discussion. And a dash of satirical memes that flit across digital platforms.

Their news access, consumption, and engagement strategies are complicated, often confounding prevailing expectations...

Students are frequently "multi-social" as well, engaging with news on a variety of online platforms and sharing media from one social platform to another. While we did not measure news readership as it occurred, we used direct observation methods to analyze a large comparative dataset of news shares on Twitter generated independently of self-reported survey results. Counter to stereotypes, not all young people regularly share news on their social network sites; about a third do not share at all. Yet, for nearly all, their news environment is constantly influenced by a broad mix of social cues and digital nudges from peers, professional media organizations, marketers, Internet platforms, algorithmic recommendation engines within applications, and countless unknown online networks. As one student summed up the ubiquity of news in the 21st century, "It's harder to *not* stay current, than to stay current."

We believe this is one of the first studies to examine how students engage with so-called "fast news" — news that simplifies news content in the era of sociotechnical expediency. News content, as the majority of students described it, is no longer a cohesive report divided into distinct sections with headings signaling what's most important, as generations before may have experienced it. Without some help from news digests, most students are often faced with determining the relative importance of stories on their own. Further, they must construct their own context and meaning as news is frequently delivered as a fragmentary mixture of bits and pieces in an endless stream.

For many of today's young news consumers, engaging with news may feel like being on a scavenger hunt. Many know they need to invest the time and critical thinking to assemble, evaluate, and interpret news as it is delivered today. News in the digital age also invites interaction: comments, likes, shares, and sentiment signaling, all in full view of peers, and often parents and professors as well. Engaging with news, as they see it, takes a certain amount of effort. As mentioned, this reality left one student saying, "I spend more time trying to find an unbiased site than I do reading the news I find." Many students exert effort to find reliable, high-quality news about topics that have piqued their interest. Persistence is their watchword.



A way forward

It is heartening to learn that some, although not all, students in our study demonstrated solid strategies to counter the glut of information they encounter. Many say they read across content producers to obtain a more complete story. They often fact-check, they discuss, they seek guidance from professors they trust, and they work hard to refine their news choices to those they consider trusted and reliable. They tune out weekly sports and instead wait for the championships. They follow and share political memes because they appreciate satire. They take in news about race and immigration and high school shootings because these news items are relevant to their social and learning communities and have a direct impact on their lives.

Of course, not all students take the time to process and interpret the news, but many do. It is clear that young news consumers are trying to develop know-how and savvy about this new, always-on world that they have inherited — this "attention economy" — which is focused on marketing to them, harvesting their personal data and their clicks, and sending them an avalanche of disparate news and information whether they want it or not.

While these news habits offer grounds for optimism, the way forward demands those involved in the media, education, and information sectors be more intentional in helping this new generation understand how to navigate the changing news environment. This help requires leveraging the knowledge and tactics these students already have and helping them refine and adapt their skills to different needs and emerging media. We must recognize the well-documented, strong connection between news media and the quality of civic life. 42 We must not forget the rich connection between news seeking and learning. This study found that traditional journalism values still matter to young adults, although many distrust today's news. The future of democracy in the United States is less likely to be bright if this distrust deepens and we see a generation that is increasingly fragmented, without common spaces for facts to be shared and shared realities to be conveyed. ❖



Recommendations

n the final section of this report, we present six recommendations to front-line professionals — educators, journalists, and librarians as well as those involved with social media platforms — whose work is dedicated to truth-seeking. We offer strategies, curricula, and services that are intended to empower young news consumers. The recommendations we offer deliberately overlap, and if instituted together, will exponentially increase in their power and purpose. Our recommendations are drawn from the study's findings and from our discussion with leading thinkers in education, libraries, and journalism, conducted for this study as a half-day workshop. Included are concise commentaries submitted by each of these leading thinkers.⁴³

Recommendation #1: Teach students "knowledge in action" skills early on and throughout their education.

Navigating the difficult terrain of today's ever-widening news space requires negotiation and seasoned evaluation skills. More than half of the college students in our study (51%) lacked the confidence to recognize "fake news"; more than one-third (36%) agreed that "fake news" had made them distrust the credibility of all news. As many survey respondents acknowledged, the ability to navigate the news landscape is critical in a democracy. This skill, however, takes time to develop.

In this recommendation, we highlight the need to introduce information competencies to students as early as kindergarten and throughout their formal education and into college (should they attend). It would also be useful to work with public libraries and integrate other resources, such as PBS, on programming for parents on how to talk to young children about the news to build news literacy, and to ingrain informed news consumption as lifelong habit, not just for academic purposes. Several other organizations and research projects are working to develop materials supporting education for news literacy.

High school librarians and teachers, and their college counterparts need to work together to better understand the strengths of students and support the transfer and extension of that knowledge in higher education. Opening up these collaborative conversations to those in public libraries and educational organizations can enrich programs that develop engagement with news across a range of experienced front-line professionals. Organizations like CIRCLE, the Center for Information and Research on Civic Learning & Engagement⁴⁶ and the Youth & Participatory Politics Network,⁴⁷ are already researching and improving how youth engage with information in the service of democracy. Although our study focused on college students, we cannot forget that many high school graduates do not continue their formal education, and that learning how to engage effectively with news is not necessary only in the classroom. News savvy matters in the workplace, personal life, and once schooling ends.

To this end, we recommend that librarians, educators and other partners make a concerted effort to teach what we call *knowledge in action* and the skills that make it work. This concept means supporting both the skills to examine questions

^{43.} The workshop "Way Forward in a Factual Recession" was held at Harvard Graduate School of Education on August 14, 2018. Statements (200-300 words) from leading thinkers about how issues to address in the way forward are available in this report following the Recommendations.

^{44. &}quot;Talking with Kids about News," Public Broadcasting System (2018): http://www.pbs.org/parents/talkingwithkids/news/

^{45.} See for example, The News Literacy Project, (2018): https://newslit.org/; Center for News Literacy, Stony Brook University School of Journalism (2018): https://newsliteracy.org/; "Poynter Receives \$3 million from Google to Lead Program Teaching Teens to Tell Fact from Fiction Online," Poynter Institute (March 20, 2018): https://www.poynter.org/news/poynter-receives-3-million-google-lead-program-teaching-teens-tell-fact-fiction-online

^{46.} CIRCLE, the Center for Information and Research on Civic Learning & Engagement (2018): https://civicyouth.org/



but also a deeper set of mental habits and intellectual frameworks that can guide efficient credibility testing and evaluation for a wide array of information types. Fact-checking must take place at "Internet speed," meaning online search engines, lateral checking, peer-guided inquiries through discussion on social media and quick evaluation of credibility.

More strategically, librarians and educators need be more explicit about the "sociology of knowledge," or understanding how facts and knowledge, and specifically news, are produced from an institutional perspective in contemporary society. We need to equip students with a healthy skepticism about news and the dangers of misinformation. At the same time, we need to accompany that skepticism with a more affirmative set of tools for acknowledging well-grounded information to steer them away from cynicism, and the distrust of all news that we saw in some survey responses.⁴⁸

How does a credible, authoritative organization, journalist, or researcher approach questions? What are examples? How can we inspect sources of information from these perspectives? And how can we support students in understanding that facts may be contingent, that understandings of the world can change in response to new information? Students need to be able to assess information through the framework of uncertainty — without being paralyzed by it — with credibility increasing as more authoritative sources on the Web are found to confirm information.

The classroom is an influential incubator for interpreting and discussing news...

To improve the way we teach about news, we need to integrate current research findings from the many social scientists around the country who have entered this debate over misinformation and draw on the cognitive science behind news reception to better understand news engagement.⁴⁹ Drawing on the literature of the scholarship of teaching and learning (SoTL), communications, neuroscience, sociology, and other disciplines, we need to bring together and strengthen an evidence-based understanding of learning and news to inform teaching across the college curriculum, and beyond it in K-12 and public settings.

Recommendation #2: Integrate news discussions into the classroom.

The classroom is an influential incubator for discussing news and interpreting current events. Seven in 10 respondents to our survey said they had learned of news in discussions with professors during the preceding week. Despite the instructional value of news, follow-up interviews with students showed news is often randomly covered in courses without any specific integrative plan. If there is one significant change educators and librarians working in higher education could make in response to the findings of this study, it would be to implement a more unifying approach in the classroom that would enable students to learn more deliberately about the relevance of news.

There is promise in following the model of a program already in place on many college campuses: "Writing across the Curriculum." This program encourages students to develop skills for writing across all their classes, not just in composition courses. 50 Similarly, a "News across the Curriculum" project could broaden student engagement with news, and encourage students to build connections between their news practices and their academic work, while situating news in the disciplines

^{48.} Barbara Fister, "From Schooled Skepticism to Informed Trust," Library Babel Fish, Inside Higher Ed (February 27, 2018): https://www.insidehighered.com/blogs/library-babel-fish/schooled-skepticism-informed-trust

^{49.} Briony Swire, Adam J. Berinsky, Stephan Lewandowsky, and Ullrich KH Ecker, "Processing Political Misinformation: Comprehending the Trump Phenomenon," *Royal Society Open Science*, 4, 3, 160802 (2017): http://dx.doi.org/10.1098/rsos.160802; David M.J. Lazer, Matthew A. Baum, Yochai Benkler, Adam J. Berinsky, Kelly M. Greenhill, Filippo Menczer, Miriam J. Metzger, Brendan Nyhan, Gordon Pennycook, David Rothschild, Michael Schudson, Steven A. Sloman, Cass R. Sunstein, Emily A. Thorson, Duncan J. Watts, and Jonathan L. Zittrain, "The Science of Fake News," *Science* 359, 6380 (2018): http://dx.doi.org/10.1126/science.aao2998; P. Takis Metaxas, "Technology, Propaganda, and the Limits of Human Intellect," (2018): https://repository.wellesley.edu/cgj/viewcontent.cgi?article=1179&context=scholarship

^{50. &}quot;Writing Across the Curriculum Clearinghouse," (2018): https://wac.colostate.edu/

^{51.} See for example, Nancy L. Malcolm, "Analyzing the News: Teaching Critical Thinking Skills in a Writing Intensive Social Problems Course," *Teaching Sociology 34*, 2, 143-149 (2006): https://dx.doi.org/10.1177/0092055X0603400204; Billy McClune and Ruth Jarman, "Encouraging and Equipping Students to Engage Critically with Science in the News: What Can We Learn from the Literature?" *Studies in Science Education 48*, 1, 1-49 (2012): https://dx.doi.org/10.1080/03057267.2012.655036



and linking theory and textbooks to current events. Several studies have shown the efficacy of such an approach for building critical thinking and disciplinary knowledge. ⁵¹ In this study, students importantly identified "a spark" between learning and news. This is when they were able to "tie together" and "connect" everything they had learned from their classes and apply it to the news or understand how things worked in their world.

Often, to their surprise, students discovered what they learned in their classes gave them a certain amount of authority when identifying and evaluating the gaps in news coverage. For example, a political science major said she knew what happens when a bill passes into law, which she recognized as a missing detail in a news story. A biochemistry major said she knew scientists worked painstakingly to discover cures, and even though a news headline claimed a miracle cure for cancer had been discovered, she knew that this could not be true. These realizations help to link to students' construction of themselves as learned people, as experts, critical to their development as students, self-efficacy with news processing, and in their growth within a discipline.

There is nothing like the power of personal modeling, and teachers are trusted sources whose lessons can be memorable across a lifetime. Students are hungry, we believe, for good models of engagement with news. They want to talk about news, both their frustrations and their longings for what they need from news providers. Accordingly, educators need to be more explicit about what a good "information diet" looks like, the drawbacks of being "always on," and, most of all, what habits a discerning news consumer practices. Classroom educators across the curriculum should demonstrate how they vet and sort information in their discipline. How do professors themselves approach novel assertions of fact? How do they keep up with issues of interest? How do they review questions in their discipline? How do educators and librarians respond to information they know to be misleading? Educators should make their own processes visible and explicit to students and not assume students will just develop their own methods or transfer skills developed in one course to another.

Recommendation #3: Reconsider how we teach evaluation.

Our study demonstrates that college students have absorbed instruction on evaluating the packages that information comes in, e.g., books, library databases, or Websites.⁵³ But, perhaps they do this too well. Some survey respondents said they only used news for academic assignments that came from peer-reviewed sources or news from .edu/.gov sites. But these field markers for quality that many faculty and librarians teach for evaluating textual scholarly information do not readily transfer to news sources. Not only is it unrealistic to expect students to check news and factual assertions using the same processes they are often taught in traditional research methods courses, those processes are often counterproductive in assessing news for use in different situations, in their personal lives, the workplace, and after graduation.

Evaluating content by surface features has been problematic for some time;⁵⁴ students need new skills focusing on evaluation of content that are useful when the traditional markers of quality are absent. They need to be able to transfer these competencies to situations and the next wave of new media that will inevitably emerge in their lifetimes. The *ACRL Framework for Information Literacy for Higher Education*⁵⁵ points in the direction of deeper engagement with evaluating content, but librarians and other faculty need to extend the application of its frames to students' use of the news beyond academic work. Along with the critical reasoning and knowledge-in-action cognitive skills, we also need to help students

^{52.} Similar work is described in "Decoding the Disciplines" (2018): http://decodingthedisciplines.org/

^{53.} Amy Jankowski, Alyssa Russo, and Lori Townsend, "'It Was Information Based': Student Reasoning when Distinguishing Between Scholarly and Popular Sources," *In the Library with the Lead Pipe* (May 16, 2018): http://www.inthelibrarywiththeleadpipe.org/2018/it-was-information-based/

^{54.} See for example Leah Graham and P. Takis Metaxas, "Of Course It's True; I Saw It on the Internet!: Critical Thinking in the Internet Era," Communications of the ACM 46, 5, 70-75 (2003): http://cs.wellesley.edu/~pmetaxas/CriticalThinking.pdf

^{55. &}quot;Framework for Information Literacy for Higher Education," Association of College & Research Libraries, American Library Association (February 9, 2015): http://www.ala.org/acrl/standards/ilframework



master tools to manage information in ways that focus on quality, whether that is understanding how algorithms work or using filters deliberately to shape their experience of news more effectively. We need to teach them the basics of turning down the constant flow of information along with things as easy as re-evaluating the feeds and notifications they have originally set on their ubiquitous mobile devices.

The good news is that students have an assortment of skills for engaging with news already that educators and librarians can build on. Many students in our survey said they used lateral checking, and deliberately sought out news from a variety of political viewpoints, countries, and genres. Some of those surveyed reported using digests from credible news organizations to get quick daily hits of top news to stay current, or using documentaries or podcasts to dig deeper into stories that intrigued them. Validating these skills and providing more information on how news works, from production and optimization for algorithms to impact on audiences, can help students develop an insider's understanding of the news supporting their choices for where to spend their attention, time, and effort. Journalism and communication educators could be particularly helpful by explaining the typical methods employed for professional newsgathering, the verification techniques used, and ethical codes that professional journalists follow.

It is useful to discuss the ethics of journalism with students in the context of their role as content producers on social media. The economic aspects of news also have a place in their college education, with discussion of new models like crowdfunding that demand direct participation. Gaining a more holistic understanding of news is likely to give students a heightened sense of agency as participants in the news culture. Again, some aspects of the *ACRL Framework*, such as "information has value," "information creation as a process," and "authority as constructed and contextual," integrate very well with these ideas but have yet to be broadly applied to news as an information source. A useful starting point might be to identify young "super-users" of news and collaborate with them to develop pathways into the news for their peers. SoTL research points to the benefits of working with students as partners in these endeavors.⁵⁶

Recommendation #4: Bring the value of context back to news coverage.

More than two-thirds of the survey sample (68%) were overwhelmed by the amount of news they received each day. About half (51%) agreed that it was difficult to tell what the most important news story of a given day was. The students we interviewed were frustrated by news coverage that treats far too many stories like breaking news, whether they warrant it or not. We concluded that most young news consumers were not inept at news gathering. Rather, they had little experience with differentiating news online that was opinion, breaking news, or features, a necessary skill for succeeding at critical news comprehension.

At the tactical level, there are likely many small things that could be tested with younger audiences to help them better orient themselves to the crowded news landscape. For example, some news organizations are more clearly identifying different types of content such as editorials, features, and backgrounders/news analysis.⁵⁷ More consistent and more obvious use of these typological tags would help all news consumers, not just youth, and could also travel with content as it is posted and shared in social media. News organizations should engage more actively with younger audiences to see what might be helpful.

When news began moving into the first digital spaces in the early 1990s, pro-Web journalists touted the possibilities of hypertext links that would give news consumers the context they needed. Within a couple of years, hypertext links slowly began to disappear from many news stories. Today, hypertext links are all but gone from most mainstream news stories.

^{56.} Tanya Michelle Lubicz-Nawrocka, "Students as Partners in Learning and Teaching: The Benefits of Co-creation of the Curriculum," *International Journal for Students as Partners*, 2, 1, 47-63 (2018): https://mulpress.mcmaster.ca/ijsap/article/download/3207/3044



And yet an editor's first question to a reporter is often, "Have we covered that story before?" and if so, "What happened last?" As news stories travel across social media platforms, embedded links to contextualizing information could ensure that stories retain their connection to deeper contexts.⁵⁸

News organizations need to provide the stories that give as much of the complete picture as possible, so that consumers have the context they crave and rarely get once they leave a news site and delve into a Google search to find out more.⁵⁹ Putting related links at the bottom of stories can be helpful, but it is no panacea. So far, there are encouraging responses to this challenge from news organizations, including the development of "explanatory journalism," and multimedia long-form journalism.⁶⁰ The

...new forms of journalism connect to possibilities for educators and librarians.

increase in long-form journalism, in audio, video, and text also allows for greater depth of coverage and reduces the fragmentation factor that some of the students in our survey lamented. G1 "Solutions journalism" is another promising trend that answers some of the respondents' sense of helplessness in the face of the barrage of crisis coverage. G2

These new forms of journalism connect to possibilities for educators and librarians. Assignments that encourage students to build context around an ongoing story through content curation in blogs, or class news projects, or that bring together multiple aspects of a story in different media, from different perspectives may provide useful practice in assembling knowledge from fragmented information. Students could complete research assignments in the solutions or explanatory journalism genres, and explore alternative media like podcasts or infographics as formats of expression. These are some ideas for bringing news into the classroom where, we found, students often hear about news and learn how to critically evaluate sources and their coverage. More cross-disciplinary conversations among journalists, librarians, and educators may yield more innovative ways of combining their expertise.⁶³

Recommendation #5: Journalists need to continue embracing new forms of storytelling and new audience engagement strategies.

As the advertising-supported model has collapsed and the news industry has contracted, many core assumptions of media are being reconsidered. One such assumption is the proper relationship between producer and consumer; between journalist and audience.⁶⁴ Many successful experiments are being tried, particularly by nonprofit and public media, that

^{58.} Given the production routines and software used in many newsrooms, editors may need to remember to add a link to a digital Web version of a story, based on a reporter's earlier draft version that contained relevant links.

^{59.} Jacqueline Marino, Robert Gutsche Jr., and Susan Jacobson, "Scrolling for a Story: How Millennials Interact with Longform Journalism on Mobile Devices," White Paper for Donald W. Reynolds Journalism Institute, University of Missouri (July 22, 2016): http://www.rjionline.org/downloads/scrolling-for-story

^{60.} Qifan Zhang, "Explaining the News Builds Audience for It," (February 28, 2018): http://projects.nyujournalism.org/newsliteracy2016/topics/explainer-journalism/; John Hudak, "Shining Light on Explanatory Journalism's Impact on Media, Democracy, and Society," Fixgov blog, Brookings Institute (February 24, 2016): https://www.brookings.edu/blog/fixgov/2016/02/24/shining-light-on-explanatory-journalisms-impact-on-media-democracy-and-society/

^{61.} Susan Jacobson, Jacqueline Marino, and Robert E. Gutsche Jr., "The Digital Animation of Literary Journalism." Journalism 17, 4, 527-546 (2016): http://www.robertgutscheir.com/wp-content/uploads/2011/01/Journalism-2016-Jacobson-527-46.pdf; For an example of a longform news story about the plight of homeless people in the California wine country, see Meg McConahey and Erik Castro, "Broken: A Year in the Life of Steve and Michelle," The Press Democrat (September 6, 2018): https://www.pressdemocrat.com/news/8712883-181/broken

^{62.} Vicki Krueger, "How Solutions Journalism Makes Your Reporting Stronger," (August 25, 2016): https://www.poynter.org/news/how-solutions-journalism-makes-your-reporting-stronger

^{63.} See the reflections of participants in "The Way Forward in a Factual Recession" discussion that follows this Recommendations section. See also Laura Saunders, Rachel Gans-Boriskin, and Lisa Hinchliffe, "Know News: Engaging Across Allied Professions to Combat Misinformation," Simmons College (2018): http://slis.simmons.edu/blogs/disinformation/files/2018/05/White-Paper.pdf

^{64.} An attempt for increased transparency between news producer and news consumer is the 2018 documentary, "The Fourth Estate," directed by veteran filmmaker Liz Garbus, that took an inside look at news production at *The New York Times* during the first year of Trump's presidency. For one review of the series, see Megan Garber, "The Humans of *The New York Times*," *The Atlantic* (June 15, 2018): https://www.theatlantic.com/entertainment/archive/2018/06/the-fourth-estate-in-the-age-of-bad-faith/562838/



enlist news consumers in two-way dialogue around particular issues and areas of concern. These often have a strong social media engagement component and produce a multi-part series.⁶⁵

Such new journalistic models have the potential to facilitate better learning to provide opportunities for meaningful participation, including providing venues for "audiences" to tell their own stories and to highlight issues they believe are important. New models may also provide greater space for journalistic transparency in terms of sources and methods.⁶⁶

Younger news consumers are often eager to participate and, per our survey findings, to have a voice on world issues. Such audience-engaged storytelling models can build trust, allowing a window into the media organization and the work of individual journalists who co-create stories. Educators might indeed focus classroom attention on this emerging space: How to be an effective and productive citizen co-creator and critic of news stories, whether through direct crowdsourced participation in stories or through critical "hashtag activism" and the like on social media, when stories are incomplete, badly framed, or just not what they should be.

Another issue highlighted by our survey is that audiences prefer news that is presented as visuals over news that is presented as text, and use platforms such as Instagram, YouTube, and Snapchat. Visual media leave powerful impressions, and while they can persuade, inspire, and provoke very readily, they often leave less room for nuance. Given this set of factors and conditions, we recommend that news organizations find ways to incorporate expressions of uncertainty in visual media. Highlighting what is not known, or not known for certain, may facilitate a more authentic relationship between consumer and media outlet. Being open about a lack of complete knowledge may appeal to a generation that has clearly grown skeptical of the pretense of media authority, and that is often confused by an online environment pervaded by misinformation.

Finally, and perhaps most profoundly, if the mainstream news industry wants to maintain its audience, it needs to reconsider the news it produces, who is involved in that production, and how it represents many groups in an increasingly diverse society. There must be a wider range of stories. News must be relevant to groups that have not traditionally seen themselves represented accurately in media. The demographics of the United States are changing rapidly, and traditional news agendas must be strongly reconsidered in light of a more diverse population.⁶⁷ News media must become more sensitive to their portrayals of these groups through stories and images, and more attuned to their menu of coverage.

At the moment, most stories of youth outside of sports coverage are not flattering, particularly as they relate to non-white communities.⁶⁸ This is an old story — media criticism of this issue has been going on since the 1960s — and it is frustrating that the needle has not moved more in mainstream media. Professional news media now competes with a sea of other media, including user-generated content, much of which focuses on negative events and produces plenty of negative emotions. News organizations must rethink the balance between focusing on negative disruptions, which will always take place, and stories that can educate and spotlight what works well.

^{65.} See Adriana Gallardo, "How We Collected Nearly 5,000 Stories of Maternal Harm," *ProPublica* (March 20, 2018): https://www.propublica.org/article/how-we-collected-nearly-5-000-stories-of-maternal-harm

^{66.} Carrie Brown-Smith, "Transparency Finally Takes Off," Nieman Lab Predictions for Journalism 2018 (December 2017): http://www.niemanlab.org/2017/12/transparency-finally-takes-off/

^{67. &}quot;Youth Movement: Gen Z Boasts the Largest, Most Diverse Media Users Yet," Nielsen (July 12, 2017): http://www.nielsen.com/us/en/insights/news/2017/youth-movement-gen-z-boasts-the-largest-most-diverse-media-users-yet.html; William H. Frey, "U.S. White Population Declines and Generation 'Z-Plus' is Minority White, Census Shows" (June 22, 2018): https://www.brookings.edu/blog/the-avenue/2018/06/21/us-white-population-declines-and-generation-z-plus-is-minority-white-census-shows/



Recommendation #6: We need to pressure social media companies to do much more to empower young news consumers.

Our study's findings suggest that most young news consumers feel overwhelmed by the volume of news and many feel they are unable to discern true from false news. Some are captive in the filter bubble their keystrokes and behind-the-scenes algorithms have both helped to create. Social media companies such as Facebook and Twitter have been contemplating important changes to help fight "fake news" and to grapple with issues such as extreme partisanship. We say much more should be done to empower young news consumers in the social sphere where they get much of their news.

Different ideas should be considered to address the underlying challenges faced by young news consumers, who are still developing their critical thinking and evaluation abilities. Many young news consumers themselves would appreciate more controls in their online environment that allow for greater access to high quality, trustworthy sources. Of course, it should be said that older generations matter, too, and are afflicted by the same problems with misinformation, and they may even be more naïve and susceptible to fake news or hoaxes in some cases. ⁶⁹ But younger consumers are in a formative, preparatory stage with respect to information evaluation, therefore warranting more careful thinking on the part of companies.

First, social media companies should be helping educators by supporting the development of more courses and tools that promote analytical thinking and reasoning about online news, which research shows are vital in fighting the spread of misinformation. For example, the organization First Draft, which works on issues of verification and misinformation, as well as the Poynter Institute, have useful learning resources. Social media companies should be heavily supporting the development of sophisticated curricula, written by educators, that complement traditional news literacy courses. Ultimately, students need to be armed with more rigorous intellectual frameworks for interpreting news on social media platforms.

Second, social media companies should pay special attention to younger users in terms of their algorithmic approach to serving up information. The common practices of filtering and personalization, based on personal data collection, already mean that online platforms are targeting individuals based on various traits, including age. Greater concern for younger users with regard to news might at least be one factor considered in tuning such algorithms.

For younger news consumers, algorithmic recommendations from social media companies should emphasize, to the extent possible, edited news digests once or twice a day, with the occasional addition of breaking news and items from professional fact-checking organizations, such as FactCheck and Politifact, instead. The edited news digest should draw upon reliable sources from the spectrum of political journalism, and it should avoid grouping celebrity news and other "soft" forms of news with hard news. These recommendations could be facilitated with the help of professional news outlets. News companies should give young news consumers the sense that they are able to get enough depth on a news story, and not that they need to keep digging to get to the bottom of an infinite network of connections, which often lead down "rabbit holes" of questionable information. Such practices of providing greater depth could help news organizations that want to position themselves as a quality, journalistic choice.

^{69.} Nicco Mele, David Lazer, Matthew Baum, Nir Grinberg, Lisa Friedland, Kenneth Joseph, Will Hobbs, and Carolina Mattsson, "Combating Fake News: An Agenda for Research and Action" (May 2017): https://web.northeastern.edu/nulab/wp-content/uploads/2017/04/Combating-Fake-News-Agenda-for-Research.pdf; a relevant passage in the report from this session is: "Beyond this, certain characteristics of people are associated with greater likelihood of sharing fake news: older and more extreme individuals on the political spectrum appear to share fake news more than others" (pg. 8).

^{70.} Gordon Pennycook and David G. Rand, "Lazy, Not Biased: Susceptibility to Partisan Fake News is Better Explained by Lack of Reasoning than by Motivated Reasoning," Cognition (in press 2018): https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3165567

^{71. &}quot;First Draft," Shorenstein Center on Media, Politics, and Public Policy, John F. Kennedy School of Government, Harvard (2017): https://firstdraftnews.org/en/education/learn/; Tina Dyakon, "Google News Lab Partners with Poynter's International Fact-Checking Network," (October 26, 2017): https://www.poynter.org/news/google-news-lab-partners-poynters-international-fact-checking-network



Ultimately, social media platforms should behave as responsible news aggregators. Their machine learning algorithms should support this role. Machine learning models should be trained to better align with the news judgment of major, credible news organizations, even if they still tailor content somewhat toward personal relevance. Any such targeted interventions by social media companies should be wholly transparent to younger users, with clear choices presented to opt out, or change settings and degrees of filtering.

Labeling of content also needs to be much better. "Native advertising" should be marked clearly as a form of advertisement — and not presented as "news." Social media companies should downplay click-bait titles and include subtitles that more clearly explain news articles. The further, technology is allowing for images and videos to be manipulated with increasing sophistication. Composite images should be clearly marked as such, as should "deepfake" videos, where facial images and voices may be used to impersonate real people. This is not only important for the software companies that enable such creations, but also for social media companies that distribute such content.

Finally, social media companies should consider identifying labels relating to websites themselves. Promising experiments such as NewsGuard, which is employing journalists to rank content based on reliability, might help in the creation of better identifying labels. 74 Such practices should not, of course, be seen as serving as a substitute for empowering young news consumers with their own analytical skills. .*

^{73.} Michelle A. Amazeen and Bartosz W. Wojdynski, "The Effects Disclosure Format on Native Advertising Recognition and Audience Perceptions of Legacy and Online News Publishers," *Journalism* (in press 2018): https://open.bu.edu/bitstream/handle/2144/27308/Final%20Approved%20Manuscript.pdf?sequence=1&isAllowed=y



Leading Thinkers

Way Forward Reflections and Responses

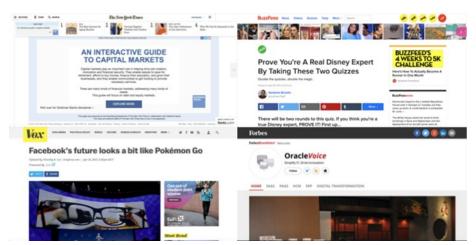
To explore the implications of this study's findings, we brought together a small group of leading thinkers in education, libraries, media research, and journalism, for a half-day workshop at Harvard Graduate School of Education (HGSE) on August 14, 2018. Participants were invited to share and discuss what they thought was essential for "the way forward" in the "post-truth era," specific to our time, technologies, and the information habits of today's young news consumers.

As a final step in the workshop, each participant was asked to submit a reflection responding to this prompt: If the challenge in a democracy is to encourage today's young adults to be engaged and effective news consumers, what is one place — in structures, behaviors, understandings, or values — for change, and what needs to change?

Michelle A. Amazeen

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I see firsthand from my students how few of them understand that we live in a commercially supported media environment and that the vast majority of the media content they encounter — including news — is influenced by advertising. Whether it's the vloggers they watch on YouTube, the posts they see on Instagram, or the news they get from apps, much of this content is designed to cultivate advertiser-friendly audiences. And because so many people of every age are ignoring, skipping, and blocking commercials, the media content itself is increasingly blurring into an amalgam of content and advertising. Today, one of the fastest-growing types of advertising is what's called "native advertising." These are ads that masquerade as entertainment (as seen on BuzzFeed) or worse, news.



Screen grabs of native advertisements in (from clockwise upper left) The New York Times, BuzzFeed, Forbes, and Vox.

Although these ads are supposed to have clear and conspicuous disclosures, my research shows that the overwhelming majority of people does not notice the disclosures or do not understand what they mean. Adoption of native advertising by nearly every legacy news publisher contributes to the declining trust in news media. Comments from my research participants also show they equate native advertising with the fake news crisis. Indeed, whether it's native advertising



camouflaged as journalism or Macedonian teenagers publishing sensational stories on fake news sites, the content was created to draw audience attention to make a profit rather than serve the public interest. Moreover, as recent research by Maha Rafi Atal⁷⁵ has shown, publishers who compromise the divide between news and advertising are less likely to offer investigative business coverage in their reporting. Although it remains to be seen whether college students care that their favorite YouTuber or Twitch streamer may be a paid influencer, they won't care that our journalism is being commercialized if they don't understand this. Journalism in the service of commercialism is no path to democracy.

Joe Blatt

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If the challenge in a democracy is to encourage today's young adults to be engaged and effective news consumers...

This framing of the challenge is excellent — except for the last word. Thanks to social media in all its forms, including blogs, memes, and videos, young people are increasingly becoming sources of news as well as consumers. This makes it all the more essential that everyone learn the key attributes of honest news, including accuracy, authenticity, and potential bias.

To make such learning ubiquitous and effective, educators need to take news literacy to heart as a goal at every level of schooling. Elementary grade teachers can introduce the key concepts as part of compiling the daily classroom newsletter. When middle school students begin writing research papers, their teachers can highlight the parallels between research standards and responsible reporting. High school teachers can take advantage of students' interest in creating social media posts, Snap videos, and college admissions portfolios to focus lessons directly on the cornerstones of news.

Finally, college classes can incorporate discussions of these values, and their appearance or absence in both formal and informal sources. Instructors across the curriculum should participate in this work, recognizing that cultivating robust citizenship in a democracy is both a responsibility and a benefit for everyone. It doesn't take a lot of imagination to see how these ideas could be made relevant in history, literature, and political science courses, but with a little creativity the same could be true for science, language, and arts courses.

Education may initially seem like a weak lever for addressing the challenge of news...but preparing young people for informed and engaged participation in democratic decision-making should be one of the principal goals of learning, in all institutions and at home.

Meredith Clark

Assistant Professor, Media Studies, University of Virginia Bio: https://mediastudies.virginia.edu/people/mdc6i

In reviewing the overlines from the Way Forward report, I'm mindful that researchers, educators, and media professionals consider a life cycle approach to understanding the information seeking and sharing behaviors of younger news consumers. Terms like "digital natives," and even the "digital divide" have given us a false sense of belief that these news consumers are somehow different, totally removed from the media ecosystems of the previous generation. They are not. Instead, the observed and self-reported news consumption and sharing behaviors reflected in this report represent a single spiral in the infinite relationship between the public and our "need to know." In my estimation, it is a downward turn that began with news media's unwillingness to create truly inclusive, culturally competent coverage of diverse communities a



generation ago, fraying the connection between the news industry and the respondents' parents and grandparents. This gap contributed to an incrementally waning sense of trust in media among the very individuals who would first influence the study respondents' early news consumption behaviors, which contributes to the shift reported herein.

It's imperative to apply a critical analysis of how race, gender, and power (in all its manifestations — from newsroom staffing to source selection to issue framing) have worked to further erode trust among marginalized communities. Fifty years ago, the authors of the Kerner Commission warned us that our sense of civic cohesion was splitting along racial lines, and that the journalism industry's failure to actively recruit, train, and promote Black news workers actively contributed to the problem. Today, the industry has made minimal progress in creating more inclusive newsrooms, a curiously self-limiting choice, as the country's demographics have grown far more complex than the Black-white binary. Diverse stories are left untold, and diverse voices are distorted to serve the interest of mainstream media's elite (and usually white) power brokers. All of these shortcomings accelerated the growing trust gap between younger generations of would-be readers, viewers, and listeners, creating an opportunity for technological change to fill the void with voices from their peers on social media, and media sources that were more attuned to their news and information needs.

This transition presents both challenge and opportunity as we (researchers, educators, and media professionals) are compelled to think about the emergent behaviors in younger populations of news consumers, and to adapt our approaches to delivering news and information in meaningful ways that keep pace with the social, economic, political and technological demands they will face in the years ahead.

Catherine D'Ignazio

Assistant Professor of Data Visualization and Civic Media, Emerson College Bio: http://www.kanarinka.com/about/bio/

I have three short thoughts to offer on youth, news and democracy. First, let's all stop beating the drum of "fake news" because it is only serving to amplify a right wing political agenda to undermine the credibility of centrist and center-left media organizations. "Fake news" is itself a propaganda strategy, and we need to name it as such rather than treating it as a legitimate subject of inquiry or curriculum. Instead, we might teach about propaganda or media manipulation in an environment where information travels quickly and emotionally, and there is financial value to attention.

Second, let's cultivate youth as community storytellers and ethical attention-shifters. Youth should not (only) consume the news, but rather create the news themselves so that they may understand the role that news can play in framing important issues and holding power to account in their communities. In the act of creating the news, there are many important questions to navigate about information ethics and ecosystems: Who chooses and frames the news? Whose stories do not get told in the news? How do we verify a statistic or vet a quote? What is the best platform or format to tell a particular story? How do we establish authentic relationships with people in our community?

And when youth tell their own stories, about their own communities, us older people should trust that they might look different and feel different to how we have defined news in the past. Based on some of the findings in this research study, news created by youth might be more visual, more emotional, more cross-platform, more advocacy-oriented or intentionally empowering. And that might be a really good thing.



Barbara Fister

Academic Librarian and Professor, Gustavus Adolphus College Inside Higher Education's "Library Babel Fish" blog

Bio: https://barbarafister.net/

As an academic librarian, I worry higher education focuses too much on helping young people become students and too little on preparing students to be informed citizens. We spend lots of time helping undergraduates learn how to find, read, and evaluate scholarship, but little on how to keep up with events or understand how news is created, circulated, and acted upon. The responsibility for broadening our focus belongs to all of us — librarians, faculty in the disciplines, and staff. We need less research on information seeking and more on information encountering behavior. We need to develop a better understanding of networked information channels and how people engage with them. We need to help bridge the space between what scholars and scientists know and how knowledge is created, remixed, and circulated beyond the academy. We need to rethink what we mean by "information literacy" and make developing informed and active citizenship a priority across our campuses. This will require redesign of curricular and co-curricular programs, faculty and staff development, and the reorientation of library programs from focusing on how an academic library works to how information works in and on society. Structurally, we'll have to reposition rewards systems away from increased productivity in a discipline toward socially responsible applications of disciplinary knowledge and from student success to the empowerment of our graduates to act as free human beings prepared to engage ethically with our world.

Kei Kawashima-Ginsberg

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We need to broaden and strengthen pipelines into all levels of the journalism profession, so that people who produce news are more diverse and representative of the world we live in. Current news media can disengage a large proportion of potential news consumers because they do not see representation of their communities. Among many things that should change, I focus on two types of pipelines because I think they are necessary. First is journalism education. The programs should continue to recruit students of racially, ideologically and economically diverse backgrounds. But they should also consider integrating a teaching hospital model of journalism education, which would get students to connect with the communities they write about early on and build a habit of infusing community voice in news.

Second, however, is more far-reaching and it has to do with how we prepare all of our educators, K-16, and value certain types of student competencies. Core characteristics of engaged and effective news consumers are, in my view: 1) curiosity about the people and world around themselves; and 2) a capability to ask and then systematically answer important questions. Educators of course must learn how changing news affects all of us and help students navigate sources. But more importantly, I think preparation for educators of the future must center on building curious learners and equipping them with tools to solve problems. News is an incredibly powerful tool — but only if people want to know (curiosity), and think they matter (agency). Curiosity and agency aren't taught but rather, built over time through values expressed in how students are expected to learn, how their voice matters in their classrooms and school, and how we define achievements. I believe educators can make this shift, one classroom at a time, but eventually in all classrooms.



Ann Marie Gleeson

Program Director, Primary Source

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Elementary and secondary education plays an important role in preparing college students who are engaged and effective news consumers by fostering the necessary information literacy skills that students of all ages need to analyze and evaluate news. In order to develop these skills, K-12 educators need support and training to both understand the ways in which young people engage with news — particularly within the digital sphere — and gain teaching strategies and tools for addressing media literacy within all disciplines.

Many of the technologies that young people use to consume news, as described in this report, are often missing from the K -12 classroom. Professional development programs that focus on evaluating new information technologies, digital platforms, ways to assess the credibility of news can be effective ways to provide teachers with the tools they need to seamlessly integrate information literacy instruction within their curriculum and prepare students for the type of digital media they encounter on a daily basis. Programs that also offer models of engaging students as creators of the news, such as community storytellers and experiences interacting with journalists, can help educators develop a classroom culture that values student voice and participation in news.

There are a growing number of resources available to K-12 educators addressing these topics and professional development opportunities can be a vehicle to connect teachers to these materials and model best practices for developing effective news consumers at all grade-levels.

Alex Hodges

Academic Librarian, Library Administrator, Member of the Faculty of Education, Harvard University Bio: http://orcid.org/0000-0003-1712-2816

There is no doubt we're experiencing an information crisis that is proving to be a destructive force in our society. I believe that student engagement in curriculum development needs to be at the forefront of educational reform. Ideally, student engagement can occur in a variety of age-appropriate ways. Students should be able to craft educational reform in tandem with their educators in order to see that their or others' methods of information consumption are unsound structurally. As a practicing librarian and education graduate school faculty member, I would value seeing a media literacy curriculum that continued across the K-20 educational continuum. To me, this media literacy curriculum would integrate information literacy and digital literacy to include, and also challenge, students' notions of the information ecosystem as it evolves. This curriculum would be extended beyond traditional schools or classrooms to reach into and within communities, providing students and their teachers with high-impact experiential learning opportunities. For instance, service learning or problembased learning curriculum could foster students' involvement in the improvement of access to factual information within their communities, while also at the same time engage the community in knowledge-sharing practices. If only a connected and rigorously assessed infrastructure of student-educator-community learning were encouraged then perhaps the trustworthiness of information within our complex society would be better?



Mary Minow

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A friend asks me, "Did you know that only 10% of eligible voters turned out at the primaries?"

"How do you know?" I ask.

The answer is likely: "I saw it on Facebook (or Instagram)" or "My friend (posted it)."

It seems harder and harder for us to *notice*, let alone remember the originating source (nytimes, politico, buzzfeed, breitbart, etc.) of digital information. Many platforms we use, like Facebook, offer the same real estate to any source.

If I were to identify *one* place for change, it would be to get students to pay more attention to *noticing* and remembering the originating source. If only this happened, we would have a chance at a better response to "How do you know?"

Is the source an imposter site? Is it reputable and known for checking its facts? At a minimum, students' critical evaluation skills would be activated, and better still might be put to deeper levels of discernment.

My parents remember exactly two questions from their entire college experience. They remember that asking these questions clears up the lion's share of miscommunications and misunderstandings. The questions are "How do you know?" and "What do you mean?"

Briony Swire-Thompson

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Bio: https://brionyswire.com/

Even the most conscientious young adult will read inaccurate information and will ultimately need to change their mind. While people typically reduce their belief in the misinformation immediately after corrections have been presented, they "re -believe" in the initial misconception as time passes. The reason that corrections don't last is unlikely to be solely due to memory, nor solely due to the biases connected to our ideological beliefs — but we still don't know in what proportions to place the blame. If we could better tease apart the processes of belief and memory, we could help young people to process corrective information. If memory is mostly to blame, we could place more importance on the repetition of corrections to improve recollection. If it is mostly belief, we could place more energy upon designing corrections that either teach students about their biases, or don't confront them head on. If only we could all process corrections better — and knew which corrections to place our faith in — we would be a more well informed democracy.

Emily Weinstein

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If we agree that a core challenge for the health of our democracy is preparing today's young adults to be effectively engaged with the news, then we cannot ignore The [current] News Study's finding that 72% of college students get news from social media daily. This finding has implications for multiple stakeholder groups, including youth and their educators and parents, for platform designers, and for news creators. Young people need to understand the features of social media platforms that influence the news they do — and do not — see on their newsfeeds. Content on social apps is shareable, scalable, and participatory; youth therefore need support in practices from responsible and effective news circulation to



constructive dialogue with peers and feedback to elites. Platform developers must recognize that their design choices are not value neutral. They need to be vigilant about the ways their platforms are vulnerable to attacks from those who seek interference in democratic processes. News creators are tasked with developing content suitable for Snapchat and Instagram Stories, and navigating the realities of divided attention from viewers who engage with news coverage intertwined with social and entertainment content. Social media can provide an opportunity for news engagement: Most young people already get news daily through these platforms.

Our challenges, then, are to consider (1) how to support young people in developing skills and dispositions required for effective engagement with online news and (2) how to design content, delivery channels, and platforms in ways that support democratic processes. This transition presents both challenge and opportunity as we (researchers, educators, and media professionals) are compelled to think about the emergent behaviors in younger populations of news consumers, and to adapt our approaches to delivering news and information in meaningful ways that keep pace with the social, economic, political and technological demands they will face in the years ahead. *



METHODS

he findings in this report are based on data about young adults' news consumption habits and preferences. The data were collected in three phases between October 2017 and October 2018 and consist of (1) a large-scale online survey of U.S. college students (N = 5,844), (2) follow-up telephone interviews with a subset of the college survey sample (N = 37), (3) a computational analysis of Twitter activity from survey respondents who shared their screen names (N = 731), ⁷⁶ and (4) a computational analysis of an existing subset of college-age individuals in a panel dataset from the Lazer Lab at Northeastern University's Network Science Institute (N = 135,891).

Three questions guided this study:

- 1. How do students conceptualize what constitutes "news" and how do they keep up, if they can?
- 2. How do students interact with and experience news when using social media networks?
- 3. How do students determine the currency, authority, and credibility of the news content they encounter from both traditional news sites and new media sites?

In this study, news was defined to study participants as "events happening all around the world," and it was noted that "news is more widely available to us than ever before." As researchers, our general working definition relied on broad meanings relating to the spectrum of information in this domain, running fully from hard to soft news: Hard news has been defined as "coverage of breaking events involving top leaders, major issues, or significant disruptions in the routines of daily life"; soft news is "typically more sensational, more personality-centered, less time-bound, more practical, and more incident-based than other news." Our premise in designing and conducting the study was that "news" encompasses a wide spectrum, and then we sought to see how our survey respondents themselves defined and engaged with news.

In Phase 1, between February 12, 2018 and April 21, 2018, the PIL Team deployed an online survey to full-time undergraduates enrolled in the current term at 11 U.S. colleges and universities. The institutional sample was selected for their regional diversity, students' demographic variation, and whether they were located in red or blue states (Figure 12). 79 A total of 5,844 undergraduates completed surveys from the 60,544 invitations that were sent, yielding a total response rate of 10%.

^{76.} An exploratory sample of high school seniors enrolled in six U.S. high schools was included as a point of comparison with the college student sample. These high school students participated in the online survey (N = 205), follow-up interviews (N = 4), and computational analysis of Twitter activity and shares (N = 42). The discussion of methods in this report focuses on the college sample; more details about the high school sample, and their survey data, is available in the User Guide for the public survey dataset for this study.

^{77.} This study defines traditional news outlets, such as The New York Times and Washington Post, while examples of new media sites include Politico or BuzzFeed.

^{78.} Thomas E. Patterson, "Doing Well and Doing Good," Shorenstein Center (2000): https://shorensteincenter.org/wp-content/uploads/2012/03/soft_news_and_cricial_journalism_2000.pdf

^{79.} Using the 2016 presidential election results, 45% of the institutional sample was located in red (Republican) states [i.e., Belmont University (TN), Oklahoma State University (OK), University of Alaska (AK), University of Texas at Austin (TX), and University of Michigan (MI)], and 55% were from blue (Democratic) states [i.e., Brandeis University (MA), DePaul University (IL), Saint Mary's College of California (CA), Wellesley College (MA), California State University Maritime Academy (CA), and John Tyler Community College (VA)]. (Source: Wikipedia entry: "United States Presidential Election, 2016,"



Appendix 1, Table 1: Institutional Sample

College or University	Location	Туре	Surveys returned
Belmont University	Nashville, TN	Private university	902
Brandeis University	Waltham, MA	Private university	749
California State University Maritime Academy	Vallejo, CA	Public university	230
DePaul University	Chicago, IL	Private university	528
John Tyler Community College	Chester, VA	Community college	355
Oklahoma State University	Stillwater, OK	Public university	469
Saint Mary's College of California	Moraga, CA	Private college	333
University of Alaska Anchorage	Anchorage, AK	Public university	351
University of Michigan	Ann Arbor, MI	Public university	919
University of Texas, Austin	Austin, TX	Public university	614
Wellesley College	Wellesley, MA	Private university	394

The survey collected quantitative data about the pathways of news students relied on, the role social media sharing played in news dissemination, and how they defined the role of news in their lives. The survey response categories were informed by exploratory focus groups we held with students in preparation for this study and pilot testing.⁸⁰ The final survey instrument consisted of 20 questions and took respondents an average of 12 to 15 minutes to complete.

The survey respondents in this study were 18 years of age or older and currently registered as full-time students at one of the 11 colleges in the sample. The sample had roughly equal representation from first-year (28%), second-year (24%), third-year (23%) and fourth-year students (21%). Nearly two-thirds of the sample (65%) was female, which is consistent with PIL's past studies. The most common major for respondents was arts and humanities (22%) and the least common was mathematics. Far more respondents—50%—identified as being liberal or very liberal, 26% as moderate, and 13% as conservative or very conservative.

Current Student Status	N	% of Sample
College first-year student	1166	28%
College sophomore or second-year student	1022	24%
College junior or third-year student	950	23%
College senior or fourth-year student	874	21%
College fifth-year student or beyond	150	4%
Other (e.g., exchange student)	43	1%
Total	4211	100%
Gender		
Male	1347	32%
Female	2774	65%
Transgender	25	1%
Prefer not to state	60	1%
Please fill in the blank	48	1%
Total	4254	100%
Age		
18-20 years old	2458	58%
21-22 years old	1231	29%
23-25 years old	219	5%
26 years old or older	314	7%
Prefer not to state	18	
Total	4240	100%
Major ⁸¹		
Architecture and Engineering	448	9%
Arts and Humanities	1068	22%
Business Administration	656	13%
Computer Science	299	6%
Education	178	4%
General Education (includes undeclared)	159	3%
Mathematics	132	3%
Occupational Training (includes Nursing)	362	7%
Social and Behavioral Sciences	838	17%
Life and Physical Sciences	818	17%
Total	4958	100%
Political Affiliation		
Very conservative	87	2%
Conservative	474	11%
Moderate	1112	26%
Liberal	1496	35%
Very liberal	625	15%
Prefer not to state	250	6%
Other	218	5%
Total	4262	100%

Due to rounding, percentages may not total 100%.

 $Totals\ reported\ in\ this\ table\ are\ based\ on\ the\ number\ of\ respondents\ that\ answered\ each\ of\ the\ demographic\ questions.$



In Phase 2, between January 10, 2018, and May 31, 2018, a computational analysis of social media data from Twitter was conducted to analyze data from direct observation on how college students consume and share news. The analysis was based on students in our sample who had ever shared at least one link on Twitter. These data had the advantage of allowing for observational insights, comparisons, perspectives, and context about our study group that were generated independently of the self-reported survey results in our study.

In Phase 3, between May 4, 2018, and June 15, 2018, telephone interviews were conducted with survey respondents in the college sample (N = 37), who had volunteered to participate in follow-up interviews. The telephone interviews consisted of three questions that were used to collect qualitative data about the news gathering practices of recent graduates.

The Twitter data we used came from two sources: (1) an existing subset of college-age individuals in a large-scale panel dataset from the Lazer Lab at Northeastern University's Network Science Institute (N = 135,891), and (2) a smaller dataset from this study's survey respondents who shared their Twitter screen names (N = 731). The timeframe for news shares from the existing dataset was between May 1, 2016, and May 31, 2018, while the timeframe for news shares from the smaller dataset from the survey respondents was since they had signed up for a Twitter account.

One of the most central complex tasks in this analysis has been defining "news" in order to examine sharing behavior on the social media platform. Social media platforms, such as Twitter, allow for all forms of content to circulate. To identify news sites, PIL researchers hand-coded a list of randomly generated sites. Krippendorff's alpha (KALPHA), the most rigorous means of testing intercoder reliability was used to test the reviewers' intercoder reliability. These results were used to verify a classification based on the sites indexed by Google News, which curates verified news sites. This allowed for focusing on news sites and volume of information shared with higher accuracy.

Methodological limitations

There are challenges associated with any research method. We took steps to avoid or minimize them. To enhance the reliability of this study's survey results, the survey instrument was pilot-tested with 11 students matching our selection criteria but who were not eligible for the study sample. We made small revisions to the wording and layout of questions before administering the survey, based on the comments from the pilot test. We shortened the amount of time it took to complete the survey from 16-18 minutes to 12-15 minutes by improving the layout and flow of the survey and tightening the wording of survey questions. The script for the follow-up interviews was also pilot-tested with six students who were ineligible for the study sample but met its demographic qualifications. Based on their comments, we changed some of the wording to improve the clarity of the questions.

We fully acknowledge the limits to the range of participants represented in our survey and problems with the generalizability of their experiences to the larger student population is skewed. The PIL survey sample, in particular, does not reflect the gender balance of college undergraduates nationwide. According to recent statistics from the U.S. Department of Education, in 2017 an estimated 57% of college graduates was female. For males, the comparable figure is 43%.82 In comparison, the survey sample for our study was 65% female and 32% male.83

The study design of this research collected self-reported quantitative and qualitative data from students about their news-seeking habits and preferences, using an online survey and follow-up interviews. Data scientists on the team used direct

^{82.} Jon Marcus, "Why Men Are the New College Minority," *The Atlantic* (August 8, 2017): https://www.theatlantic.com/education/archive/2017/08/why-men-are-the-new-college-minority/536103/



observation data for conducting a computational analysis of Twitter data associated with the survey respondents and the larger Twitter panel of more than 135,000 college-age persons. While mixed method approach was used with triangulated results, a limitation of these data is their ability to determine the depth of students' engagement with news items. It is unclear from these methods whether they read all or part of articles, or watched all or just some of news videos, or just skimmed the headlines as they scrolled.⁸⁴

Another limitation was survey questions asking respondents which pathways to news they had followed in the preceding week and news that had occurred during this timeframe (February 12, 2018, and April 21, 2018), which students may have been more or less apt to follow, given their interests. Among the key stories were a shooting at a Alabama high school on March 8, the death of world-renowned scientist, Stephen Hawking on March 13, the "March for our Lives" on March 23, teacher walkouts in Oklahoma, Colorado, and Arizona during April to protest low wages, and the "National Student Walkout" on April 20 to protest gun violence.

For these reasons, the PIL findings from our survey are limited. The findings cannot be generalized to a larger population in our sample, or beyond. Instead of drawing conclusions about the population of college students at large, we have conducted an analytical study. While fully acknowledging that further research is required to confirm our findings, especially in terms of generalizing to the full college population, the data we have collected, the response rates, and the data analysis applied and reported have shown consistent responses and fairly robust relationships.

We have also found, as part of our ongoing research, that these relationships have been validated with different samples of students and have confirmed findings about news engagement from research conducted by the American Press Institute, Pew Research Center, and Knight Foundation.⁸⁵ As such, the data from this survey are informative about the respondents who did take the survey. The data provide a detailed snapshot of students and their news-seeking behaviors, habits, and preferences that provide directions for further inquiry in qualitative and quantitative studies from a variety of disciplines. *

^{84.} Leading researchers have found that the activity of reading in general has changed. See for example Maryanne Wolf, "Skim Reading Is the New Normal. The Effect on Society Is Profound," *The Guardian* (August 25, 2018): https://www.theguardian.com/commentisfree/2018/aug/25/skim-reading-new-normal-maryanne-wolf



ABOUT PIL

Project Information Literacy (PIL) is a nonprofit research institute in the San Francisco Bay Area that studies what it is like to be a student in the digital age. In a series of 10 groundbreaking scholarly research studies, PIL has investigated how high school, college students, and recent graduates utilize research skills, information competencies, and strategies for completing course work and solving information problems in their everyday lives and the workplace. Research findings and recommendations from PIL studies have informed and influenced the thinking and practices of diverse constituencies from all over the world from those in higher education, public libraries, newspapers, and the workplace.

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ABOUT THE NEWS STUDY

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Abstract: This report presents findings about how a sample of U.S. college students gathers information and engages with news in the digital age. Included are results from an online survey of 5,844 respondents and telephone interviews with 37 participants from 11 U.S. colleges and universities selected for their regional, demographic, and red/blue state diversity. A computational analysis was conducted of Twitter data associated with the survey respondents and a larger Twitter panel of more than 135,000 college-age persons. Findings indicated two-thirds of the survey respondents received news from at least five pathways to news during a given week with peers, social media, professors, and online newspapers most commonly used. News was overwhelming for two-thirds of the respondents (68%), so they were selective about what they read or viewed, following topics meeting their immediate needs, i.e., weather and traffic reports, news about national politics, or political memes that appealed to their appreciation of satire. Some 58% shared news on social media during the past week, often to pass on information they thought friends and followers should know. Most students defined news content broadly and no longer see news as a cohesive, authoritative report as prior generations may have defined it. Many invested time and critical thinking to assemble, compare, and interpret news across sources. Social media and the open Web make traditional standards of evaluation increasingly problematic. While most believed in the core principles of journalism, and considered news necessary in a democracy (82%), many students were dissatisfied with the quality of news available today when media and political polarization were particularly acute. Distrust of news stemmed, in part, from the rise of "fast news" — oversimplified and fragmented news snippets released throughout a day — and the "fake news" phenomenon; only 14% felt very confident they could tell "fake news" from "real news." Six recommendations are included for educators, journalists, and librarians working to make students effective news consumers. To explore the implications of this study's findings, concise commentaries from leading thinkers in education, libraries, media research, and journalism are included.



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