Project Information Literacy
Provocation Series

Lizard People in the Library

As "research it yourself" becomes a rallying cry for promoters of outlandish conspiracy theories with real-world consequences, educators need to think hard about what's missing from their information literacy efforts.

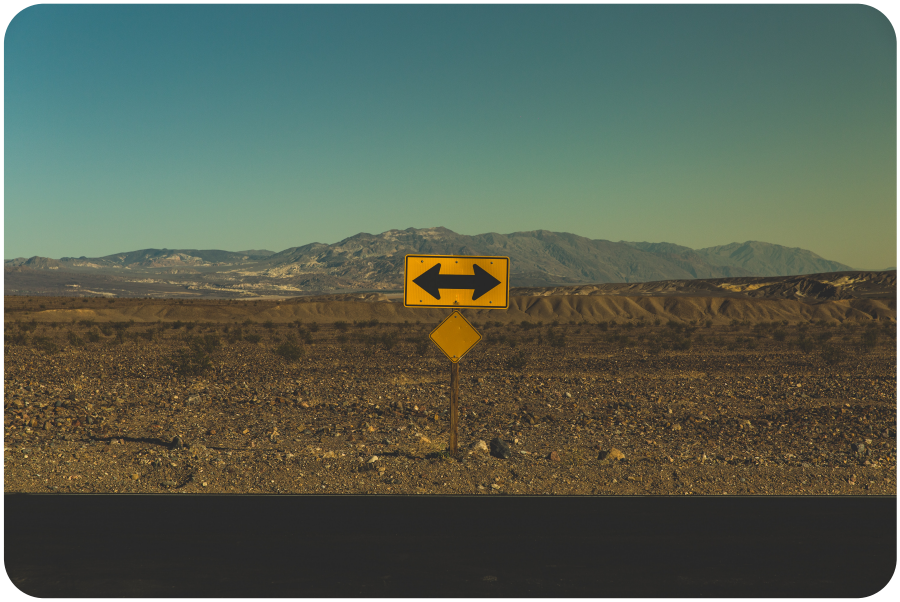
EPISTEMOLOGY

BY BARBARA FISTER

FEBRUARY 3, 2021

Tweet

Information systems that we use in our daily lives map the divisions that have become a fixture of American social life, exposing a topology of deep epistemological rifts. Take QAnon, for example. The rise of this multi-headed hydra of conspiracy theories that are factually absurd, yet are widely disseminated online and in public life, shows how a community was able to form itself around a radically divergent set of assumptions about how we know what is real. Those assumptions were not a benign online eccentricity: They fomented violence, including an insurrectionist attack on the U.S. Capitol — and on democracy itself.



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Incubated on an obscure anonymous message board given to pranks, where irony and serious intent are hard to distinguish, QAnon gained a passionate audience devoted to interpreting cryptic messages from a mysterious figure claiming to be deeply embedded in the American political establishment.

With a fanbase growing around this gamified propaganda, it migrated to other social platforms, was promoted by President Trump at his mass rallies and on Twitter, had adherents elected to Congress, parasitically attached itself to causes from child protection to anti-vax campaigns, and spread abroad. It grew explosively as it migrated across information networks, resisting attempts to suppress its reach.

Among its central beliefs: Satanic cannabalistic pedophiles control much of the world, but President Trump secretly battled the cabal and would triumph in an apocalyptic "storm." It's a "big-tent" movement that welcomes those who believe in alien abduction, that the moon landing was a hoax, and that shape-shifting reptilian aliens are running the government.

Though it seemed almost comically absurd to many observers, the movement's potential for violence was made manifest when QAnons joined neo-Nazis, white supremacists, and armed militias to "storm the capitol" on January 6, 2021, livestreaming an insurrection foretold in prophesy and planned in online forums to their fellow believers.

How could such extravagantly counter-factual beliefs attract so many adherents and cause so much damage to democracy?

Divided Reality

In 2011 Eli Pariser popularized the idea that polarization was driven by what he called the "filter bubble," attributing this bifurcation of realities to the work of social media companies that personalize what news and opinion we see, hiding from us information that doesn't concur with our previous beliefs. Since then, researchers (including Pariser himself) have realized it's a good deal more complicated than that.

Yochai Benkler's research on propaganda networks suggests the roots of our divided reality — what he terms our "epistemic crisis" — predate social media, influenced by the Republican party's courting of previously apolitical white evangelical voters, media deregulation and consolidation, the rise of talk radio and Fox News, and more recently OANN and NewsMax. While the design of social media platforms feeds this split, it isn't its cause.

As the denouement of the 2020 presidential race presented voters with wildly different claims about the validity of election results, feeding an eruption of violence as Congress convened to complete the work of the Electoral College and confirm Joe Biden as president, many stunned observers demanded to know where we went wrong. How could so many people believe things that are obviously untrue? Why don't kids learn about this in school? Shouldn't being able to navigate information and separate truth from lies be a standard part of education?

It is. It has been, for a long time. It clearly hasn't worked.

What Went Wrong?

Setting aside the fact that the people most likely to share misinformation haven't been in a classroom for decades, most students in the past fifty years have received instruction under various names: media literacy, digital literacy, news literacy, information literacy, civic literacy, critical thinking, and the umbrella concept of metaliteracy. It's constantly being reinvented to meet perceived crises of confidence, largely driven by the emergence of new technologies.

But the present moment demands serious consideration of why decades of trying to make information literacy a universal educational outcome hasn't prevented a significant portion of the population from fervidly embracing an elaborately populated world of disinformation while rejecting "mainstream media."

There are many reasons for this failure. The low social status of teachers and librarians, the lack of consistent instruction about information and media literacy across students' educational experience, the diminishment of the humanities as a core element of general education, and the difficulty of keeping up with technological change and digital culture have all played a role. So does the fact that this kind of learning has no specific place in the curriculum. It's everywhere, and nowhere. It's everyone's job, but nobody's responsibility. In many cases, the people who care about it the most have had their jobs felled by the austerity axe.

Yet the question remains: Given years of experience teaching students how to distinguish facts and sound reasoning from political fanfiction and profit-driven humbug, why are so many people unable or unwilling to recognize their claims are nonsense? Why don't they see that their knee jerk rejection of facts that don't fit their preexisting beliefs puts democracy at risk?

Since the 19th century, librarians, media literacy advocates, and educators of all kinds have promoted independent research as a practice that develops in students critical thinking and a disposition to be curious and engaged. But students too often have been treated as naive information consumers who, if properly trained, can make more sophisticated shopping choices about what information they can use for a task. In the case of media literacy, learners are often positioned as audiences learning how to review media objects as savvy consumers, able to challenge media messages critically and reject those that prove to be faulty. But these canned classroom situations don't necessarily transfer to more complex realities.

We know from Project Information Literacy's 2016 lifelong learning study the vast majority of graduates feel the research they were asked to do in college failed to prepare them to ask questions of their own. After all, faculty were the ones defining what questions were worth asking and where legitimate answers could be found: in library databases, in the stacks, or in the textbook.

While school-based efforts to promote information literacy typically are tied to producing information (college papers, digital projects, PowerPoint slide decks), students are not invited to reflect on how information flows through and across platforms that shape and are shaped by participatory audiences and influencers. They aren't learning much about how information systems (including radio, print journalism, academic and trade book publishing, television, YouTube, Facebook, Instagram, etc.) make choices about which messages to promote and how those choices intersect with political messaging and the social engineering of interest groups.

There's a good chance their teachers haven't learned much about this, either.

The Search for Truth

Now that conspiracy theories have accelerated into the mainstream and competing versions of "truth" vie for attention, information literacy advocates must acknowledge that focusing on how to find and evaluate information is not sufficient and may, if taught ineffectively, actually be harmful. What happens in classrooms under the banner of information literacy has to include an understanding of *information systems*: the architectures, infrastructures, and fundamental belief systems that shape our information environment, including the fact that these systems are social, influenced by the biases and assumptions of the humans who create and use them. Otherwise, educators and students will make no progress in healing our current crisis of faith.

While it may seem odd to use the phrase "crisis of faith," we are experiencing a moment that exposes a schism between two groups: those who have faith there is a way to arrive at truth using practices based on epistemology that originated in the Enlightenment, and those who believe events and experiences are portents to be interpreted in ways that align with their personal values.

As Francesca Tripodi has demonstrated, many conservatives read the news using techniques learned through Bible study, shunning secular interpretations of events as biased and inconsistent with their exegesis of primary texts such as presidential speeches and the Constitution. The faithful can even acquire anthologies of President Trump's infamous Tweets to aid in their study of coded messages.

While people using these literacy practices are not unaware of mainstream media narratives, they distrust them in favor of their own research, tied to personal experience and a high level of skepticism toward secular institutions of knowledge. This opens up opportunities for conservative and extremist political actors and media to exploit the strong ties between the Republican party and white evangelical Christians.

After all, QAnon itself is something of a syncretic religion. While at its core it's a 21st century reboot of a medieval anti-Semitic trope (blood libel) it has shed some of its Christian vestments to gain significant traction among non-evangelical audiences.

"Conspirituality," a neologism coined in 2011 to describe the link between new age spirituality and conspiracy theory, is an accurate name for the strange pathways QAnon takes into unexpected places. For example, yoga instructors who are Instagram influencers have become a vector for QAnon spread.

Social media companies have gained enormous wealth and influence by recommending paths of connections, incentivizing information production as a route to celebrity and wealth, and offering an infinite bazaar of consumer choice. This has made research easy — and opened the gate to a digital multiverse where the basic laws of knowledge vary widely but are in some ways eerily similar, especially in terms of the value of inquiry and evidence.

It should give advocates of information literacy pause that, similar to the way the phrase "fake news" was appropriated to disparage mainstream journalism, the slogan "research it yourself" has become the empowering antidote to elitist expertise. *Do you really believe vaccines are dangerous?* Research it yourself. *How can you believe the earth is flat or that alien lizards have infiltrated the halls of power?* Hang on, I can show you loads of evidence.

Those who spend their time in the library of the unreal have an abundance of something that is scarce in college classrooms: information agency. One of the powers they feel elites have tried to withhold from them is the ability to define what constitutes knowledge. They don't simply distrust what the experts say, they distrust the social systems that create expertise. They take pleasure in claiming expertise for themselves, on their own terms.

Moreover, the internet gives them opportunities to create their own versions of scholarly societies, networked and engaged in building entire circulating libraries containing the fruits of their research. Their superpower is knowing how the internet works, so they can in turn successfully work the internet, nurturing and amplifying their truth by exploiting the attention-seeking tools of social platforms, strategically harnessing their online skills to penetrate real-world systems of power. Eventually mainstream media has no choice but to validate it through coverage, trying to balance viewpoints from an untenable position of neutrality.

Where Do We Go from Here?

Years ago, in a trenchant critique of information literacy theory and practice, library and information science scholar Christine Pawley argued that we need to teach students "how information 'works'" — not just how to find and select information as if it's a market good to be produced and consumed, but rather to understand the social and economic contexts that influence how information is created and circulated. She further argued we need to make clear the role individuals and groups play in "actively shaping the world in ways that renders the producer-consumer dichotomy irrelevant."

Pawley wrote this critique at the dawning of the 21st century, before Web 2.0 promised a participatory social experience online and before Facebook, Twitter, and YouTube played such a volatile role in our political culture. She was addressing librarians who were struggling to adapt their mental constructs to a world where information was going online, mapping what they previously told students about using print libraries to an emerging digital environment.

A great deal has changed in the information environment since then, but too often what passes as information literacy continues to be instruction on how to satisfy the requirements of assignments that may explicitly forbid students from using information that doesn't pass through traditional gatekeeping channels. It's ironic that Wikipedia, a social platform once demonized by educators as unreliable, now is a global avatar of strict adherence to a set of retro principles about how to properly establish and document information through objectivity, appealing to generally accepted facts, and references to authoritative sources.

There's no doubt it will be difficult to shift the information literacy narrative from emphasizing finding, evaluating, and using information in an academic setting to something that addresses a broader understanding of how information "works" these days. Our information systems operate in a complex world in which messages take root in dark corners and spread rhizomatically through

connections that are often hidden from view; a world in which power users discover hacks to trip up algorithmic systems in ways the authors of the algorithms failed to anticipate; a world in which the rules of the game change constantly even while the consequences of systems designed to share information virally pose a serious threat to democracy.

It's time for a thorough revamping of the purpose of inviting students to engage in inquiry as a civic practice. Educators, including librarians who teach, will need to dive deeply within themselves to confront and clarify their own beliefs and assumptions about how they know what is real and what isn't.

It will take work. But there are some promising places to start.

First, taking a leaf from an organization formed to advise journalists how to cover a divisive election, educators should consider ways to frame discussions of knowledge through the lens of democracy rather than through partisan political positions. This means being willing to take a strong stand on behalf of ethical research practices, the voices of qualified experts, and the value of information systems that judiciously vet and validate information, along with a willingness to clearly reject the notion that truth is simply a matter of political allegiance or personal choice.

Second, educators must be explicit about the ethical frameworks and daily practices of truth-seeking institutions such as science, scholarship, and journalism. Social media platforms enact values that are firmly grounded in beliefs about individualism, capitalism and consumerism. Educators must make it clear how those values differ from the pursuit of truth through other means. Be humble about failures, but avoid allowing cynics to blur distinctions between the values and training of scientists, scholars, and journalists, and the values of social media corporations, television personalities, and internet influencers.

Third, as Mr. Rogers famously said, "look for the helpers." There are likely people in educators' circles who have a deep knowledge of intersecting information systems, or at least of parts of it. Scholars have been studying these systems and documenting their findings for years. There's no need to research it yourself. Find the experts and develop communities to share ideas about teaching practice.

Fourth, the kids are alright. While they may not have much academic knowledge, and their technical understanding may be limited, among students in any given class there is likely to be a lot of knowledge about how information circulates through social media. Some students may have significant experience in creating and measuring the reach of their own media messages. Connecting what they're learning in class to their lived experience online may encourage students to share what they know and are learning about information systems to their friends and families beyond academia. Indeed, in focus groups conducted by Project Information Literacy in 2019 for the algorithm study, college students expressed concern about whether younger people and the elders in their lives understood how social media platforms work and how to recognize disinformation.

Today's students should be provided opportunities to learn from one another to not only share knowledge but compare their experiences with different information systems and knowledge traditions as educators explain their own disciplinary practices, articulating and arguing for the values that undergird them. For example, students could be asked to articulate their own practices online, their personal "code of ethics" as they navigate their social networks, and discuss those in comparison to codes of ethics from the Society of Professional Journalists, the National Press Photographers Association, or from disciplinary or professional societies.

As the historian of science Jacob Bronowski wrote in 1973, "There is no way of exchanging information that does not involve an act of judgement." We've grown accustomed to many of those acts of judgement being made by algorithms that have a commercial goal in mind. Students often assume that is the way of the world, that every exchange of information must be financialized in a red-hot, high-frequency attention market. While professionals don't always live up to expectations, it can be illuminating for students to find out there are traditions and practices that aren't entirely driven by a search for attention. They may even be surprised that their own motives for sharing information are more nuanced and ethical than social media platforms assume.

It may be difficult, even impossible, to overcome an epistemological rift among Americans, one that was deliberately pried even further apart during the Trump years, culminating in a democracy-shaking insurrection, simply by changing how education approaches information literacy instruction. But it's clear we need to come up with a better answer to the question, "Why isn't this something students learn in school?"

Read the author's reflections on what inspired this essay.

Read the Atlantic Magazine version (published February 18, 2021)

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This occasional series is meant to formalize and voice pressing information literacy-related issues, ideas, and concerns while raising solutions or new ways of thinking for plotting a way forward. The goal of the international series is to create better teaching and learning opportunities for students, librarians, and educators, while identifying new directions that inform future research. Read more about the series »

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Project Information Literacy (PIL) is a nonprofit research institute in the San Francisco Bay Area. Since 2009, in a series of 12 groundbreaking scholarly research studies, PIL has investigated how U.S. college students and recent graduates utilize research skills, information competencies, and strategies for completing course work, engaging with news, and solving information problems in their everyday lives and the workplace.

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