

# A ROLE FOR SCIENCE IN JOURNALISM EDUCATION



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Imagine you're a local reporter covering a hurricane blowing through your community. You have a strong sense there is something you should say about climate change. Maybe these storms are more frequent because of climate change? Or more intense? But you're just not sure. And the wind is blowing and your deadline is looming, so you focus on the damage and the power outages and you file and move on.

Or maybe you're a general assignment reporter and your editor has handed you a press release from the local university about a new study: people who ate more chocolate had fewer heart attacks! You're excited because they want this for a possible A1, but something you vaguely remember from your freshman biology class is nagging you. Something about correlation versus causation? Or sample size? But what kind of expert could you call to quickly critique or comment on this study, which to some in the newsroom is "too good to check"?

These are the kinds of situations that local and general assignment reporters face with increasing regularity, and that journalism students need to prepare for. But too often, even journalism programs that teach science reporting sidestep the job of teaching how scientific evidence is generated. It's an oversight not corrected by the current popular focus on data journalism, because it's not just about understanding the *products* of science but rather about the nature of the scientific process itself.

As we've seen during the COVID-19 pandemic and the intensifying climate crisis, every reporter may at some point need to cover science, even if their beat is business, transportation, or education. Even stories that are not "about" science can almost always be strengthened by incorporating some science-related reporting. Issues of race, gender, and economic equity, for example, are not simply matters of politics and policy but are topics deeply informed by social science research.

Of course, it's not realistic to expect non-specialty reporters to become scientific experts themselves. But they can and should be taught the basics about how science works, in a way that's directly relevant to their journalistic needs. They can be taught about the different kinds of studies scientists conduct, the strengths and weaknesses of those studies, and the kinds of conclusions that can be drawn from each, to inform their news judgement. They can be taught how to find appropriate scientific sources to support their reporting, and how to glean the basics from a published study. And importantly, they can be

taught how to avoid some classic errors, such as giving too much credence to individual studies or preliminary results. Over time, such errors can leave news consumers feeling whiplashed by seemingly contradictory findings and ultimately kindle a loss of trust in science, despite the scientific method's excellent record of figuring out how the world works.

At [SciLine](#), the philanthropically funded free service for journalists based at the nonprofit American Association for the Advancement of Science, we and our colleagues have mediated thousands of interactions between journalists and scientists over the years, to fulfill our mission of fostering the inclusion of research-backed evidence in news stories. Along the way, we've learned a lot about how journalists can take advantage of the enormous wealth of expertise and context that scientists can bring to all kinds of news stories—and about the pitfalls that journalists can avoid when including science in their reporting.

We've turned what we've learned into a one-hour, virtual "Crash Course" that we offer freely to working journalists and journalism classes. It teaches not just specific skills but also about the culture of science and scientists (we separately teach scientists about the culture of journalism and journalists!) with the goal of helping these two professional communities better understand each other's priorities and needs. After all, these two groups have much in common (both are laser-focused on facts, use publication as their metric of success, and desperately want to avoid getting scooped by the competition, for example). But there are also important differences that, if not acknowledged, can lead to surprises, frustration, and a poorly served public.

In this era when misinformation and intentional disinformation are creating a global "infodemic" in which truth, trust, and democracy itself are on perilously uncertain ground, it's important that journalism curricula include instruction in the scientific method and the value of scientifically derived evidence. With that foundational understanding, there is hope that reporters will be able to sift through the daily avalanche of prospective news and share, with clarity, the portion that can help news consumers make evidence-informed decisions for themselves, their families, and their communities.

*To learn more about SciLine's Crash Course on incorporating science into news stories, or to talk about including SciLine's Crash Course in your journalism class, email [sciline@aaas.org](mailto:sciline@aaas.org).*