

Roundtable News

What Good is Education if People Ignore Facts?

Cognitive scientist: Why do we believe what we believe?



The United States, indeed much of the West, seems awash in disinformation—false information deliberately spread to influence public opinion or obscure the truth. Sometimes it is open propaganda put forth by governments to undermine another power.

In the midst of this, the Roundtable asked Daniel Willingham, a cognitive scientist at the University of Virginia, to help us explore the question, “What good is education if people ignore facts?” In April, he met with us for an hour via Zoom.

Willingham, currently Professor of Psychology at the University of Virginia, earned a Ph.D. in cognitive psychology from Harvard in 1990. The author of numerous books and articles, including *Why Don't Kids Like School?*, his current research concerns the application of cognitive psychology to K-16 education.

In an impressive presentation that touched on self-identity, intuition vs. reflection, John Locke vs. Rousseau, and the importance of knowledge, Willingham organized his presentation around three questions: Why do we believe what we believe? How does belief go wrong? And, what can educators do to improve the situation?

Why do we believe what we believe? Although it is true to a certain extent that we like to think our beliefs are based on evidence and conform with reality, other factors are also at work, reported Willingham. “Reason, thankfully,” is the most

powerful reason we try to coordinate our beliefs with the real world, he said, but he cited three other important factors: “One reason we believe things is in order to maintain our sense of self.” We also believe things “that are outside facts and logic” to regulate our emotions, he reported. Third, people adopt views to protect values important to them.

So, topics such as global warming or homosexuality typically trouble and frighten some people. “It’s too scary for some people to accept these things. Arguments often aren’t about the facts of the matter but around people’s emotions, around their anger about facts that threaten them, and the need to protect values that are important to them.”

How does belief go wrong? When the issue of “fake news” began receiving attention in 2015, most people assumed that it was driven by partisanship. To a certain extent that’s true. Whether people are liberal or conservative, if they see news or conclusions confirming their outlook, they tend to accept it at face value. It confirms their identity.

But it’s more than that, insisted Willingham, citing Nobel Prize winner Daniel Kahneman’s *Thinking Fast and Slow*. Thinking fast (or System 1) is based on intuition. “You see something. You size it up. And you say, ‘Yeah, that seems like it’s probably right.’” Thinking slow (or System 2) is based on reflection. “This is what we normally consider to be thinking. You’re really analyzing. You’re really trying to put things together.”

System 1 thinkers, he suggested, are likely to be influenced by attractive spokespeople for their views, and attractive well-designed websites. They’ll also look for social backing for their views—how many people around them share their views? And they’ll take “likes” and re-tweets and the like as confirming their prejudices, whether liberal or conservative.

When things go wrong, argued Willingham, we find the quality of reflection lacking. System 2 does

not kick in. “The propensity to think things through (or not), is more important than partisanship.”

Lack of knowledge also leads to things going wrong and embedding fake news. “Knowledge is protective when it comes to fake news.” There were, for example, “a huge number of fake news stories in 2016 when it was reported that Pope Francis had endorsed Donald Trump. It was the number one fake news story.” But later research showed that people who knew more about Catholicism were likely to reject this fake news because they knew a pope had never endorsed a U.S. presidential candidate at any time and it would be weird for Pope Francis to start doing so now.”

What can educators do? Now to the heart of the matter: What can educators do in the face of these challenges?

Knowledge, to repeat, is important. It’s the *raison d’être* of schooling. Knowledge is protective because, “If you know something about a topic a fake news headline that jumps out to you is likely to be seen as improbable.”

Researchers found that when they sent high school students to a website about global warming and asked them whether or not it was a reliable source of information, the students struggled with the task. Although the website was a climate-change-denial site, “96% of the students failed to figure that out.”

Another task asked students to evaluate a video posted to Facebook that seemed to show a security camera revealing individuals stuffing ballot boxes in Atlanta. Among high school students, 52% said it showed strong evidence of voter fraud; 25% said it did not, mostly because of the poor quality of the video, and 23% thought the video was legitimate, but they rejected the conclusion that it was evidence of voter fraud.

But the video, which did show evidence of voter fraud, had been taken in a former province of the Soviet Union. It had nothing to do with American elections or Atlanta, at all.

These examples show students struggling with distinguishing fake versus real news online and on Facebook.

Inattention can be part of the problem, but even when students are working hard to figure things out, challenges remain.

Willingham recommended several strategies to help improve students’ skills in thinking things through:

- **Teach them to read laterally.** Adopt the strategies of professional fact checkers—don’t click through an advocate’s website to see what it says about itself; check other websites to see what others say about the advocate.
- **Get them to engage System 2.** Ask consciously, “How do I know that this is correct?”
- **Look for peripheral clues:** Look for unusual formatting, misspelling, dates that seem off kilter and the like.
- **Encourage “click restraint.”** Most of us never go beyond the first page of a Google search, but Google’s algorithms determine what’s on Page 1 and the algorithms are unlikely to be related to reliability. It might be wise to do what Fact-Check.org does: restrain ourselves and go to page 3 or page 5 to see what these later citations have to say.¹

Discussion. Several points were made by Willingham or participants during the discussion:

When people in remote areas are overwhelmed with a tidal wave of fake news, these communities face a really serious situation.

We need greater attention to civic education in the schools.

Politicians have realized that the truth is sort of optional, a matter of convenience.

Politicians can now say things they don’t believe because they are aiming at their base. “They’re not worried about what reflective people think because they don’t really care what we think.”

As school leaders we need to think about reaching out to adults in our communities. “We have to be on top of social media in our communities. It can blow up overnight and then it’s out of control.”

Dr. Willingham provided a link to a curriculum on civic reasoning and lesson plans that can be accessed free at: <https://cor.stanford.edu/>

¹ [FactCheck.org](https://factcheck.org/) is a program of the Annenberg Public Policy Center—founded by Kathleen Hall Jamieson who met with the Roundtable in 2020.