Study shows photos more credible, cartoons more persuasive

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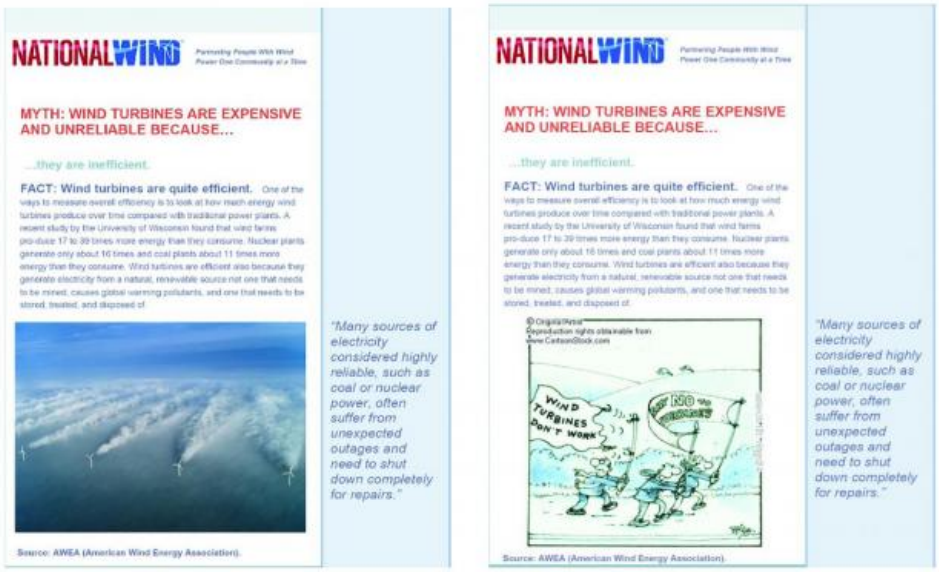

Example pair of identical brochures used in study. Credit: University of Illinois

If you're creating a message to educate, inform, or persuade, don't

underestimate the power of a well-executed cartoon. A new study at the University of Illinois suggests if you're trying to convince the public to change their stance on a topic such as wind energy, you may be more successful if you use a cartoon rather than a photograph.

"Photographs were shown to be more credible, but cartoons were more likely to change behavior," says U of I agricultural communications professor Lulu Rodriguez who led the study. "A cartoon grabs people's attention long enough to deliver the message. That's what you need in today's message-heavy atmosphere. Why not use a tool that has proven ability to cut through the others and inform people in a way that actually works?"

In the study, participants were shown one of two versions of the same set of brochures. Each set was designed to debunk a myth about wind energy, the intent being to give readers scientific information about wind energy and assuage their fears. Each pair of brochures was identical in design, text, color, size, etc. The only difference was that the originally designed brochures featured a beautiful, professional photograph of wind turbines, while the look-alike brochures created for the study swapped out the photograph with a cartoon.

"You have to spend more time with a cartoon to figure out the meaning of the illustrations, and the situation," Rodriguez says. "People look at cartoons longer, so they're more cognitively engaged with the cartoon. Usually it includes humor and people work hard at figuring out the punch line. The photos used to represent wind energy on the original brochures were just beautiful scenic shots of the turbine blades or a landscape dotted with turbines so people didn't look at them as long."

Interestingly, the respondents said the content was better in the cartoon brochures (even though the text was identical), but the credibility was lower than the brochures using photographs.

"It may be because of the more light-hearted approach of cartoons," Rodriquez says. "Cartoons make a topic like wind energy, which may be a bit scary to people, more accessible. But this notion of credibility is a different issue. We teach students to be conversational in writing. Don't put on your 'tuxedo' language. And yet, people associate big words with credibility."

Rodriguez says the use of comics has already been shown to be effective in explaining scientific concepts and principles in high school chemistry classrooms. (Rodriguez is also the director of the agricultural communications program in the College of Agricultural, Consumer and Environmental Sciences and the College of Media.) She says she has not seen the comparison of photos versus cartoons studied in non-classroom settings.

In addition to educational settings, the power of cartoons to persuade can be of value to agencies working to educate the public about a science-laden concept—one for which they would like to change opinion, intentions, or behaviors.

"My interest is in making science more accessible to the public," Rodriguez says. "This study offers real recommendations to communicate science better to a general audience. Understanding the science helps get people past whatever might be controversial about a scientific breakthrough or innovation. The controversies usually arise out of a lack of understanding."

In terms of wind energy, Rodriguez says, people worry about claims that the turbines kill birds, when in fact, cars kill more birds. "We kept hearing scientists say that people do not fully understand wind energy. So we thought, how can we deflect that misunderstanding?"

Rodriguez cites communicating about GMOs as another possible case in

which incorporating cartoons may inform people.

"Most people don't know about all the regulatory layers at the local and national level involved in producing GMOs. If you try to describe that for people in text, they may not get it or they may not be motivated to read lines and lines of words. Perhaps a cartoon showing safety regulations or the similarity of genetic engineering to natural crossing of plants would be more convincing," she says.

"I have a colleague who actually did this to explain how they got the vitamin A into golden rice using a cartoonish infographic. Not very scientific—but people get it. It's a lot easier to explain complex scientific concepts that way."

Rodriguez admits that text and photos may be the easier route to take.

"Truth be told, this is easy to recommend, but cartoons and effective information graphics are difficult to create. You have to hire someone with real skills to do it. Making things easier to understand is a difficult thing to do," she says. "And, when people hire an advertising agency to create a brochure for their product or cause, they may lean toward using photos because they convey prestige or credibility. It may be difficult to convince them to use a cartoon because they think it reduces the classiness of the brochure."

More information: Lulu Rodriguez et al. The impact of comics on knowledge, attitude and behavioural intentions related to wind energy, *Journal of Visual Literacy* (2017). DOI: 10.1080/1051144X.2016.1278090

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