

Teaching Current Directions in Psychological Science

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Aimed at integrating cutting-edge psychological science into the classroom, Teaching Current Directions in Psychological Science offers advice and how-to guidance about teaching a particular area of research or topic in psychological science that has been the focus of an article in the APS journal [Current Directions in Psychological Science](#). Current Directions is a peer-reviewed bimonthly journal featuring reviews by leading experts covering all of scientific psychology and its applications and allowing readers to stay apprised of important developments across subfields beyond their areas of expertise. Its articles are written to be accessible to nonexperts, making them ideally suited for use in the classroom.

To Err Is Human: The Psychological Science of Voting Mistakes

by David G. Myers

[Kortum, P., & Byrne, M. \(2016\). The importance of psychological science in a voter's ability to cast a vote. *Current Directions in Psychological Science*, 25, 467–473.](#)

Egocentrism — difficulty in taking another's perspective — is not just for preschoolers. We adults, too, can easily overestimate the extent to which others share our understandings. By assuming that what's clear to us also will be clear to others, we often exhibit “the curse of knowledge.” Some examples:

- Having explained that negative reinforcement \neq punishment, we teachers are astonished when students misremember what we think we have so clearly taught.
- Imagine rapping your knuckles on a table to convey a familiar tune, such as “Mary Had a Little Lamb” or “Happy Birthday,” to a friend. Thanks to the curse of knowledge, the tune seems obvious to us. But our seemingly dim-witted friend finds it incomprehensible (Newton, 1990).
- E-mail senders often are surprised when their readers don't discern their “just kidding” teasing and take offense (Epley, Keysar, Van Boven, & Gilovich, 2004; Kruger, Epley, Parker, & Ng, 2005).

Such “human perceptual and cognitive limitations also pose a serious and immediate threat” to democracy's voting systems, note Philip Kortum and Michael Byrne (2016). In case after case, the people who design and word ballots assume that what's clear to them will be similarly clear to all voters. Thus, when the Palm Beach County elections supervisor designed the infamous “butterfly ballot” for the 2000 election, it was perfectly clear to her that those favoring the second set of candidates should punch the third hole from the top. Alas, voter confusion caused enough Gore voters to punch Buchanan to flip the state outcome — and the presidency — from Gore to Bush ... thus altering the course of history (Fig. 1).



Fig. 1

In addition to such perceptual fiascos, Kortum and Byrne also note that voting procedures can yield ambiguously marked ballots. After 2.8 million Minnesotans chose between US Senate candidates Al Franken and Norm Coleman, fewer than 300 votes separated the candidates. The recount of several thousand ballots, such as the one shown in Figure 2, swung the vote to Franken.

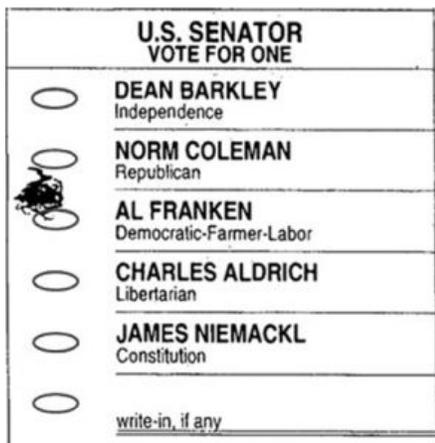


Fig. 2

Demonstrating Voting Mistakes

To illustrate the perceptual psychology of voting, instructors may wish to visit tinyurl.com/ballotpsychology, where they will find sample ballots created by Kortum and his colleagues and a scale for assessing their usability. Responding to several of the layouts will illustrate both clear and unclear alternative designs (civicedesign.org/fieldguides offers guidelines for clear ballots).

For a second activity, tinyurl.com/ballotpsychology2 will take students to a Minnesota Public Radio website that invites students to judge Franken versus Coleman voter intentions, and then to compare their judgments with those of more than 100,000 other respondents.

Identifying Other Human Errors

In the spirit of the Kortum–Byrne essay, instructors could invite students to identify other ways in which humans routinely exhibit either Murphy’s Law (*anything that can go wrong, will go wrong*) or the curse of knowledge. Three examples:

Auditory processing. Hearing, like vision, occurs top-down as well as bottom-up. Therefore, misperceptions can color hearing, leading listeners to mishear what speakers perceive themselves as having plainly said.

It's a phenomenon that, as a person with hearing loss, I frequently experience. At a recent advisory council meeting of the National Institutes of Health's National Institute on Deafness and Other Communication Disorders, I was surprised to hear one of its executives repeatedly mention the Institute's "missionaries." Who are these people, I wondered — evangelists for hearing health? On about the fifth utterance, I recomputed: *mission areas*.

Much as Norwegians can tell Norwegian jokes to one another, so the hearing-loss community laughs over its own faux pas, as in the story of the three golfers with hearing loss. "It's windy," remarks one. "No," says the second, "it's Thursday." "Me, too," says the third. "Let's go get a drink."

But it's not just people with hearing loss. Depending on the context (such as happy or sad music playing), our meaning-making brains may mishear "morning" as "mourning," "dye" as "die," or "pane" as "pain" (Halberstadt, Niedenthal, & Kushner, 1995).

The power of framing. More than many people suppose, the mere wording of a proposition can shift people's expressed views. Voters have been more supportive of "assistance to the poor" than "welfare" (*Time*, 1994). They have favored cutting "foreign aid" but increasing spending "to help hungry people in other nations" (Simon, 1996). "Gun safety" initiatives, such as requiring background checks, elicit more public support than "gun control" (Steinhauer, 2015).

Misreadings. "The curse of knowledge is the single best explanation I know of why good people write bad prose," observes APS William James Fellow Steven A. Pinker (2014, p. 61). "It simply doesn't occur to the writer that her readers don't know what she knows."

Readers' misunderstandings or misinterpretations of my own written words led me to create Myers's first law of writing: *Whatever can be misunderstood, will be*, and its corollary second law of writing: *The reader is always right*. (If I am misread, the problem lies with the writing, not with the reader.)

The list of ways in which humans perceive or believe incorrectly goes on. Our thinking, while often accurate and generally adaptive, is vulnerable to perceptual set, selective inattention, change blindness, stereotyping, confirmation bias, belief perseverance, overconfidence, self-serving bias, overreliance on heuristics, false consensus, illusory correlations, priming effects, and much more. And that is why Kortum and Byrne are surely right to remind us that "human perceptual and cognitive limitations" can distort voting and to recommend universal ballot design principles that accommodate the human factor.

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