

# FairerScience in an Unfair World

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## Why FairerScience.org?

1873: Based on research it was concluded:

“Higher education will cause women's uteruses to become atrophied.”

2005: Based on research it was concluded:

“Girls and boys behave differently because their brains are wired differently.”

We have not been effectively communicating our findings on women and STEM in ways that allow the public to understand and evaluate these findings and, where appropriate, make decisions based on them. FairerScience is committed to changing that.

# What Can We Do?

## **Become better communicators:**

Learn more about what journalists want (KISI: Keep It Simple and Interesting).

Learn more about what to watch out for when dealing with journalists (KICI: Keep It Careful and Intelligent).

## **Look At language use:**

Fairness vs equity.

Stereotype vs image.

## **Reframe how findings are presented:**

Statistical significance vs effect size.

Group differences vs group overlap.

Support statistics with stories.

Present in ways that get through existing preconceptions.

## What Can We Do?

**Set up a rapid response structure to let folks know, in user friendly ways about research and interpretations related to gender and science.**

Blog using humor.

Set up a wiki like process to have folks generate responses.

Support good research and accurate interpretations again and again and again.

Rebut bad research and inaccurate interpretations again and again and again.

# What Can We Do?

**Make diversity (gender, race/ethnicity and disability) the default option:**

Include topics on diversity as well as diverse researchers on the Science on-line seminars.

Include STEM diversity as a EurekAlert! Topic.

Recently Mark Liberman from the Language Log wrote:

“I do realize that some people freeze up and stop thinking whenever they see a mathematical symbol or term (even something routine like  $r^2$  or  $p < .05$ ). In this state of intellectual desperation, if forced by circumstance to pretend to understand what's going on, they clutch reflexively whatever simple-minded description comes most quickly to hand.

This certainly happens sometimes on exams, and perhaps some journalists have a similar experience when assigned to a science story.

In any case, I blame myself. At least, I blame the profession of college teachers that I belong to. We seem to be turning out many students who can't understand relatively simple sorts of modern science, but lack the ethical gumption to admit it.

Unfortunately, this ignorance and pretense combine with darker motives of sensationalism and pandering to stereotypes, creating a perfect storm of misinformation” (October 7, 2006).

If we are ever to have FairerScience, we've got to do more than ride out the storm; we have to change the conditions that created it.