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Science

SCIENCE IN MIND

News coverage of science, tech is slim, report says

By Carolvn Y. Johnson | GLOBE STAFF FEBRUARY 17, 2014

It's the kind of result anyone who writes about science for the general public will find disheartening: Less than 2 percent of news coverage in traditional media over a five-year period was about science and technology, according to a new federal report.

The report, "Science & Engineering Indicators," was released to Congress by the National Science Board this month and sums up in one chapter the state of public comprehension of science. There are the usual, and at this point mostly not surprising, statistics that show basic scientific literacy isn't great, but isn't the worst in the world. Sprinkled in is the occasional astonishing fact, such as that only 55 percent of people think astrology is "not at all scientific." Half of Americans apparently think lasers are generated by concentrating sound waves.

But the point of evidence is to use it, and for me that means finding ways to try and translate stories about science to the public that are effective, interesting, and informative.

The report offers plenty of facts that will give people pause, along with fodder to think more carefully about our assumptions about how to write, talk, and teach about science.

Here are a few of the observations I found most interesting:

- A survey found that between 2000 and 2008, just 1 percent of the characters on prime-time network television shows were scientists. And those were overwhelmingly white men. TV always presents a skewed version of reality, but this statistic underscores an imbalance in real life. A feature story that ran in the Globe food section recently about the Google cafeteria in Cambridge was striking because its photos showed so few women.
- Despite the fact that science and technology are very infrequently featured in news stories, science and technology news is "very closely" followed by 16 percent of Americans, about the same percentage that in 2012 very closely followed news stories about business and finance (15 percent) or politics and Washington news (17 percent).
- Although there are routine surveys testing people's understanding of basic scientific facts, what has always seemed to matter more is being able to reason about problems in a rational way. This report found that only a third of respondents could comprehend the basics of how scientific inquiry works, such as understanding why drugs are tested the way they are, with one group receiving the medication and another group not.

I would like people to all know that the earth goes around the sun (only 74 percent did), but I would be more fearful of the person who answered the question incorrectly on the spot, and lacked the mental tools to work through to the correct answer given some evidence. As a science reporter, I try as much as I can to write about the process of coming up with an idea — the testing, doubting, and troubleshooting.

Understanding that seems to me as important as knowing any single result, and is really more what science is about. The groundbreaking result is the rarity; the struggle to figure out what's going on is the constant work.

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