

Chat from Symposium on Teaching Statistics  
November 2, 2021

Andrew Gelman to Everyone

David: I think you will like this paper on statistical workflow as we express a view that is similar to yours:

[http://www.stat.columbia.edu/~gelman/research/unpublished/Bayesian\\_Workflow\\_article.pdf](http://www.stat.columbia.edu/~gelman/research/unpublished/Bayesian_Workflow_article.pdf) (I apologize for not citing your earlier papers on model uncertainty; we will include them in the revision.)

Andrew Gelman to Everyone

Regarding storytelling: here's an argument that the key aspects of a story in science is that it be anomalous and immutable:

<http://www.stat.columbia.edu/~gelman/research/published/storytelling.pdf>

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I think a course should now include ethics and comms

Keith Markus to Everyone

Rogers, J. L. (2020). Teaching statistics and quantitative methods in the 21st century. New York: Routledge.

David Spiegelhalter to Everyone

Andrew, thanks for the story-telling link

David Han to Everyone

I absolutely agree that STA programs should include ethics and comm. critical these days due to so much misinformation circulating via weird analyses.

Andrew Gelman to Everyone

David R. was too modest to mention it, but he's the author of Rindskopf's Rules for Statistical Consulting: [https://statmodeling.stat.columbia.edu/2008/01/25/rindskopfs\\_rule/](https://statmodeling.stat.columbia.edu/2008/01/25/rindskopfs_rule/)

Mercedeh Ghadessi - Bayer to Everyone

Is it helpful to couple statistics and math with programming at the basic levels. I found it much easier to understand the concept. e.g. programming simulations

Shari Berkowitz to Everyone

That's how I do it, too.

Andrew Gelman to Everyone

I agree. I do a computer demonstration in every class session. In the demo, I speak as I type (as David Draper said about writing on the board).

Shari Berkowitz to Everyone

I start with taking data on my grad students and we just dig into the data. I work with future speech pathologists. They've had undergrad stats but they have not learned to make an argument with stats

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And they all do small group projects over a year

Mercedeh Ghadessi - Bayer to Everyone

Having them to present and teach them in the class follow TED talk is also useful  
It's like driving, I never learn how to get somewhere if someone drives me, but I would learn how to get there when I drive myself

Joe Hill to Everyone

In their book Made to Stick, the Heath brothers, use the mnemonic SUCCEs = Simple, Unexpected, Concrete, Credible, Emotional, Stories... which they argue helps ideas to be understood, accepted, and remembered.

Kevin to Everyone

Thank you all for the thoughtful presentations and discussions.

David Draper to Everyone

[https://www.ted.com/talks/hans\\_rosling\\_the\\_best\\_stats\\_you\\_ve\\_ever\\_seen](https://www.ted.com/talks/hans_rosling_the_best_stats_you_ve_ever_seen)

Michael Granaas to Everyone

Rosing related website <https://www.gapminder.org/>

Shari Berkowitz to Everyone

I used to use mostly Excel but now add JASP on top. As they add data, the graphs and stats change

Nick Horton (he/him) to Everyone

Rosling's work (now being continued by his daughter Anna) was one of the rationales for the focus on multivariate thinking in introductory statistics within the revised GAISE (Guidelines for Assessment and Instruction in Statistics Education) college report

<https://www.amstat.org/asa/education/Guidelines-for-Assessment-and-Instruction-in-Statistics-Education-Reports.aspx>