

USCOTS 2015 Statistical Literacy Roundtable

Milo Schield (topic convener). Nine attendees at table for ten.

Milo asked the first three questions. The attendees gave the answers shown.

1. How many of you have taught a course that focuses on Statistical Literacy?
Three have taught. One will teach (fall). One teaches school teachers. Others are interested.
2. Why are you interested in statistical literacy?
 - a. So students can evaluate statistics in the media
 - b. So students can evaluate statistics in research articles
 - c. So students can focus less on computation/formulas and more on essential ideas. [Biggest group]
 - d. So secondary math teachers can do a better job of teaching statistics
 - e. So school teachers can do a better job of understanding and communicating education statistics.
3. What textbooks do you consider most relevant or helpful for teaching statistical literacy?
 - a. Jessica Utts: *Seeing Through Statistics*. [This is different from the Utts & Heckard book]
 - b. Moore & McCabe: *Concepts and Controversies*. "Good first section, then regular stat inference"

The attendees raised these questions. Here are Milo's answers:

4. What articles on statistical literacy are most relevant? [By others than Schield; Date order]
Walman (1993). [Enhancing statistical literacy: Enriching our society](#). *JASA* [Download fee]
Best (2001): [Telling the Truth About Damned Lies and Statistics](#) *Chronicle of Higher Education*
Rumsey (2002). [Statistical literacy as a goal for introductory statistics courses](#). *JSE*
delMas (2002). [Statistical literacy, reasoning, and thinking: A commentary](#) *JSE*
Gal (2002). [Adults' statistical literacy: Meanings, components, responsibilities](#). *International Stats Review*
Utts (2003). [What educated citizens should know about statistics](#). *American Statistician*.
Ben-Zvi & Garfield Ed. (2004). [Statistical literacy, reasoning, and thinking: Goals, definitions, and challenges](#).
Gal (2005). Statistical literacy. The Challenge of developing statistical literacy. In [Ben Zvi & Garfield book](#).
5. What journal articles on statistical literacy by Schield are most relevant? [Date order]
1999: [Statistical literacy: Thinking critically about statistics](#). *APDU: Of Significance*
2004: [Statistical Literacy and liberal education at Augsburg College](#). *AAC&U Peer Review*
2004: [Statistical literacy curriculum design](#). IASE Curriculum Design Roundtable.
2004: [Information literacy, statistical literacy and data literacy](#). *IASSIST Information Quarterly* 2005
2006: [Presenting Confounding Graphically Using Standardization](#). *ASA STATS* magazine.
2008: [Quantitative Literacy and School Mathematics](#) in *MAA Calculation vs. Context*.
2010: [Assessing statistical literacy: Take CARE](#). In *Assessment Methods...* book [Excerpts]
2011: [Statistical literacy: A new mission for data producers](#). *Stat. Jrnl. Int. Assoc. Official Statistics*
6. What books are most relevant for understanding statistical literacy
 - a. For my pick of the top eight popular authors, go to www.statlit.org/1Authors.htm
 - b. For my pick of the top eight academic authors, go to www.statlit.org/2Authors.htm
7. What websites are relevant and helpful?
 - a. www.Stats.org Statistics in the news (special services for journalists).
 - b. <http://simplystatistics.org/tag/statistical-literacy/> Analysis of statistics in the news.
 - c. www.StatLit.org See StatLit News for various years. [PS. Milo is the editor ☺]
8. What is a good reference on education research?
 - a. Become familiar with Gerald Bracey See Gerald's page at www.statlit.org/Bracey.htm
 - b. See his principles of data analysis: www.statlit.org/pdf/2006BraceyPrinciplesGrouped.pdf