What's New with CAUSEweb and MERLOT?

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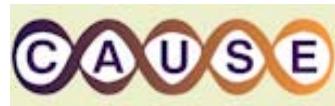
Highlights from ICOTS 9

ICOTS 9, with the theme "*Sustainability in Statistics Education,*" occurred from July 13th to July 18th of this year in sunny Flagstaff, Arizona. For the conference, there were about 200 invited papers/panels, over 50 posters and almost 300 contributed papers. Each day was also highlighted by a wonderful keynote speaker.

On Monday, we heard a presentation from Pedro Luis do Nascimento Silva from Brazil on "Sustainable education for professional Statisticians." He presented some of the challenges that our profession is facing, including "Big Data," data mining and artificial intelligence. He then discussed national professional accreditation programs as well as other ways to make we keep up with the discipline.

On Tuesday, we heard from David Spiegelhalter (Dr. Risk) from Cambridge University in the United Kingdom. His talk was titled, "What can we learn from real world communication about risk and uncertainty." When working out problems related to probability and to risk, he recommended using natural frequencies, expected frequency trees and real object visualizations such as with colored cubes.

On Wednesday, we heard from Rachel Fewseter from New Zealand. She presented "Teaching statistics to real people: Adventures in social stochastics." She shared her successes and failures in using team-based learning in the classroom. She shared the successful activities of making a $0 budget movie to explain a statistical concept, investigated the fairness of "baked" die, and a clever "Catch the Spies" game to illustrate maximum likelihood estimation. She also shared her failed "Buttered Toast" experience and coined a new term for statistical education –"Too Much Toast" – "The art of missing the educational point due to an energy-consuming distracter."

On Thursday, Zalman Usiskin from the University of Chicago in the United States presented "On the relationships between statistics and other subjects in the K-12 curriculum." He talked about how statistics topics for K-12 could be integrated and taught alongside of traditional mathematical topics, in applied mathematics, as its own subject matter, and finally taught across the curriculum.

On Friday, Ron Wasserstein, the executive director of the American Statistical Association (ASA) in the United States, presented "Statistics in 2014: Reflections on the occasion of the 175th anniversary of the American Statistical Association." Dr. Wasserstein reflected on the events of the 175th anniversary of the ASA and talked about the challenges that our field faces. He covered many ongoing activities, but to name a few, he discussed the "This is Statistics" public relation campaign, efforts to prepare teachers for teaching statistics in K-12, as well as the current work to write the "Guidelines for the undergraduate curriculum in statistics."

The papers for these talks and others can be found in the proceedings:
http://icots.info/9/proceedings/home.html

At the closing banquet, the location of the next ICOTS was announced as Kyoto, Japan. *Arigato*, see you in 2018!

USCOTS '15

If 2018 is too long to wait, take heart; USCOTS is only 6 months away! USCOTS '15, "*Making Connections*", will be held from Thursday May 28 through Saturday May 30, 2015, with workshops on Tuesday and Wednesday, May 26-27. Take note of the change of venue: USCOTS '15 will be held at the Penn Stater Hotel and Conference Center in State College Pennsylvania. More information will be posted at https://www.causeweb.org/ when available.

MERLOT News

The MERLOT blog makes for some interesting reading. Recent posts include *Open Education Resources (Are the best things in life really free?)*, and *Abuse of Instructional Technology (How can large lectures, and especially MOOCs, really be good?)*. To read and discuss these and other articles, simply click http://blog.merlot.org/.

MERLOT ELIXR

The MERLOT ELIXR Initiative offers a digital case story repository that hosts discipline-specific multimedia stories. Of particular interest to Statistics educators is the *Statistical Buffet* approach to redesigning the Introductory Statistics course that was used at The Ohio State University. Similar to a traditional buffet, individual student can choose different "flavors" of lectures, labs, and problem-solving sessions according to their needs, interests and learning styles. For more details, visit http://elixr.merlot.org/case-stories/course-preparation--design/transforming-course-design/statistical-buffet.

Statistics Portal

The MERLOT Statistics Portal is a joint project with CAUSE and provides easy access to statistics education resources with both organizations. Browse and/or contribute learning materials (and more) at http://statistics.merlot.org/.

The MERLOT annual conference is "*devoted to exploring how emerging and innovative uses of technology are improving and changing online teaching and learning.*" The next conference will be held April 22-24, 2015 in Dallas, TX. For more details, check the conference website, http://olc.onlinelearningconsortium.org/conference/2015/et4online/welcome.

The Journal of Online Learning and Teaching

Instructors who are interested in learning about universal design in an online learning environment might be interested in one of the case studies in the most recent volume (Vol. 10, No 2.) of the *Journal of Online Learning and Teaching*. The article, "Universal Design for Learning in an Online Teaching Education Course: Enhancing Learner's Confidence to teach online" talks about the experiences of pre-service teachers experiencing an online course. The pre-service teacher's confidence and efficacy before and after the course were measured as well as their perceptions of the teaching and learning in the online environment. The full article can be easily obtained at http://jolt.merlot.org/vol10no2/he_0614.pdf.

CAUSEweb Highlight

In this edition of *Teaching Bits*, we would like to highlight the *Stat 2 Labs* collection of interactive, computer-based activities for both Stat 1 and Stat 2 courses, by Shonda Kuiper of Grinnell College. A large number of creative explorations and game-based labs are downloadable with full documentation, including student handouts, instructor's notes, and where applicable, relevant research articles, data sets and related resources such as YouTube videos. A wide variety of real-world applications are utilized ranging from Epidemiology and Ecology to Marketing and Psychology. Statistical topics covered include hypothesis testing, sampling, regression and experimental design. This resource was the recipient of a *MERLOT Classics Award*, signifying an outstanding source of discipline-specific learning

material. Readers are heartily encouraged to check out
http://web.grinnell.edu/individuals/kuipers/stat2labs/Labs.html!

Recent CAUSEweb Webinars

CAUSEweb offers three webinar series: Activity Series, Teaching and Learning Series and Journal of Statistics Education Series. Below is a list of the most recent webinars from these three series. The slides of the presentations as well as the recorded webinar are currently available for viewing at the websites listed below.

Teaching and Learning Webinar Series
- "The Wikipedia Makeover: Spreading Stat Ed's Joy and Wisdom" by Ethan Brown , University of Minnesota https://www.causeweb.org/webinar/teaching/2014-09/)

If you have ideas for a webinar, please contact Ellen Gundlach at gundlach@purdue.edu.

Journal of Statistics Education Series
- "What is the probability you are a Bayesian?" by Shaun S. Wulff, University of Wyoming (https://www.causeweb.org/webinar/jse/2014-11/)
- "Simpson's Paradox: A Data Set and Discrimination Case Study Exercise" by Stanley A. Taylor & Amy E. Mickel; California State University, Sacramento (https://www.causeweb.org/webinar/jse/2014-10/#a)
- "Teaching an Application of Bayes' Rule for Legal Decision-Making: Measuring the Strength of Evidence" by Eiki Satake, Emerson College (https://www.causeweb.org/webinar/jse/2014-10/#b)
- "Everyone Can Read a Histogram, or can they?" by Jennifer Kaplan, University of Georgia (https://www.causeweb.org/webinar/jse/2014-09/)

Activity Webinar Series
No Activity Webinars have recently been presented; the most recent webinar was in February:
- "Five Years on the Island" by Michael Bulmer, University of Queensland (https://www.causeweb.org/webinar/activity/2014-02/)

If you have ideas for a webinar, please contact Leigh Johnson at lweiss@capital.edu.

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