What’s New with CAUSEweb and MERLOT?

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written consent from the authors and advance notification of the editor.

Many new things are happening with CAUSEweb and MERLOT, and the purpose of this short article is to share some important updates with the greater statistics education community.

**eCOTS 2014**

eCOTS 2014 is nearly here! eCOTS will take place entirely online from May 19-23, 2014, and registration for this conference has now started. Please go to:  
www.causeweb.org/ecots for more details.

Focusing on undergraduate-level statistics education (including AP Statistics) with a target audience of statistics teachers, eCOTS seeks to provide a virtual meeting space for educators to share ideas, teaching methods, and research results. It is hoped that eCOTS will be a forum where statistics educators from around the world network and connect as they learn how to incorporate new ideas, methods, and resources into their existing courses or programs. The registration fee is a mere $25, and provides unlimited access to all sessions and activities, in addition to six workshops. The eCOTS 2014 themes are:
1. **Teaching from Big Data**

What are some of the issues and challenges when it comes to using big data for teaching and learning purposes? How can a focus on big data change the way we teach statistics? How can we teach data analytic methods that draw insights from massive data?

2. **The Impact of the Common Core**

How can we better prepare, at the college level, future teachers of statistics at all levels (K-16)? How must teachers be prepared to deal with the Common Core State Standards? Further, how should the teaching of statistics at the college level change in light of changes in the K-12 statistics curriculum?

3. **Bridging the Disciplines**

How can we enhance the centrality of statistics across the disciplines? What can we learn from and take from other disciplines in order to create a more positive learning experience for our students? How can we connect with other disciplines and forge relationships with these disciplines that will be mutually beneficial? How might we create valuable learning experiences for students that will prepare them to work in multidisciplinary teams?

Two exciting keynote speakers have agreed to participate and share their insights: **Conrad Wolfram** and **Christine Franklin**.

Conrad Wolfram will speak on the topic of **“Fundamentally Changing Maths Education for the New Era of Data Science.”** With degrees in natural sciences and maths from University of Cambridge, and a regularly featured speaker in the media, Conrad Wolfram is strategic director and European co-founder/CEO of the Wolfram group of companies. The Wolfram Group aims to push the boundaries at the intersection of computation, math, and knowledge, and this group is the producer of Mathematica software and the WolframAlpha knowledge engine which is used to power some searches and knowledge answers for Microsoft Bing and Apple Siri.

Of particular interest to eCOTS attendees, Conrad Wolfram is also a leading advocate for a fundamental shift of math education to become computer-based, arguing this is the only way to solve the global math education crisis. His widely acknowledged 2010 TED talk, [http://www.ted.com/talks/conrad_wolfram_teaching_kids_real_math_with_computers](http://www.ted.com/talks/conrad_wolfram_teaching_kids_real_math_with_computers), laid out...
the rationale and roadmap for this rethink and led to his founding of
http://computerbasedmath.org to drive the implementation of this change. The movement is now
a worldwide force in re-engineering the STEM curriculum; in February 2013 it was announced
that Estonia would be the first partner.

Chris Franklin will speak about “Preparing K-12 Teachers to Navigate
the Data Stream: Great Opportunities and Challenges.” Chris Franklin is Senior Lecturer, the Lothar Tresp Honoratus Honors Professor at the University of Georgia, and an inducted member of the University of Georgia Teaching Academy. She has co-authored a popular Introductory Statistics textbook (“Statistics: The Art and Science of Learning from Data”, Agresti and Franklin, Pearson 2007) as well as “Statistical Reasoning in Sports” (Tabor and Franklin, W.H. Freeman, 2011) and has published more than 50 journal articles. Chris was the Chief Reader for AP Statistics in 2008 and 2009, and was the lead writer for the American Statistical Association Pre-K-12 Guidelines for the Assessment and Instruction in Statistics Education (GAISE) Framework.

Chris is also a Fellow of the American Statistical Association. In 2013 she received the USCOTS lifetime achievement award for her lifetime devotion to statistics education, and was awarded a Fulbright US Scholar Grant to New Zealand for 2014-2015 where she will share international perspectives on statistics education at the University of Auckland.

In this talk, Chris will provide an overview of the statistics and probability content of the Common Core State Standards. Soon, and for the first time, most of our entering college students will have been taught some statistics and probability, so our introductory college statistics course will have to change. Especially with the increased emphasis on data and statistical understanding, it is crucial for us as educators to consider how we can prepare a statistically literate population. Chris will describe the knowledge and preparation needed by the future and current K–12 teachers who will be teaching these standards. She will also outline a new ASA strategic initiative, the Statistical Education of Teachers, and speak about the desired assessment of statistics at K-12 on high stakes national tests.

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**

- “Developing New Statistics Instructors and Student Leaders Through Peer Mentoring” by Aimee Schwab and Erin Blankenship, University of Nebraska, Lincoln  
- “Strategies for successful implementation of collaborative student assessment in face-to-face and online statistics classes” by Audbjorg Bjornsdottir, University of Minnesota  
- “Investing in the Next Generation through Innovative and Outstanding Strategies (InGenIOuS): Report of outcomes from a recent workshop” by A. John Bailer, Miami University  

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

**Activity Webinar Series**

- “Five Years on the Island” by Michael Bulmer, University of Queensland  

If you have ideas for a webinars, please contact Leigh Slauson at lslauson@capital.edu for Teaching and Learning webinar ideas.

**Journal of Statistics Education Series**

- “The Evidence for Efficacy of HPV Vaccines: Investigations in Categorical Data Analysis” by Alison Gribs and Emery Gossens, University of Toronto  
- “Discovery Projects in Statistics: Implementation Strategies and Examples of Student Projects” by Brad Bailey and Dianna Spence, University of North Georgia  
- “Primarily Statistics: Developing an Introductory Statistics Course for Pre-Service Elementary Teachers” by Jennifer L. Green, Montana State University and Erin E. Blankenship, University of Nebraska-Lincoln  
CAUSEweb Resource Highlights

CHANCE magazine (http://chance.amstat.org/) is our CAUSE resource highlight for this edition. The magazine is co-published by ASA and Taylor Francis Group. The most recent issue of the magazine includes articles such as “Can you buy a president? Politics after the Tillman Act,” “Examining a Gambler’s Claims: Probabilistic Fact Checking and Don Johnson’s Extraordinary Blackjack Winning Streak,” “The Conduct of Statistical Consulting Sessions between Statisticians and the Researchers with Whom They Interact: A Survey of Consulting Clients from Academic Settings” and “Statistics and the Ontario Lottery Retailer Scandal.” The magazine concentrates on engaging readers about good statistical practice through current events. Articles in the magazine can easily lead to great discussions in a statistics classroom.

Merlot News

7th Annual Emerging Technologies for Online Learning International Symposium

For those of you who are interested in online learning, you may be interested in the 7th Annual Emerging Technologies for Online Learning International Symposium (ET4Online) that will take place in Dallas, Texas at the Sheraton Dallas Hotel from April 9-11, 2014. This conference is a joint offering between the Sloan Consortium and Merlot. (Virtual and live attendance options.) More information can be found at http://sloanconsortium.org/conference/2014/et4online/welcome.

The new Merlot II website also features a blog and a YouTube channel. The blog highlights topics in education such as Open Access Education and Open Education Resources. Additionally, the YouTube channel has two videos about how to use the Merlot Website and writing peer reviews. For more details, pay a visit to http://blog.merlot.org/ and http://www.youtube.com/merlotplace.

JOLT Highlight

Many of our readers are familiar with the MERLOT Journal of Online Learning and Teaching (JOLT), a peer-reviewed online journal that is published quarterly. We would like to briefly draw your attention to a case study published in the most recent issue (September 2013).

Most instructors are interested in helping the low performers in a class improve their knowledge and obtain better performance. In the most recent issue of JOLT, Rachel Sturm-Beiss presents a case study utilizing online videos to help students with a diverse range of abilities in a pre-
calculus class prepare for their semester tests. Whereas low-performing students usually have a lower participation rate in optional, grade-improving activities, the online video test reviews were viewed in equal proportions by low- and high-performing students, and low-performing students appeared to be more motivated than without the video reviews. The mean standardized grade of the students who watched the entire video review series increased significantly and additionally, students were more motivated to continue watching online reviews including optional topics not covered during class.