

AP Statistics: A Focus on Design of Studies

PRESENTED BY CHRIS OLSEN & COREY ANDREASEN

This four-day workshop, intended for teachers of AP Statistics, will address the design of studies. We will discuss the following topics:

- the sampling techniques described on the AP Statistics syllabus: simple random sampling, stratified random sampling, systematic sampling, and cluster sampling, and the formulas associated with these techniques
- observational and experimental studies, including aspects of their analysis and their theoretical basis.
- techniques of simulation applied to study design, assisted by Fathom dynamic statistical software
- appropriate inferential procedures

The intent of the workshop is to deepen and expand the background of AP Statistics teachers beyond the AP Statistics syllabus and to provide teachers with a better understanding of a “Bigger Picture”. The primary audience is teachers of AP Statistics (beginners and experienced), but instructors of statistics at any level are welcome to join us.

Corey Andraesen has taught mathematics at the high school, junior high school, and university levels in Wisconsin over the past sixteen years, and he currently teaches at North High School in Sheboygan, Wisconsin. He is finishing his second term as a director (representing grades 9-12) of the Wisconsin Mathematics Council and is associate editor of the journal Wisconsin Teacher of Mathematics and co-editor of the Activities department of Mathematics Teacher. He recently worked as a writer and consultant for Key Curriculum Press's *Statistics in Action: Understanding a World of Data*, 2nd Edition by Ann Watkins, Richard Scheaffer, and George Cobb.



Corey holds bachelor's and master's degrees from the University of Minnesota at Minneapolis, and is certified by the National Board for Professional Teaching Standards.

Chris Olsen taught statistics in Cedar Rapids, IA for over 30 years, and most recently at Cornell College in Mt. Vernon, IA. He has switched venues and will be teaching elementary statistics and experimental design at Grinnell College in Grinnell, IA this upcoming year.



He graduated from Iowa State University majoring in mathematics and philosophy, and in his graduate work at the University of Iowa concentrated on statistics, computer programming, psychometrics, and test development, eventually stumbling into a PhD.

He has been involved nationally in workshops and conferences relating to statistics for over 25 years. He is a co-author, with Roxy Peck and Jay Devore, of the Introduction to Statistics and Data Analysis, published by Duxbury Press, now in its 3rd edition. He is a past member (twice!) of the AP Statistics Test Development Committee, and a member of the editorial board of *Teaching Statistics*. He is a past member (twice!) of the AP Statistics Test Development Committee, and a member of the editorial board of *Teaching Statistics*.

Registration Information Workshop #968

DATES: Four days: August 17, 2010 —August 20, 2010

TIME: 8:00-4:00

COST: CESA 5 Title I Consortium Members \$275/person

LOCATION: Sauk Prairie High School

CESA 5 Center Members \$350/person

All Others \$450/person

MEALS: A continental breakfast will be provide; lunch will be “on your own”.

Please register for this event using the following website: www.myquickreg.com
Questions? Phone 608/742-8814, Doug Shanks ext. 305 or Amanda Curtis ext. 303
or email assessment@cesa5.k12.wi.us

Cancellation Refunds for Participants: Registered participants will receive a full refund if they cancel more than 3 working days before a workshop. Because of our commitments to the trainer and the food vendor, participants who cancel less than 3 working days or do not attend, will be billed the full fee.