Preliminary Announcement

The Eighth International Research Forum on Statistical Reasoning, Thinking, and Literacy (SRTL-8)

18–24 August, 2013Hosted by the University of Minnesota, Minneapolis, USALocation: Superior Shores Resort on Lake Superior

Conference Theme:

Reasoning about Uncertainty in the Context of Making Informal Statistical Inferences

Uncertainty is everywhere and you cannot escape from it. (Dennis Lindley, 2006)

The SRTL-8 Forum will build on and expand the work discussed at previous SRTL gatherings. Recent research on Informal Inferential Reasoning (IIR) suggests it is important to study further ideas and pedagogical approaches related to uncertainty and confidence in the context of reasoning about informal statistical inferences (ISIs). Assessing confidence about uncertain phenomena and understanding ideas of uncertainty are essential components in making predictions and making judgments about the reasonableness of patterns and trends identified in data. Furthermore, recent developments in technology (e.g., TinkerPlots 2) can support not only exploratory data analysis approaches to learning IIR but also experimentation with ideas of uncertainty and probabilistic models as generators of data, modeling and simulations. These developments provide new stimulus for growth in the rethinking and study of the role of uncertainty in helping students develop statistical reasoning. This topic is relevant and important at all levels of schooling, even in the early years.

We invite contributions that study one or more of the following themes:

- How does reasoning about uncertainty develop in the context of learning to make ISIs from data?
- What are rudimentary ideas of uncertainty and how are they expressed among young students? (e.g., what is random? what does "by chance" mean?)
- How are ideas related to uncertainty understood and used by students in making ISIs?
- What are innovative and effective tasks, tools, or sequences of instructional activities that may be used to help these ideas emerge?
- What are ways to assess reasoning about uncertainty?
- How can technology help to develop students' reasoning about uncertainty in the context of making ISI?
- What new approaches can be used to help teachers develop students' reasoning about uncertainty?
- What new ideas and considerations regarding uncertainty have or will emerge as a result of prevailing trends in the discipline of statistics (e.g., computation, exceedingly large data sets, Bayesian analysis, etc.)?

Philosophical, historical, and psychological contributions on the theme of the role of reasoning about uncertainty in the context of making ISIs are also welcomed.

Expression of interest to attend the conference can be submitted before September 1, 2012 (maximum of two pages), but conference attendance is by invitation because only a small number of scholars can be accommodated. Inquiries may be addressed to srtl2013@gmail.com

SRTL-8 Local Organizers:

Joan Garfield (jbg@umn.edu), Bob delMas (<u>delma001@umn.edu</u>), and Andy Ziefller (<u>zief0002@umn.edu</u>) from the University of Minnesota, Minneapolis, USA

SRTL-8 Location

Superior Shores Resort & Conference Center 1521Superior Shores Drive, Two Harbors, MN 55616, USA http://www.superiorshores-resort.com