

CALL FOR PAPERS: REASONING ABOUT DISTRIBUTIONS

The *Statistics Education Research Journal* (SERJ), a journal of the International Association for Statistical Education (IASE), is planning a special issue for November 2006, focused on research on reasoning about distributions. Submission Deadline: November 1, 2005.

The aim of the special issue is to advance the current state of research-based knowledge about the learning and teaching of reasoning about distributions, and to contribute to future research and to research-based practice in this area. Little research, whether qualitative or quantitative, has been published to date in this area, despite “distribution” being a foundational topic in statistics and one of the underpinnings of statistical literacy. Many research challenges exist, such as regarding knowledge of students and educators in diverse contexts of learning distribution-related ideas (e.g., K-12, tertiary, workplace), effective curricular materials and tools, or methods for documenting knowledge or measuring performance on tasks that require understanding of distributions.

Examples for relevant topics for research-oriented papers include (but are not limited to):

- How students or adults understand distributions, or make use of information about distributions, whether as a stand alone topic or in relation to reasoning about other statistical topics or tasks (e.g., involving variation, statistical inference, probability),
- How technological tools are utilized by learners to generate representations or improve thinking about distributions,
- What developmental trajectories exist, e.g., in acquisition of informal and formal knowledge about distributions, in learning to represent distributions, in proficiency in interpreting information or displays about distributions,
- How students interpret information regarding distributions when generated by technology or other means, and how these interpretations can be improved,
- What misconceptions and difficulties can be seen when students or adults think about or work with information about distributions, and what may be their origins,
- How does learners’ knowledge of distributions, or difficulties they encounter in this regard, contribute to or impede their behavior and thinking when coping with tasks involving other topics in statistics and probability,
- Knowledge and perspectives of educators involved in teaching about distributions,
- The relative efficacy of teaching approaches or curricular materials that can promote the understanding of distributions or their use in various tasks,
- Innovative assessment approaches and research methodologies in this area.

Manuscripts will be limited to a maximum of 8500 words of body text (not counting abstract, tables and graphs, references, appendices). Shorter, concise papers are preferred. Manuscripts will be reviewed following SERJ’s regular double-blind refereeing process. Guest Editors of this special issue will be Maxine Pfannkuch (University of Auckland, New Zealand) and Chris Reading (University of New England, Australia).

Interested authors are asked to send a letter of intent with details of the planned paper, or any queries, to Iddo Gal, SERJ co-editor, at: <iddo@research.haifa.ac.il>. Manuscripts must be submitted by November 1, 2005 to the same address, using the SERJ Author Guidelines and Template found on: <www.stat.auckland.ac.nz/serj>. (Please be advised that the Author Guidelines and Template will be updated in July 2005.)