

EDITORIAL FOR REGULAR PAPERS

Welcome to the second issue of *SERJ* for 2017. Before my discussion on the regular papers in this issue, there are some important announcements. First, Jennifer Kaplan, University of Georgia, USA, has agreed to be Co-Editor of *SERJ* responsible for the regular papers and three out of four issues over a two-year period. Jennifer has been an excellent Associate Editor of *SERJ* for four years and I know that her experience in this role and knowledge about statistics education research will be invaluable to guide *SERJ* into a new professional publishing era. Second, Beth Chance, California Polytechnic State University, USA, has not only come out of retirement to be the *SERJ* Assistant Editor for the Regular papers in this issue but has also agreed to be Assistant Editor in 2018. Her continuing involvement and work for *SERJ* over many years is much appreciated. Third, Susan Peters, University of Louisville, USA, has kindly agreed to be an Associate Editor and began serving in October 2017. Fourth, Chris Franklin, University of Georgia, USA, and Jane Watson, University of Tasmania, Australia, are stepping down from their role as Assistant Editors. The three issues they have overseen, November 2016, May 2017, and November 2017 are the largest ever in the history of *SERJ*, as each contained special issues with two including regular papers. Assistant Editor work requires meticulous and thorough editing of papers to ensure that they are up to a high publication standard. Chris and Jane's voluntary service in this capacity has ensured *SERJ* has maintained high standards. Many thanks also to Kim Love for her invaluable support to Chris Franklin as *SERJ* webmaster.

There are nine regular articles in this issue. One article provides insights into statisticians' perceptions about learning statistics whereas another article examines professional statisticians' experiences in the work place. A model for teacher development is proposed in one paper and another article delves into how students understand variability related to measurement tasks. Providing evidence that new curricula are effective is the premise of two papers while three articles focus on students' attitudes, dispositions or satisfaction about learning statistics.

Aurel Diamond and Andreas Stylianides interviewed six academic statisticians in order to explore their personal epistemologies, including their beliefs about statistical knowledge compared to mathematical knowledge. Their study offers some new insights into some statisticians' perspectives on their discipline and possible explanations about why mathematical epistemologies of teachers may not be appropriate for learning statistics. Therefore, understanding epistemic beliefs would seem to be a fruitful course of action for future research.

Claire Cameron, Ella Iosua, Matthew Parry, Rosalina Richards and Chrystal Jaye report on a survey of New Zealand professional statisticians. Their focus is on whether the issues and challenges faced by these statisticians in their work places are consistent with issues identified in the literature. Determining whether findings in one country are transferable to another country's culture and practice is an important aspect of the research process.

Randall Groth proposes a model for fostering the development of teachers' statistical knowledge for teaching through engaging them in design-based research. His innovative approach to teacher development includes descriptions of how mistakes can productively provide an opportunity to grow teachers' knowledge about statistics content, student ways of reasoning, and how to facilitate students' reasoning processes.

Adri Dierdorff, Arthur Bakker, Dani Ben-Zvi and Katie Makar focus their study on a class of secondary students and the ways they consider variability when engaged with authentic measurement tasks. There is a growing research base on students' understanding of the nature and role of variability and this study adds to the knowledge base by illustrating how enabling students to perform measurements using authentic practices may stimulate them to reason with relevant aspects of variability in a variety of ways.

Matthew Beckman, Robert delMas and Joan Garfield examine cognitive transfer outcomes for introductory statistics students in an effort to provide evidence that the simulation-based CATALST curriculum is effective for students' future use of statistics. Using an enhanced version of the CAOS instrument in which items were classified as near or far transfer they analysed and compared the outcomes for CATALST and non-CATALST students. Their positive findings add to the literature supporting the benefits of simulation-based introductory courses.

Jacqueline McLaughlin and Isabell Kang describe their flipped classroom model for biostatistics short course for students at the start of a doctoral programme in pharmacy and healthcare. Their evaluation of student learning and perceptions of the short course indicate that implementing new teaching strategies has the potential to improve student engagement with statistics.

Nadia Martin, Jeffrey Hughes and Jonathan Fugelsang examine the joint effects of gender and experience through giving the Statistical Reasoning Assessment task and a battery of cognitive ability and thinking dispositions tests to undergraduate and graduate psychology students. Their findings suggest that gender influences statistical reasoning with thinking dispositions having an indirect influence.

April Kerby and Jacqueline Wroughton investigated introductory students' attitudes towards statistics using the novel approach of tracking their attitudes from pre- to mid- to post-course. Their findings suggested that attitudes did not necessarily decline over the course, that attitudes remain fluid throughout the course and that looking at overall mean scores might not be giving the full picture of when and why students' attitude scores go up or down.

Warren Paul and Clare Cunnington also explored introductory students' attitudes and satisfaction about statistics in a course inspired by the GAISE document. Although there was no change in mean attitudes over the semester, a Bayesian network analysis and focus group interviews revealed possible factors influencing students' feelings about cognitive competence.

To conclude I would like to give special thanks to Randall Groth, Associate Editor for *SERJ*, who took Editorial responsibility for the Special Collection of papers on "Reasoning about models and modelling in the context of informal statistical inference" in this November 2017 issue. His dedicated assistance to the Guest Editors and to *SERJ* is deeply appreciated.

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