INVESTIGATIONS IN MATHEMATICS LEARNING

Call for Manuscripts

Investigations in Mathematics Learning invites scholars to submit manuscripts for a special issue to be published in the summer of 2017. *Investigations in Mathematics Learning* is the journal for the Research Council on Mathematics Learning. The broad focus for this special issue is validity-related aspects of research, evaluation, and measurement using quantitative tools within mathematics education contexts.

There is value in the knowledge that large-scale quantitative research can bring to the field in terms of generalizability to educational practice when appropriately conducted (American Statistical Association, 2007; Hill & Shih, 2009). The American Statistical Association implores researchers: "New research needs to build on existing research to produce a more coherent body of work… Studies cannot be linked together well unless researchers are consistent in their use of interventions; observation and measurement tools; and techniques of data collection, data analysis, and reporting" (2007, pp. 4-5). Measure (instrument) quality strongly influences the data collected and relatedly, findings of a research study (Gall, Gall, & Borg, 2007). Measures with a clearly defined purpose and supporting validity evidence are foundational to conducting high quality large-scale quantitative work (Newcomer, 2012). Near the core of any methodology is the measure or instrument used to collect data.

The American Psychological Association, National Council on Measurement Education, and American Educational Research Association ([APA, NCME, AERA] 2014; 1999) provide clear guidelines regarding measurement validity and reliability. Unfortunately, "evidence of instrument validity and reliability is woefully lacking" (Ziebarth, Fonger, & Kratky, 2014, p. 115) in the literature. Validation studies of quantitative measures are noticeably absent from mathematics education journals, which present the challenge of determining whether an instrument is appropriate for a given study much less whether it will generate valid and reliable data for analysis (Hill & Shih, 2009). *Investigations in Mathematics Learning* aims to provide scholars working in this area an outlet to publish manuscripts related to research, evaluation, and measurement using quantitative tools within mathematics education topics. For this special issue, tools are characterized as tests, evaluation tools, protocols, instruments and other assessments that generate quantitative data. Possible manuscripts might explore (but are not limited to):

- Validation studies of new or modified quantitative tools and/or measures.
- Validation studies of previously published and used quantitative tools and/or measures
- Theoretical discussions of validity and/or reliability, which relate to measures and other instruments
- Applications of quantitative tools within a research study that includes an explicit focus on aspects related to validity and/or reliability.
- Applications of novel psychometric approaches within mathematics education contexts that highlight aspects of validity and/or reliability
- Literature syntheses of quantitative instruments (within a specific area such as achievement, problem solving, efficacy, or practice) within mathematics education contexts.
- Analyses regarding equity-related issues examining validity regarding tests, evaluation tools, protocols, and/or assessments that generate quantitative data.

All manuscripts will be reviewed by a double-blind peer-review process. Authors submitting a manuscript will be expected to review one or more manuscripts. The submission deadline for manuscripts is August 1, 2016. We anticipate sharing reviews with authors January 2017.

The editorial team for this special issue of *Investigations in Mathematics Learning* consists of four individuals. Jonathan Bostic will serve as editor. The three associate editors for this special issue are Michele Carney, Erin Krupa, and Jeff Shih. Questions regarding this special issue should be directed to Jonathan Bostic, bosticj@bgsu.edu. Drew Polly (investigationseditor@gmail.com), editor of *Investigations in Mathematics Learning,* will support the editors of the special issue and oversee the publishing process of this special issue.

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