EBERHARD KARLS
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The LEAD Graduate School & Research Network at the University of Tübingen invites you to attend the lecture by

Christopher Rhoads
University of Connecticut

Practical research design in quantitative education research: Statistical results and reflections on next steps

Tuesday, March 17th, 2020, 9:00 am
Hector Research Institute of Education Sciences and Psychology, Room 204,
Europastraße 6, 72072 Tübingen

Abstract: The talk will be in two parts. Part I will summarize some of Dr. Rhoads' scholarly work in the area of planning educational studies when clustering of outcomes is an issue (i.e. in multi-level settings). This work can help answer questions such as: (i) When does it make sense to randomize classrooms or schools to educational treatments and when is it preferable to randomize students? and (ii) given a fixed budget what is the optimal number of schools for my study and what is the optimal number of students per school. In Part II Dr. Rhoads will reflect on current impediments to learning what works in educational policy and practice via randomized experiments. Issues discussed include: the need to improve measurement, particularly fidelity measurement; the changing nature of "Business as Usual"; teacher and student mobility; and the need to detect very small effects.

Biography: Dr. Christopher Rhoads received his Ph.D. in Statistics from Northwestern University (NU) and is currently an Associate Professor in the Department of Educational Psychology in the Neag School of Education at the University of Connecticut, where he teaches classes in research design and quantitative methods. He entered his current position following a three-year post-doctoral fellowship at the Institute for Policy Research at NU. Dr. Rhoads' research focuses on methodological and statistical approaches to improving causal inference in policy-relevant research, particularly in the design and analysis of large field studies for the purposes of policy evaluation. He has published articles in outlets such as *Journal of Educational and Behavioral Statistics*, *Journal of Research on Educational Effectiveness* and *British Journal of Mathematical and Statistical Psychology*. Dr. Rhoads is or has been a member of research teams conducting investigations in the areas of educational technology, online literacy, gifted education, teacher professional development to improve elementary math education and the impact of online course offerings on the retention of non-traditional students in college.

Important Publications:

Rhoads, C. (2017). Coherent power analysis in multi-level studies using parameters from surveys. *Journal of Educational and Behavioral Statistics*, 42(2), 166-194.
Rhoads, C. and Dye, C. (2016). Optimal Design for Two Level Random Assignment and Regression Discontinuity Studies. *Journal of Experimental Education*, 84(3), 421-448.
Rhoads, C. (2016). The Implications of Contamination for Educational Experiments with Two Levels of Nesting. *Journal of Research on Educational Effectiveness*, 9(4), 531-555.

Contact: Sven Rieger, LEAD Graduate School & Research Network, sven.rieger@uni-tuebingen.de

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