

Curriculum Vitae

Ian Edgar Thacker

3470 Trousdale Parkway, Waite Phillips Hall Room 600G

Los Angeles, CA 90089-4036

ithacker@usc.edu

EDUCATION

- 2015-present **University of Southern California**
Ph.D. Urban Education Policy, Educational Psychology concentration
Expected degree date: May, 2019
Advisor: Gale M. Sinatra, Ph.D.
Dissertation Title: *The Influence of Numerical Estimation Skills and Epistemic Cognition in Plausibility Judgments and Conceptual Change*
- 2017-present **University of Southern California**
M.S. Statistics
Expected degree date: May, 2019
Department of Mathematics
- 2008-2010 **University of California, Berkeley**
M.A. and Credential in Science and Mathematics Education (MACSME)
Advisor: Dor Abrahamson, Ph.D.
- 2001-2005 **University of Colorado, Boulder**
B.A. Mathematics
B.A. Physics

PROFESSIONAL AFFILIATIONS

American Education Research Association (AERA)
American Psychological Association (APA)
European Association for Research on Learning and Instruction (EARLI)
Mathematics Association of America (MAA)
National Council of Teachers of Mathematics (NCTM)
National Consortium for Instruction and Cognition (NCIC)
Southwest Consortium for Innovative Psychology in Education (SCIPIE)

RESEARCH / PUBLICATIONS

Publications

Abrahamson, D., Bryant, M. J., Gutiérrez, J. F., Mookerjee, A. V., Souchkova, D., & **Thacker, I.E.** (2009). Figuring it out: mathematical learning as guided semiotic disambiguation of useful yet initially entangled intuitions. In S. L. Swars, D. W. Stinson & S. Lemons-Smith (Eds.), *Proceedings of the Thirty-First Annual Meeting of the North-American Chapter of the International Group for the Psychology of Mathematics Education* (Vol. 5, pp. 662-670). Atlanta, GA: Georgia State University. [Author names are in alphabetical order]

Work under Review

Thacker, I., Muis, K.R., Danielson, R.W., Sinatra G.M., Pekrun, R., Winne, P.H., Chevrier, M. (under review). *The Influence of Attitudes and Emotions in Learning from Multiple Texts.*

Copur-Gencturk, Y. & **Thacker I.** (under review). *Teachers' self-reports of knowledge gains compared with validated measures: Relationships among self-reports, direct assessments, and teacher characteristics.*

Kim, A.Y. & **Thacker, I.**, (under review). *A Good Sine: Seeking and Finding Math Help Using Online Discussion Boards.*

Work in Progress

Thacker, I. (in preparation). *Not Too Slippery a Slope: Grounding the Mathematics of Slope in Students' Perceptions of Steepness.* Manuscript in preparation

Thacker, I., Sinatra, G.M., (in preparation). *Feel the Heat: A Grounded Approach to the Instruction of the Greenhouse Effect.* Manuscript in preparation.

Thacker, I., Sinatra, G., & Rasiej, R. (in preparation). *Teachers' Beliefs About Mathematical Knowledge and Knowing and their Influence on Mathematics Instruction.* Manuscript in preparation

Danielson, R.W., Sinatra, G.M., **Thacker, I.**, & Jacobson, N.G. (in preparation). *When Strategic Graphical Interpretation Fails: The Influence of Prior Belief and Political Identity.* Manuscript in preparation.

HONORS AND AWARDS

2018 Inaugural recipient of the Richard C. Anderson Graduate Student Research Award
2015-present Rossier Dean's Fellowship, University of Southern California
2015-present USC Graduate Student Travel Fund Recipient

GRANTS

2017 Internal Research Funds Award
2016 Graduate Student Government Travel Grant Recipient

RESEARCH PRESENTATIONS

Thacker, I., Sinatra, G.M. (June, 2018). *When Actions Do Not Reflect Ideals: Justifications for Climate Inaction*. Presentation to be given to the American Psychological Association, San Francisco, CA.

Kennedy, A.U., Jacobson, N., **Thacker, I.**, Sinatra, G.M., ... Nye, B.D. (June, 2018). *Re-Living Paleontology: Using Augmented Reality to Promote Engagement and Learning*. Poster to be presented at the meeting of the American Psychological Association, San Francisco, CA.

Thacker, I., Sinatra, G.S. (April, 2018). *Feel the Heat: An Embodied Approach to the Instruction of the Greenhouse Effect*. Roundtable presented to the annual meeting of the American Educational Research Association, New York, USA.

Copur-Genkturk, Y., **Thacker, I.**, Junk, D.L. (April, 2018). *Do Teachers Accurately Report Their Learning? A Comparison of Teacher Reports to Validated Measures*. Spoken presentation presented to the annual meeting of the American Educational Research Association, New York, USA.

Thacker, I., Muis, K.R., Danielson, R.W., Sinatra G., Pekrun, R., Winne, P.H., Chevrier, M. (August, 2017). *Shifting Attitudes on GMFs: The Influence of a Conceptual Change Intervention*. Poster presented to the European Association for Research on Learning and Instruction, Tampere, Finland.

Danielson, R.W., Sinatra, G.M., **Thacker, I.**, & Jacobson, N.G. (August, 2017). *When Strategic Graphical Interpretation Fails: The Influence of Prior Belief and Political Identity*. Poster presented to the European Association for Research on Learning and Instruction, Tampere, Finland.

Kim, A.Y. & **Thacker, I.**, (August, 2017). *A Good Sine: Seeking and Finding Math Help Using Online Discussion Boards*. Poster presented to the American Psychological Association, Washington DC.

Sinatra, G.M., **Thacker, I.**, & Danielson, R.W. (August, 2017). *When Strategic Graphical Interpretation Fails: The Influence of Prior Belief and Political Identity*. Spoken presentation given to the Society for Text and Discourse, Philadelphia, USA.

Thacker, I. (April, 2017). *Not Too Slippery a Slope: Grounding the Mathematics of Slope in Students' Perceptions of Steepness*. Roundtable presented to the annual meeting of the American Educational Research Association, San Antonio, USA.

Thacker, I., Muis, K.R., Danielson, R.W., Sinatra G., Pekrun, R., Winne, P.H., Chevrier, M. (April, 2017). *The Influence of Attitudes and Emotions in Learning from Multiple Texts*. Poster presented to the Annual meeting of the American Educational Research Association, San Antonio, USA.

Corwin, Z., Ochsner A.K., Maruco, T., Danielson R.W., Tichavakunda, A.A., Kolluri, S., **Thacker, I.**, Galan, C., Sinatra, G., Tierney, W.G. (April, 2017). *A Digital Approach to Increasing College Access in California High Schools*. Symposium presented to the annual meeting of the American Educational Research Association, San Antonio, USA.

Thacker, I. (2016) *Fostering Student Grounding of Slope in Perceptions of Steepness*. Spoken presentation given to the 2016 National Consortium for Instruction and Cognition Annual Meeting. Washington DC.

TEACHING

Courses Prepared to Teach

Learning and Instruction
Human Motivation
Multiple Regression
Introductory Statistics

Teaching Experience

Graduate Level Teaching Experience

Spring 2018 **Instructor**, University of Southern California, *Intro Stats Workshop*.

- Fall 2017 **Teaching Assistant**, University of Southern California, *EDUC 712: Human Motivation*.
- Spring 2017 **Teaching Assistant**, University of Southern California, *EDUC 642: Learning and Instruction*.
- Spring 2017 **Course Facilitator**, University of Southern California, *Intro Stats Workshop*.
- Fall 2016 **Teaching Assistant**, University of Southern California, *EDUC 712: Human Motivation*.

High School/Undergraduate Teaching Experience

- 2012-2015 **High School Instructor**, AGBU Manoukian High School, Pasadena, CA
Physics / Precalculus / Geometry
- 2010-2012 **High School Instructor**, City Arts Technology HS, San Francisco, CA
Physics / Precalculus / Academic Advisor
- 2009-2012 **Graduate Student Instructor**, University of California, Berkeley, CA
Physics for Future Presidents. (Undergraduate course)
- 2009-2012 **High School Instructor**, University of California, Berkeley, CA
Algebra II Instructor. Academic Talent Development Program.
- 2008-2010 **Student Teacher**, San Francisco and Berkeley Unified, CA
Algebra / Algebra II
- 2006-2008 **High School Instructor**, Mapleton Early College, Denver, CO
Geometry / Algebra / Math Support / Academic Advisor
- 2005-2006 **Substitute Teacher**, Denver Public Schools, Denver, CO

RESEARCH EXPERIENCE

- 2015-present **Motivated Change Research Lab Team Member**. University of Southern California. Directed by Gale Sinatra, Ph.D. Working as a collaborative team to design and execute various studies examining conceptual change and attitudes related to controversial science topics. Built lab website.

- 2017-present **Joan Herman & Richard Rasiej Mathematics Initiative Research Assistant.** *Scaled Models for Certificate Delivery.* Total. Award: \$1,000,000. Research Assistant helping to develop research initiative at USC. Helped plan annual conference, contributed to development of five-year research agenda.
- 2015-present **Social Sciences & Humanities Research Council of Canada (SSHRC) Research Assistant.** *Fostering epistemic belief change: The role of epistemic emotions and self-regulated learning.* Total Award: \$497,286. Awarded \$13,700 to USC. Research Assistant helping to measure change in epistemic beliefs while reading conflicting texts regarding controversial science topics.
- 2015-2017 **Jobs for the Future Research Assistant.** *Scaled Models for Certificate Delivery.* Total. Award: \$99,242. Research Assistant helping to evaluate the outcomes of employer created credentialing programs. Developed multiple measures to assess knowledge, attitude, and motivation, developed research design, and conducted quantitative analysis.
- 2008-2010 **Embodied Design Research Laboratory Team Member.** University of California at Berkeley. Directed by Dor Abrahamson, Ph. D. Worked as a collaborative team to design, execute, and build theory from various design-based research studies investigating the embodied nature of mathematical knowledge. Principal investigator of an empirical study and director of undergraduate and graduate students.
- 2008-2010 **Reasoning Research Group Team Member.** University of California at Berkeley. Directed by Michael Ranney, Ph. D. Worked as a collaborative team to design and execute empirical studies regarding reasoning that occurs when learning controversial science topics like climate change and evolution.

PROFESSIONAL AND ACADEMIC SERVICE

- 2016-2017 **Board Member,** Student Community of Ph.D.'s in Education (SCoPE)
- 2016-present **Ad-Hoc Reviewer**
Learning and Instruction
ZDM (Zentralblatt für Didaktik der Mathematik)
Educational Psychologist

RELEVANT SOFTWARE SKILLS

Statistical Analysis: R, SAS, EQS, Mplus, SPSS, STATA

Qualitative Analysis: NVivo

Web Design: [HTML](#), Google Sites, Wix

Adobe Creative Suite

Learning Management Software (e.g., Blackboard, TeacherEase, Powerschool)

Math Education Technology (e.g., Desmos, NetLogo, Sketchpad explorer)