

## Annie and John Selden Prize

### Paul Dawkins

Texas State University

Dr. Paul Christian Dawkins completed his PhD in Mathematics Education in 2009 at The University of Texas at Arlington. He is currently an associate professor in the Department of Mathematics at Texas State University. Dawkins is a prolific author; since his dissertation, 17 of his articles have been published in the prestigious journals *Educational Studies in Mathematics*, *The Journal of Mathematical Behavior*, *For the Learning of Mathematics*, and the *International Journal of Research in Undergraduate Mathematics Education*. He has also contributed 3 chapters for books on mathematics research and pedagogy. Both in their number and in their intellectual depth, these publications represent an unusually high level of production for a young scholar. Throughout his career, Dawkins has used heuristics such as guided reinvention and constructivist conceptual analysis to develop ways to help students formalize their prior mathematical understandings in advanced mathematical settings and to enable researchers to study student responses to various instructional strategies. In a variety of different ways, Dawkins' research has focused on exploring the complex interactions between everyday use of language and advanced mathematical language, especially the interplay of semantics, syntactics, and pragmatics for developing student understanding of proof and disproof. Two of his articles have won awards at conferences of the Special Interest Group on Research on Undergraduate Mathematics Education, and he is currently co-principal investigator on a grant from the National Science Foundation to adapt research-based K–12 practices for orchestrating discussion to the context of an undergraduate proof-based mathematics course. From the beginning, Dawkins has carried out his work with extraordinary energy and precise attention to detail. A co-author wrote that “I can honestly say that I have become a better researcher simply by mimicking Paul's example.” Dawkins' nominator described him as “one of the strongest theoreticians in our field,” who “perceives the same issue two levels deeper than myself and most of my colleagues.”

### Response

I am very thankful to receive affirmation that the work that I enjoy so much is of value to my peers. To be nominated is a joy and to be awarded is incredibly humbling. I am grateful to a number of people who have helped and taught me throughout my career thus far. My wife Stephanie makes all of life more fun because we do it together. She is such a wonderful partner, friend, and mother. I want to give credit to my father Ross Dawkins for fostering my love of learning and for being a humble man of intellectual and moral integrity. I am thankful to more senior scholars like James Alvarez, Christopher Kribs-Zaleta, Pat Thompson, Marilyn Carlson, Chris Rasmussen, Keith Weber, Amy Ellis, and Mike Oehrtman who have taught me how to conduct valuable research in mathematics education. Not only have I learned from their scholarship, but they have always welcomed me into the research community and given their time and attention to help me grow. I am thankful to collaborators and friends such as Kevin Moore, Kyeong Hah Roh, John Paul Cook, Rob Ely, Dov Zazkis, Michael Tallman, and Shiv Karunakaran with whom I have enjoyed learning. It is a wonder to get to work in the business of learning and producing new knowledge. It is made so much better by getting to do it with people that I admire and enjoy. In receiving this award, I am mindful of the many ways that unmerited privilege has helped me get to this point. I sincerely hope that I can use what influence I have to foster learners and scholars who have to fight much harder in the face of inequity and adversity. Finally, I thank Jesus for giving me life, peace, and the perspective to try to value things worth valuing.

## Biographical Sketch

Dr. Paul Christian Dawkins is an associate professor at Texas State University. He previously taught and researched at Northern Illinois University for nine years. His dissertation work on student reasoning and defining in real analysis began a journey of investigating what it means for students to engage in advanced mathematical practices. This has branched into research on student defining, axiomatizing, proving, and reading and speaking mathematical language. Through all of these explorations, Dr. Dawkins seeks to understand how to create opportunities for students to apprehend the power and beauty of mathematical epistemology in the context of their ongoing mathematical journeys. His research methodologies draw heavily upon teaching experiments and conceptual analysis in the Radical Constructivist tradition and guided reinvention and progressive mathematization in the Realistic Mathematics Education tradition. His ongoing passion is to understand how students can construct mathematical logic from within their own mathematical activity. Outside of his roles as a teacher and researcher, Paul is a husband, father, pastor, music lover, and board gamer. He partners with his wife Stephanie to raise their daughter Lily and their son Ransom in a loving home.