

# MPES Colloquium Series

**What is Higher Order Thinking in Mathematics, and  
Challenges in Ensuring Access for All**

**Lindsey E. Richland**

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**University of Chicago**

**Comparative Human Development**

**Committee on Education**



**Thursday, December 3<sup>rd</sup> 2015**

**12:30-1:30 PM**

**Annenberg 303**

I will describe a series of studies exploring the role of analogical reasoning in an introduction to proportional thinking within mathematics. In particular I'll highlight the role that aspects of social context, stereotype threat and pressure, and individual cognitive differences can play in leading children to gain different knowledge from the same lesson. I'll discuss implications for the persistent achievement gaps within and across US populations.

**Lindsey Richland** is an Associate Professor of Comparative Human Development and a member of the Committee on Education at the University of Chicago. She received her Ph.D in psychology from the University of California, Los Angeles and held a prior faculty appointment at the University of California, Irvine in the School of Education. She examines both the basic science of relational reasoning, memory, and higher order thinking development, and mathematics and science classroom practices that support and build on these developing competencies. Dr. Richland is also a member of the Spatial Intelligence Learning Center, and was awarded a National Academy of Education and Spencer Foundation Postdoctoral Fellowship. Her work has been supported by a CAREER award from the National Science Foundation as well as grants from the Institute of Education Sciences, the Office of Naval Research, the National Institutes of Health, and the Spencer Foundation.