



THURSDAY, OCTOBER 15 2:00-2:50 PM

ME Research Seminar



Tinkering to Learn Mechanical Engineering

DR. MICAH LANDE SOUTH DAKOTA MINES

Dr. Lande is an Assistant Professor and E.R. Stensaas Chair for Engineering Education at South Dakota Mines. He directs the Holistic Engineering Lab & Observatory and teaches human-centered design thinking and design innovation courses. Dr. Lande researches how technical and non-technical people learn and apply design thinking and making processes to their work. He is interested in the intersection of designerly epistemic identities and vocational pathways. He received a BS Engineering (Product Design), MA Education (Learning, Design and Technology), and PhD in Mechanical Engineering (Design Education) from Stanford University.

Talk abstract

Mechanical Engineering education balances breadth and depth: foundational topics in engineering sciences with applications through a mechanical engineering design process. With perspectives from the learning sciences, engineering education research, and design research, this talk will introduce an evolving notion of “*Tinkering to Learn*” that can be applied across learning experiences. Relevant research studies on physical prototyping, “Making” in the wild, and learning trajectories of student learners will be presented. Implications for teaching and learning including the role of product-based learning and pedagogical content knowledge will be discussed.

THURSDAY 10/15 2-2:50 PM
in-person: CM 266 (capacity 16)
Live *Zoom!* LINK: tiny.cc/MinesF20