PROGRAM 2022

KEYNOTES VIA ZOOM

IFS-Virtual Keynote Series

The Center for Research on Education and School Development (IFS) at the TU Dortmund University organizes the second IFS Virtual Keynote Series. Two keynotes will be held per date. A five-minute introduction is followed by the 45-minute keynotes. After each keynote will be 15 minutes time for moderated questions and answers. The Virtual Keynote Series will end with a final moderated discussion (20 minutes).

24TH JANUARY

INNOVATIONS FOR INSTRUCTIONAL DESIGN

3.15–4.20 p.m.
PROF. ROGER AZEVEDO, PhD, University of Central Florida
Designing Advanced Learning Technologies to Capture Multimodal Real-Time Self-Regulated Learning Processes

4.20–5.25 p.m.
ASST. PROF. TEYA RUTHERFORD, PhD, University of Delaware
Opportunities for Educational Research Born of a Long-Running Partnership with a Mathematics Learning Platform

5.25–5.45 p.m.
FINAL MODERATED DISCUSSION

31ST JANUARY

INTERVENTIONS THAT SUPPORT STUDENTS' ACADEMIC SUCCESS

3.15–4.20 p.m.
PROF. JUDY HARACKIEWICZ, PhD, University of Wisconsin
Promoting Motivation and Performance in Gateway STEM Classes with Value Interventions: Challenges and New Directions

4.20–5.25 p.m.
ASSOC. PROF. DAVID YEAGER, PhD, University of Texas
What We Learned from 10 Years of Mindset Intervention Research?

5.25–5.45 p.m.
FINAL MODERATED DISCUSSION

24TH JANUARY

INNOVATIONS FOR INSTRUCTIONAL DESIGN

Designing Advanced Learning Technologies to Capture Multimodal Real-Time Self-Regulated Learning Processes
Prof. Roger Azevedo, PhD (University of Central Florida)

Self-regulated learning (SRL) is key to understanding how learners dynamically monitor and regulate their cognitive, affective, metacognitive, and motivational (CAMM) processes during learning with advanced learning technologies. Despite learners' potential to accurately monitor and regulate their CAMM processes, not all are capable of enacting these processes in real-time during learning, problem solving, and reasoning across tasks, domains, and contexts with advanced learning technologies (e.g., serious games, virtual reality). In this talk, I will focus on the design features (e.g., intelligent virtual humans) that can me embedded across several advanced learning technologies to capture, model, track, and foster CAMM SRL processes.

Opportunities for Educational Research Born of a Long-Running Partnership with a Mathematics Learning Platform
Asst. Prof. Teya Rutherford, PhD (University of Delaware)

In this talk, Dr. Teomara Rutherford will present an overview of her research partnership with the online mathematics learning platform, Spatial Temporal (ST) Math. Dr. Rutherford will discuss the formation and the 12-year evolution of the partnership, along with the opportunities and challenges inherent in working with digital content developers. After this overview, Dr. Rutherford will present recent work using data from ST Math to understand student learning and motivation during the pandemic-induced shift to online instruction.

31ST JANUARY

INTERVENTIONS THAT SUPPORT STUDENTS' ACADEMIC SUCCESS

Promoting Motivation and Performance in Gateway STEM Classes with Value Interventions: Challenges and New Directions
Prof. Judy Harackiewicz, PhD (University of Wisconsin)

I will discuss a theoretical model for the science of targeted intervention, and discuss our work on utility-value interventions in college STEM classes. It is essential that students perceive value in their academic work, and we have tested the potential of utility-value interventions to promote perceptions of value, motivation and performance in gateway science classes. We have also followed students over time to explore long-term intervention effects. Most recently, we developed a new version of the utility-value intervention that may be more effective for first-generation (low SES) students. I will present preliminary findings and discuss some challenges with implementing writing interventions in science classes.

What We Learned from 10 Years of Mindset Intervention Research?
Assoc. Prof. David Yeager, PhD (University of Texas)

This talk reviews the key findings from a decade of at-scale mindset intervention experiments in education settings. It shows that a key finding is the context-dependency of these interventions. New experiments are seeking to directly intervene on the context--teachers and peers--as a means for enhancing treatment effects and narrowing group-based inequality. In addition, the talk covers the recent extension of mindset research into the health and well-being domains.