

STEM Education, Learning Disabilities, and the Science of Dyslexia

CONFERENCE CHAIRS:

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Instructional Research Group



Goals

- 1. Create new, *better informed*, collaborations between researchers from diverse fields (e.g., neuropsychology, special education, mathematics education, cognitive psychology).
- 2. Sharing of ideas and unresolved issues between those groups.
 - Formal dialogue (Q&A during Panel and Plenary sessions)
 - ➤ Informal dialogue (around Interactive Poster Sessions, social hour, etc.)



Formats

- 1. Keynotes and Plenary sessions:
 - ➤ Big picture views of lines of research and what they mean for STEM instruction
 - Emerging trends and themes (e.g., professional development, comorbidity, nature of special education mathematics instruction)
- 2. Breakout panels Examination of an issue or topic (implementation of interventions in mathematics, executive function) from multiple lenses…focuses on highlights of research
 - ➤ Allow ample time for discussion
- 3. Premier Interactive Poster sessions.
 - ➤ Allow discussion of nitty gritty of research



A Few Conference Themes

- 1. Deeper understanding of nature of dyslexia and learning disabilities.
- 2. Transcending defining learning disabilities by discipline (reading, mathematics).
- 3. Evidence on comorbidity from both psychological and intervention research.
- 4. Neuro science findings on specific deficits.
- 5. Broader and deeper knowledge of executive functions.
- 6. Advances in intervention research.



Emerging Theme

How can the scientific and theoretical advances inform instruction?