THE UNIVERSITY OF SYDNEY

Successful Learning Conference: Masterclass

How to design and deliver effective Mathematics intervention

Tuesday 22 June 2021, 9.00am-3.00pm | Online by ZOOM

How to design and deliver effective Mathematics intervention

In this masterclass, we focus on the design and delivery of mathematics intervention. Our focus is on practices with an evidence base for students aged 5 to 14 years, though information may apply to other students as well. First, we will determine critical mathematics content, identify evidence-based practices, and put together an instructional platform. Then, we will examine how to best deliver mathematics intervention, focusing on explicit instruction, precise language, and multiple representations in addition to building fluency and developing problem-solving skill. Come learn to design and deliver effective mathematics intervention!

Sarah R. Powell is an Associate Professor in the Department of Special Education at the University of Texas at Austin. Dr Powell's research and teaching interests focus on developing and implementing interventions for students experiencing mathematics difficulty.

She currently works on grant-funded projects from the Institute of Education Sciences, National Science Foundation, Texas Education Agency, Office of Special Education Programs, and TLL Temple Foundation. In 2019, Dr Powell was awarded the Presidential Early Career Award for Scientists and Engineers (PECASE).

She has worked with educators in over 30 states in the US - as well as in Canada, England, Iceland, and Oman - to improve mathematics outcomes for students.

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Program details

Session 1: Design of intervention and use of explicit instruction

- Necessity for providing mathematics intervention
- Longitudinal pathways in mathematics
- Designing your instructional platform
- Focusing on critical mathematics content
- Evidence-based practices in mathematics for the instructional platform
- Explicit instruction (modeling, guided practice, independent practice; asking questions, receiving feedback, responding to feedback).

Session 2: Tools to deliver intervention

- Precise mathematical language (formal versus informal mathematical language; ways to help students learn the vocabulary of mathematics).
- Multiple representations (concrete - hands-on; pictorial and virtual; abstract).
- Fluency and computation (fluency building activities; computation with alternate algorithms).

Session 3: Word-problem strategies for intervention

- Word-problem solving (Ineffective instruction, i.e., key words); attack strategies; teaching with a focus on schemas.

Registration & Fees

$297 (1 day masterclass) per person GST Incl. Includes full-day online masterclass attendance, and electronic resources bundle. Please register online by visiting: https://sydney.edu.au/arts/study/continuing-professional-development/professional-learning-calendar.html and follow the calendar links.

During COVID-19 restrictions our commitment to teachers is to continue to provide quality professional learning opportunities. In order to maintain the safest environment in which to do this, our programs will be available for participation by Zoom only.

How to design and deliver effective Mathematics intervention provides 5hrs of Teacher Professional Development, addressing Proficient Teacher Standard Descriptors 1.2.2, 1.5.2, 1.6.2, 2.2.2 and 6.3.2 from the Australian Professional Standards for Teachers.