

BETTER, TOGETHER! LITERACY & NUMERACY 2023

FEB 17 - CALGARY



Association of Independent Schools & Colleges in Alberta Teachers' Convention

BEST WESTERN PREMIER CALGARY PLAZA HOTEL & CONFERENCE CENTRE

8:00am - 9:00am	Registration
9:00am - 9:15am	Opening
9:15am - 10:45am	Keynote Presentations
10:45am - 11:05am	Wellness Break
11:05am - 12:15pm	Breakout Sessions A
12:15pm - 1:00pm	Lunch Break
1:00pm - 2:10pm	Breakout Sessions B
2:10pm - 2:20pm	Transition Time
2:20pm - 3:30pm	Breakout Sessions C
3:30pm	Day Ends

AISCA's "Better, Together!" Teachers' conference has quickly become an annual highlight on the PD calendar. We owe much of our success to the many educators and leaders who have stepped up to lead engaging and informative workshops. This year our theme is "Better, Together!: Literacy & Numeracy". Based on last year's success, the conference will be taking place in multiple locations! We will be hosting in-person conferences in Calgary and Edmonton, and an Online option will also be available.

NOTE: Breakout sessions differ by venue.

**Our Mathematical Minds:
Why Math is the Key
to Equity at School
and in Life**

DR. JOHN MIGHTON,
JUMP Math Founder



KEYNOTES



**Robust and Explicit
Vocabulary Instruction in
the Classroom: Closing
the Vocabulary Gap**

LORRAINE REGGIN,
PhD Candidate, U of C



Registration & Questions
e: register@crcpd.ab.ca
w: www.crcpd.ab.ca

Breakout Sessions A

11:05am - 12:15pm

Gifted 101 (Elementary, Middle School)

Christine Avey & Kristi Kraychy, Calgary Changemaker School

Developing a Class Culture that Supports Engaged and Successful Problem Solvers (All Levels)

Dr. John Mighton, JUMP Math

Setting Your Classroom up for Success (Kindergarten, ECS)

Kyla Conway & Danni Muir, Providence

Interoception: Using our Body's Clues (All Levels)

Samantha Melle & Kathryn Andrais, Renfrew Educational Services

Mentorship - How You Can Help Others to Live their Best Life! (All Levels)

Harold Hoffmann, Airdrie Christian Academy

Sustainable Development Goals and Design Thinking: Design a Seed Save (Elementary, Middle)

Samantha Sirianni, Rundle Academy (presenting on behalf of Let's Talk Science)

Social Media & The Internet: How Online Interactions are Impacting Student Mental Health (All Levels)

Dr. Hayley Watson

Breakout Sessions B

1:00pm - 2:10pm

Designing to the Edges of Your Math Class (Elementary, Middle School)

Sheryl Walters & Elizabeth Thompson, Calgary Academy

A Deep Dive into Vocabulary Instruction in the Classroom (All Levels)

Lorraine Reggin

Mental Math Strategies - The Renert School Approach (Middle School)

Aaron Renert, Renert School

Process Art based on the Works of Famous Artists (Elementary, ECS)

Terri Calder, Foothills Alliance Preschool and Kindergarten

Disciplinary Literacy - Reading like a Scientist (Middle School, High School)

Neil Frail & Charity Helman, Calgary Academy

Open Parachute Community of Practice Session (All Levels)

Dr. Hayley Watson

Learning to Love Math! Math Anxiety and Social Emotional Learning (Elementary, Middle School)

Lindsey Bingley & Kathleen Phelan, Calgary Academy

Breakout Sessions C

2:20pm - 3:30pm

Math Games - Division II (Grades 4-6)

Patricia Pope, MAC Islamic School

Social Media & The Internet: How Online Interactions are Impacting Student Mental Health (All Levels) (REPEAT)

Dr. Hayley Watson

Trauma Informed Education (All Levels)

Esther Groen & Julia Lavender, Renfrew Educational Services

Coding for Literacy (All Levels)

Sue Mylde, Rundle College

Learning to Love Math! Math Anxiety and Social Emotional Learning (Elementary, Middle School) (REPEAT)

Lindsey Bingley & Kathleen Phelan, Calgary Academy

Two-Eyed Seeing Approach to Indigenous Perspectives In Math (All Levels)

Reem Ghaleb, Banbury Crossroads School

Designing to the Edges of Your Math Class (Elementary, Middle School) (REPEAT)

Sheryl Walters & Elizabeth Thompson, Calgary Academy

"Better, Together!"

February 17, 2023

Session Descriptions

KEYNOTE 1 - Our Mathematical Minds...Why Math is the Key to Equity at School and in Life Dr. John Mighton

New research on the brain suggests that math may be the most universally accessible and the most important subject for young students. But a decade of significant investments in new technologies and curricula hasn't significantly improved outcomes in math. We will discuss potential solutions to this problem including some key findings from the science of learning that could help us nurture the full intellectual potential of every student and create a more equitable and productive society.

A Deep Dive into Vocabulary Instruction in the Classroom

Lorraine Reggin

Practice identifying appropriate words for explicit instruction, using techniques for explicit vocabulary instruction and Frayer models. Gain experience using different discourse genres, inferencing, and the use of figurative language to improve reading comprehension in your students across the grades.

Coding for Literacy (All Levels) Sue Mylde

Can you use coding in your literacy classrooms? Yes! Join this session to see how you can use Block Coding (using Scratch) and Text-Based Coding (using Python) in your ELA class to integrate coding and literacy!

Suitable for BEGINNERS and INTERMEDIATE users. Bring your computers so we can code together!

Designing to the Edges of Your Math Class

(Elementary, Middle School) Sheryl Walters & Elizabeth Thompson

Instructional design is a powerful tool for creating accessible and engaging lessons in our mathematics classrooms. Intentional, universal design embeds high-impact strategies and accessible activities with a low floor and high ceiling. In this session, we will discuss the importance of intentional instructional design in mathematics, and the power accessible tasks can have in engaging students and building their understanding. Participants will leave with a better understanding of how to design to the edges of their classrooms, as well as a number of resources and strategies that they can embed into their lessons right away.

Developing a Class Culture that Supports Engaged and Successful Problem Solvers (All Levels)

Dr. John Mighton

Research in cognitive science suggests that students are more likely to become engaged and successful problem solvers when they are given sequences of challenges in which (initially) only one or two dimensions of the problem are varied at a time. By raising the bar incrementally and combining scaffolding with continuous feedback, teachers can help students learn to persevere and develop the conceptual foundations they need to tackle complex problems. We will demonstrate free resources that use these evidence-based strategies to teach problem solving. In a large randomized controlled trial, students taught by these methods made significantly more progress in problem solving than student in the control group.

KEYNOTE 2 - Robust and Explicit Vocabulary Instruction in the Classroom: Closing the Vocabulary Gap Lorraine Reggin

Learning to read involves a complex interaction of two broad components: listening comprehension and word recognition. Although seemingly simple, as outlined by the Simple View of Reading, each of these components is complex and involves all areas of learning and teaching. We will focus on vocabulary and weave together research and practical classroom applications. Come with your ideas, inspiration, challenges and triumphs to help support every child to learn new vocabulary.

Disciplinary Literacy - Reading like a Scientist (Middle, High)

Neil Frail & Charity Helman

Is reading comprehension holding your students back in your science classes? Have you ever felt nervous taking on literacy because you're not the English teacher? This session will give you the tools and strategies that will take your student's reading comprehension to the next level by teaching them how to read like a scientist. Session will include:

- Annotation strategies
- Multiple modes of presenting understanding
- Peer feedback and revision activities
- Collaborative learning exercises

Gifted 101 (Elementary, Middle School)

Christine Avey & Kristi Kraychy

An introduction to gifted learners: Theory and Practice with a focus on how to program using differentiation techniques specifically in literacy, numeracy, and Social Emotional Learning.

Interoception - Using our Body's Clues (All Levels)

Samantha Melle & Kathryn Andrais

Interoception is a pre-requisite skill for many daily life skills like knowing when we are nervous or excited, when we are hungry or thirsty, and knowing when we are becoming upset or overwhelmed. Without recognizing our body signals, accurately interpreting them and connecting them to an emotion, how can we expect to be able to maintain or restore the level of comfort we seek? Many self-regulation approaches are based on the assumption that we have basic body awareness, which is not always the case. Join us in this breakout session to dive into an experiential learning opportunity about interoception, interoceptive awareness and a few simple ways you can apply your learning into work, self-care, and leisure.

Learning to Love Math! Math Anxiety & Social Emotional Learning (Elementary, Middle) Lindsey Bingley & Kathleen Phelan

Everyone can do math! This is true, according to some of our most well-known mathematicians/educators like Jo Boaler and John Mighton. However, there is an epidemic of math anxiety in our classrooms that prevents students from fully engaging in learning math. In order to counteract this contagious condition, teachers need to create a classroom community where students feel safe enough to take risks and make mistakes. They need to help students understand the process of learning, as well as the purpose of mistakes. Through the explicit teaching of the skills, habits, and mindset of social emotional learning, all teachers can create a math classroom full of students who can take risks, make mistakes, and support each other as they learn to love math.

Session Descriptions (Cont'd)

Math Games - Division II Patricia Pope

In this workshop session you will be presented a variety of interactive games you can use to engage your students in basic number operations (+ - x ÷) and other math concepts. You will find your students bragging about you to others when you bring out these activities. This session has activities for grades 4-6.

Mental Math Strategies - The Renert School Approach (Middle School) Aaron Renert

Basic numeracy is at the forefront of mathematics education. Without developing mental math agility, the learner is destined to years of frustration and fuzziness in the math classroom. At Renert School we are deeply committed to coaching our children to acquire this fluency by using various methods and techniques. In this presentation I will discuss some of the most effective techniques we have developed for allowing kids to rely on the most powerful calculating aid they have: their brain.

Mentorship - How You Can Help Others to Live their Best Life! (All Levels) Harold Hoffman

Throughout the Ages, the art of Mentorship has been used to form great leaders and help societies and their citizens live their best lives. Come join me as we explore the secrets to enduring and effective mentorship that will help you teach anyone you are connected with how to live their best life!.

Open Parachute Community of Practice Session (All Levels)

Dr. Hayley Watson

Open Parachute School Champions and interested teachers implementing Open Parachute in their classrooms are welcome to attend this session. It is an opportunity to join Dr. Hayley Watson to share, network and ask questions.

Process Art Based on the Works of Famous Artists (Elementary, ECS)

Terri Calder

Using masterpieces by Monet, Van Gogh, Mondrian, Kandinsky and others, students explore the elements of art through process driven activities. The experiences in which they participate help to develop fine motor skills and strengthen academic understanding of ECS concepts such as line, colour, shape, texture. Although geared to ECS children, the activities and experiences presented can easily be adapted for Elementary aged students.

Setting Your Classroom up for Success (Elementary, ECS)

Kyla Conway & Danni Muir

Diving into the physical classrooms of early childhood education and understanding the intentionality behind how they are set up, organized and structured to provide the most optimal environment for student success in both learning and play.

Social Media & The Internet: How Online Interactions are Impacting Student Mental Health (All Levels)

Dr. Hayley Watson

This session will provide educators with an understanding of the impacts of social media and other online interactions on student learning, peer dynamics, and self-esteem. They will explore ways in which online exposure impacts short and long-term mental health outcomes, as well as strategies for helping their students counteract these impacts.

Sustainable Development Goals and Design Thinking: Design a Seed Save (Elementary, Middle School) Samantha Sirianni

During the last 2 years our students have experienced many "ups and downs" with their learning. This has left many of our students feeling uncertain about their ability to impact their own learning. Designing a classroom around executive functioning creates a sense of security and stability for students and creates a common ground for learning conversations with students. This session will discuss executive functioning, how to introduce this to your students and how to collaboratively create a classroom around students executive functioning needs.

Trauma Informed Education (All Levels)

Esther Groen & Julia Lavender

Do you want to learn more about early childhood trauma and the impact this has on the developing brain? This workshop will share information about early childhood trauma and how this may impact the way a child learns and behaves. We will spend some time discussing what trauma means and considerations for working with children who are managing traumatic stress. We will then discuss developmentally appropriate strategies for supporting functioning. Lastly, we will explore the meaning of trauma-informed practice and how it can be incorporated into education as a whole.

Two-Eyed Seeing Approach to Indigenous Perspectives In Math (All Levels) Reem Ghaleb

This session will explore ways to integrate Indigenous Knowledge with math outcomes through project-based learning in the classroom using a Two-Eyed Seeing approach. Such projects include mini tipis, robot powwows, flute making, and more. The focus of this session will be on the curricular connections to the mathematics outcomes but will also touch upon connections to other curricular outcomes as well, including art, science, language arts, health, and more!