



Big Ideas: The Essential “Toolkit” for All Levels of Math

Facilitator(s):	Keith Van De Keere
Date:	November 06, 2018
Time:	9:00 am – 3:30 pm
Cost:	\$50.00 (includes lunch, which is not prepared in a nut/gluten-free environment)
Location:	Edmonton (ERLC Office at Elmwood School) Room 17/18, 16325 - 83 Avenue
Session Code:	19-MA-115



Target Audience

Grades 1-6 Math Teachers

About this Learning Opportunity

Everything in math is tied to big ideas. They are the foundation of number sense. These core concepts can serve as an organizing structure for teaching and learning. They are what young children should be wrestling with. They represent what we are meant to be assessing!

Students with a deeper understanding of the Big Ideas:

- have better mental math skills and automaticity of facts
- are more willing to think critically to find the “why” behind the math
- can generalize concepts because they understand that the big ideas never go away and never change
- bring flexibility to problem solving that spills over to problem solving in their daily lives.

When we understand the big ideas, we have a better understanding of the intent of each outcome and therefore better able to assess what really matters!

About the Facilitator(s)

Keith Van De Keere believes that when math teaching is focused on deep understanding of the big ideas, students have a better chance of experiencing enduring success, and teachers can better see the natural flow between teaching and assessment. To promote and support this kind of teaching, Keith is booked to do at least 100 demo lessons in classrooms during this school year. Each demo is followed up with lesson planning aimed at engaging students, impacting their level of understanding, and inviting them to see math as an investigation.

Keith asks the teachers he works with to aim for planning lessons that are infused with visual and verbal experiences for students. To this end, most lessons begin with either a visual and/or a contextual representation. Teachers then act as facilitators and “kid watchers” as the discussion revolves around the representations rather than just about numbers. They ask questions that keep the investigation moving forward and keep it in the hands of students. The focus is on understanding rather than having ways to get answers.

Keith has worked with Dr. Cathy Fosnot, who is a North American leader in constructivist learning and in changing the culture of math classrooms. In doing so, he has worked with K - 9 teachers and school divisions in Ontario, Manitoba, San Francisco and Hartford but does the majority of his work supporting teachers in north central Alberta.

This learning opportunity is being provided through funding from Alberta Education.