



Fractions and Decimals: One Big Idea

Facilitator(s):	Keith Van De Keere
Date:	March 18, 2020
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:	20-MA-043

Target Audience

Grades 4-6 Math Teachers

About this Learning Opportunity

Decimals and fractions are key areas of number sense needed for success in Math. We have to make sure we depict them as different symbolic representations of the same big idea.

We will look at:

- meaningful activities to promote a deep understanding of decimals and fractions
- decimals as an extension of our place value system and as fractions with special rules
- “unit fractions” and “unit decimals”
- common misconceptions about decimals and fractions
- four models we need kids to see and use.

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 subsidized through funding from Alberta Education.