

Thinking101

Summer Institute 2018

Number Sense before Number Facts

Location: Grande Prairie Regional College

Dates: August 20- 22 Numeracy/Literacy building the basics pre- K to Grade 3
August 22-24 Bridging the Gaps Grade 3 to 6

Register for 3 Days: \$399 5 Days \$ 525



It's time to register!

Teachers who participate in summer institute want to continue to build their personal knowledge and understandings of the big ideas of math.

Teachers who participate in summer institute love to examine and explore literature, science and literacy links that can make their math lessons more engaging and effective.

Every summer institute is different. The tasks, the literature, the practice with models and problems designed around the big ideas of Number, Space and Shape and Measurement. Tasks designed around visuals that are differentiated so as to provide entry points for all students, regardless of their age and ability levels.

This summer we will focus on:

- a newly created **diagnostic tool for** identifying grade level gaps in Number Sense and Number reasoning skills.
- a set of curriculum-based tasks designed to overcome those gaps.

Success with number facts and number operations is directly linked to number sense. Case, Griffin, and Siegler (1994) found that children who have a well-developed Number Sense are able to succeed in early math (and beyond), while children who don't are at much greater risk of falling increasingly further behind. The good news, any child can develop Number Sense (Griffin, 2004). The bad news, only if their teachers deliberately and intentionally focus on tasks that build number sense before number facts and number relationships before computations and operations. (Clements & Sumara, 2011)

The items included in each level of the diagnostic have been matched to specific outcomes in the Alberta Program of Studies. During institute, participants will study how the items at each grade level link to basic skills, facts and strategies, and why our teaching **MUST** focus on number sense and reasoning before number facts. Participants will receive a copy of the diagnostic to pilot in their classroom as well as a range of visual materials, tasks and problems that support teaching for number sense.

Next year I want to have all my staff come to Institute. I cannot believe how inspired and excited I am to get back in the classroom and help students link literacy and numeracy into such engaging tasks. I had no idea how "mathematical" I am as I did not do well in school. Now I see it was the teaching, not the math. (Cathy King, 2017)

Why Summer Institute? NO SUBS, NO SUB PLANS!

Register on line: www.thinking101.ca or by email: [Attention Geri gloryway@thinking101.ca](mailto:AttentionGerigloryway@thinking101.ca)