Webinar Guide

Multiplicative Thinking

Elementary Mathematics Professional Learning

This webinar guide is designed for use by instructional leaders and professional learning communities or as a self-paced study to explore Multiplicative Thinking in Elementary Mathematics.

Full Webinar: 57:40 minutes

Start Times

Big Idea 1:	9:17
Big Idea 3:	19:22
Exemplars:	40:52
Learning Guide:	47:44

We want kids to eventually see multiplication and division as an efficient upgrade for repeated addition and subtraction.

Synopsis: This webinar provides an overview of multiplicative thinking, focusing on the different strategies for multiplication and division in the elementary years.

Key Understandings

Multiplicative thinking is:

- A capacity to work flexibly with the concepts, strategies and representations of multiplication and division
- Going beyond memorization of basic arithmetic skills
- The means to communicate multiplicative understanding effectively in a variety of ways

Instructional Practices

- Students benefit from thinking flexibly. They need to see that the Distributive Property is a powerful strategy.
  - 6 x 5 is the same as
    - (3 x 5) + (3 x 5)
    - (2 x 5) + (4 x 5)
    - (2 x 5) + (2 x 5) + (2 x 5)
- Different tools are beneficial to different students:
  - Base Ten Blocks
  - Arrays
  - Number lines
  - Cuisenaire Rods

Questions for Discussion

- Can you find more than one way to multiply 18 and 37?
- How do we help students to better communicate their strategies?

Reflection

- How might you know if your students have a solid understanding of multiplicative thinking?
- What am I already doing in my classroom to support the development of multiplicative thinking?
- What is one strategy I can add to my "classroom toolbox" to support the development of multiplicative thinking?

For more information

- Please visit our online learning guide at:
  - http://learning.arpdc.ab.ca
- Visit your local consortium's website to view upcoming learning opportunities, or to discuss customized follow-up possibilities.

Acknowledgement:

The *Elementary Mathematics Professional Learning* project is led by ARPDC and funded through a grant from Alberta Education to support implementation.

Alberta Regional Consortia
https://arpdc.ab.ca