Elementary Math Focus Afternoon

September 28 2015

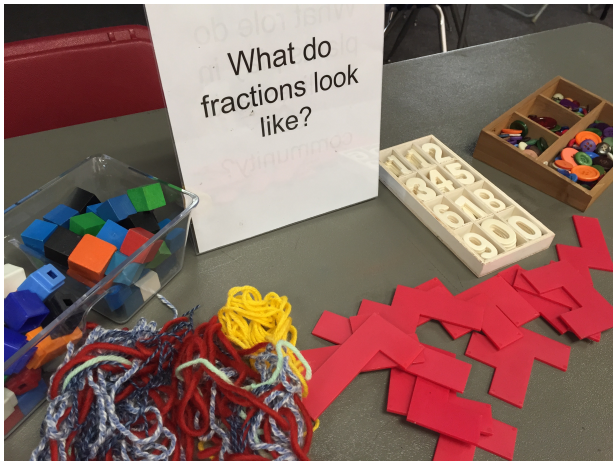
Steves Elementary

12:30 Welcome
Overview of Afternoon
The Redesigned Curriculum

1:00 Session #1

2:00 Session #2

2:55 Meet back in gym
Door Prizes



Please help out by stacking a chair or two at the end of the day.

Schedules of Sessions

Session #1 – 1:00-1:50pm	Session #2 – 2:00-2:50pm
Block Play K-2 with Marie Thom	Block Play K-2 with Marie Thom
High Yield Routines 1-3 with Michelle Hikida	Mathematical Inquiry K-4 with Michelle Hikida
Our K-2 Math Program with Ellen Reid and Kathleen Paiger	High Yield Routines 4-7 with Braunwyn Thompson
Montesorri Math K-7	**Montessori Math K-7**
Mathematical Data Sets 2-7 with Brooke Douglas & Lisa Schwartz	Mathematical Data Sets 2-7 with Brooke Douglas & Lisa Schwartz
Screencasting – Capturing Math Talk K-7 with Chris Loat	Screencasting – Capturing Math Talk K-7 with Chris Loat
Elementary Coding 4-7 with Fred Harwood	Big Ideas in Multiplication 4-7 with Weily Lin
Computational Fluency (K-7) with Janice Novakowski	Place-Based Mathematical Inquiry with Janice Novakowski

After the second session, please join us in the gym…door prizes will be drawn at 2:55pm

session descriptions and locations on next pages…

Session Descriptions and Locations

Session #1 – 1:00-1:50pm

Block Play with Marie Thom (K-2) **Room #13**

This session will show how block play covers many aspects of learning across the curriculum. Participants will have opportunities to explore and play with a variety of blocks to understand their potential for use in the classroom.
A comprehensive handout will be given. References to architecture will be highlighted through picture books, photography, and other resources.

Our K-2 Math Program with Ellen Reid & Kathleen Paiger (K-2) **Room #10**

With a focus on the redesigned curriculm, we will share our collaborative approach to planning and teaching multiple grades in a play based primary math program that meets the diverse needs found in a classroom. We will explore how we use manipulatives, iPads and Twitter to enhance our program, and e-portfolios to celebrate student's mathematical thinking and to communicate learning. We also will discuss how a Math Night is an exciting way for students to teach parents and demonstrate all that they are learning in the classroom.

High Yield Routines with Michelle Hikida (1-3) **Room # 3**

Curricular Competencies and Content

NCTM has written a book highlighting 7 routines that you can use as introductory activities or mini-lessons with your class and these activities promote powerful mathematical thinking and connections. In this session we will look at each routine through student examples and be engaged in the activities ourselves, discussing how these routines build a mathematical community of thinkers and reasoners.

Montessori Collaboration with Braunwyn Thompson & Dawn Lessoway (K-7) **Room #18**

This is a brainstorming, collaborating and planning sessions intended to provide Montessori teachers time to learn together. We will be looking for connections and pathways for understanding and implementing the new transforming curriculum documents for Math through the lens of Montessori philosophy, pedagogy and materials. Please bring your wonderings and questions so we can collaborate together. The second hour is for those would like to continue collaborating and planning with Montessori colleagues.

Mathematical Data Sets with Brooke Douglas & Lisa Schwartz (2-7) Room #14

Big Ideas

How can we use photos and images to engage students in thinking and communicating about Math concepts? This hands-on session will explore how we can develop language and concept attainment through fun, interactive learning for all students. A focus will be on developing oral language in all learners - French and English. We will also look at using the critical thinking competency in formative assessment for mathematical thinking.

Screencasting –Capturing Math Talk with Chris Loat (K-7) Library

Technology & Communication

The iPad provides opportunities for K-7 students to explain their thinking in a variety of ways. We will examine the apps 30 Hands, Tellagami, and Explain Everything to see the different ways these apps enable students to orally explain and share what they know in your math class. We will also share ideas of how to manage this type of lesson in your classroom. If possible, please bring an iPad with the apps already loaded.

Elementary Coding with Fred Harwood (4-7) Computer Lab

Creative Thinking

Mathematical reasoning and creativity can easily be accessed through the simple but powerful LOGO language. This workshop will use two website resources that can make this accessible for all grades. Students are empowered when they see themselves controlling the mathematics to create beauty and fun. Math is something that they do!

Computational Fluency with Janice Novakowski (K-7) Gym

Curricular Competencies & Content

In the redesigned curriculum, computational fluency remains a highlighted goal with specific content identified in this area. A student with computational fluency has a strong sense of number and is a flexible thinker who draws upon a range of mathematical strategies when working with number operations. Instructional practices such as number talks, teaching of mental math strategies and use of visual tools will be shared along with examples showing the continuum of fluency from Kindergarten through grade 7.

Session #2 – 2:00-2:50pm

Block Play with Marie Thom (K-2) **Room #13**
Repeat from Session #1

Mathematical Inquiry with Michelle Hikida (K-5) **Room #3**
Big Ideas & Inquiry
Inquiry-based approaches to teaching and learning are a focal aspect of the redesigned curriculum. Are you wondering what inquiry looks like in a math class? Come and see examples of ways to use student and teacher generated inquiry questions to guide mathematical thinking and learning.

Montessori Math (K-7) **Room #18**
A collaboration session for Montessori teachers.

High Yield Routines with Braunwyn Thompson (4-7) **Room #10**
Curricular Competencies and Content
This resource is a powerful tool for teachers in their mathematics classroom. NCTM has written a book highlighting 7 routines that you can use as introductory activities or mini-lessons with your class and these activities promote powerful mathematical thinking and connections. In this workshop we will look at each routine through student examples and be engaged in the activities ourselves.

Mathematical Data Sets with Brooke Douglas & Lisa Schwartz (2-7) **Room #14**
Repeat from Session #1 *Big Ideas*

Screencasting – Capturing Math Talk with Chris Loat (K-7) **Library**
Repeat from session #1 *Technology & Communication*

Big Ideas in Multiplication with Weily Lin (4-7) **Room #7**
Big Ideas
This session will focus on the big ideas behind multiplication, focusing on using the area model to understand, explain and justify multiplication computation. Weily is the secondary math education facilitator at Steveston-London Secondary School and will share the importance of the importance of multiplication as students transition from elementary to secondary school.

Place-Based Mathematics with Janice Novakowski (K-7) **Gym**
Inquiry & First Peoples Principles of Learning
A place-based approach to teaching and learning mathematics connects students to their community, local cultures and the environment through a stance of inquiry. A strong connection to place is fundamental to the First Peoples Principles of Learning and provides opportunities for high engagement and personalized learning. Examples of learning experiences that are place-based will be provided.