

K-12 Mathematics



in the Richmond School District June 2016

BC's Redesigned Curriculum

Changes to the mathematics curriculum include a focus on the processes of mathematics through the curricular competencies, contextualizing mathematical experiences in place, community and culture, planning with mathematical big ideas in mind, content addition of financial literacy and a more explicit focus on computational fluency.

A final draft of the K-9 Mathematics Curriculum Framework can be found on the BC Ministry of Education website here:

<https://curriculum.gov.bc.ca/curriculum/mathematics/k>

The information about the drafts for 10-12 mathematics can be found here:

https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/pdf/m_10-12.pdf

The most current versions of the draft 10-12 courses and corresponding curriculum information is currently hosted on the BCAMT website here:

<http://www.bcamt.ca/revised-curriculum/>

The BCAMT is also starting to compile resources created by BC teachers that support BC's redesigned curriculum. These resources can be found here:

<http://www.bcamt.ca/resources/>

Curriculum Implementation Days

On both Curriculum Implementation Days in Richmond this year, there were opportunities for teachers of mathematics to come together to share ideas and concerns, suggest resources to each other and collaborate on planning for the redesigned curriculum.

Elementary Math Focus Afternoons

This year, Richmond hosted two elementary math focus afternoons – September 28 and January 18. Staffs from schools with a math goal or a professional interest in mathematics came together to attend sessions facilitated by Richmond teachers.

Provincial Numeracy Project

Richmond was one of seven districts in BC that was part of a pilot/focus group for BC's Provincial Numeracy Project. This project is based on the highly successful model from Changing Results for Young Readers. School teams from Byng, Westwind and Kidd were involved this year. The provincial website with resources to support teachers and students will be released this fall.



Grades 3-5 Big Mathematics Ideas

In its third year, this afterschool series looks at the big mathematical ideas for grades 3-5 specifically focusing on fractions, multiplication and division and large numbers (place value). Woven into these sessions were key aspects of the redesigned curriculum framework in mathematics including teaching and learning through inquiry, the use of technology and the importance of spatial awareness and reasoning.



K-5 Reggio-Inspired Mathematics Project

Richmond is one of nine districts participating in a BCAMT-supported cross-district collaborative professional inquiry project looking at how Reggio-inspired principles and practices can enhance the teaching and learning of mathematics. This inquiry-based approach involves both providing students with open-ended provocations to inspire mathematical thinking as well as both short-term and long-term inquiry projects that might involve the whole class or small groups of students.

Grades 6-9 Bridging Mathematics

Teachers at some of our elementary and secondary schools are working together to support student success in mathematics as the bridge from elementary to secondary school. Schools are collaborating in different ways to share perspective and develop common understandings and ways to support our students. Some secondary school math departments have regular meetings with their neighbouring elementary grades 6&7 teachers while other school teams visit each others' classrooms to gain perspective on where students are coming from and where they are going.

Curricular Competencies

As we think about the development of the curricular competencies in mathematics, some resources that support the "doing" (reasoning, modeling, estimating, problem-solving, communicating, connecting, etc) of mathematics include:

High Yield Routines – an NCTM publication (K-9)

Number Sense Routines by Jessica Shumway (K-3)

Number Talks by Sherry Parrish (K-7)

Making Number Talks Matter by Cathy Humphreys and Ruth Parker (3-9)

Estimation 180 - estimation180.com (K-12)

Which One Doesn't Belong (WODB) - wodb.ca (K-12)

Richmond School District K-12 Mathematics and Science Blog

A district blog is maintained to share what is happening in the areas of mathematics and science in the Richmond School District. The blog address is:

<http://blogs.sd38.bc.ca/sd38mathandscience/>

If you have anything you would like to submit to be posted on the blog, please email information and photos to Janice at jnovakowski@sd38.bc.ca