

2014-2015 Mathematics Action Plan

Once again there is lots of discussion in the media about teaching and learning in mathematics. Last week I attended a meeting of the Council of Ontario Directors of Education (CODE) where this discussion continued. We had the opportunity to hear directly from the The Honorable Liz Sandals, Minister of Education; George Zegarac, the Deputy Minister; and Mary Jean Gallagher, the Assistant Deputy Minister responsible for the Student Achievement Division. Considerable work has been done by the province.

The first piece of work is in the analysis of recent international, national and provincial assessments. Internationally, Ontario's scores have experienced a decline in overall scores on the 2012 Programme for International Student Assessment (PISA), which is a test for 15 year olds, and the 2011 Trends in International Mathematics and Science Study (TIMSS), which is a test for students in grade 8. However, Ontario continues to rate as one of the top ranking jurisdictions in the world. At the national level, Ontario performed similarly to Alberta, with only Quebec outscoring those two provinces on the 2013 Pan-Canadian Assessment Program (PCAP). Provincial assessments have shown a decline in scores at the elementary level and some improvement in secondary. The most interesting aspect of the analysis is that Ontario students do well in basic facts and arithmetic. Where they are lacking is in their ability to know how to apply and when to apply this knowledge to solve problems in every day interactions. This clearly tells us the need for a balanced mathematics program – one that emphasizes the development of basic arithmetic skills as well as problem-solving skills.

The Ministry has developed *Ontario's 2014-2015 Mathematics Action Plan*. It outlines the Seven Foundational Principles for Improvement in Mathematics, K-12. The principles include:

Focus on Mathematics

Coordinate and Strengthen Mathematics Leadership
Building Understanding of Effective Mathematics Instruction
Support Collaborative Professional Learning in Mathematics
Design a Responsive Mathematics Learning Environment
Provide Assessment and Evaluation in Mathematics that Supports Student Learning
Facilitate Access to Mathematics Learning Resources

We're well on track in the OCDSB. We've taken a close look at our programs as well. Last November, Committee of the Whole received a report outlining our *2014-2015 District-wide Action Plan for Numeracy (K-12)*. Here is some of the work going on in our District:

- [OCDSB Balanced Mathematics Instruction, K-12](#) – a framework emphasizing the importance of both operational skills and problem solving.
- [OCDSB Glance at a Sample Week in Mathematics instruction](#) – a document designed to help junior and secondary teachers plan their weekly lessons. Primary and intermediate versions will be released this year.
- *System-wide Networks for Educators* – professional learning for every grade 2, 3, 5 and 6 teacher of mathematics in the District, focusing on proportional reasoning. Grades 7 to 10 math teachers are discussing proportional and algebraic reasoning.
- *Instructional Coaches* – facilitating professional learning among teachers in identified schools.
- *Student Voice* – encouraging students to make their thinking visible through the use of graffiti boards, white boards, and the effective use of math manipulatives.

- *Parental Engagement* – our OCDSB Numeracy Committee, comprised of staff and community members, has published *A Guide for Parents/Guardians* and have plans to develop a bank of resources and tools to help parents encourage healthy mathematical thinking at home.

These are just a few ways that we are improving teaching and learning in mathematics. We know that mathematical thinking is important for every child in our school district. Our teachers, support staff, and administrators are committed to continually improving our professional practice in mathematics. We'll keep you posted on our students' progress!

Jennifer