

TCDSB K to 12 Professional Learning Form 2016-2017



SCHOOL - Prin - Sup	St Simon, Boccia, Area 1
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BACKGROUND – DATA ANALYSIS

Student Achievement Data (EQAO, CAT4, etc.)	Perceptual Data (Survey data, School Climate, etc.)	Demographic Data (N tiles, etc)	Program Data (Empower, 5 th Block, Taking Stock, SSI, etc.)	Other (SSLN, EDI, etc.)
-Mathematics The overall trend in CAT4 has indicated an upward trend with Gr. 5 and 7 and a slight decrease with Gr. 2 -EQAO is currently unavailable	- There is a stable core population with a growing population of ESL and new Canadians	- Two distinct income levels, high (75%) and low (25%). With a rise in the number of low income families. As well as, non-English speaking and low parent education families.	- Language Impairment Program	-Intermediate teachers worked with the SSLN teams -math coach worked with grade 6- 8 teachers -Math Study Gr. 4-6

URGENT CRITICAL LEARNING NEED Explain in 140 characters or less ... student learning problems we need to solve - Professional learning focus for this year.	- Math, in the areas of open response in all strand areas. Students will develop the skills needed to solve multi-step problems.
From the data, what learning condition will support increased achievement?	-EQAO Mathematics: -Primary has maintained the provincial average for the past 3 years. -Junior has continued to struggle to achieve the provincial average for the past -4 years, however there was a gain in 2013-2014. -EQAO Reading and Writing: -Primary and Junior have demonstrated an upward trend for the past 5 years.

PROFESSIONAL LEARNING PLAN TO MEET URGENT CRITICAL NEED:

Collaborative Inquiry Question (What is the problem of practice?)	How do we support students in the process of developing the skills and strategies to solve problems multiple step problems?
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<p>If... Then... Statement:</p>	<p>If teachers assist students to recognize and identify different steps requires to solve problems involving more than one step. Then they will be able to build their own repertoire of strategies to use when solving multi-step problems.</p>
<p>Learning Goals (related to urgent critical learning need)</p>	<p>To help students develop strategies to solve multi-step problems.</p>
<p>Marker students who will receive intervention (subgroups e.g., achieving at 2.5-2.9, Applied, gender, Grade(s), etc)</p>	<p>-Students on the move as determined by each teacher in relationship to DIP information</p>
<p>Actions/Interactions (What will we do to meet our goals?)</p>	<ul style="list-style-type: none"> -Teachers familiarize themselves with different multi-step problem solving strategies; -Teachers model solving a variety of multi-step problems using different strategies; -Teachers collaborate with other teachers to identify different strategies used in solutions; -Teachers purposely select questions that elicit various solutions and steps; -Teachers give students opportunities to solve multi-step problems in different ways; -Teachers identify and name the strategies used by students to solve multi-step problems; -Teachers expose students to other strategies if students are limited to only one strategy; -Collect student solutions that show different strategies; Teachers challenge students to identify and name strategies;
<p>Strategies to address the needs of students who have an IEP or are ELL</p>	<ul style="list-style-type: none"> -more time and attention given by teachers -focused intervention -peer assistance
<p>PD Required for Staff</p>	<ul style="list-style-type: none"> -Recognize and identify different multi-step strategies; -Create professional community to analyze student solutions; -Co-plan a multi-step lesson and choose an appropriate problems that can be solved using a variety of strategies and steps; -Co-teach a multi-step lesson to recognize and identify strategies in student solutions; -Analyze how multi-step strategies evolve; -Share and Analyze evidence that support learning goal and "if" "then" statement; -Reflect on learning goal and "if" "then" statement and show evidence of success criteria;

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Measures/Evidence of Success to be used	<ul style="list-style-type: none"> -Analysis of student work; -Pre and post assessments; -Students' ability to communicate their understanding of multi-step problems (triangulation of data: conversation, observation, product); -Students' ability to justify their thinking; (student voice)
Resources Required (human, material, #code days)	<ul style="list-style-type: none"> -Big Ideas by Marian Small -Making Math Meaningful by Marian Small -Good Questions: Great Ways to Differentiate Mathematics Instruction by Marian Small -Family Math Night- Parents and students learn Math together -Khan Academy- Pilot project focused on Math. -Online resources: 21C application of knowledge -Monographs (MOE) -Code Day 1: Understanding the school's Critical Need (DIP analysis) SIT Team -Code Day 2: Understanding Various Representations of Multi-step problem solving and focus on mental math. Planning Session: Co-plan and Co-teach -Code Day 3: Co-Teach; Reflect and analyze student work -Code Day 4: Assessments