

# TCDSB K to 12 Professional Learning Form 2015-2016



<b>SCHOOL NAME</b>	St. Demetrius	<b>Sup. Area</b>	<input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> Monsignor Fraser Principal Name: Marika Boshyk
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**Based on analysis of the data, in collaboration with staff identify a critical need area or strategy that addresses the learning of your school community (i.e., assessment, problem solving, inquiry learning, learning skills, etc.)**

## 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 <sup>th</sup> Block, Taking Stock, etc.)	Other (SSLN, SSI, EDI, etc.)
<p><b>CAT4 data indicates:</b>                      Areas of Need for Current Grade 3 students :                      - SUBTRACTION OF WHOLE NUMBERS was an area of need for 23% of the students who scored below expectation</p> <p>Areas of Need for Current Grade 6 students:                      -DECIMALS AND WHOLE NUMBER OPERATIONS was an area of need for 36% of the students</p> <p>Area of Need for Current Grade 8 students:                      -WHOLE NUMBER OPERATIONS AND DECIMAL OPERATIONS was an area of need, for 50% of the class</p>	<p><b>EQAO</b> Perceptual data indicates that Gr. 3 students may benefit from activities (i.e., Mental Math) to increase self confidence in Math.</p> <p><b>Safe and Caring Catholic School Climate Survey:</b>                      - Students feel it is very important for them to do their best in school, and the adults in school have high expectations for learning                      - Approximately 90% of students indicate that learning is important to them.                      -Overall, the majority of students (approximately 90%) feel safe throughout the school.</p>	<p>- approximately 25 % of school student population consists of ELL learners at various stages of English Language development                      -teachers feel this impacts all areas of the curriculum                      - mid to high income families</p>	<p>No specialized programs</p>	<p>SSLN work in grade 7 and 8 last year focused on use of technology in Math (i.e., Prodigy)</p>

<i>From the data, what key factors are identified for increasing Student Achievement?</i>	<p>-Computation and estimation on the CAT4 indicate an area of need.                      -Mental Math skills which can be applied in problem solving in all Math strands.                      -Increased confidence in Math leads to increased student achievement.</p>
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<b>URGENT CRITICAL NEED</b>	<p><i>Explain ... what are the student learning problems we need to solve? Professional learning focus for this year.</i></p> <p><b>Students need a variety of mental math strategies and skills, and need encouragement to apply mental math strategies more consistently.</b></p> <p><b>In the Primary Division: students need strategies to solve subtraction of whole numbers with regrouping.</b></p>
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**PROFESSIONAL LEARNING PLAN TO MEET URGENT CRITICAL NEED:**

Collaborative Inquiry Question (What is the problem of practice?)	<p><b>How do we support students in developing and utilizing mental math strategies?</b></p> <p><b>In primary: how do we support students to develop strategies in subtracting whole numbers with regrouping?</b></p>
<i>If... Then... Statement:</i>	<p><b>If</b> teachers assist students to become more proficient in applying <b>mental math strategies</b> in daily curriculum <b>then</b> students will be more confident and apt to use these strategies in all areas of math.</p> <p>Primary Division: If teachers assist students to identify different strategies in <b>subtracting whole numbers with regrouping</b>, then they will be able to use different strategies when subtracting whole numbers with regrouping.</p>
Learning Goals (related to urgent critical need)	<p>-To help students develop and utilize a variety of mental math strategies in order to strengthen computational skills and number sense</p> <p>-To help students extend the use of mental math skills to solve every day problems</p> <p>Primary Division: to help students develop strategies to solve subtraction of whole numbers with regrouping</p>
Actions/Interactions (What will we do to meet our goals?)	<p>Establish common goals/collaborative planning and teaching</p> <p>Teachers familiarize themselves with a variety of mental math strategies in all strands (Primary Division: subtracting whole numbers with regrouping strategies)</p> <p>Teachers model, share different strategies</p> <p>Teachers collaborate with other teachers to share resources</p> <p>Increased use of technology for math activities</p> <p>Teachers select questions that elicit various mental math strategies</p> <p>Teachers give students opportunities to learn from each other</p> <p>Teachers may provide mental math warm up questions prior to lessons</p> <p>Teachers may include mental math on strand tests</p> <p>Collect student solutions that show different strategies</p> <p>Teachers challenge students to explain/present strategies</p> <p>Teachers reinforce basic skills /facts in the 4 operations</p> <p>Anchor charts and Math walls in evidence in classrooms</p> <p>Display student work/thinking in classrooms and hallways</p> <p>A Problem of the Month/ Bansho may be posted in hallway</p> <p>Math games and challenges</p> <p>Use of math manipulatives</p> <p>Invite Math Resource teacher to support learning</p> <p>Develop professional learning opportunities for teachers</p>
PD Required for Staff	<p>Develop a greater repertoire of mental math strategies</p> <p>Recognize and identify different mental math strategies</p> <p>Request code days in order to develop mental math understanding and strategies</p>

<b>Measures/Evidence of Success</b>	<p>Analysis of student work</p> <p>Oral, written and visual assessment : (pre and post) assessments</p> <p>Formal assessments (EQAO, CAT4)</p> <p>Results of Safe and Caring Catholic School Climate Survey</p> <p>Students are able to communicate their understanding of various mental math strategies used</p> <p>Students show increased confidence with using mental math strategies</p> <p>Students are able to justify their thinking</p> <p>Student work in evidence in classrooms and hallways</p> <p>Consider class math buddies once a month</p> <p>Teacher observation</p>
<b>Resources Required (human, material, code days)</b>	<p>Ministry of Education Math DVDs</p> <p><u>Making Math Meaningful</u> by Marian Small</p> <p><u>Good Questions: Great Ways to Differentiate Mathematics Instruction</u> by Marian Small</p> <p>Monographs (MOE)</p> <p>Math websites (MOE)</p> <p>Code Days: Understanding Mental Math Strategies; Resources; Assessments; Reflect and Analyse Student Work</p> <p>Supplementary resources: JUMP Math, PRISM, My Ontario Math, Math Smart, Leaps and Bounds</p>

Please send the completed copy to your Area Superintendent with a copy to N. D'Avella (Secondary) D. Koenig (Elementary) by September 25, 2015.

**Questions to Consider:**

- Are we being collaborative in our decision making?
- Are we improving instructional leadership in our school?
- How are all stakeholders involved in the Professional Learning Plan?
- Does the plan build capacity amongst our staff related to student need?
- Are we using high yield instructional strategies? What does research say about this student learning problem?
- Have we increased the amount and quality of learning related to our student need?