

# TCDSB K to 12 Professional Learning Form 2016-2017



SCHOOL - Prin - Sup	St Roch, Jackson, 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 <sup>th</sup> Block, Taking Stock, SSI, etc.)	Other (SSLN, EDI, etc.)
<p>-Report card data for grade 6 cohort-58% of student are receiving C-D (level 1 and 2) in Number Sense</p> <p>-Report card data for grade 6 cohort-52% of student are receiving C-D (level 1 and 2) in Measurement</p> <p>-Report card data for grade 6 cohort-47% of student are receiving C-D (level 1 and 2) in Geometry</p> <p>-2014-2015 Grade 3 EQAO Mathematics data for the grade 6 cohort- 37% at level 3, 43% level 2, 14% level 1</p> <p>-Gr 7- did Mock Grade 6 EQAO in September- areas of urgent critical need were understanding Fractions, Decimals and Percent, also Geometry and Measurement</p>	<p>-over 33% of students gave no response any of the learning skills questions-over -33% of students gave no response to questions 20-22 on mindset and learning</p> <p>-about 58% of students report they use learning goals and success criteria. This has been a focus for our SLIP for the past 3 years</p> <p>-the lack of response suggests students do not understand learning skills or attitudinal attributes such as mind set</p>	<p>-81 IEPs</p> <p>-27 ELL</p> <p>-49.4% of students speak a language other than English at home-Ntile 2</p> <p>-30.5% families receive financial assistance- ntile 1</p> <p>-34% Low Income families- Ntile 2</p> <p>-34% Single parent families- Ntile 2</p> <p>-23% of parents did not complete high school - ntile 1</p>	<p>-Empower- 16 students are receiving the program.</p>	<p>SSLN focus last year was studying math content and working on bansho/board writing, co-construction of learning goals and success criteria</p>

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<p>were areas of concern. Open Response questions, specifically Application and Thinking questions were an area of concern</p> <p>-Gr 4 and Gr 5 - did Mock Grade 3 EQAO in September- revealed concern around Open Response questions, specifically Application and Thinking questions</p>				
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<p><b>URGENT CRITICAL LEARNING NEED</b>          Explain in 140 characters or less ... student learning problems we need to solve - Professional learning focus for this year.</p>	<p>Mathematics- problem solving and communication, with an emphasis on reasoning and proving, content- fractions, decimals and percent</p>
<p>From the data, what learning condition will support increased achievement?</p>	<ul style="list-style-type: none"> <li>-Improving student explanation (communication and reasoning) of their mathematical thinking to problems</li> <li>- co-constructing mathematical concepts, methods and procedures from students' mathematical thinking during After (Consolidation)</li> <li>-co-construction of learning goals and success criteria</li> <li>- bansho (board-writing) provides students with visual record of their collective thinking and modeling of strategies and solutions</li> <li>-student note-taking which requires students to process their thinking through several transitions of receptive and expressive language, in oral, concrete models and in written forms</li> <li>- a focus on high expectations and providing timely feedback</li> </ul>

**PROFESSIONAL LEARNING PLAN TO MEET URGENT CRITICAL NEED:**

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<p>Collaborative Inquiry Question (What is the problem of practice?)</p>	<p><b>What mathematics must students understand conceptually with precision to be successful in their mathematics learning? How do teachers need to know mathematics to implement effective lessons?</b></p>
<p>If... Then... Statement:</p>	<p>If the St. Roch staff improve their mathematical pedagogical knowledge by studying mathematics for teaching, then their mathematics lesson planning, and instruction (questioning, decision making) will improve student achievement in mathematics.</p>
<p>Learning Goals (related to urgent critical learning need)</p>	<p>Develop precision in students' mathematical understanding and communication, orally, using concrete materials, labeled diagrams and written explanations. Identify and co-construct mathematics success criteria in relation to lesson learning goals with students, recorded in Highlights/Summary</p>
<p>Marker students who will receive intervention (subgroups e.g., achieving at 2.5-2.9, Applied, gender, Grade(s), etc)</p>	<p>Each teacher will choose three students in the 2.5 to 2.9 achievements range in order to track their progress through the study. Teachers will collect artefacts, assessments, anecdotal evidence, and student work samples for these students</p>
<p>Actions/Interactions (What will we do to meet our goals?)</p>	<ul style="list-style-type: none"> <li>-Identifying trajectories through school wide problem solving questions (ELP-8)</li> <li>-Participate in Math Study Groups where we study the math content and practice board writing, co-construction of learning goals and success criteria</li> <li>-Diagnostics to be used at the beginning of each unit</li> <li>-co-plan at math study sessions and practice the math in between the math study sessions</li> <li>-bring interesting work samples and problems of practice to share and discuss at the math study sessions</li> <li>-school wide math problems to be solved and solutions analyzed for areas of improvement</li> </ul>
<p>Strategies to address the needs of students who have an IEP or are ELL</p>	<ul style="list-style-type: none"> <li>-Using and defining Math vocabulary</li> <li>-Providing appropriate modifications and accommodations</li> <li>-Differentiated Instruction i.e. Frayer Model</li> </ul>
<p>PD Required for Staff</p>	<ul style="list-style-type: none"> <li>-Studying math for teaching (key mathematical concepts, learning network trajectories, coordinating class discussion for co-construction of mathematics success criteria in relation to the lesson learning goal</li> <li>- using student thinking to co-construct success criteria during After (Consolidation) and preparing and structuring bansho (board writing);</li> <li>-public research lessons with a focus on NSN (proportional reasoning , Fractions, decimals and percent, number operations etc.)</li> </ul>

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Measures/Evidence of Success to be used	<ul style="list-style-type: none"><li>-School-wide surveys (e.g. equivalency, mental math, NSN (especially proportional reasoning)</li><li>-student work samples (random collection)</li><li>- students to watch observations</li><li>-Common assessments; observation</li><li>-interview of students learning</li><li>- teachers engaging in math instruction</li></ul>
Resources Required (human, material, #code days)	<ul style="list-style-type: none"><li>-Math Dictionaries</li><li>-Marian Small</li><li>-ONAP</li><li>-EQAO released questions( mock eqao as base line data)</li><li>-Math Curriculum Unit Planner</li><li>-math coach</li><li>-Numeracy coach grade 7-10</li><li>-math resource teacher</li></ul>