

TCDSB K to 12 Professional Learning Form 2016-2017



SCHOOL - Principal - Superintendent	Sts. Cosmas & Damian C.S. Principal – Nunzio Del Giudice Superintendent – Michael Caccamo
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Based on analysis of the data, in collaboration with staff identify a critical learning need area or strategy that addresses the learning of your school community (i.e., numeracy, 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 th Block, Taking Stock, SSI, etc.)	Other (SSLN, EDI, etc.)
<p>EQAO 2014-2015 Math: Grade 3 – Minor decline (-3%) Grade 6 – Minor Improvement (+1%; Level 1 Range). Latest data indicates that the Primary and Junior results reflect combined analysis from 2014-2016.</p> <p>EQAO 2010-2015 Long Range Trends Grade 3 & 6 - Mathematics achievement is consistently and considerably lower than language.</p> <p>PLC Number Sense 2016/2017 Early stages of data and represents only one strand which typically has shown higher levels of achievement:</p> <p>Grades 3-5</p>	<p>2014-2016 EQAO Student Questionnaire: 26% of grade 3 and 29% of grade 6 students report being able to answer difficult math questions most of the time.</p> <p>47% of grade 3 and 42% of grade 6 students report that they are good at math most of the time.</p> <p>58% of grade 3 and grade 6 students report thinking about the steps to use in solving problems most of the time.</p> <p>55% of grade 3 and 75% of grade 6 students report checking their work for mistakes most of the time.</p>	<p>School Wide Demographics 382 Students 61 IEP Students 75 ELL Students</p> <p>16% of grade 3 students are ELL</p> <p>8% of grade 3 students on an IEP</p> <p>26% of grade 6 students are ELL</p> <p>13% of grade 6 students are on an IEP</p> <p>The percentage of Special Education and ELL students achieving at level 3 or 4 is consistently and considerably lower for mathematics compared to all students achieving level 3 or 4 across all divisions for TCDSB (BLIP 2014-2018).</p>	<p>Two DHH ISP classes for Junior and Intermediate students.</p>	<p>BLIP SEF School Staff Survey June 2016:</p> <p>71% of staff report routine promotion and sustainment of student well-being and positive behaviour in a safe, accepting, and inclusive and healthy learning environment (2.5).</p> <p>76% of staff report the teaching and learning environment is inclusive, and promotes the intellectual engagement of all students and reflects individual student strengths, needs, learning preferences and cultural perspectives (3.1). 33% of staff report routine use that processes and practices are</p>

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<p>Target 51/68 (75%) – Currently at 49/68</p> <p>Grade 6 Target 28/37 (75%) – Currently at 28/37</p> <p>Grade 7 Target 29/38 (75%) – Currently 28/38</p> <p>Grade 8 Target 33/44 (75%) – Currently at 31/44</p>		<p>2013 – 2014 Primary Mathematics 66% all students; 33% of Special Education students and 57% of ELL students.</p> <p>2013 – 2014 Junior Mathematics 53% of all students; 16% of Special Education students and 39% of ELL students.</p>		<p>designed to deepen content knowledge and refine instruction to support student learning and achievement (2.2).</p> <p>19% of staff report routine use of job- embedded and inquiry-based professional learning builds capacity, informs instruction to support student learning and achievement (2.2)</p> <p>29% of staff report routine use of teaching and learning in the 21st Century is collaborative, innovative and creative within a global context (4.3).</p>
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<p>URGENT CRITICAL LEARNING NEED Explain in 140 characters or less ... student learning problems to solve - Professional learning focus for this year.</p>	<p>Our school’s urgent critical student learning need – aligned with the TCDSB BLIP for 2014 – 2018 and the Renewed Math Strategy in Ontario - is Mathematics. Specific strands across all divisions have been identified in consideration of the range of evidence cited. Students need learning opportunities to further develop skills in problem solving, inclusive of all Mathematics strands.</p>
<p>From the data, what learning conditions will support increased achievement?</p>	<ul style="list-style-type: none"> - Embed mathematics across the curriculum - Support technology-enabled learning to deepen students’ understanding of key math concepts and procedural fluency - School-home partnerships in students’ learning

PROFESSIONAL LEARNING PLAN TO MEET URGENT CRITICAL NEED:

<p>Collaborative Inquiry Question (What is the problem of practice?)</p>	<p>How can we support students in the process of developing high yield strategies to successfully solve problems inclusive of all strands in mathematics?</p>
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If... Then... Statement:	If teachers provide students with multiple opportunities to develop procedural fluency to solve problems and support them in identifying different problem solving strategies, then students will be able to build their own repertoire of strategies and apply them when solving problems to improve overall mathematics achievement.
Learning Goals (related to urgent critical learning need)	Students will develop strategies to solve problems in mathematics, inclusive of all math strands, by engaging in teacher-organized opportunities to develop proficiency in Mathematics Communication and Computation.
Marker students who will receive intervention (subgroups e.g., achieving at 2.5-2.9, Applied, gender, Grade(s), etc.)	Based on analysis of data including Elementary Report Cards, marker students currently at an average of level 2 in grades 3 and 6 will receive additional intervention in order to support them towards achieving provincial standards in curriculum achievement and standardized tests (level 3).
Actions/Interactions (What will we do to meet our goals?)	<ul style="list-style-type: none"> -Work with students to make their mathematics thinking visible, and provide models of how to answer open-response questions with accurate and precise written communication (i.e. Bansho) - RMS: Teachers and instructional leaders to participate in collaborative teacher inquiry to examine evidence-based teaching strategies. -Teachers to incorporate EQAO Sample Assessment Questions in Assessment Tasks to allow students to explore and work through various curriculum expectations in all math strands - Include Multiple Choice and Open Response-type questions. - Provide EQAO Resources to Grade 3 and 6 classes including scoring guides to generate discussions and help students become aware of the requirements for a complete mathematics solution. -Initiate an EQAO Prep Program to build proficiency in answering EQAO-type questions. - Math Word Walls for each strand and Frayer’s Model for most essential strand vocabulary. Frayer Model Vocabulary Booklets provided for every student, Grades 1-8 -Initiate a Mathematics Homework Club, engaging students from all divisions. -Broaden the use of Prodigy Math to increase mathematics engagement and understanding in all strands - In addition to Prodigy Math, expand repertoire of mathematics websites to engage students in building understanding and proficiency in math -Introduce Daily Math Minute and Jump Math to engage students in computation exercises to improve proficiency
Strategies to address the needs of students who have an IEP or are ELL	Students will receive a range of intervention strategies including explicit training with Assistive Technology software for classroom and standardized assessments (i.e. Kurzweil). Students will also receive explicit support in vocabulary development aligned with mathematical knowledge and understanding (i.e. <i>do</i> words for math including ‘calculate’ and ‘justify’) to enhance application and communication.

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<p>PD Required for Staff</p>	<p>Review the effective use of success criteria, learning goals and timely, ongoing feedback with regards to problem solving in all strands of Mathematics. Allow opportunities for teachers to co-plan and co-teach problem solving lessons, as well as engage in moderated marking to build greater consistency in assessment and evaluation. Provide opportunities for teachers to co-create EQAO-Type Key Assessment Questions. Build greater capacity among staff to integrate technology and engaging software to enrich the learning experience. Study different problem solving approaches. Numeracy in-servicing by Margaret Quinn, Resource for Area 3.</p>
<p>Measures/Evidence of Success to be used</p>	<p>Increased visible use of Problem Solving Steps across individual and cooperative problem solving tasks/activities (i.e. Bansho) Analysis of student work. In consideration of the Triangulation of Perceptual and Achievement Data, would achievement levels indicate alignment across the various indicators (EQAO, CAT4, and Report Card).</p>
<p>Resources Required (human, material, #code days)</p>	<p>EduGains Professional MOE Website (www.edugains.ca) A Guide to Effective Instruction in Mathematics (MOE Publication) Consultation with Margaret Quin, Resource Personnel with TCDSB Area 3 Marion Small Resources 14 Code Days: - 4 Days used on October 18th, 2016 for School Improvement Team Meeting - 1.5 Days used on October 28th, 2016 for School Improvement Team Meeting</p>

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?