

TCDSB K to 12 Professional Learning Form 2017-2018

SCHOOL – Principal – Superintendent	St. Gabriel – Ms. C. Crispo – Mr. P. Aguiar
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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 2016-2017, 2014-2015 Math – EQAO Question Breakdown, IIRs, EQAO Question Analysis</p> <p>-data reveals that multistep problem solving is area of need</p> <p>-EQAO student data shows that 68% of grade 3 student like math and only 30% of grade 6 students like math - mindset will also be a focus this year</p> <p>CAT4 2016-2017 Math and Computation</p> <p>Running Records – 70% students reading at Level P by end of grade 2</p>	<p>BLIP/SEF Survey 2016 – 77% nurture Catholic School teaching – 70% positive school climate (for staff)</p> <p>How does this</p>	<p>TCDSB Demographic Indicators Project 2016-2017</p> <ul style="list-style-type: none"> ● 280 students ● 38 IEPs ● 50 ELL ● \$46,000 ● 31.8% low income ● 32% born outside of Canada ● 24% single parent 	<p>ELL Spec. Ed ME</p>	<p>SSLN – math focus curriculum outcomes/specific outcomes – Math Talks</p> <p>EDI (Early Development Instrument) – low vulnerability</p> <p>SCCSC – 84% never been bullied</p>

URGENT CRITICAL LEARNING NEED Explain in 140 characters or less ... student learning problems to solve - Professional learning focus for this year.	Students are struggling with understanding multi-step problems in thinking and application type questions (i.e., converting measurements, algebra) as well as reading and understanding what a question is asking for and how to begin to take the necessary steps to solve it.
From the data, what learning conditions will support increased achievement?	Use our literacy achievement and apply that knowledge to support better outcomes in mathematics.

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PROFESSIONAL LEARNING PLAN TO MEET URGENT CRITICAL NEED:

Collaborative Inquiry Question (What is the problem of practice?)	How can we use our students' success in literacy to help them to understand and solve multi-step problems in mathematics?
If... Then... Statement:	If we promote a growth mindset and explicitly teach math vocabulary and multi-step problem solving, then student achievement will improve in the areas of mathematical reasoning and problem solving.
Learning Goals (related to urgent critical learning need)	<ul style="list-style-type: none"> ● Encourage growth mindset in approaching mathematical problems ● Teach math vocabulary ● Help students to understand how to read a question and determine what it is asking for ● Use more open ended questions in math to allow students to enter at their level of understanding ● Math Talks – give students opportunities to engage in math talk with their peers
Marker groups that will receive intervention (subgroups e.g., achieving at 2.5-2.9, Applied, gender, Grade(s), etc)	<ul style="list-style-type: none"> ● Students achieving at levels 2.5 to 2.9 will be tracked ● Use Prime assessments to determine student levels and align assessment across the whole school
Actions/Interactions (What will we do to meet our goals?)	<ul style="list-style-type: none"> ● Promote growth mindset by posting fixed and growth mindset comparisons and refer to them when students are struggling ● Create math word walls and math dictionaries with students to improve their mathematics vocabularies ● Explicitly teach the steps involved in deciphering the layers in a multi-step problem (ex. read the question, write down what you know, find out what you need to know, think about what mathematical operation might be needed etc.) ● Encourage students to use simpler problems and what they already understand to help them solve more difficult problems ● Provide open ended questions whenever possible so that students can enter at their own level of understanding ● Create problems that focus on a specific curriculum outcome ● Explicitly teach how to answer multiple choice questions in all grades
What professional learning have you engaged in (or will you engage in) to ensure that culturally responsive pedagogy is embedded in teaching and learning?	<ul style="list-style-type: none"> ● Individual staff members participate in various AQ Course (Integration of Technology, Grade 7&8 Math, Drama) and share their learning with staff ● Two Math Lead teachers attend PD sessions and share with staff ● Indigenous Studies Lead teacher shares info with staff ● Capacity Building Series (articles) shared with staff (i.e., Differentiating Mathematics Instruction, etc.) ● Support newcomers with language of mathematics in the Ontario Curriculum (especially in Math strands other than Numeration)

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Strategies to address the needs of students who have an IEP or are ELL	<ul style="list-style-type: none"> ● Use visuals and manipulatives ● Simplify language based questions ● Pre-teach vocabulary and use word banks ● Access to technology
PD Required for Staff	<ul style="list-style-type: none"> ● review Ontario Math Curriculum documents specific outcomes ● plan lessons according to specific outcomes, use grade specific long range plans 2016-2017 ● align resources and PRIME assessments per grade ● learn about and create 3 part problem solving lessons for thinking and application multi-step word problems ● know the difference between thinking, application and knowledge and understanding questions and how to compose those different question types (SSLN)
Measures/Evidence of Success to be used	<ul style="list-style-type: none"> ● key assessment questions ● pre/post tests ● tracking level 2.5-2.9 students ● observations and anecdotal records ● Prime assessment - measuring tool to fill in student learning gaps for Numbers and Operations ● Student numbers talks and appropriate PRIME phase according to grade level (less learning gaps)
Resources Required (human, material, #code days)	<ul style="list-style-type: none"> ● Numeracy coach ● Mathematics Resource Teacher ● Student Achievement Officer ● Curriculum documents, Nelson text, Jump Program (Grade 7), Long Range Planners, Ministry Documents (RMS), Prime Kits (Number and Operations, Measurement) ● 9 code days for RMS, 3 code days for SLIP

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?