School Improvement Plan
for Student Achievement 2017-18

School: Montague

Principal: Kyle Taugher

Vice-Principal(s):

Area of Focus: Numeracy

Overall Goal: Increase student engagement and confidence in mathematics.

Needs Assessment / Where Are We Now??

Teacher observation/ analysis:

At Kindergarten level students enter with a virtual blank slate in mathematics. Little sense of numbers or numeracy beyond number recognition.
No awareness of math in surrounding world or daily interactions beyond "math class".
Students have difficulty communicating their understanding of the processes used in math.
Students locked in to procedural approach to math problems. Minimal conceptual understanding. Topic areas very compartmentalized.
Minimal transference of skills to address alternative problems.

EQAO data

	Math	
Grade 3	77	
Grade 6	66*	Additional 20% of students scored 2.9

-grade 3 shows less than half of students like math;
-two thirds have low confidence in ability to do math;
-more than three quarters report they are trying hard in math activities
-grade 6 shows less than 1/ 2 like math
-only 1/3 think they are good at math and can handle difficult questions
-3/4 report doing their best in math activities

Thus low confidence and frustration building, leading to disengagement.

PLAN	ACT	ASSESS	REFLECT
PLAN: Needs Assessment Where are we now?	***ACT: Evidenced-Based Strategies/Action What are we going to do?***	***ASSESS: Monitor/Gather Data How are we doing? What evidence do you have?***	***REFLECT: Analyze/Reflect How did we do? Where to next?***
1st CYCLE OF INQUIRY If we restructure programming to include more math talks, collaborative inquiry and open ended questioning then students will gain confidence and engagement with math and develop more flexibility in application of numeracy skills.	***Actions will be outlined in the first three learning team meetings through the "SIPSA Monitoring Template" and summarized here at the end of the cycle – November 17th*** -using open ended questions expand students need to use a variety of strategies to problem solve -develop student skills at naming strategies to support evidence of learning Use pre/ post test data to measure change in response to explanation questions. -Quantify variety of strategies students can identify -measure change in classroom discourse pre and post introduction of number talks in regular programming. -identify marker students to gather anecdotal evidence of change.	***Data Gathering will be outlined and collected in the first three learning team meetings through the "SIPSA Monitoring Template" and summarized here at the end of the cycle – November 17th*** -Number talks participation: pre unit =20-25%, post unit =50% to 90% -strategies accessed increased. -ability to name math processes increasing -math classroom discourse increasing at all levels. -from number talks: easier to identify struggling and successes in student by teachers.	***Reflections of Learning Teams work for cycle one will be summarized here at the end of the cycle by November 17thand posted on Insite*** -language skills (terminology, vocabulary) greatest correlate of math engagement and thus confidence. -comfort levels with sharing are increasing. Discovering they actually know more than they thought. -common attitudinal survey to be completed by multiple classes. - Still reservations of students regarding transference from oral number talks to paper exercise; not as robust responses and engagement.

2nd CYCLE OF INQUIRY ***Starting November 20, 2017*** *Because we are seeing positive trajectory towards goal, if/then statement will remain same with expansion of aspects such as use of open ended question to solidify learning.* If we restructure programming to include more math talks and open ended questioning then students will gain confidence and engagement with math and develop more flexibility in application of numeracy skills. ***If/Then Statement: Posted by December 1, 2017***	***Actions will be outlined in the three learning team meetings through the "SIPSA Monitoring Template" and summarized here at the end of the cycle on March 9th, 2018***	***Data Gathering will be outlined and collected in the three learning team meetings through the "SIPSA Monitoring Template" and summarized here at the end of the cycle on March 9th, 2018***	***Reflections of Learning Teams work for cycle two will be summarized here at the end of the cycle on March 9th, 2018, and posted on Insite***
3rd CYCLE OF INQUIRY ***Starting March 19, 2018*** *Complete this section with any new data from your 2nd Cycle of Inquiry* ***If/Then Statement: Posted by March 30, 2018***	***Actions will be outlined in the three learning team meetings through the "SIPSA Monitoring Template" and summarized here at the end of the cycle by June 15th, 2018.***	***Data Gathering will be outlined and collected in the three learning team meetings through the "SIPSA Monitoring Template" and summarized here at the end of the cycle by June 15, 2018.***	***Reflections of Learning Teams work for cycle two will be summarized here at the end of the cycle by June 15th, 2018, and posted on Insite***