

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Identified Action Arena	Broad Outcome	Desired student products and performances (SMART goal)	Required student knowledge, skills and dispositions	Desired teaching products and performances (SMART goal)	Required teacher knowledge, skills, and dispositions	Desired team products and performances	Required team knowledge, skills, and dispositions
Numeracy Problem Solving 6-8	Students will improve their ability to engage, persevere, and communicate their reasoning in problem solving.	By June 2022, all students will be meeting grade level expectations in problems solving, reflected as a 3 or 4 on the report card as per the Provincial Report Card and Assessment documents. 2020-21 T2 Data: 63%	<p>Students will:</p> <ul style="list-style-type: none"> understand and apply common problem solving assessment criteria decode written and visual text to identify key information for solving a problem. choose an efficient strategy that will lead to a reasonable answer. communicate effectively to justify an answer using mathematical reasoning. identify themselves as having a growth mindset and as being a math learner. use a variety of models and materials to make sense of the mathematics in the task. stick to a task (persevere) and recognize that struggle is part of the problem solving process. 	<p>Teachers will:</p> <ul style="list-style-type: none"> use collaborative inquiry to learn, teach, and assess the effectiveness of our practice on all students' ability to persevere and to communicate their problem solving knowledge and skills by June 2022. use a rubric that is based on the problem-solving achievement profile (MB Education) and share common assessment criteria with students (math teachers - MT). teach problem solving strategies explicitly using the Optimal Learning Model (OLM) and knowledge of Building Thinking Classrooms (Vertical Non-Permanent Spaces and visible random groupings). provide both routine and non-routine problems for students to solve. Use grade level specific rich problem-solving tasks (TedEd Riddles & Rich Tasks) as selected by the math team to encourage productive struggle. Facilitate and scaffold discussions among students and anticipate possible student solutions to problems. (5 Practices Approach). 	<p>Teachers will:</p> <ul style="list-style-type: none"> Understand the research and pedagogy in Building Thinking Classrooms and how to properly implement the strategies (VNPS, flexible random groupings, etc.). Understand the importance of selecting rich tasks anticipating possible student solutions to problems (Step 1: 5 Practices). Understand the principles of "5 Practices for Orchestrating Productive Math Conversations". Understand and apply a balanced approach to assessment of problem-solving. Plan and administer common grade-level assessments as per divisional formative assessments. 	<p>Our Team Will:</p> <ul style="list-style-type: none"> work collaboratively to design, teach, and assess growth mindset, perseverance, and highly effective problem solving strategies to students. Participate in collaborative inquiry to learn more about Building Thinking Classrooms. Work collaboratively to select grade level specific rich problem solving tasks and anticipate possible student solutions (MT). Co-construct a rubric based on the problem solving achievement profile (MT) and share the rubric with students. Have collaborative discussions to promote connections between math curriculum and all other subject areas. use PLCs have learning focused conversations and review common assessment data. 	<p>Our Team Believes:</p> <ul style="list-style-type: none"> that a growth mindset is necessary for growth in all aspects of life. we are all teachers of numeracy. each of us is capable of learning math to high levels (No such thing as a "Math Brain"). we are more effective when we work collaboratively and support each other. in a willingness to reflect on our own levels of understanding and seek out clarification and support as needed. in using our PLCs and inservice time to review common grade assessments as a team to benefit teaching and learning for all.