


Action Plan for Learning

	School Name: Eagle Mountain Middle
	School Context Link:
	School Goal: Numeracy
	School Year: 2019-2020


Goal / Inquiry Student learning	How can we better prepare students to understand the mathematical information presented to them about the world and use that information to further drive their thinking?
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<p>Rationale 1-3 reasons for choosing goal</p>	<p>Eagle Mountain teachers continue to work collaboratively to develop and enhance all students' learning through inquiry-based learning skills and strategies. Our school's journey towards integrating and innovating has helped us to continue to refine our collective vision of "learners at the center" and prepare our learners for the 21st Century.</p> <p>This past year our goal has been to continue to improve our students abilities, competencies and confidence in Math/Numeracy. We have made some strides in improving teacher skills and approaches but we do not yet feel like we have made a significant impact on student success. We feel another year, provided the learning opportunities provided and an effective assessment tool to evaluate our progress will be positive and exciting.</p> <p>Inquiry continues to be cornerstones to our school-wide vision. As we move forward, keeping all these aspects of our story intact, we want to further integrate and build capacity for increased mathematical conceptual thinking. They are two important aspects of this: first to look at how math can be connected to and integrated within other parts of the curriculum, and second to continue to develop a Growth Mindset perspective within math for our learners. In her (2016) book "Mathematical Mindsets" Jo Boaler describes what this can look like, "Successful math users search for patterns and relationships and think about connections. They approach math with a mathematical mindset, knowing that math is a subject of growth and their role is to learn and think about new ideas" (p. 34).</p> <p>So as we continue to prepare our learners to build strategies and skills for the 21st century, we know that developing a mathematical mindset will be critically important for their success.</p>
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<p>References and sources to support actions</p>	<p>Curriculum Resources: <u>Fair Shares, Teaching Division in grade 4-7</u> by Carole Fullerton; <u>Cuisenaire Rods Rock</u> by Carole Fullerton; <u>Multiplicative Thinking</u> by Carole Fullerton</p> <p>Critical Friend and Support: Carole Fullerton</p>
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	<p>Book resource – “Mathematical Mindsets: unleashing students’ potential through creative math, inspiring messages and innovative teaching” by Jo Boaler (2016). A copy of this resource will be given to all core classroom teachers and learning services teachers.</p> <p>BCED Plan 2015 – bcs_education_plan_2015.pdf</p> <p>Ministry of Education Math K-9 new curriculum documents - m_learning_standards.pdf m_learning_standards.pdf</p> <p>Other websites – https://www.youcubed.org/ http://nrich.maths.org/frontpage</p>
Backup Documentation	FSA data and school based assessment data to be added.

<p>Planned Actions</p> <p>Continuing practices working well (1-3)</p> <ul style="list-style-type: none"> • What will we do differently? (1-3) • How will we provide for staff development and collaboration? • How will we involve parents? • How will we involve students? • How will we monitor progress and adjust actions? 	<p>Plan for best practices:</p> <p>Eagle Mountain staff is committed to continuing their work to develop 21st Century competencies, knowledge, skills and attitudes for all of our learners. This is supported through the following innovations :</p> <ul style="list-style-type: none"> • an inquiry based learning approach • a focus on core competencies from the BCED Plan • a collaborative approach through teams where learners are grouped for 30 months of learning and connect with multiple teachers • continued focus on strengths and the use of formative assessment practices • learning empowered by technology through our BYOD policy • developing a Growth Mindset by allowing our learners to make mistakes and learn from them <p>Planned actions include:</p> <ul style="list-style-type: none"> • School wide sign up for Carole Fullerton: Middle Numeracy and Math Focus Sessions. 2 full day pro-d sessions as well as 10 member numeracy team working with Carole in classrooms to observe meaningful numeracy practices in the class. • 6 member Numeracy Learning team using Discovery Math Tech Books with the potential to see school wide implementation in 2020. • Implementation and use of new manipulatives purchased for each team • Monthly use of Collaboration morning on numeracy topics. • Intentional instruction and time for students to further build and develop math conceptual thinking, and link math to real life examples <p>Monitoring progress:</p> <ul style="list-style-type: none"> • We will work with Jennifer Whiffin (District MST) to create and collect qualitative data in Nov. and Feb. to monitor our progress. • We will intentionally examine our work throughout the year at staff meetings and team leader meetings, school-based professional days, and through the use of collaborative Thursday times which are embedded into our weekly schedule. Ideas for the implementation of math big ideas, specific math concept instruction and strategies, and types of assessments will be discussed and disseminated at each team level and implemented accordingly within each classroom. Feedback from classroom teachers and students will come back through these channels for continual reflection and revision as it relates to our numeracy goal.
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<p>Backup Documentation</p>	
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<p>Documentation of learning</p> <p>Key evidence of change</p> <ul style="list-style-type: none"> • How did your actions make a difference? • Choose 1-3 pieces of evidence to demonstrate the impact your actions have had on student learning to meet your goal. • Documentation could include video, survey results, performance standard data, anecdotal evidence, work samples, etc. 	<p>As this was the second year of our goal, key evidence of change can still best be seen in teacher attitude and engagement towards teaching math in a different way.</p> <p>In the 7 teachers attended after school series with Carole Fullerton around deepening understanding of numeracy for middle school students. During these sessions, teachers were inspired to try new practices in their classroom, and learn more in a more systemic way.</p> <p>In the second term, a number of teachers attended workshops by Thinking Classroom presenter, Allan Pruner. These sessions further inspired teachers to do more hands on, open ended problem solving with students – that helped develop understanding of core numeracy concepts.</p> <p>During the third term, 8 members of staff participated in another professional development series with Carole Fullerton and hosted by Learning Services. The series was practical and thought provoking. Many of the resources we will be using next year come from this series (see below).</p>
<p>Backup Documentation</p>	<p>To be added.</p>

<p>School Community Engagement Process</p> <ul style="list-style-type: none"> • How did you engage parents, teachers, students & support staff in developing your APL? • How did you share your APL goals with parents, teachers, students & support staff? 	<p>The development of our APL involved multiple opportunities for consultation with students and teachers and parents.</p> <p>Students gave us feedback in their end of term reflections and set goals for themselves throughout this year:</p> <ul style="list-style-type: none"> • Students reflected on their confidence in mathematical understanding and how their confidence and skills have grown during the school year. <p>Our staff meetings and professional development sessions have been utilized in allowing for conversations with teachers related to our school goal:</p> <ul style="list-style-type: none"> • At our May 2018 staff meeting and Pro-D sessions, teachers had the opportunity to give input towards continuing our goal, and continuing on the numeracy path was encouraged. The continuation with a goal about fostering increasing mathematical thinking is important as we feel we have just started! • Plans for professional development in 2019-2020 are exciting! <p>We have included our parent community with updates to our school vision and goal through the following:</p> <ul style="list-style-type: none"> • Monthly school newsletters • Our June 2019 PAC Meeting
<p>Backup Documentation</p>	

<p>Reflection Highlights</p> <ul style="list-style-type: none"> • Where are we now? • What are some patterns emerging? • What surprised you? • What conclusions / inferences might you draw? • How does this inform potential next steps? 	<p>Although we have been two years in the process, it still feels like we are just beginning on our journey. The work with incredible educators like Leyton Schnellert, Carole Fullerton and Peter Liljedahl have not only inspired us, but it has prepared us to make real, meaningful growth in our approach to mathematical instruction.</p> <p>New resources have been purchased (Carole Fullerton texts and manipulatives) and a the pilot of the Discovery Tech Books is exciting. The fact the entire school is hosting Carole Fullerton for a two day pro-d series (with learning teams meeting between sessions) is positive and energizing.</p> <p>One aspect we will be focusing on early in the new school year is creating an assessment tool to assess our practices and the impact they have on students conceptual understanding and attitude towards math. We will be working with district MST, Jennifer Whiffin to create and formalize such a tool!</p>
Backup Documentation	

Signatures

School Name: Eagle Mountain Middle	School Goal: Numeracy	School Year: 2019-2020
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Title	Name	Signature
Principal	Darren Macmillan	<i>D. Macmillan</i>
Assistant Superintendent	Reno Ciolfi	<i>R Ciolfi</i>

Print this page, have it signed by Principal & Assistant Superintendent, scan it and attach it here	
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