Hedges Numeracy Goal Planning For 2019-2020

Step 1 Identify Action Area	Step 2 Broad Outcome	Step 3 Desired student products and performance	Step 4 Required student knowledge, skills and dispositions	Step 5 Desired teaching products and performances	Step 6 Required teacher knowledge and dispositions	Step 7 Desired team product and performances	Step 8 Required team Knowledge, skills and dispositions
Problem Solving 6 – 8	Students will improve their ability to engage, persevere, and communicate their reasoning and understanding in mathematics.	All students will achieve 3 or 4 in Problem Solving by June 2020 Current Data: 55% Term 2 data	Students will: • Decoding 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 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.	Teachers will: • Teach problem solving strategies explicitly using the Optimal Learning Model (OLM). • Provide both routine and non-routine problems for students to solve. • Use the strategy of Vertical Non-Permanent Spaces (VNPS) and visible random groupings. • 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 amongst students and anticipate possible student solutions to problems. (5 Practices Approach). • Develop common practice among all math teachers for assessing student progress using a rubric that is based on the problem-solving achievement profile (MB Education).	Teachers will: • Understand the research behind and how to properly implement Vertical Non-Permanent Spaces (VNPS) and visible random groupings. • 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 a balanced approach to assessment of problem-solving.	Our Team Will: • Participate in professional learning for VNPS (ALL) • 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) • Use PLC time to develop consistency within our grading (ie. All 4’s look the same) (MT) • Have collaborative discussion to promote connections between math curriculum and all other subject areas (ALL).	Our Team Believes: • That a growth mindset is necessary. • Numeracy is everyone’s responsibility. • Everyone 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. • Willingness to reflect on our own levels of understanding and seek out clarification and support as needed