ANYTHING IS POSSIBLE...





...AT EARL BEATTY

CONCLUSIONS FROM DATA ANALYSIS

1) Geometry (symmetry, angles and transformations) and Measurement were two strands that were identified as a need in our school.

2) A need to focus on conceptual understanding opposed to procedural math.

3) Teach to the big ideas, providing open-ended problem solving tasks that reflect real-life experiences. (Students need opportunities to think-reason and prove their thoughts in math).

CONCLUSION FROM DATA ANALYSIS

4) Connect math to other curricular areas and make connections between math strands.

5) Access to manipulatives

6) Asking "Does my answer make sense" after finishing a problem-solving task.

7) Understanding benchmarks (in mass, distance – not just temperature) to ensure students can reason if their answers make sense.

CONCLUSIONS FROM DATA ANALYSIS

Key areas of Focus:

- Measurement: Relationships among 2D and 3D shapes
- Geometry: Location and movement of objects
- > Procedural vs. conceptual learning
- \succ Teaching to the big ideas



RECOMMENDATIONS FROM DISTRICT REVIEW

Involving the school in a math question that will be completed by each class, Kindergarten - Grade 8, so that we can understand mathematical thinking and the math curriculum.

REQUIREMENTS FOR A RICH MATH TASK

1. Can you use open tasks with multiple methods, pathways and representations(show your thinking visually and explain why your solution makes sense)?

2. Can you create inquiry tasks and have students think about ideas and use a procedure?

3. Can you ask the problem task before teaching the concept?



REQUIREMENTS FOR A RICH MATH TASK

4. Can you add a visual component (draw the problem)?

5. Can you make the task Low Floor and High Ceiling?

6. Can you provide reasons for your solutions?



THE BIG IDEA:

Find a space in our schoolyard that needs to be remodeled in order for us to create a safe and inclusive space where we can all learn, play and grow...Find the math...show the opportunities..anything is possible!

LA GRANDE IDEE:

Trouve un espace dans notre cour d'école qui a besoin d'être remodelée afin de créer un endroit inclusif et sécuritaire où nous pouvons tous apprendre, jouer et s'épanouir....Trouve les mathématiques, montre les possibilités après tout: Tout est possible!



JK/SK-GRADE 8 CONTINUUM

Grades	JK/SK	Gr.1	Gr.2	Gr.3	Gr.4	Gr.5	Gr.6	Gr.7	Gr. 8
Measure ment	Measure using non-standard units of the same size and compare objects, materials and spaces in terms of their length, mass, capacity area and temperature and explore ways of measuring the passage of time through inquiry and play-based learning	Compare, describe, and order objects, using attributes measured in non-standa rd units.	Compare, describe, and order objects, using attributes measured in non-standa rd and standard units.	Compare, describe, and order objects, using attributes measured in standard units.	Determine relationships among units and measurable attributes, including the area and perimeter of rectangles.	Determine the relationships among units and measurable attributes, including the area of a rectangle and the volume of a rectangular prism	Determine the relationships among units and measurable attributes, including the area of a parallelogram, the area of a triangle, and the volume of a triangular prism.	Determine the relationships among units and measurable attributes, including the area of a trapezoid and the volume of a right prism	Determine the relationships among units and measurable attributes, including the area of a circle and the volume of a cylinder
Geometry	Describe, sort classify, build and compare 2D and 3D figures and describe the location and movement of objects through investigation	Describe the relative locations of objects using positional language.	Describe and represent the relative locations of objects, and represent objects on a map.	Identify and describe the locations and movements of shapes and objects.	Identify and describe the location of an object, using a grid map, and reflect two-dimension al shapes	Identify and describe the location of an object, using the cardinal directions, and translate two-dimensional shapes.	Describe location in the first quadrant of a coordinate system, and rotate two-dimensio nal shapes	Describe location in the four quadrants of a coordinate system, dilatate two-dimensional shapes, and apply transformations to create and analyse designs.	Represent transformations using the Cartesian coordinate plane, and make connections between transformations and the real world.

BENCHMARKS: PROJECT OUTLINE



Nov 8th: Co-plan with grade partners using A4L. Release time will be provided.

November 10th: Co-teach lesson and debrief

December 1st Staff Meeting: Present student work samples of Level 3 and an idea of what makes a Level 3 for Measurement and Geometry. Teams will work together to create indicators for Level 3 in Measurement and Geometry.

December 7th and 8th: Grade teams will meet to create assessments and next steps. Release time will be provided. Everyone to bring a sample of a Level 1, 2, 3, 4 and create criteria for a Level 1, 2 and 4.

December 20th: Trajectory of level 3 math work samples with indicators of why it's a level 3 will be displayed for each grade.

Release at a later time for next steps.

AN EXAMPLE OF A 3 PART LESSON

Let's look at an example.

FIRST STEP

November 8th - Co-planning using A4L with grade teams. Release time will be provided.

November 10th - Co-teaching of lesson

December 1st- Moderated marking Level 3

December 6-8th - Moderated marking

• Collaboration Times will be devoted to co-teaching and co-planning with grade team partner