

I. Curriculum Area

Mathematics

II. Courses

5150 Secondary Math III

5151 Secondary Math III Honors

5152 Secondary Math III Honors - Accelerated

III. Goal Summary Statement

Students will demonstrate learning from a pre to a post assessment in a chosen domain using at least one of the eight Mathematical Practice Standards

IV. Full Goal Description

The teacher will identify a low scoring domain from pre-assessment data. Looking at the standards within the domain, the teacher will incorporate good teaching strategies to teach, reteach and extend learning throughout the year.

Student growth will be measured by using a pre and post assessment with equal rigor and Depth of Knowledge levels.

Teachers must incorporate one or more of the 8 Mathematical Practice Standards as it applies to the chosen domain.

V. Connection to DESK Standards

*Teachers will select a domain from the DESK Standards.

Number and Quantity

- A. The Complex Number System

Algebra

- A. Seeing Structure in Expressions
- B. Arithmetic with Polynomials and Rational Expressions
- C. Creating Equations
- D. Reasoning with Equations and Inequalities

Functions

- A. Interpret Functions
- B. Building Functions
- C. Trigonometric Functions
- D. Linear, Quadratic, and Exponential Models

Geometry

- A. Similarity, Right Triangles, and Trigonometry
- B. Geometric Measurement and Dimension

C. Modeling with Geometry

Statistics and Probability

- A. Interpreting Categorical and Quantitative Data
- B. Making Inferences and Justifying Conclusions

*In the action plan, teachers will indicate how the Mathematical Practice Standards will be used to facilitate the goal.

Step 1	Step 2	Step 3
Choose a Domain	Choose a Fundamental Concept from DESK	Choose one or more Mathematical Practice Standards

Examples:

Domain Example	Fundamental Concept from DESK	Mathematical Practice Standard
Algebra – Arithmetic with Polynomials and Rational Expressions	5. Know and apply the Binomial Theorem for the expansion of $(x + y)^n$ in powers of x and y for a positive integer n , where x and y are any numbers.	2. Reason abstractly and quantitatively. 4. Model with mathematics.
Functions – Interpret Functions	5. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.	7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.
Statistics – Making Inferences and Justifying Conclusions	1. Understand that statistics allow inferences to be made about population parameters based on random sample from that population.	4. Model with mathematics. 5. Use appropriate tools strategically.

VI. Assessment Tool/Rubric/Evidence

Teachers will use or create quality pre and post assessment to show evidence of student growth. Questions in the assessments should isolate and focus on each fundamental mathematical standard listed in the action plan with equal rigor and Depth of Knowledge levels. Teachers are highly encouraged to use traditional assessment methods coupled with a project-based assessment (rubric, a collection of student artifacts, portfolios, etc.) so that all aspects of student growth can be captured.