

I. Curriculum Area

Mathematics

II. Courses

5130 Secondary Math I
5131 Secondary Math I Honors
5132 Secondary Math I 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

Algebra

- A. Seeing Structure in Expression
- B. Creating Equations
- C. Reasoning with Equations and Inequalities

Functions

- A. Interpreting Linear and Exponential Functions
- B. Building Linear or Exponential Functions
- C. Linear and Exponential

Geometry

- A. Congruence
- B. Expressing Geometric Properties with Equations

Statistics and Probability

- A. Interpreting Categorical and Quantitative Data

*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 |
|---|--|--|
| Statistics and Probability – Interpreting Categorical and Quantitative Data | 1. Represent data with plots on the real number line (dot plots, histograms, and box plots). | 3. Construct viable arguments and critique the reasoning of others. 6. Attend to precision. |
| Functions – Building Linear or Exponential Functions | 2. Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, for specific values of k (both positive and negative); find the value of k given the graphs. | 2. Reason abstractly and quantitatively. 7. Look for and make use of structure. |
| Geometry - Congruence | 6. Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide whether they are congruent. | 4. Model with mathematics. 8. Look for and express regularity in repeated reasoning. |

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.