


Directions: Review the information provided in the scenario. Complete the items marked as  Practice. Discuss your responses with other participants.

Tier 1 Problem Solving Practice

STEP 1 – PROBLEM IDENTIFICATION: What is the problem?

The Geometry teachers and Math Coach at Sunny Skies High School meet every three weeks to review student progress and plan instruction. The teachers administer a benchmark assessment three times per year to measure student attainment of standards. Upon reviewing the data from the first assessment period (“Benchmark 1”), the team notes a need for core or Tier 1 improvement. More specifically, they note that across classes fewer than 80% of students are demonstrating mastery of the critical standards assessed. The team decides to prioritize Standards G-CO.1.1 and G-CO.3.9 given the number of assessment items that address the two standards and the lower levels of mastery noted across all classes. They identify the following goal for student performance:

GOAL: 80% of Geometry students will demonstrate mastery of Standards G-CO.1.1 and G-CO.3.9 as measured by the items on the Benchmark 2 Assessment

Expected level of performance: 80% of students or more will demonstrate mastery

Current level of performance:

*Note: There are three Geometry teachers – A, B and C. Teacher A teaches two classes, Teacher B teaches one class and Teacher C teaches four classes (one regular, three honors)

		Teacher A 1 st Pd.	Teacher A 6 th Pd.	Teacher B	Teacher C Regular	1 st Pd. Honors	4 th Pd. Honors	5 th Pd. Honors
Standard	Item #	% of students demonstrating mastery on Benchmark 1						
F-IF.3.7a	23, 24	42.1%	59.4%	51.0%	50.0%	87.9%	88.0%	92.9%
G-CO.1.1	1-4, 8, 9, 15, 22, 26- 29	43.0%	37.5%	38.4%	42.5%	61.8%	57.7%	63.4%
G-CO.3.9	1, 2, 4- 6, 16- 22, 25, 27, 30	47.0%	50.8%	47.2%	49.3%	61.4%	58.7%	66.2%
G.GMD.1.1	11, 13, 14	42.1%	40.6%	38.7%	40.0%	70.7%	60.0%	75.0%
G.GMD.1.3	14	52.6%	56.2%	46.1%	50.0%	86.2%	60.0%	85.7%
G.GPE.2.5	7, 23, 24	47.4%	64.6%	52.9%	53.3%	92.0%	89.3%	94.0%
G-GPE.2.7	10, 11, 12	38.6%	41.7%	26.8%	20.0%	58.6%	58.7%	66.7%

STEP 2 – PROBLEM ANALYSIS: Why is the problem occurring?

*The team generated several hypotheses and corresponding prediction statements across multiple domains (Instruction, Curriculum, Environment, Learner) in order to determine **why** the problem was occurring.*

Hypothesis 1 - Instruction: The problem is occurring because the amount of instructional time dedicated to teaching the standards is inadequate.

Prediction Statement: If more time is dedicated to teaching the deficit standards, then the problem would be reduced.

Hypothesis 2 Curriculum: The problem is occurring because teachers are not utilizing available supplemental supports to the curriculum.

Prediction Statement: If the teachers utilize the available supplemental supports, then the problem would be reduced.

Hypothesis 3 Learner: The problem is occurring because the students are fatigued due to the time of day.

Prediction Statement: If instruction was scheduled earlier in the day, then the problem would be reduced.



Practice: *Develop a hypothesis and corresponding prediction statement for the domain of environment. (See RIOT x ICEL Matrix for elements related to the domain of Environment.)*

Hypothesis 4 Environment: The problem is occurring because

Prediction Statement: If

then the problem would be reduced.