STUDENT LEARNING GOALS/OBJECTIVES DEVELOPMENT GUIDE

Grade: 10
Content Area: Geometry

Component	Guiding Questions	Descriptors
Baseline/Trend Data	*What data were reviewed to assist in establishing the student learning goal/objective?*	1. District Pre-Assessment, September 2014 2. Score from Interim Comprehensive Assessment, May 2014 3. Interim Instructional Block scores from High School Blocks of Transformations, Proofs and Making Inferences and Justifying Conclusions, September 2014
Student Population	*Who is included in this student learning goal/objective? Why is this target group/class selected?*	This year I have one class of Geometry with a total of 28 students. Of the 28 students, 2 are on 504 plans. Twenty of the students in this class did not meet the standard set by the district on the pre-assessment. In addition, of those 20 students, 18 of them were considered "below standard" on all three interim instructional blocks that were administered.
Standards And Learning Content	*Which standards are connected to the learning content?*	The learning content that will be the focus of this goal are the following: CCSS.Math.Content.HSG.CO.A.1 Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. CCSS.Math.Content.HSG.CO.A.2 Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). CCSS.Math.Content.HSG.CO.A.3 Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself. CCSS.Math.Content.HSG.CO.A.4 Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments. CCSS.Math.Content.HSG.CO.A.5 Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure

		onto another. CCSS.Math.Content.HSG.CO.B.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 if they are congruent. CCSS.Math.Content.HSG.CO.B.7 Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent. CCSS.Math.Content.HSG.CO.B.8 Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions. CCSS.Math.Content.HSG.CO.C.9 Prove theorems about lines and angles. *Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints*. CCSS.Math.Content.HSG.CO.C.10 Prove theorems about triangles. *Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point*. CCSS.Math.Content.HSG.CO.C.11 Prove theorems about parallelograms. *Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals*. In addition to these content standards, this goal is directly linked to CCSS.Math.Practice.MP3 Construct viable arguments and critique the reasoning of others.
Student Learning Goal/Objective Statement	*What is the expectation for student growth and development?*	Students in my Geometry class can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.

Indicators Of Academic Growth And Development (IAGDs) **Growth Targets**	*A. How will you measure progress toward your student learning goal/objective?* *B. What targets will you establish to demonstrate attainment of your student learning goal/objective?* **NOTE: If teacher sets only one goal/objective then there MUST be at least two IAGDs**	**IAGDs:** **A. ASSESSMENTS/MEASURES OF PROGRESS** 1. Interim Assessment Block from high school blocks of Transformations, Proofs and Making Inferences and Justifying Conclusions administered two additional times this year. 2. Monthly District "vital sign" assessments. 3. District Post-Assessment, May 2015 **B. GROWTH TARGETS** 1. 75% of the 18 students falling in the "below standard" category on all three IABs will move to "at or near the standard" on at least 2 out of the 3 assessments. 2. On the post-assessment, all students will move at least one level on the rubric.
Instructional Strategies/Supports	*What methods will you use to accomplish this student learning goal/objective? How will progress be monitored? What professional learning/supports do you need to achieve this student learning goal/objective?*	• Math practices will be embedded in every lesson. • All units of instruction will provide for opportunities for students to share both orally and in writing about the mathematical process. • Effective questioning strategies will be evident in all lessons. • Rubric will be used as part of the class on a regular basis • Anchor sets of the rubric will be developed.