STUDENT LEARNING OBJECTIVE PROCESS GUIDE

Teacher:	Chemistry – Atomic Structure
School:	High School
Evaluator:	

STEP ONE: SLO DEVELOPMENT

Prioritize Learning Content: *Identify standards and content.*	*What is the most important learning that needs to occur during the instructional period? Specify which standard(s) the SLO addresses and Identify the specific data source or trend data used. (1a)*
	9-12.P.1.1: Students are able to use the Periodic Table to determine the atomic structure of elements, valance number, family relationships, and regions (metals, nonmetals, and metalloids). Explicit Outcomes: (1) Students can interpret isotopic models and notation. (2) Students can calculate the average atomic mass given an element's isotopes.

Identify the Student Population: *Describe the context of the class.*	*How many students are addressed by the SLO? Detail any characteristics or special learning circumstances of the class(es). (1b, 1c)*
	This SLO covers two section of chemistry, and totals 32 students. Three (3) of these students are on IEPs, and most students face many challenges including academic, behavioral, and attendance issues.

Interval of Instruction: *Specify the time frame in which growth with be measured.*	*What is the time period in which student growth is expected to occur? Identify the length of the course or provide rationale for an time period that is less than the full length of the course.*
	One semester While this priority content is only one small part of this chemistry course, it is the building block of foundational knowledge and skills for all learning. This is the prerequisite piece that needs to be mastered at the beginning of the course.

Analyze Data and Develop Baseline: *Detail student understanding of the content at the beginning of the instructional period.*	*Where are my students starting? Summarize student baseline performance and attach additional data if necessary. (1b, 1f)*
	The pre-test data revealed that 21 of the 32 scored at the "below basic" level as specified by the performance level descriptors established by the District chemistry teachers.

Select or Develop an Assessment: *Describe how the goal attainment will be measured.*	*What specific assessment or instrument will be used to measure goal attainment? Describe the source of the assessment and the connection to identified content and standards. (1c, 1d, 1f, 3d)*
	The "Common Summative Assessment" developed by the District's chemistry teachers will be used to determined student growth.

Growth Goal: *Establish expectations for student growth.*	*What can I expect my students to achieve? Establish rigorous expectations for student performance. (1b, 1c)*
	Upon completion of the instructional unit, 80 % of non-IEP students will perform at a proficient level as indicated by the District's descriptors, and 80 % of IEP students will perform at the basic level.

Provide Rationale: *Describe how your SLO benefits student learning.*	*How do the content, baseline data, assessment and growth goal support student progress and growth? Describe why you chose to develop this SLO. (1a, 1f)*
	Atomic structure and electrons are the backbone of understanding the composition of matter and its changes. This SLO then becomes an early indicator of success in the whole of chemistry. Students that have a high understanding of atomic structure will be more likely to be successful in understanding the changes and interactions that matter undergoes. This SLO will help us determine which students will require more support moving forward to understand the concepts of chemistry.

Learning Strategies: *Describe your plan to meet student needs.*	*How will you help students attain the goal? Provide any specific actions that will lead to goal attainment. (1b, 1e, 1f, 4a)*
	The following instructional strategies will be employed: • Classroom instruction that is driven by the workshop model • Technology based instruction that uses multimedia tools—such as PowerPoint, virtual labs, videos, and flipped resources • Hands on investigative laboratory activities designed more for visual leaners—creating models, drawing picture, and constructing and manipulating objects. • Science literacy skills which require students to make meaning of more technically written materials and calculations based on information from the periodic table and in mathematical scenarios.

STEP TWO: SLO APPROVAL

The SLO has been reviewed jointly between the teacher and evaluator and will serve as the agreed-upon measure to determine the teacher's student growth rating.

Teacher Signature: Date:

Evaluator Signature: Date:

STEP THREE: ONGOING COMMUNICATION

Progress Update: *Describe student progress toward the growth goal.*	*Are your students on track toward meeting the growth goal? Specify the assessment used to track progress. (1f, 3d, 4b)*
	Formative assessments indicate that all students are making adequate progress toward the goal.

Strategy Modification: *If necessary, document changes in strategy.*	*Does data suggest I need to adjust my instructional strategy? Describe how you plan to meet the goal. (1e, 4a)*
	No modifications are necessary.

SLO Adjustment: *If justified, describe changes to the SLO.*	*Are there circumstances beyond the teacher's control that will impact growth goal? If needed, attach a revised SLO. (1b, 4a)*

Teacher Signature: Date:

Evaluator Signature: Date:

STEP FOUR: PREPARE FOR THE SUMMATIVE CONFERENCE

This section documents the preliminary student growth rating, which will be discussed during the end-of-year Summative Conference.

SCORING

High Growth: *The growth goal was 86% to 100% attained.*	*What does high growth mean? Detail end-of-course achievement levels that equate to high growth. (4b)*
	All students with an IEP met their growth goal, while 26 of the 29 non-IEP students met the established goal. These numbers indicate a success rate of 91%. The remaining 3 students, all of whom were rated "below basic" on the pretest, attained the "basic" level despite numerous absences during the SLO time period.

Expected Growth: *The growth goal was 65% to 85% attained.*	*What does expected growth mean? Detail end-of-course achievement levels that equate to expected growth. (4b)*

Low Growth: *The growth goal was less than 65% attained?*	*What does low growth mean? Detail end-of-course achievement levels that equate to low growth. (4b)*

PRELIMINARY STUDENT GROWTH RATING

PRELIMINARY STUDENT GROWTH RATING Based on final assessment data, the student growth rating is:		
LOW	EXPECTED	HIGH
☐	☐	**X**

REFLECTION

Professional Growth: *Detail what you learned.*	*What worked? What should be refined? Describe the support you need to improve instruction and student learning. (1a, 4a)*
	I would definitely expand the priority content to include more standards and a large piece of the overall learning intended for this course. I would cover a broader range of topics to include in the SLO interval of instruction.