# 8<sup>th</sup> Grade Science SLO Sample Draft to be used during SLO Peer Review and Support Session (for training purposes only)

### **Student Learning Objective Form**

#### **Student Learning Objective Title**

Enter a short name for the SLO that identifies the content or area of focus (e.g., Reading Comprehension & Fluency; Biology: Human Body Systems)

# 8<sup>th</sup> grade Science

#### Student Learning Objective Grade Level (s)

Circle all that apply:

Pre-K	К	1	2	3	4	5	6	7	8	9	10	11	12

#### Student Learning Objective Content Area(s)

Circle all that apply:

ELA/English	ESL	Mathematics	World Language	Social Studies
Art	Music	Physical Education	Science	Other (Please specify):

#### **Objective Statement**

Describe the overall objective, including whether it focuses on progress (i.e., expecting students to make a certain amount of progress within an interval of instruction) or mastery (i.e., expecting students to meet a particular bar or standard).

# Students will be able to analyze scientific texts and craft written responses supported by textual evidence.

#### **Rationale**

Describe the reasoning for this objective, including whether it is aligned to a school-wide SLO, and what data informed this decision.

Common Core State Standards emphasize teaching students to respond to informational science texts.

#### Aligned Standards

Specify the CCSS, RI GSEs/GLEs, or other RI/national standards to which this objective is aligned.

### <u>RI Grade Span Expectations for Inquiry:</u>

- *INQ-1a, 1b* Analyze information from observations, research, or experimental data for the purpose of formulating a question, hypothesis, or prediction.
- INQ-2 Construct coherent argument in support of question, hypothesis, or prediction.
- *INQ-5* Develop an organized and logical approach to investigating the question, including controlling variables.
- *INQ-8* Use accepted methods for organizing, representing, and manipulating data.
- *INQ-10* Summarize results based on data.
- *INQ-11* Analyze data including determining if data are relevant, artifact, irrelevant, or anomalous.
- *INQ-12* Use evidence to justify interpretations and conclusions or explain how the evidence refutes the hypothesis.
- *INQ-13* Communicate how scientific knowledge applies to explain results, propose further investigations, or construct and analyze alternative explanations.

Common Core State Standards for Literacy in Science and Technical Subjects

- *RST.6-8.1:* Cite specific textual evidence to support analysis of science and technical texts.
- *RST.6-8.2:* Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.
- *RST.6-8.7* Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.
- *WHST.6-8.2:* Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
  - a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
  - b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
  - c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.
  - d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
  - e. Establish and maintain a formal style and objective tone.
  - f. Provide a concluding statement or section that follows from and supports the information or explanation presented.

*WHST.6-8.9:* Draw evidence from informational texts to support analysis reflection, and research.

#### **Students**

Specify the number of and grade/class of students to whom this objective applies.

## This objective applies to the 87 students in my 4 sections of 8<sup>th</sup> grade Science.

Interval of Instruction (select one): Semester

School Year

Other (Please specify):

#### **Baseline Data**

Describe the pre-test or baseline information/data available for this student population that informed the target(s) (e.g., are students entering without, with, or above the necessary prerequisite knowledge or skills?).

In early September, students completed a baseline inquiry task developed from a NECAP Inquiry Task. This task contains items of varying DOK and is a good approximation of students' ability to analyze and respond to informational text and what students know and are able to do in the Areas of Inquiry. We used the NECAP Inquiry Task scoring guides and exemplars of student work to determine what constituted basic proficiency. Based on these results, I created the following groups:

Group I (21) students scored Substantially Below Proficiency Group II (58) students scored Below Proficiency Group III (8) students scored Basic Proficiency

#### Target(s)

Describe where you expect students to be at the end of the interval of instruction. If baseline data suggest meaningful differences in prerequisite knowledge or skills, targets should be tiered to be both rigorous and attainable for students at various levels.

All students (87) will complete an Inquiry Portfolio, which is composed of 10 tasks completed throughout the year (2 per guarter, midterm, and final).

- a. Group I (21) will demonstrate basic proficiency (or better) on at least 5 tasks.
- b. Group II (58) will demonstrate basic proficiency (or better) on at least 6 tasks.
- c. Group III (8) will demonstrate basic proficiency (or better) on all 10 tasks.

#### Rationale for Target(s)

Explain how the target(s) was determined (e.g., pre-test, baseline, or historical data on your current students, or historical data from past students). Explain why the target(s) is appropriate (both rigorous and attainable) for all students.

# These targets are tiered to reflect students' differing baselines, as determined by the "Sick School" inquiry task.

	Level of Standardization	Evidence Source(s)  Description: Describe what accessment(c) you will use to measure student
	Indicate the appropriate loss	logrning and why the accossment(s) is appropriate for massiving the
	standardization: Light	a of the second se
	assessments administered a	oujective. At least one assessment as a source of evidence is required, but must be used if a common assessment evicts, it must be
	scored in a standardized	used as the primary source of evidence
	manner Medium accesso	asca as the printary source of evidence.
	with lacking standardization	in
	administration and may have	····
	subjective scoring: Low:	
	assessments not administere	2d
	and scored in a standardized	
	manner.	
Evidence Source 1		Student portfolios will consist of 10 entries (two
(required)		han quantan 1 mid tanm 1 final) Traving taska
	🗆 High	per quarter, 1 mia-term, 1 final). Inquiry tasks
		and their accompanying scoring guides were
	Medium	created by the science Department Coordinator
		and neviewed by depentment members during
	Low	and reviewed by department members during
		common planning time. These tasks were
		developed in accordance with guidance from
		RTDF and Measured Progress and are intended to
		winis the time of to deal students will
		mimic the type of tasks students will encounter
		on the grade 8 science NECAP assessment.
Evidence Source 2	🗆 High	
(optional)		
	Medium	
	Low	
Evidence Source 3	🗆 High	
(optional)		
	Medium	

	<b>Administration</b> : Describe how the assessment will be administered (e.g., once or multiple times; during class or during a designated testing window; by the classroom teacher or someone else).	<b>Scoring</b> : Describe how the assessment identified in the Description section will be collected and scored (e.g., scored by the classroom teacher individually or by a team of teachers; scored once or a percentage double-scored).
Evidence Source 1 (required)	Inquiry tasks will be administered in class, twice per quarter (the exact timing of the administration will be at my discretion based on formative assessment of student skills). Finally, the midterm and final exam each include an inquiry task that will be administered according to the school-wide exam schedule.	I will score the Inquiry Tasks, in collaboration with the other 8 <sup>th</sup> grade Science teacher. We will norm our scoring using developed scoring guide developed with other members of the Science department and double scoring 5% of completed tasks to ensure calibration.
	Students will receive strategic supports throughout the instructional interval and the opportunity to submit at least two portfolio entries each quarter. Collecting data throughout the year will enable me to monitor their progress toward their targets and provide additional supports as necessary.	
Evidence Source 2 (optional)		
Evidence Source 3 (optional)		