

EXAMPLE Student Learning Objective (SLO) Template (with Embedded Checklist)

Teacher Name: _____ Content Area and Course(s): Biology Grade Level(s): 9-12 Academic Year: 2013-2014

Please use the guidance provided in addition to this template to develop components of the student learning objective and populate each component in the space below.

Baseline and Trend Data

What information is being used to inform the creation of the SLO and establish the amount of growth that should take place?

Pre - assessment data was collected through a multiple – choice exam looking at the first 67 questions (of 100 questions chapters 1,3-15) based on state standards and Post-assessment: the first 67 questions cover CH 1, 3-12. No trend data is available due to the differences in 9th & 10th grade curriculum.

Student Pre-Assessment test scores ranged from 19% to 64%.

Break down of student scores is as follows:

10%-19% = 1

20%-29% = 12

30%-39% = 9

40%-49% = 16

50%-59% = 10

60%-69% = 5

Overall the students showed strengths in the area of scientific method and ecology, and they struggled with cell structures, process and functions.

Checklist & Comments: Baseline and Trend Data

Does the identified baseline and trend data meet the following criteria?

X Identifies sources of information about students (e.g., test scores from prior years, results of pre-assessments)

X Draws upon trend data, if available

X Summarizes the teacher’s analysis of the baseline data by identifying student strengths and weaknesses

Comments/Questions:

1. Please provide a breakdown of student scores on pre-assessment .
- 2.
- 3.

Student Population

Which students will be included in this SLO? Include course, grade level, and number of students.

- Biology (9th, 10th, 11th & 12th graders are in these classes based on the requirements needed for graduation.)
- 54 total students
- 18 IEP students
- 3 504 students
- 1 LEP student
- No subgroups are excluded

Students on IEPs have learning disabilities in reading and math. These students may struggle in problem solving and vocabulary skills which will make scaffolding concepts difficult.

Students on 504s have frequent absences and difficulty focusing.

Checklist & Comments: Student Population

Does the identified student population meet the following criteria?

X Identifies the class or subgroup of students covered by the SLO

Describes the student population and considers any contextual factors that may impact student growth

X If subgroups are excluded, explains which students, why they are excluded and if they are covered in another SLO

1.

2. Please identify factors which may impact student growth as indicated in IEP's, and 504's.

3.

Interval of Instruction

What is the duration of the course that the SLO will cover? Include beginning and end dates.

- The duration of the course is one year.
- August 27, 2013 – April 1, 2014

Checklist & Comments: Interval of Instruction

Does the interval of instruction identified meet the following criteria?

X Matches the length of the course (e.g., quarter, semester, year)

X Considers the length of the course in relation to the instructional pacing when the initial (starting point) and summative (endpoint) growth measure evidence collection occurs – deadline of April 15th for year-long courses and 2nd semester courses / as identified for 1st semester courses and 9-week courses (no later than April 15th)

1.

- 2.
- 3.

Standards and Content

What content will the SLO target? To what related standards is the SLO aligned?

The SLO content will include the Ohio Academic Standards listed below:

Science Inquiry and Application

- Identify questions and concepts that guide scientific investigations;
- Design and conduct scientific investigations;
- Use technology and mathematics to improve investigations and communications;
- Formulate and revise explanations and models using logic and evidence (critical thinking);
- Recognize and analyze explanations and models; and
- Communicate and support a scientific argument.

Heredity

- Cellular genetics
- Structure and function of DNA in cells
- Genetic mechanisms and inheritance
- Mutations
- Modern genetics

Evolution

- Mechanisms
 - o Natural selection
 - o Mutation
 - o Genetic drift
 - o Gene flow (immigration, emigration)
 - o Sexual selection
 - o History of life on Earth
- Diversity of Life
 - o Speciation and biological classification based on molecular evidence
 - o Variation of organisms within a species due to population genetics and gene frequency

Diversity and Interdependence of Life

- Classification systems are frameworks created by scientists for describing the vast diversity of organisms indicating the degree of relatedness between organisms.
- Ecosystems
 - o Homeostasis
 - Carrying capacity
 - Equilibrium and disequilibrium

Cells

- Cell structure and function
 - o Structure, function and interrelatedness of cell organelles

- o Eukaryotic cells and prokaryotic cells
 - Cellular processes
- o Characteristics of life regulated by cellular processes o Photosynthesis, chemosynthesis, cellular respiration o Cell division and differentiation

Checklist & Comments: Standards and Content

Do the standards and content described meet the following criteria?

- X Specifies how the SLO will address applicable standards from the highest ranking of the following: (1) Common Core State Standards, (2) Ohio Academic Content Standards, or (3) national standards put forth by education organizations
- X Represents the big ideas or domains of the content taught during the interval of instruction (between the initial (starting point) to the summative (endpoint) growth measure evidence collection - deadline occurs: April 15th for year-long courses and 2nd semester courses / as identified for 1st semester courses and 9-week courses (no later than April 15th))
- X Identifies core knowledge and skills students are expected to attain as required by the applicable standards (if the SLO is targeted)

- 1.
- 2.
- 3.

Assessment(s)

What assessment(s) will be used to measure student growth for this SLO?

This SLO will use assessments designed by district Biology teachers using the current state standards. The assessments will include a pre – assessment, mid – year and early-April assessment.

Checklist & Comments: Assessment(s)

Does the description above meet the following criteria?

- X Identifies assessments that have been reviewed by content experts to effectively measure course content and reliably measure student learning as intended
- X Selects measures with sufficient “stretch” so that all students may demonstrate learning, or identifies supplemental assessments to cover all ability levels in the course
- X Provides a plan for combining assessments if multiple summative assessments are used
- X Follows the guidelines for appropriate assessments
- X Matches the interval of instruction and reflects consideration of summative (endpoint) growth measure evidence collection deadline occurs – April 15th for year-long courses and 2nd semester courses / as identified for 1st semester courses and 9-week courses (no later than April 15th)

- 1.
- 2.
- 3.

Growth Target(s)

Considering all available data and content requirements, what growth target(s) can students be expected to reach?

Students will be expected to grow based on the formula $(100 - \text{pre-assessment score}) \div 4$.

At 10% increments, this breaks down to look like:

1. 0% will grow to 25%
2. 10% will grow to 33%
3. 20% will grow to 40%
4. 30% will grow to 48%

All values that fall in between these increments will be calculated based on the formula above.

Checklist & Comments: Growth Target(s)

Does the identified growth target(s) meet the following criteria?

- All students in the class have a growth target in at least one SLO
- Uses baseline or pretest data to determine appropriate growth
- Sets developmentally appropriate targets
- Creates tiered targets when appropriate so that all students may demonstrate growth
- Sets ambitious yet attainable targets
- Reflects consideration of interval of time between initial (starting point) growth measure evidence collection and summative (endpoint) growth measure evidence collection deadline occurs – April 15th for year-long courses and 2nd semester courses / as identified for 1st semester courses and 9-week courses (no later than April 15th)

1. . Please identify growth targets based on pre-assessment data, baseline and trend data.
Please set tiered targets which are appropriately ambitious and ensure that all students demonstrate growth.
- 2.
- 3.

Rationale for Growth Target(s)

What is your rationale for setting the above target(s) for student growth within the interval of instruction?

The following formula, $(100 - \text{pre-assessment score}) \div 4$, was chosen to help ensure that all students will be able to demonstrate developmentally appropriate growth. The expectation is that each student will be able to meet the growth measure.

[Targets are aligned with the broader school and district goal of improving student achievement.](#)

Checklist & Comments: Rationale for Growth Target(s)

Does the rationale described above meet the following criteria?

- Demonstrates teacher knowledge of students and content
- Explains why target is appropriate for the population
- Addresses observed student needs
- Uses data to identify student needs and determine appropriate growth targets
- Explains how targets align with broader school and district goals
- Sets rigorous expectations for students and teacher(s)
- Reflects consideration of interval of time between initial (starting point) growth measure evidence collection and summative (endpoint) growth measure evidence collection deadline occurs – April 15th for year-long courses and 2nd semester courses / as identified for 1st semester courses and 9-week courses (no later than April 15th)

1. Please state that the targets align with the broader school and district goal of improving student achievement.
- 2.