

Student Learning Objectives (SLO)

Teacher Name:

Content Area and Course: Physical Science

Grade Level: 9

Academic Year: 13-14

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?

Results of a pretest comprised of 25 multiple-choice questions created by the teachers who teach the Physical Science course and based upon the content covered in the Board approved text was used to determine trend. Pretest scores for the 47 students that I am teacher of all the students. Previous test scores from Eighth grade OAA- Science were also used to set growth targets. Student's responses were strong when it came to questions about measurement and conversions, but were weaker in chemistry and physics'.

Student Population

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

This SOL covers 47 students in 9th Grade Physical Science. The population is composed of regular education students and 2 IEP or 504 students. Only one of the IEP students requires modifications on their tests. No students have been identified gifted or advanced in science.

Interval of Instruction

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

This SOL covers the first semester of the 2013-2014 school year – from August 2013 through December 2013. The class meets everyday, 87 minutes on, Tuesday, Thursday, Friday, and 78 minutes on Monday and Wednesday.

Student Learning Objectives (SLO)

Standards and Content

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

Based on the results of the pre-assessment, the learning content for this SLO focuses on Ohio physical science standards, as required by section 3313.603 of the Ohio Revised Code. Students are expected to follow certain laboratory safety techniques to construct their knowledge and understanding in all science areas. Students will be able to Identify questions and concepts that guide scientific investigations, design and conduct experiments, use mathematics to improve investigations, formulate and revise models, recognize and analyze explanations, and support a scientific argument. By the end of this course students should have basic foundations and understanding in the following areas: Matter (classification of matter, atoms, periodic trends, bonding compounds, reactions of matter), Energy and Waves (conservation of energy, waves), Forces and Motion (motion, forces, dynamics), and the Universe (History of the universe, galaxy formation, stars and our solar system). In addition students should be able to use appropriate scientific vocabulary to define, describe, and perform scientific inquiry. Students will demonstrate basic lab skills and apply concepts learned in class to gather scientific knowledge.

Assessment(s)

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

The assessments used to measure student growth is a 25 question multiple choice test constructed from course content in our board approved text book that aligns with Ohio's state standards. The multiple choice questions were selected by three different teachers and designed with the intent to cover a wide range of knowledge backgrounds and cover all areas discussed in the course. The multiple choice questions will be graded using an answer key developed by the same three teachers that constructed the questions. The pre assessment questions will be incorporated into the course final exam at the end of the semester to allow for student growth to be measured.

Student Learning Objectives (SLO)

Growth Target(s)

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

Students will increase their knowledge of the Ohio Physical Science standards including the areas of Matter, Energy and Waves, Force and Motion and the Universe. They will demonstrate basic laboratory safety techniques and conduct experiments. Growth will be measured by comparing their pre and posttest scores, which ask comparable questions. I have set growth targets for my students with a target score of at least 15, which is a passing score in my district. Students' scores on the pre-assessment determine the growth target for their post-assessment

| Baseline score from Pre-assessment | Target Score from Post-assessment |
|------------------------------------|-----------------------------------|
| 4-14 | Minimum of 15 |
| 15 | 16 or greater |
| 16-17 | 18 or greater |
| 19-20 | 21 or greater |

Rational for Growth Target(s)

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

Tiered targets were set to help ensure that all students will be able to demonstrate developmentally appropriate growth. Students who scored lower on their pre-assessment are expected to demonstrate more growth in order to meet grade-level expectations. The wide variety of questions from the pre-test will gauge strengths and weaknesses that students may have and formative and summative assessments throughout the course will be used to monitor growth. The growth targets established in this SLO will ensure students are prepared for upper level science courses.

Student Learning Objectives (SLO)
