**Student Learning Objective (SLO) Template**

*This template should be completed while referring to the SLO Template Checklist.*

Teacher Name: Mr. Smothers  
Content Area and Course(s): Technology  
Grade Level(s): 8  
Academic Year: 2014-2015

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?*

> The baseline data for this course was determined by the results of a pre-assessment consisting of a 50 question multiple choice test and a performance task written assessment that align with the post-test which consists of a 50 question assessment and the actual performance activity. The assessment is based on a 50 point multiple choice assessment and a yearlong project with a capstone for those students who pre-tested at the accelerated level.

A tiered performance chart was created to reflect student growth expected at the end of this course. Students will take the end of course assessment between April 1st and April 10th. The results of the Pre-Assessment given showed that 42 students scored at a level between 10-20%, 38 students scored between 21-53%, 16 students scored between 54-80% and 8 students scored 81% and above. Student performance was low on the following units of the assessment: Nature of Technology (16%), Technology and Society Interaction (9%), Technology for Productivity Applications (6%), Technology for Information Literacy (5%), Design (3%), and Design World (2%). Students showed a higher level of performance on Technology for Communication (38%). This data is similar to trend data from the previous 4 years on assessments that are similar but have updated or refined questions. Nature of Technology averages has historically been closer to 21% while Communication has been closer to 31%. Those students who had technology in the home scored much higher in all areas than those who do not. Students with disabilities and ELL students had difficulty with the vocabulary that appeared in the question portion.

Results from the pre-assessment are as follows (number of students):

<table>
<thead>
<tr>
<th>Score ranges:</th>
<th>Multiple Choice</th>
<th>Written/PBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–20 (Intensive)</td>
<td>29</td>
<td>42</td>
</tr>
<tr>
<td>21–53 (Targeted)</td>
<td>39</td>
<td>38</td>
</tr>
<tr>
<td>54–80 (Benchmarked)</td>
<td>26</td>
<td>16</td>
</tr>
<tr>
<td>81–100 (Accelerated)</td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>
**Student Population**

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

This Technology course meets one day a week during 4th Period for 38 minutes with a different class each day for an entire year. This “Special” is designed for 8th grade students. There are 104 students enrolled across the five days. The demographics of the students consist of 48 males and 56 females. Thirty-two percent of the students do not have internet access or a computer in the home. 18 students are on IEP’s (3 have significant delay and are labeled CDs, 6 have a disability in reading, 9 have a disability in mathematics), 4 are on WEPs (2 are identified gifted in reading and 2 in superior cognitive), 6 are on 504 plans (all 6 are for ADD or ADHD) and 2 are ELL students (this being the first year in an English speaking culture). No subgroup will be excluded from this SLO.

**Interval of Instruction**

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

This Technology course is a yearlong course that will run from August 2014 to April 2015. This course is taught for one period lasting 38 minutes for one day a week. The Pre-Assessment for the course will occur before September 1, 2014 and the Post Assessment will occur between April 1 and April 10th, 2015.

**Standards and Content**

*To what related standards is the SLO aligned?*

This SLO will align to the Ohio’s Technology Content Standards. It is not a targeted SLO. These students have progressed through the 5-7th grade technology series with the teacher of this 8th grade course. The standards below continue to be appropriate for students to become technology literate. This specific SLO meets the following units and the indicators housed in each unit:
Essential Standards, Benchmarks and Indicators

**Benchmark A: Evaluate the accuracy, authority, objectivity, currency, coverage and relevance of information and data sources**

4. Evaluate the validity of information by comparing information from different sources for accuracy (e.g., what makes the author an expert? Is information the same in multiple sources?).

**Benchmark B: Use technology to conduct research and follow a research process model, which includes the following: developing essential question; identifying resources; selecting, using and analyzing information; synthesizing and generating a product; and evaluate both process and product.**

1. Formulate an essential question to guide the research process.
2. Identify and evaluate relevant information and select pertinent information found in each source.
3. Analyze information, finding connections that lead to a final information product.
4. Demonstrate how to determine copyright issues when creating new products (e.g., permission to use articles and graphics, credit information to be included).
5. Use a teacher or district designated citation or style manual to credit sources used in work (e.g., MLA style manual, APA Guidelines or other selected style manuals).
6. Digitize information for archiving and future use (e.g., creating an electronic portfolio of curricular projects).
7. Revise and edit information product.
8. Evaluate final product for its adherence to project requirements (e.g., recognize weaknesses in process and product and find ways to improve).

**Benchmark C: Develop search strategies, retrieve information in a variety of formats and evaluate the quality and appropriate use of Internet resources.**

4. Compare several Web sites on the same topic and evaluate the purpose of each site (e.g., use several sites for a specific curricular need and note whether the sites have similar or conflicting data).

**Benchmark D: Select, access and use appropriate electronic resources for a defined information need.**

3. Locate and use advanced search features and appropriate tools such as Boolean operators ("AND" "OR" "NOT") and a thesaurus in an online database.
Assessment(s)

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

The Assessment used to measure student growth in this Technology Course is a two-part assessment. The first part consists of 50 multiple-choice questions that focus on the technical, ethical and problem solving aspects of technology. The second part of the assessment focuses on the students’ ability to design, problem-solve and critique by developing a technology product. The pre-assessment consist of 50 multiple-choice questions with the second portion consisting of a series of questions that correlate directly to the key components of the performance activity that will be completed throughout the year and show the students’ understanding of the Standards/ Benchmarks/ Indicators. An answer key will be used to evaluate the multiple-choice questions while a 25 point rubric will be used to assess the performance task and a 20 point rubric for the capstone.

Targets are set for each portion of the assessment: multiple-choice and project-based. The performance task will allow students, who scored accelerated on the pre-assessment, to show skills attained at a more complex level by completing the capstone which has a 20 point rubric. Students scoring in the Intensive range will be able to show growth by either having the accommodations listed on the IEP and/or additional scaffolds including reduced requirements to more closely relate to student need. Vocabulary will be examined to ensure all students are able to access and achieve to show their technology skills.

All students on IEP’s/504s/ELL/Gifted will receive all appropriate accommodations/modifications/extensions per their specific documents when taking the online assessment. Student growth expectations for this SLO will be based on the pre-assessment. The assessments have been developed by a team of technology teachers in area schools and vetted by two curriculum specialists with technology background. The assessment scoring protocols were created and vetted in the same manner to ensure accessibility and bias free results.

Growth Target(s)

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

There are four levels of achievement on this assessment: Accelerated, Benchmarked, Targeted, and Intensive. The assessment has two components to ensure student knowledge of factual information as well as student ability to manipulate and solve problems with technology. The target scores are set so that students have to develop a minimal level of competency in all of the standards but still have ample allowance for all students to show growth either in the Multiple Choice and PBA or with that set and the capstone activity.
Results from the pre-assessment are as follows:

<table>
<thead>
<tr>
<th>Baseline Score ranges:</th>
<th>Target Scores Multiple Choice</th>
<th># students</th>
<th>Target Scores PBA</th>
<th># students*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–20 (Intensive)</td>
<td>32 or above at least 15 point growth(Targeted)</td>
<td>6</td>
<td>35 or above at least 15 point growth(Targeted)</td>
<td>18</td>
</tr>
<tr>
<td>21–53 (Targeted)</td>
<td>57 or above at least 15 point growth (Benchmarked)</td>
<td>18</td>
<td>55 or above at least 15 point growth (Benchmarked)</td>
<td>31</td>
</tr>
<tr>
<td>54–80 (Benchmarked)</td>
<td>89 or above at least 15 point growth (Accelerated)</td>
<td>46</td>
<td>85 or above at least 15 point growth (Accelerated)</td>
<td>42</td>
</tr>
<tr>
<td>81–100 (Accelerated)</td>
<td>95 or above at least 15 point growth (Accelerated)**</td>
<td>34</td>
<td>95 or above at least 15 point growth (Accelerated)**</td>
<td>12</td>
</tr>
</tbody>
</table>

*Student A’s target on the performance assessment is 22 due to historical data related to his extreme ADHD and behavioral issues.

** Students who scored in the accelerated range on the pretest will be given a capstone activity in order to meet the 15 point increase.

This two part system is designed to cover materials in a project-based, authentic task and to determine knowledge that can’t be determined with the task. In order for a child to meet the growth target, target has to be met in both the multiple choice and the PBA components of the test. This differentiation of mastery allows students to show progress in both areas: knowledge attainment and performance based.

PLEASE NOTE: The tiered system explained above is not an accepted or expected rating system for technology skill attainment. However, students can demonstrate growth without yet attaining the skill.

### Rationale for Growth Target(s)

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

**Demonstrates Teacher Knowledge of Students and Content**

After studying student historical data on computer based projects and assessments for this course, along with the students’ pre-assessment scores and other special considerations (IEP, ELL, access to technology), I concluded that developing a tiered system will allow for the greatest determination of student growth.

**Explains Why Target is Appropriate for the Population**

All students individual needs outlined above (disability, language barrier and/or technology access, low Pre-test scores) were considered in setting the student growth targets. This course allows for not only cognitive learning, but with the use of Performance Based Measures, all students are able to demonstrate growth through open ended tasks completed throughout the year with a capstone or scaffolds to ensure the ability to show growth. The Minimum Target Score shows that all students are capable of reaching the Targeted Score for the Assessment.

**Addresses Observed Student Needs**

The students with the lower baseline scores can show considerable growth, even if they do not reach the benchmark by providing scaffolds and/or providing vocabulary attainment. Those who score in the Accelerated range have the opportunity to go beyond the requirements to use extended skills.
to complete the project.

**Uses Data to Identify Student Needs and Determine Appropriate Growth Targets**
After studying student trends and baseline data for this course, data collected from previous years’ projects, along with the students’ pre-assessment scores, I have weighed all factors aligned with this course and set targets for each tier, which will measure student growth in the course and content material. All students’ individual needs outlined above were considered in their student growth targets.

**Explains How Targets Align with Broader School and District Goals**
The above growth targets are aligned with the district’s goals for improving students’ technology skills and integration of technology in problem solving. Each student will score within the targeted range before entering high school ensuring skills to be successful in Tech 101, a freshman required course, and within the content areas. The performance-based project will also be scored and placed in each student’s portfolio.

**Sets Rigorous Expectations for Students and Teacher(s)**
The standards that are used for this course were developed to allow students to prepare for either content integration of technology and/or the work force. The students with the lower baseline scores can show considerable growth, even if they do not reach the benchmark score set. The technology concepts and understandings will be embedded in the production of the performance component. Students will be able to understand first hand why ideas, rules and warnings have been set into place. By working to solve a problem the students will get to practice not only the skills of each program but also why each technology was chosen and the range of abilities the program has.