

## New York State Student Learning Objective: **Science 5<sup>th</sup> Grade**

*All SLOs MUST include the following basic components:*

<b>Population</b>	<p><i>These are the students assigned to the course section(s) in this SLO - all students who are assigned to the course section(s) must be included in the SLO.</i></p> <p>One class, inclusive of five students with IEPs, 18 students total</p>
<b>Learning Content</b>	<p><i>What is being taught over the instructional period covered? Common Core/National/State standards? Will this goal apply to all standards applicable to a course or just to specific priority standards?</i></p> <p>Science Standard #2: Students will access, generate, process, and transfer information, using appropriate technologies.</p>
<b>Interval of Instructional Time</b>	<p><i>What is the instructional period covered (if not a year, rationale for semester/quarter/etc.)?</i></p> <p>2012-2013 school year.</p>
<b>Evidence</b>	<p><i>What specific assessment(s) will be used to measure this goal? The assessment must align to the learning content of the course.</i></p> <p>Baseline assessment: Fourth grade science state test results. Multiple choice questions pertaining to ability to read graphs, tables, charts, etc. Short answer questions pertaining to analyzing and interpreting the graphs, tables, charts, etc.</p> <p>Also, students complete an M&amp;M Science Lab at the beginning of the year where they must tally the number of each color M&amp;M to complete a data table, bar graph, and pie graph utilizing a cup of M&amp;M's given at the beginning of the lab. At the conclusion of the lab, students complete short answer questions that require them to analyze and interpret the data table, bar graph, and pie graph they constructed.</p> <p>Summative assessment: Students will individually research and obtain relevant information pertaining to a specific pre-assigned science topic (of the teacher's choice), using at least three different resources (local/national media, library, government agency, industries, etc. Students will analyze this data to design video, graphic, and/or text based presentations that include photos, graphs, tables, and/or spreadsheets.</p>

<b>Baseline</b>	<p>What is the starting level of students' knowledge of the learning content at the beginning of the instructional period?</p> <p>On last year's NYS Science 4 test: 15% scored 1, 15% scored 2, 60% scored 3, 10% scored 4. On the M&amp;M lab assessment 15% scored 1, 15% scored 2, 40% scored 3, 30% scored 4.</p>																				
<b>Target(s)</b>	<p>What is the expected outcome (target) of students' level of knowledge of the learning content at the end of the instructional period?</p> <p>Students who scored a "1" will obtain at least 75% accuracy on the summative assessment (research project) with minimal/moderate support. All other students will obtain at least 85% accuracy on the summative assessment (research project) with minimal support (based on 100 point science rubric to be designed by the teacher based on his/her expectations of the research project).</p>																				
<b>HEDI Scoring</b>	<p>How will evaluators determine what range of student performance "meets" the goal (effective) versus "well-below" (ineffective), "below" (developing), and "well-above" (highly effective)?</p> <p>See below (based on baseline data and district history):</p>																				
	HIGHLY EFFECTIVE			EFFECTIVE									DEVELOPING					INEFFECTIVE			
	20	19	18	17	16	15	14	<u>13</u>	12	11	10	9	8	7	6	5	4	3	2	1	0
99-100	97-98	95-96	93-94	91-92	89-90	87-88	84-86	81-85	78-80	75-77	72-74	70-71	68-69	66-67	64-65	62-63	60-61	54-59	41-54	<40	
96-100	92-95	88-91	85-87	82-84	80-82	77-80	74-76	71-73	68-70	65-67	62-64	60-61	58-59	56-57	54-55	52-53	50-51	44-49	31-44	<30	

## Rationale

*Describe the reasoning behind the choices regarding learning content, evidence, and target and how they will be used together to prepare students for future growth and development in subsequent grades/courses, as well as college and career readiness.*

Learning Content is based on CCLS anchor Standard 2, 1.1. The Baseline evidence is based on 4th grade Science state test scores with a focus on multiple choice questions pertaining to the ability to read graphs, tables, and charts as well as short response questions pertaining to analyzing and interpreting graphs. Summative Evaluation is based on the ability to apply (these skills) to collect and analyze relative data and produce a product using appropriate technologies, that accurately interprets and clearly represents the data collected as put forth in Standard 2, 1.1 Summative Score is calculated based on at-grade level science performance rubric totaling 100 pts.