Wisconsin Student Learning Objective

After reviewing available data and identifying the student population for whom the SLO will apply based on the needs identified by trends and patterns in the data, create a Student/School Learning Objective. Submit the SLO Plan to your evaluator prior to the Planning Session.

Subject Area/Grade Level

Science/Grade 7

Baseline Data and Rationale: *(What sources of data did you examine in selecting your SLO? What issues related to student equity can be seen through the data review? Summarize trends and patterns from your data review. If this is the same SLO as you submitted last year/semester/interval, please provide justification for why you are repeating your goal. Did you consider both qualitative and quantitative data?)*

Recent item analysis of the WKCE indicated that students are not scoring well on the WKCE questions using tables and graphs. Additionally, student scores on the most recent (fall 2014) Measures of Academic Progress (MAP) assessment indicated that 29% of the students in the 7th grade scored below the 40th percentile in the Statistics and Probability strand and 36% of the eighth grade students scored below the 40th percentile in the Statistics and Probability strand.

As a result of these observations, a pre-assessment based on analyzing and interpreting graphs was given to our students. The assessment data collected from the pre-assessment indicated the students fell into the following scoring categories: 0% advanced, 46% proficient, 46% basic and 8% minimal. The attached Excel file shows the data for individual students.

Learning Content and Grade Level: *(Which content standards are relevant to/related to/in support of your goal? Is this content reinforced throughout the interval of this goal? Did you identify the national, state, or local standards relevant to your role in the district?)*

Science
C.8.6 State what they have learned from investigations, relating inferences to scientific knowledge and to data that they have collected
C.8.7 Explain their data and conclusions in ways that allow an audience to understand the questions they selected for investigation and the answers they have developed
NGSS Developing and using models; constructing explanations
Math
7.RP Analyze proportional relationships and use them to solve real world and mathematical problems
8.SP Investigate patterns of association and bi-variate data

Student Population: *(Which students are included in the target population? How does the data analysis support the identified student population?)*

All of the 7th grade students in my 5th hour science class. (26 total) 46% of the class contributing data for the SLO monitoring is female and 54% is male

The current enrollment at [school] is 559 students.

School Demographics:
95% Caucasian
2% Hispanic
2% African American
1% American Indian
1% other

18% of our student population is SPE
47% of the student population qualifies for free/reduced lunch
1% is Limited English Proficient

Targeted Growth: *(Have you identified the starting point for each target student? How did you arrive at these growth goals?)*

With this being the first year using this assessment and this learning objective (in this format), I do not have a complete sense of what growth through the year might be. Based on prior experience with monitoring students' progress I will expect the following:
85% of students who have scored below a level 3 (proficient) on a data application assessment will demonstrate measurable progress by improving their post assessment score by one rubric level.
95% of students who are at a level 3 are expected to remain at a level 3 or advance to a level 4 (advanced)

Interval: *(Does the goal apply to the duration of the time you spend with your student population (ex. Year, Semester, Trimester, etc.)?)*

Full academic year with the pre-test given in early October and post test given in mid May. Mid-interval checks will be made four times before the mid-May post test and revisions to the SLO goal will be dependent on the data collected from the mid-interval checks.

Evidence Sources: *(What benchmark assessments will you use (pre-instruction, mid-interval, post-instruction)? What formative practices will you use to monitor progress throughout the interval? What summative assessment will you use to determine student growth at the end of the interval? Is the assessment: Aligned to the instructional content within the SLO? Free of bias? Appropriate for the identified student population?)*

Teacher-created rubric for assessment of data interpretation (see attachment)

Data collected from mid-interval checks of the students' ability to interpret graphs will be recorded in Skyward and graphed following the end of the year assessment.

SLO Goal Statement: (*Specific, Measureable, Attainable, Results-based, and Time-bound*)

Over the course of the 2014-2015 school year, all FAY students attending at least 85% of the time will improve their ability to interpret graphs.
- 85% of students who have scored below a level 3 (proficient) on a data application assessment will demonstrate measurable progress by improving their post assessment score by one rubric level.
- 95% of students who are at a level 3 are expected to remain at a level 3 or advance to a level 4 (advanced).

Instructional Strategies and Support: *(What professional development opportunities support this goal? What instructional/leadership methods will you employ so that students progress toward the identified growth goal? How will you differentiate instruction to support multiple growth goals within your population? Who might you collaborate with in order to support the unique learning needs within your group?)*

Through the course of the year students will be asked to build, design and interpret a variety of graphs. They will use these graphs in their explanations and refine these graphs as a class, in groups and individually. The primary skill being monitored will be the student's' ability to accurately interpret a variety of graphs. Interpreting a variety of graph types will help students gain a better understanding of the science content being studied. Advanced students will be expected to be able to interpret more sophisticated graphs, while a variety of simplified graphs will help students lacking understanding to gain a better understanding of the material.

Students scoring advanced in the beginning will receive additional project work to extend their learning. Students scoring at the minimal and basic levels will receive targeted small group instruction using graphing strategies to build understanding and guided practice in modeling the interpretation of graphs.

Students identified as SPE will be evaluated using the same rubric as the regular education students and will have their scores included with the overall class scores. However, modifications to the graphing assessments will be made as needed according to an individual's IEP.