

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

Technology Education - Welding and Metal/Grades 11-12

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?)*

According to local businesses and tech schools, students competing for jobs in the workforce and enrolling in tech school must be able to accurately read and use a variety of high precision measurement tools, and many are struggling to do so. The Welding and Metals Fabrication class was given a study at the beginning of the year on using calipers and micrometers to measure 10 different objects. The accuracy of the measurements had to be within .010 thousands of an inch to count as a correct answer. The following data shows the breakdown of the student scores; column one is the percent of correct answers, column two is the percent of students who scored in that range.

0-24%	20%
25-49%	20%
50-74 %	40%
75-100 %	10%

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?)*

- A.12.1 Contrast the increasing complexities of technology with its ease of use
- B.12.5 Assess the impact new and improved products and services have had on the quality of life; explain how the development of new tools, materials, and processes is necessary to maintain and improve high productivity and quality
- B.12.7 Explain how new and higher quality products require new and higher quality materials and processing techniques

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

11-12th grade high school students enrolled in Welding and Metal Fabrication class.

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

In each of the categories shown from the baseline data the following will occur:

Students in the 0-24% will go from 20 % to 0, students scoring below 50% will decrease to 20%,

Students scoring in the 50-74% range will decrease to 20%, and students scoring in the 75-100% range will increase to 60%.

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

2014-2015 Student School Year

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?)*

Final assessment will be students will have 10 different labeled parts that need to be measured. They will be given a selection of tools to use what is to be measured and answer sheet for all measurement and tool used.

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

In the 2014-2015 Student School Year Welding and Metals Fabrication Class, 60 % of students will be able to measure a selected object using the correct tool, micrometers or caliper, within .010 of an inch with 75% accuracy.

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?)*

Students have studied the chapter in the Metalworking Text on Measurement and Measurement Tools, and have completed a worksheet on using measurement tools. I have displayed the different tools to the students and have shown them how to use these tools. We have watched video's on the correct way to use these tools and when they should be used. During the course of the year students will have to keep using these tools to work with their metalworking projects. They will be used on milling projects, lathe turning projects, sheet metal projects, and in a variety of other lessons in the metalworking shop. Through all these lessons they will be using these tools daily to keep dimensions of their projects and adjusting the machines to remove the needed material. At the end of each project the students will go over the dimensions and the precision of their projects with the blueprints of the projected measurement and the actual measurements that the finished project has and the difference in the two measurements and are graded on the project and the accuracy of it.