

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
Mathematics/Grade 2

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?)*

When completing the district's "Understanding Place-Value" Assessment, 70% of the students in my second grade scored "Partially Proficient", 25% scored "Limited Proficiency" and 5% scored "Proficient". This suggests that a majority of my students are not proficient in conceptual understanding and fluency of place-value. This concept is one (of four) critical areas for students in second grade as defined by the Common Core State Standards for Mathematics.

The positions of digits in numbers determine what they represent and which size group they count. Recognizing the groupings of ones, tens, hundreds, etc., allows us to take numbers apart and combine them with other numbers in efficient ways to assist with computations. Place value understanding is essential to understanding the concept of numbers and quantities. Having a solid understanding of place value gives students a foundation to be successful with more sophisticated concepts such as number operations and algorithms.

Understanding the base-ten system provides students with the necessary conceptual foundation to take numbers apart and put them together in efficient ways. In addition, it helps to develop students' understanding of the meanings and properties of addition, subtraction, multiplication, and division. Work in the base-ten system relies on these meanings and properties, but also contribute to deepening students' understanding of the properties and their meaning.

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?)*

- CCSS.Math.2.NBT.A.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
 - CCSS.Math.2.NBT.A.1a 100 can be thought of as a bundle of ten tens — called a "hundred."
 - CCSS.Math.2.NBT.A.1b The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
- CCSS.Math.2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s.
- CCSS.Math.2.NBT.A.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
- CCSS.Math.2.NBT.A.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.

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

All students in my second grade class.

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

- The students who were "proficient" will continue to demonstrate proficiency and will demonstrate advanced proficiency. Students in the advanced proficiency level will show an understanding of flexibly showing numbers in different ways (example: 254 is two hundreds, 5 tens and 4 ones OR one hundred, 15 tens, and 4 ones OR two hundreds, 4 tens and 14 ones.) Also, students demonstrate understanding of WHY it is important to be able to flexibly break apart and put together numbers.
- The students who were "partially proficient" will move to the proficient level or the advanced level of proficiency.
- The students that demonstrated "limited proficiency" will move to the partially proficient level, proficient level, or the advanced level by the end of the semester.
- NOTE: Although limited proficiency students are to move at least one level on the rubric, this does not mean that it ends there. By the end of the year, the goal is still for ALL students to meet proficient levels.

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

This SLO will span the entire 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?)*

The following will be used to determine student progress toward the objective:

- Students' scores on the district's "Understanding Place-Value" Assessment task. This task is designed to assess students' conceptual understanding and fluency with the concept of place-value. This assessment will be given three times during the year. The assessment will be administered in September as a pre-assessment, then during January as a mid-year assessment and as a final assessment in May.
- As students work in pairs or groups, the teacher will assess the students monthly to see the base-ten understanding by using the "place-value rubric" o This rubric is designed to determine the students' conceptual understanding through the use of various manipulatives as well as their fluency in working with numbers in the hundreds and thousands.
- The teacher will conduct one-on-one interviews monthly using the "place-value rubric" to informally assess students' conceptual understanding.

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

100% of the students will be proficient in their ability to read and write numbers using base-ten numerals and apply their understanding of place value by representing numbers pictorially (using symbols for base-ten block manipulatives), writing numbers in expanded form, locating a number on a number line, and comparing numbers.

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?)*

Manipulatives: Teacher will provide students with manipulatives. Manipulatives will include multi-link or unifix cubes, base-ten blocks, straws (or other materials that can be placed in groups of ten), etc. Students will be allowed the opportunity to explore and use manipulatives to help with understanding the concept of place value. Pictorial representations: After multiple opportunities using manipulatives, teacher will introduce students to pictorial representations. Pictorial representations are the next step in moving students from concrete (manipulatives) to abstract understanding (symbolic) understanding of numbers. Think alouds: Teacher will utilize think alouds in the classroom. Think alouds are explicit explanations of the thinking that is going on. The teacher is modeling a metacognitive thought. (Example: I have 358 which is 3 hundreds, 5 tens and 8 ones. How can I make 358 in a different way? Hmm...If I break apart one of the tens, I can make it 3 hundreds, 4 tens and 18 ones. Using manipulatives, physically demonstrate the decomposition of the 1 ten. It is still the same number, 358. Let's count it together to make sure...) Cooperative learning groups: Teacher will allow students the opportunity to work collaboratively when working through problems. To allow for engaging and maximum 'talk time' between students, pairs are ideal. Collaborative Teacher Groups: Teacher will work another grade-level teacher in analyzing data for planning for future interventions.