

Student Learning Objective Worksheet¹

Teacher Name: Annelies de Groot

Standard: Reading, Writing and Communicating // *Grade Level:* Ninth / Tenth Grade Band // *Standard Category:* 4. Research Inquiry and Design

Prepared Graduates: (10. Gather information from a variety of sources; analyze and evaluate its quality and relevance; and use it ethically to answer complex questions)

Grade Level Expectation: (1. Synthesize multiple, authoritative literary and/or informational sources, creating cohesive research projects that show an understanding of the subject.)

(*Colorado Academic Standards Online*, n.d.)

1. **Rationale:** (*Why have you chosen this objective?*)

As students move through their education, they will be required to complete numerous research projects independently. This particular standard highlights the skills that students need to complete a thoroughly researched project. “Although information literacy is essential to students' success in higher education and lifelong learning, research reveals that students lack IL skills” (Mercardo-Sierra & Northam, 2023). Additionally, the need for research skills in the workplace has been identified by many organizations, including [glassdoor.com](https://www.glassdoor.com) and [indeed.com](https://www.indeed.com), two highly respected websites on the forefront of hiring data. The Colorado Department of Education demonstrates that the Thompson Valley District’s performance ratings are approaching Meeting Expectations for Academic Achievement, Academic Growth, and Post Secondary Workforce Readiness, and increasing information literacy is an effective way to further increase these learning outcomes (*SchoolView Frameworks*, n.d.).

2. **Population:** (*What students will this objective address?*)

The students addressed by this objective are lower-level high school students (9th and 10th grade) that will work independently of a classroom environment. The online classroom environment is designed to address their specific academic growth needs, executive functioning skills, and personal interests to showcase individual skills. This objective develops the skills towards information literacy that the student lacks either through evidence of school grades or through self-reported/parent-reported struggles.

3. **Interval of Instructional Time:** (*How long is the interval of instruction (i.e., weeks, quarters, semesters or one school year)?*)

The length of time spent on this objective will vary depending on the level of participation and capabilities of the individual participating students. The online classroom time occurs for 60 minutes per week, and independent assignments will be expected to take between two to four hours per week. With realistic participation, the objective should be achieved in four to six weeks.

4. **Assessment:** (*How are you going to measure student growth?*)

While working towards this SOL with individuals, the assessment will be a teacher-originated assignment assessed using a quantitative rubric and developed using the Colorado Department of Education’s “Assessment Review Tool” to ensure the appropriate rigor and focus towards the chosen standard. When this SOL is utilized with an in in-person classroom within the State of Colorado, appropriate assessments will be identified through the “Assessment Inventory Tool” (*Measures of*

¹ Adapted from the SLO template for Denver Public Schools, pg. 10 (Center for Great Teachers & Leaders, 2013)

5. **Expected Gain or Growth:** *(How much are your students going to grow?)*

Much of the growth of the students participating in these objective tasks depends on the intrinsic motivation of the students and their dedication to the end result. The student will be identified as achieving growth when the end result of the final teacher-designed assessment demonstrates at least an “acceptable” level for each required skill, and/or when the student achieves a 15-20% growth over baseline in their research skills assessment score. Independent students’ baseline is self-reported as “low”, and the accompanying formative rubric throughout the process is designed to increase confidence to a minimum of “proficient” level skills.

6. **Learning Content** *(What does the baseline data indicate you need to focus on with your students?)*

Participating independent students’ baseline data is self-reported as “low research skills/low confidence in research”, while classes' baseline data indicates a below-proficient level of research ability (CDE). The baseline assessment will be loosely based on a diagnostic instrument developed in 2011 that identifies strengths & weaknesses in various research skill areas (Meerah et al., 2012). Throughout the skills development process, students will learn how to conduct thorough and pointed searches for research sources, how to identify verified and unbiased sources, how to analyze these sources for correlations, how to use them to develop and support a thesis, and how to appropriately cite their research. This work will be further developed and utilized towards an additional objective later in the online/in-person class experience.

7. **Strategies:** *(What will you do to meet your objective?)*

Each one hour class will be allocated to reinforcing certain research principles and practices while outlining the requirements of a completed independent task. Each class and independent task will be scaffolded towards the end product of an annotated bibliography. Class time will be spent discussing the nature of authority/what makes a source valid/credible, exploring boolean operators and search tools, discussing what goes into crafting a strong initial inquiry, practice source analysis, identification of commonalities among example sources, exercises of completing a CRAAP test for valid source identification, recognition of citation rules and tools, and conversations about how to analyze sources. Reflection and self-grading will be incorporated into the students’ independent work as well.

Reference:

American Institutes of Research. (2013). Introduction to Student Learning Objectives. Center on Great Teachers & Leaders at American Institutes for Research.

https://gtlcenter.org/sites/default/files/IntroSLOs_Handouts.pdf

Center for Great Teachers & Leaders. (2013). Introduction to Student Learning Objectives. *American Institutes for Research*. https://gtlcenter.org/sites/default/files/IntroSLOs_Handouts.pdf

Colorado academic standards online. (n.d.). <https://www.cde.state.co.us/apps/standards/6,30,21>

Measures of Student Learning Approaches for selecting and using multiple measures in Teacher Evaluation-Step 2 | CDE. (n.d.). https://www.cde.state.co.us/educatoreffectiveness/msl_teacher_step2

Meerah, T. S. M., Osman, K., Zakaria, E., Ikhsan, Z. H., Krish, P., Lian, D. K. C., & Mahmud, D. (2012).

Developing an instrument to measure research skills. *Procedia - Social and Behavioral Sciences*, 60, 630–636. <https://doi.org/10.1016/j.sbspro.2012.09.434>

Mercardo-Sierra, M., & Northam, S. (2023). Beyond Reading and Writing: Informational Literacy in Higher Education for Lifelong Success. *Texas Journal of Literacy Education*, 10(1).

SchoolView Frameworks. (n.d.). <https://www.cde.state.co.us/schoolview/frameworks/indicators/1560/8824>