

STUDENT LEARNING OUTCOMES AT EAST CAROLINA UNIVERSITY

What are program student learning outcomes (SLOs)?

Program SLOs are statements that specify the knowledge, skills, and perceptions/attitudes students will demonstrate when they have completed the academic program.

- Program SLOs identify what students learn as a result of the entire curriculum.
- Program SLOs are measured through multiple data- points gathered from the assessment at the course level.
- Mapping the curriculum demonstrates where the desired program SLOs are Introduced, Reinforced and/or Mastered in the curriculum thus providing sequential opportunities for student learning.

What needs to be considered when developing program SLOs?

- Focus on the end results - what students will do upon completion of the program not a specific course. For example:
 - Program SLO: Upon completion of the ABCD program, students will be able to discuss the processes of urbanization and modernization in the developing world.
 - Course level SLO: Upon completion of Course XYZ, students will be able to analyze cities as products of modernization, as expressions of various processes, such as investment and employment.
- Determine the program SLOs that are most applicable to the program. A general guideline would be 6-8 for degrees and 2-4 for certificates and stand-alone minors.
- Use concrete verbs that result in observable behavior that can be measured (e.g. demonstrate, define, design, synthesize, differentiate, and illustrate)
- Avoid verbs that call for students' behavior which cannot be easily measured (e.g.; exposed to, familiar with, learn, understand or know)
- Avoid generic outcomes that could be associated with any program or the institution. For example:

<i>Generic</i>	<i>Program Specific</i>
Upon completion of the DEFG program, students will be able to communicate effectively.	Upon completion of the DEFG program, students will be able to write lab reports that clearly communicate results employing vocabulary and analytical tools appropriate in the discipline.
	Upon completion of the DEFG program, students will be able to converse fluently in a foreign language.
	Upon completion of the DEFG program, students will be able to demonstrate proficiency in basic writing skills for communication professionals.

- Write outcomes in language that will allow a variety of audiences to understand what students in the program will learn (jargon-free).
- Focus only on one learning statement per outcome.
- Keep program SLOs appropriate to the student's level (undergraduate major or certificate, undergraduate or graduate minor, graduate major or certificate), realistic and attainable.

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How are program SLOs measured?

Methods of assessment describe the process used to gather data to measure each stated program SLO. When selecting the appropriate method, direct and indirect assessment can be used to provide evidence that the outcomes have been achieved BUT at least one direct method of assessment must be used for each program SLO.

- Direct Measures:
 - Students **show us** (provide evidence) of what they have learned. In other words, observable actions or behaviors by the students have been identified and measured.
 - Examples: Objective tests, essays, presentations, lab experiments, artistic performances special projects, classroom assignments, portfolios, licensure exams
- Indirect Measures:
 - Students **tell us** what they have learned as a result of the program, how satisfied they are with their experience or to what degree they are successful through institutional metrics.
 - Examples: Exit surveys, student interviews, alumni surveys, questionnaires and employee/supervisor satisfactions surveys, graduations rates, GPA, job placement, publications, continuing education placement, enrollment
- Curriculum Maps: A Curriculum Map is a matrix that graphically organizes important information about the Introduction (I) , Reinforcement (R), Mastery (M) , and Assessment (A) of the program SLOS.
- Multiple Means of Assessment:
 - Using the curriculum map, locate courses where the outcome is I, R, and M to identify possible assessment data points for each program SLO.
 - While the minimum requirement is that at least one outcome must have multiple means of assessment, it is good assessment practice to have multiple means of assessment for all outcomes.
 - Any “A” identified in the curriculum map needs to be a means of assessment in Nuventive Improve (formerly TracDat).
 - Multiple means of assessment can be combined in Nuventive Improve so that they can be reported and analyzed together.
 - You do not have to assess an outcome with multiple means of assessment each year.
 - Program SLOs can be assessed using methods not mapped to particular courses (e.g. licensure exams).

What are acceptable criteria for success or targets for program SLOs?

Criteria for success are specific, quantifiable expectations of students’ collective performance related to each measure of SLOs.

- Express as percentages rather than means.
 - For example, *90% of students will earn a 3.0 on a five-point rubric scale* is more useful as an indicator of individual student learning than *Students will earn an average of 3.1 on a five-point rubric scale.*

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- Another example, *95% of students will earn at least an 80* is more useful as an indicator of individual student learning than *Students will earn an average of 73*.
- Multiple criteria for success may be used for several levels.
 - For example, 90% of students will earn at least an adequate rating and 30% of students will earn an exemplary rating.
- Benchmarks: Where appropriate, program SLOs should use external standards and benchmarks for adequate, exemplary and inadequate performance.