## University Alignment of Learning Outcomes

The CSU's <u>Program Planning Resource Guide</u> offers the following terms and definitions related to learning outcomes:

**Institutional learning outcomes (ILOs)** highlight the general knowledge and skills expected of students upon graduation.

**Program learning outcomes (PLOs)** highlight the discipline-specific knowledge and skills expected of students upon graduation.

**Student learning outcomes (SLOs)** clearly convey the specific and measurable behaviors that students will demonstrate in order to achieve a program's learning outcomes.

Under this structure, program faculty look at samples of student work demonstrating the behaviors described in SLOs in order to measure how well students are achieving their program's PLOs — that is, *to reflect on how well students are learning what faculty want them to learn*.

Thus, a good SLO loosely describes what students will do in a signature assignment designed to elicit demonstration of a PLO (or multiple PLOs). In a major program, these assignments should appear near the end of the program curriculum so as to reflect cumulative learning near graduation.<sup>1, 2</sup>

Here is an example of outcome alignment presented in the CSU's resource guide:

BS in Biological Sciences (CSU Example)			
ILO	PLO	SLO	
Graduates will think critically and creatively and apply analytical and quantitative reasoning to complex problems.	Graduates will solve complex biological science problems.	Using biological science data sets, students will analyze and synthesize the data to solve a scientific problem in the interest area.	

The example presents a program that has identified the ability to solve complex biological science problems as an outcome of their curriculum, and they have noted that this fulfills the institution's desire that graduates will think critically and creatively in the application of analytical and quantitative reasoning. Crucially, through the wording of the SLO, program faculty have described explicitly what their students will do to demonstrate the PLO. In effect, the SLO broadly describes a signature assignment used to assess the PLO.

Now observe the same alignment in how an HSU BA program assesses a PLO aligned with HSU's critical thinking ILO:

<sup>&</sup>lt;sup>1</sup> A single course can feature multiple signature assignments or one signature assignment that serves to elicit demonstration of multiple PLOs. This is particularly appropriate for capstone courses.

<sup>&</sup>lt;sup>2</sup> This summative, cumulative-learning strategy does not apply as simply to the university's GEAR program, as its structure does not present any simple location for a demonstration of student achievement of the 14 GEAR PLOs at the top of the curriculum. Assessment of those PLOs will thus occur across the GEAR curriculum.

BA in Critical Race, Gender, and Sexuality Studies (HSU)			
ILO	PLO	SLO	
Critical Thinking: HSU graduates will be able to critically evaluate issues, ideas, artifacts, and evidence to guide their thinking.	Graduates will be able to explain prominent debates in critical social theory.	Students will use two or more critical social theories to analyze a core concept in the field, e.g., power, knowledge production, ideology, resistance, agency, identity.	

Once again, we see an SLO describing explicitly what students will do to achieve the PLO. A reader from any discipline can generally infer the structure of the signature assignment that CRGS faculty are using to assess student learning of this ability.

Notice also that the SLO allows room for individual faculty members to vary how they ask students to present their analyses. As long as the signature assignment always requires a demonstration of the measurable behaviors identified in the SLO, programs are free to determine an acceptable amount of variability in how different faculty members present the assignment from course section to course section or semester to semester.

In summary, student performance in the assignment linked to the above SLO gives faculty a measurement of how well students are achieving the PLO, which, in turn, gives a measurement of how well CRGS majors are achieving HSU's critical thinking ILO.

The alignment could be described like this:

HSU graduates should be able to critically evaluate issues and evidence to guide their thinking (ILO). The CRGS bachelor's program addresses this outcome by teaching its majors to explain prominent debates in critical social theory (PLO). In order to measure how well its majors meet this outcome, program faculty ask their graduating students to use critical social theories to analyze a core concept in the field (SLO).

If a program has its outcomes aligned properly, faculty should be able to articulate a comparable description for each of their PLOs.