Alignment and Mapping

An aligned curriculum is one in which there are direct, intentional, and transparent relationships between Program Learning Outcome (PLOs), Course Learning Outcomes (CLOs), and equitable opportunities for students to learn, develop, and demonstrate their attainment of PLOs.

Curriculum analysis is the process that results in a curriculum map. Faculty begin the conversation of curriculum analysis and mapping by asking:

When and how often does the program provide students opportunities to demonstrate their learning?

Curriculum analysis and mapping for equity

We "need to consider how curricula are structured to advance student learning and how courses within curricula are linked to help students make connections, transfer learning, and reach the goals we set for them in learning outcomes" (Jankowski & Marshall, 2017, p. 27).

Why does this matter? When was the last time you thought about what it was like to be a novice in your field?

Unfortunately, the implicit nature of faculty expertise doesn't always translate directly to clear goals for student learning. Instead, sometimes the very thing that qualifies someone as an expert--unconscious competence-- can lead to disciplinary blind spots, which in turn, may create unintended obstacles for students.

The iterative curriculum alignment process of reflecting on your expectations for student performance may help bring your implicit expectations about disciplinary knowledge, skills, and abilities to an explicit level.

We cannot hold students responsible for demonstrating mastery of learning outcomes unless we provide sufficient number and sufficiently varied opportunities for them to achieve those outcomes. This is true at the course- and program-level.

An equity-centered aligned curriculum is characterized by direct and intentionally transparent relationships between Program Learning Outcome (PLOs), Course Learning Outcomes (CLOs), and opportunities for students to learn.
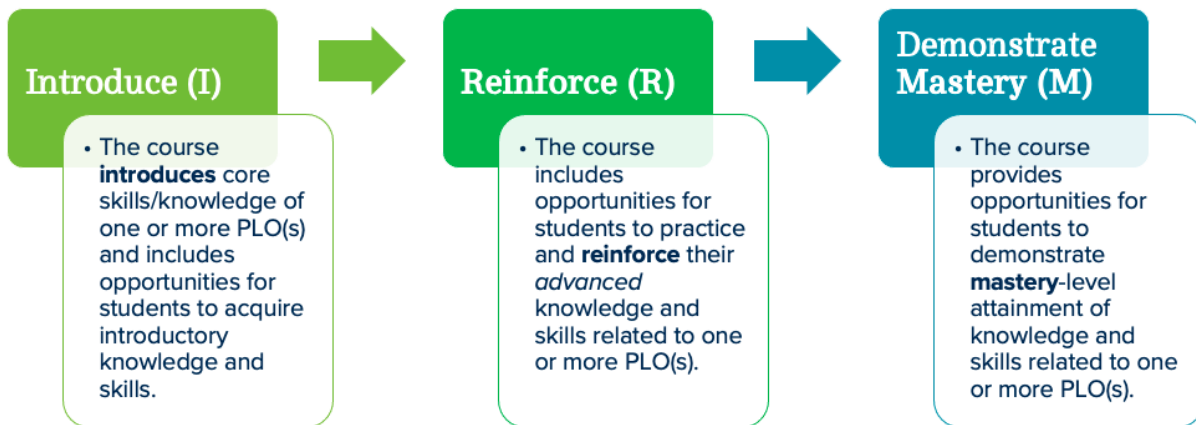
Curriculum analysis

Curriculum analysis is an intentional, iterative, and collaborative examination of the degree to which the program's curriculum provides sufficient and sufficiently scaffolded opportunities for students to learn, develop, and demonstrate their attainment of PLOs.

Sufficient in number: the program's curriculum includes multiple opportunities (i.e., more than two courses) for students to develop, reinforce, and demonstrate their attainment of the knowledge / skills associated with each PLO.

Sufficiently scaffolded: the program includes opportunities for increasing levels of engagement with each PLO through which students develop, reinforce, and demonstrate their attainment of the knowledge / skills associated with each PLO.

Levels of engagement

It is necessary to identify the degree to which each required course provides opportunities for students to engage with the (sub)skill/knowledge for each PLO. We refer to those levels I, R, and M (alternatively identified with an A for Assessed). See graphic below for details.

Introduce (I)	Reinforce (R)	Demonstrate Mastery (M)
• The course **introduces** core skills/knowledge of one or more PLO(s) and includes opportunities for students to acquire introductory knowledge and skills.	• The course includes opportunities for students to practice and **reinforce** their *advanced* knowledge and skills related to one or more PLO(s).	• The course provides opportunities for students to demonstrate **mastery**-level attainment of knowledge and skills related to one or more PLO(s).

Curriculum mapping

"Mapping is a strategy for visualizing the areas where we think learning is happening as it relates to specific learning outcomes" (NILOA, 2018, p. 7).

The process of curriculum analysis yields a curriculum map, which visually represents the opportunities the program provides for students to engage with skill(s)/knowledge related to each PLO. Strong curriculum maps must include: A) all of the PLOs; B) required courses offered by the department / program; and C) Intended levels of engagement. (See image below.)

Components of strong curriculum maps

	B. Required courses offered by the department/program									
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PLO# 1	A. PLOs text									
PLO# 2			C. Intended levels of engagement: "I" "R" and "M"							
PLO# 3										

The MOST important characteristic of a strong map is **accuracy**.

Does the program provide sufficient (and sufficiently scaffolded) opportunities for students to learn and sufficient (and sufficiently scaffolded) opportunities to demonstrate their learning?

Are the opportunities accessible & transparent for all?

References

University of California, Davis, 2018,https://assessment.ucdavis.edu/get-curious/alignment

Jankowski, N., & Marshall. (2017) Assessment That Matters; Trending Toward Practices that Document Authentic Student-Learning. National Institute for Learning Outcomes Assessment. January 2018. https://files.eric.ed.gov/fulltext/ED590514.pdf