Quick Guide to Curriculum Maps

This quick guide was prepared by the WSU Office of Assessment for Curricular Effectiveness (ACE) and is intended to help WSU programs and faculty consider good practices for developing and updating curriculum maps. ACE is also available to collaborate with WSU undergraduate degree programs to develop or update their curriculum map. Contact us at ace.office@wsu.edu for more information.

Introduction

A curriculum map is a matrix aligning program-level student learning outcomes (SLOs) with the courses for a degree program or major. Curriculum maps make visible the relationship between courses and program-level SLOs, enabling faculty to design and implement intentional curricula which systematically develop and deepen students' key skills and knowledge.

Types of Curriculum Maps

Program curriculum maps may vary in complexity and structure, to best meet the needs of the program. Curriculum maps can be constructed in different ways, depending on what your program wants to know. Below are examples of three variations, with descriptions of what each type of map can tell you about your curriculum.

Basic Curriculum Map

A basic curriculum map (Figures 1 and 2) can be used to:

- **Identify which core courses support which program SLOs.** How do core courses fit together?

- **Reveal any gaps.** In Figure 1, program SLO #3 is not addressed in any course. In Figure 2, Course 4 does not address any program SLO. A course is not necessarily required to address all program SLOs and a course can address outcomes other than the program SLOs. However, significant gaps in the alignment of core courses with the program's learning outcomes should be discussed by faculty.

	Course 1	Course 2	Course 3	Course 4	Course 5
SLO #1	X				X
SLO #2	X	X		X	X
SLO #3					
SLO #4	X		X	X	X

Figure 1: A basic curriculum map where a program SLO is not addressed in any course

	Course 1	Course 2	Course 3	Course 4	Course 5
SLO #1	X		X		X
SLO #2	X	X			X
SLO #3		X	X		
SLO #4	X		X		X

Figure 2: A basic curriculum map where a course does not address any program SLOs

Program SLO Development Map

A curriculum map focused on skill development (Figure 3) can:

- **Help determine how the curriculum systematically builds skills and knowledge.** Do lower-level courses help prepare students for upper-level courses?

- **Show any gaps in the progression of learning opportunities.** Are all program SLOs being introduced? Are students given enough opportunity to develop and master program SLOs over time? In Figure 3, it appears as if students are not being given adequate opportunity to practice using skills and knowledge before "Mastery" level learning is expected for program SLO #1.

- **Identify courses where assessment measures of the program SLOs could be applied.** In Figure 3, the senior project in Course 5 is an assignment in which students must apply and integrate all of the program's SLOs and this program assesses all program SLOs using this project.

	Course 1	Course 2	Course 3	Course 4	Course 5
SLO #1	I				M/A
SLO #2	I	D	D	D	M/A
SLO #3	I	D/A		D	M/A
SLO #4	I		D	D	M/A

I = Introduced
D = Developing (opportunity to practice, with feedback)
M = Mastery level expected of a senior
A = Assessed for program assessment

Figure 3: A program SLO development map where there is a gap in opportunities for students to develop for a program SLO

Program SLO Emphasis Map

A curriculum map focused on emphasis of program SLOs (Figure 4) can help a program determine the extent to which each program SLO is addressed in each course.

All program SLOs do not necessarily need to be equally emphasized, but any differences, such as program SLO #4 in Figure 4, should be recognized and discussed by faculty. In this case, faculty could discuss the following questions:

- Is this program SLO important to the program?

- Is this program SLO more challenging to teach?

- Can this program SLO be addressed effectively in fewer courses than other program SLOs require?

	Course 1	Course 2	Course 3	Course 4	Course 5
SLO #1					
SLO #2					
SLO #3					
SLO #4					

Black/Primary-The vast majority of the content addresses this SLO
Medium Gray/Secondary-Addressed by a significant portion of the course
Light Gray/Tertiary-Addressed infrequently or to a minor extent
White/Nonexistent-This SLO is not addressed in this course

Figure 4: A program SLO emphasis map where one program SLO receives less emphasis compared to other program SLOs

Value of Curriculum Maps

A curriculum map can give program leadership, faculty, students, and advisors a shared understanding of what the curriculum seeks to accomplish. Curriculum maps should be shared regularly with all faculty who teach, discussed periodically, and updated as needed. They can be provided to new faculty as part of orientation to the department and can be shared with others, such as advisors, TAs, and students. In this context, a curriculum map can:

- Help each faculty member understand how their course is situated in the curriculum, and the essential contributions their course makes toward advancing program-level SLOs
    - Help faculty make decisions during the semester if something must be changed/dropped/added
    - Guide decisions about assignments, activities, textbooks, technology, and training
- Provide a catalyst for faculty discussions about aligning and scaffolding courses, teaching, and assignments to effectively support student learning
    - Clarify the relationships between courses
    - Enable faculty to better build on skills and knowledge from previous courses in the curriculum
    - Align course offerings taught by multiple instructors
- Inform decisions about course offerings, sequencing, scheduling
    - Verify that course sequencing and scheduling are appropriate
    - Guide changes in scheduling rotations, course offerings, etc.
- Help students see the bigger picture of how their courses fit together, and help focus and motivate their learning
- Reveal where the curriculum is stronger or weaker in terms of advancing program-level SLOs
    - Show strengths to preserve or build on
    - Guide areas for improvement, such as gaps in the curriculum or unintended overlaps
- Help programs plan assessment of program-level SLOs
    - Identify courses or assignments where an assessment measure could be collected
- Provide a framework for exploring the alignment between the intended, taught, and assessed curriculum
    - If assessment results show that students are not performing well on a program SLO, a curriculum map could help faculty determine if the learning opportunities in the curriculum are a possible contributing factor (i.e., Is enough emphasis being given to the skills and knowledge for that program SLO? Are students given a chance to practice applying and integrating skills and knowledge in different contexts?)

How to Develop or Update a Curriculum Map: General Steps

Perhaps the most useful part of curriculum mapping as an activity is the faculty discussion that occurs as part of the process of creating the map, refining it, and using it as a reference point for ongoing assessment and engagement in teaching and learning.

Step 1: Arrange program-level SLOs and courses for the degree program/major into a table

List the program-level SLOs along one axis and the courses for the degree program/major along the other axis. At minimum, a program should include core or required courses for the degree program/major. Programs may also include electives or other experiences, as appropriate to the program's context, structures, and needs.

Step 2: Identify how courses advance program SLOs

Faculty identify how their courses advance program SLOs. Faculty may wish to identify how course SLOs relate to the program SLOs and, potentially, what sort of emphasis and skill level their course addresses, depending on the type of map the program wants to create (see pages 1-2 for types of maps). It may also be valuable to identify key assignments, or other learning opportunities that address the program-level SLOs.

Note: It's useful to have faculty discuss how they chose levels of emphasis and skill and note any differences in their understanding. As faculty go further into the process (see Step 3), their choices can be revised.

Step 3: Review and refine map

It's important that faculty take time to "read" the resulting map and discuss what they see. This is an opportunity for faculty to discuss their approaches to teaching and their observations about student abilities, preparedness, and progress through the curriculum. Faculty could also discuss how key assignments work together (or could work together) in courses to help students develop skills and knowledge across the curriculum. These conversations might lead the group back to the curriculum map to make adjustments as they compare notes about how they interpret different levels of skill development.

Step 4: Consensus

Effective curriculum maps are widely accepted and supported by program faculty members. For degree programs offered at multiple campuses/locations, the curriculum map should be supported by program faculty at each campus/location.

Some programs may choose to have faculty formally approve their curriculum map (e.g., via a vote), while other programs may choose more informal acknowledgements of approval (e.g., general consensus during a faculty meeting). Regardless of the process a program chooses, it is important to note that developing and updating an appropriate and useful curriculum map is often an iterative process; it's not unusual to refine a curriculum map prior to reaching consensus.

Follow Up Steps: Sharing and Using the Curriculum Map

- Use the curriculum map to guide faculty discussions and decisions about aligning and scaffolding courses, teaching, and assignments to effectively support student learning
- Use the curriculum map to plan assessment efforts.
- Develop an internal process for sharing the curriculum map with new faculty and instructors, for example at an annual departmental training for new faculty or instructors.
- Revisit and update the curriculum map on a reoccurring basis, as appropriate to the program. A general rule of thumb is for faculty to review the map at least every three years and update as needed.