Curriculum Design and Mapping

Introduction

If you are planning to engage in curriculum design, review, and/or mapping, begin by asking a series of questions. Focusing on the what and why of mapping can help avoid misunderstandings and much wasted time as you engage in a highly complex process. A few questions to consider are provided here, with possible answers, but the most effective strategy is to engage these questions with your stakeholders and build a shared understanding.

- **What do we mean by curriculum?**
  - A robust, systematic, and overall plan for student learning (*Darby, F. and Lang, J., 2019*)
  - A planned sequence of instruction (*Latucca, L.R. and Stark, J.S., 2009*)

- **What are the markers of a great curriculum?** *(Suskie, 2018)*
  - Coherence; appropriate, progressive rigor; synthesis
  - Concludes with a capstone type course
  - Starts with 100 level courses where course outcomes are sub-components or building blocks toward the PLO's
  - 400 level course outcomes are more similar to or ARE the PLO's & a significant part of the course grade is based on achievement of the outcome(s)

- **Why should we map our curriculum?**
  - Designing, mapping, and revising can all help justify mission fit
  - Mapped curriculum leads to a cohesive teaching and learning experience, benefitting both students and faculty

- **How do we begin?**
  - Ensure outcomes are clearly written and will prepare graduates for success in their chosen field
  - Identify key assessments that will allow students to demonstrate achievement of outcomes
  - Create a focus map
  - Advance to a progression map

- **What will we do with the map when it is finished?**
  - Publish and share the map with stakeholders
    - Students in the program
    - Faculty who teach in the program
    - Parents and prospective students
    - Accreditors

Research

Identify one to three similar comparable institutions that offer programs similar to the one you are designing or revising. You may wish to review their program documents (description, goals and outcomes, course scope and sequence) before engaging in this work, or you may wish to take a first pass at this, and then make a comparison after you've completed your initial draft. Faculty with expertise in the discipline will bring their professional judgment to the process. Using AI as a partner in research and brainstorming may also be helpful.

Other helpful inputs or sources include:

- External accreditor requirements, especially for professional programs that lead to licensure or credentials
- An environmental scan to understand employer needs and job outlook
- Literature in the discipline that provides theoretical frameworks
- Literature in higher education that will inform design decisions like UDL, HIPS, and TILT

Program Description

In two to five sentences, describe what students will gain by completing this program. How will the program shape their knowledge, skills, and values? What will they be prepared to do or be as a graduate of the program? How is this unique from other institutions' programs? Include how a Biblical worldview will be integrated into the program. This creates a strong and clear link between your mission statement and the goals and outcomes that you will create next. It also helps maintain commitment to Biblical integration despite external influences like faculty turnover or a high percentage of courses taught by adjunct instructors.

Goals

Goals are high level, aspirational statements of what you want your students to know, do, and be after they complete your program. They are not necessarily measurable, but they are helpful buckets or categories in which to organize your program learning outcomes. Three to five goals are normally sufficient for most programs. The goals should include a focus on Biblical worldview and how development of that will be evidenced. In some instances, the Institution has already articulated these goals as Institutional Learning Outcomes (ILO's). It's not necessary to create a second set of goals, and in fact this may over-complicate your curriculum design and mapping process.

1. Know/Head Goal -
2. Do/Skill Goal -
3. Be/Value/Attitude Goal -
4. Add more Goals as needed -

Outcomes

Outcomes are specific statements of what students will know, do, and be after they complete your program. They must be measurable and usually include a learning verb drawn from Bloom's Taxonomy or other taxonomies of learning. Each outcome should align with one of the goals stated in the section above. "Selecting outcomes should focus on not just what faculty most want to teach but what students most need to learn" (*Suskie, 2018*). Wiggins and McTighe's (*2005*) prioritization activity is an effective way to help program faculty gain consensus on program outcomes. Outcomes should clearly state how Biblical worldview will be evidenced by students as they demonstrate mastery of the outcomes. Most programs will have between six and ten outcomes.

1. Outcome 1 (Goal 1)
2. Outcome 2 (Goal 1)
3. Outcome 3 (Goal 2)
4. Outcome 4 (Goal 2)
5. Outcome 5 (Goal 3)
6. Outcome 6 (Goal 3)

Key Assessments

In the next wave of mapping, you will identify courses where the outcomes will be taught and assessed. Stating that an outcome will be 'covered' in a course does not meet the rigorous standard of evidence-based assessment. Ideally, assessment will occur at multiple places in the program, moving from introductory through mastery, using a variety of measures to evidence student achievement. This is where you begin to create a grid or matrix to understand how Outcomes are aligned with Courses in the program. The process at this point is no longer linear. Identifying assessments may lead to rewording of Outcomes. Mapping Outcomes to Courses may lead to addition or removal of Courses. Addition or removal of Courses may lead to re-sequencing Courses. The process of mapping is complex and time-consuming.

1. Outcome 1
    a. Introductory Assessment: Course #
    b. Reinforcement Assessment: Course #
    c. Mastery Assessment: Course #.
2. Outcome 2
    a. Introductory Assessment: Course #
    b. Reinforcement Assessment: Course #
    c. Mastery Assessment: Course #

	Course #	Course #	Course #	Course #	Course #	Course #
Outcome 1	I	R	M			
Outcome 2		I	R			M
Outcome 3				I	R	M

Scaffolding

A value added component of curriculum mapping is the attention to scaffolding learning over the course of the program. In the example above, an outcome is assessed at an introductory level, then students have a second opportunity to demonstrate learning at the reinforcement level, and then a third opportunity to demonstrate mastery. The key assessment does not have to use the same type of product each time, as long as the assessment allows students to demonstrate achievement of the outcome.

Another opportunity for scaffolding during the mapping process may be in giving students exposure to different learning methods and tools. If use of learning technologies will play an important role in demonstration of outcome mastery, look at places to incorporate the method or tool early and often within the program.

Example 1 - Students in an B.S. in Business program may benefit from using project management tools like Monday or Asana. Introduction of the tool in 100 level courses, and then again in 200 or 300 level course will provide practice opportunities prior to a Capstone project that requires use of the tool.

Example 2 - Students in a B.S. in Biblical Studies program may need to do word studies prior to a major project in Homiletics. Assigning word studies in 100 and 200 level survey courses or bible interpretation courses will give them multiple opportunities to master this skill.

Course Outcomes and Course Mapping

Once a cohesive program has been designed (or redesigned) and mapped the next step is aligning the key assessments in the course syllabi. Syllabi traditionally include a course description and set of learning outcomes. If a course is said to house a key assessment for an outcome of the program, one of the learning outcomes must be a component of that program outcome, or at the 300/400 level, may be identical to the program outcome. Including an outcome/assessment table in a course syllabi is a way to make this alignment transparent for students and faculty alike. If outcome/assessment pairs meet the requirement of an external accreditor, include that in the table. For some professional programs, this alignment is required; in this case, add another column to the table to demonstrate how each course outcome aligns with the standards.

Course Outcome	Assessment Tool	Program Outcome
Outcome 1*	Research Paper	1**
Outcome 2	Video Presentation	4
Outcome 3	Reading Reflection	3

*Programmatic Key Assessment
**InTasc Standard 1 (example)