Curriculum Mapping for Graduate Programs

The curriculum map is a communication tool that visually aligns a program's student learning outcomes, instructional activities and primary assessment methods. It is situated within the broader context of the University and College goals for graduate education. It articulates graduate student development from senior learner, to colleague-in-training, to junior colleague (Sprague & Nyquist, 1991). The curriculum map provides insight into curricular coherence and content emphasis, and indicates areas of scholarship in the program. It offers shared context for all stakeholders to communicate criteria and standards of program excellence, logic of program design, implementation and assessment, and faculty contributions. The curriculum map serves as a living document that should be revisited periodically to reflect curricular enhancements or changes in program mission. The curriculum map at the minimum contains the following program aspects:

- Student learning outcomes.
- Primary assessment methods.
- Instructional methods and activities.

At its best, it serves as a road map for student progression to degree and articulates significant milestones in achieving learning outcomes, such as:

- Qualifying exams
- Comprehensive exams
- Successful completion of core courses
- Dissertation proposal
- Dissertation defense
- Field experience/Practicum

Typically, curriculum maps are set up in the following way:

- Program learning outcomes are listed on the left-hand side of the table. You may list each learning
 outcome separately, or you may organize learning outcomes based on overarching competencies they
 reflect. For example, Scholarly Writing Competencies (overarching competency): Identify research
 question and formulate thesis statement, Synthesize pertinent literature on specific topic, Document
 reference and citations according to MLA (specific program learning outcomes).
- 2. Core courses, program activities and learning experiences are listed across the top of the table. It is best practice to indicate the relative emphasis that a student learning outcome received in a core course or learning experience. For example, you may use I=Introduce, R=Reinforce, E=Emphasize/Apply or H=High Emphasis, M=Medium Emphasis, L=Low Emphasis.
- 3. Primary assessment methods used in core courses, program activities and learning experiences are identified. For example: Essay, team project, presentation, case analysis, exam, thesis, lab activity, manuscript.

¹ Core courses and program learning outcomes can be reversed by listing courses on the left-hand side of the table, and listing the program learning outcomes across. The map should be formatted according to your program's needs.

Acknowledging specialization, student self-directedness in their learning process, and unique scholarly opportunities in programs, consider how the curriculum map most accurately reflects how your program helps students attain the expected learning outcomes. Think about places in the program where students may be asked to determine the focus of their learning goals in consultation with their faculty mentor and these self-developed learning goals will drive that part of their educational experience. For example, students may select a research focus or internship focus based on their interest, prior academic training, professional background, and career aspirations. You may label such program learning outcomes as *Student will take ownership of the learning process (i.e., student self-developed learning outcome.)* If in your program, some students purposefully select a set of courses throughout their graduate study to develop a specific skill, learn specific content, or gain understanding relevant to their future career plans, you may capture that in your curriculum map. There are many benefits to doing so, such as: students personalize their course of study, and hence take increasing ownership of their education process, and programs become aware of emerging academic interests and needs of the student population they admit.

Example

Program Learning	Core Courses		Program Activities	
Outcomes I=Introduce; R=Reinforce; E=Emphasize Decision Making	Course number (PADM 670 – Administration in Public Affairs)	Course number (PADM 675 – Public Policy Analysis)	Field work	Internship and/or practicum
Competencies Students apply their	R =Reinforce	E = Emphasize	E=Emphasize	E=Emphasize
knowledge of organizational decision making to	(Case study analysis)	(Project)	(Journal and supervisor evaluation)	(Journal and supervisor evaluation)
real world contexts Students exemplify		R = Reinforce	E=Emphasize	E=Emphasize
skills for ethical decision making in the context of conflicting public sector demands		(Reflective Essay)	(Journal and supervisor evaluation)	(Journal and supervisor evaluation)
Students create their personalized course of study (student-developed learning outcome)			E=Emphasize	

Considerations as you conceptualize the progression of learning activities in your program curriculum that link to program outcomes:

- 1. Identify core courses, which are required of all students in the program.
- 2. Identify specializations and / or elective courses in the program.

- 3. Identify program activities that may occur outside of core courses and may reflect areas of specialization and link to program outcomes. For example: Field work, internships, practicum, and affiliation with research centers.
- 4. Identify faculty mentored instructional engagement with individual students. For example: independent study, thesis or dissertation research, laboratory research, supervised field work, community outreach.
- 5. If your program is accredited by an external accrediting agency, overlay your program learning outcomes with learning competencies required by the external accreditor. Some accrediting agencies may focus on demonstration of program excellence via provision of specified curricular activities. It is recommended to translate these curricular activities into learning outcomes by asking: What are students gaining from participating in these activities?

Other considerations related to curriculum map and program development:

Consider the context of your program and its distinguishing attributes as they provide necessary background for your curriculum map. You may address the following questions:

- How does your program advance university and college goals?
- How does your program contribute to the needs of the state of DE? (e.g., educate future leaders at the state level)
- What external factors impact your program?
- What are the characteristics of your student population?
- What are the characteristics of the faculty in your program?
- What resources are involved in program delivery?

Potential uses of the curriculum map:

- Consistent and transparent communication of the nature of the program to various constituents.
- Transparency of students' graduate career path to inform student decision-making and ownership of their graduate experience.
- Consensus building among faculty and faculty ownership of all program aspects.
- Determination of resource allocation for program delivery.
- Identification of program areas for potential growth and specialization.
- Making a case for the excellence of the program to raise program profile nationally and internationally and attract funding, sponsorship and partnership opportunities.

Developed by The Center for Educational Effectiveness, 212 Gore Hall, University of Delaware, March 2010. Questions: Gordana Brendza, Office of Educational Assessment: http://assessment.udel.edu/ Gabriele Bauer, Center for Teaching and Learning: http://cte.udel.edu/

Adapted from: Innovation Network, Transforming Evaluation for Social Change. *Logic Model Workbook*. Maki, P. (2004). *Assessing for learning*. Sterling, VA: Stylus Publishing. Maki, P. et al. (ed.) (2006). *The assessment of doctoral education: Emerging criteria and new models for improving outcomes*. Sterling, VA: Stylus Publishing.