

## Curricular Mapping: Process AND Product

---

Katherine Kelley, PhD  
Assistant Dean for Assessment & Accreditation  
Ohio State University College of Pharmacy

## Attendees Profile

---

- Knowledge/understanding of Standards 2007
    - Minimal
    - Moderate
    - Advanced
  - Assessment plan or process at your school/college
    - Just starting out
    - Fairly well defined
    - Well defined
-

## Attendees Profile

---

- Knowledge of curricular mapping
    - Minimal
    - Moderate
    - Advanced
  - Progress of mapping process at my school or college
    - Just starting out
    - In process
    - "Completed"
- 

## Objectives

---

- Review key theoretical frameworks relevant to curricular mapping
- Overview ACPE Standards 2007 that relate to curricular mapping
- Explore elements that can be included in your map
- Discuss faculty involvement in the process
- Discuss utilization of the data collected

By the end of this session you will have produced a workbook with:

---

- List of resources on mapping
  - List of "data" to collect with your map
  - Ideas for how to include faculty in your process
  - Plan for analysis of map and use of data
- 

What is curriculum?

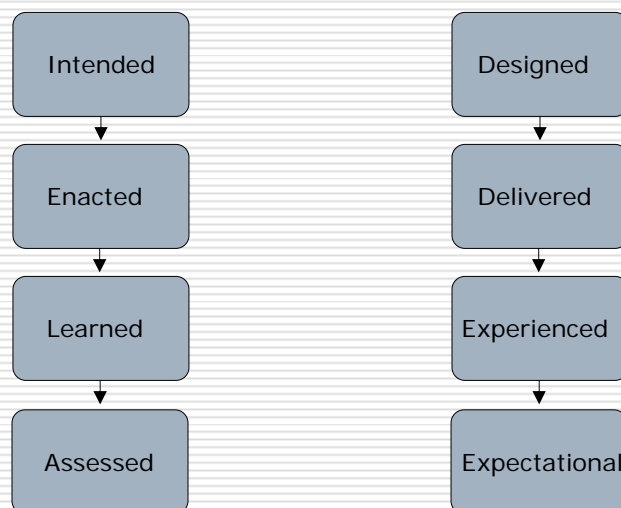
## Theoretical Framework

---

- Intended curriculum
    - What we are accredited based on (ACPE Standards)
  - Enacted curriculum
    - What we do
  - Learned curriculum
    - What students achieve
  - Assessed curriculum
    - What we test
- 

Porter & Smithson, 2001

## Curricular Frameworks



Porter & Smithson, 2001

Ewell, 1997

## Curricular Mapping

---

- Helps make explicit connections between ability outcomes and courses
  - Assessment tool
    - Helps determine gaps or over-coverage of knowledge, skills or attitudes
    - Helps track change over time
- 

---

How can we capture elements of curricular conceptual frameworks in a way that helps us visualize, learn about, and improve what is happening?

## Curricular Elements/Dimensions

---

- Topic coverage or content
- Level of coverage or time
- Cognitive demand
- Mode of presentation

---

Porter & Smithson, 2001

## Topic Coverage and Level of Coverage

---

- Content
  - What we teach
  - What is included
- Relative emphasis
  - How much of it we teach
  - How important it is relative to other content

## Cognitive Demand

---

- How students engage with the subject matter
- Activities or functions that enable learning to occur
  - E.g. Conceptual understanding, skills, and application
  - Expectations that instructors have for students in the class

---

Porter & Smithson, 2001

## Mode of Presentation

---

- How the material is delivered to the students
  - Pedagogy
  - Teaching and learning methodologies

## ACPE Standards

---

- Standards 9-15 deal with curriculum
  - Guideline 10.2
    - Awareness by faculty of each other's courses including content, depth, methodologies used and relationship to adopted curricular competencies and outcomes
    - Application and reinforcement of curricular content
    - Use of proven teaching and learning methodologies
- 

## ACPE Standards

---

- Standard 11 requires that faculty members use a variety of teaching and learning techniques
  - Standard 12 requires a **map** linking curriculum to expected outcomes and competencies
  - Standard 13 how program content aligns with the recommended content list in Appendix B of Standards
-



## GROUP ACTIVITY (PART I)

---

- List and share resources you have found useful related to curricular mapping

---

See references section

## Edu-speak

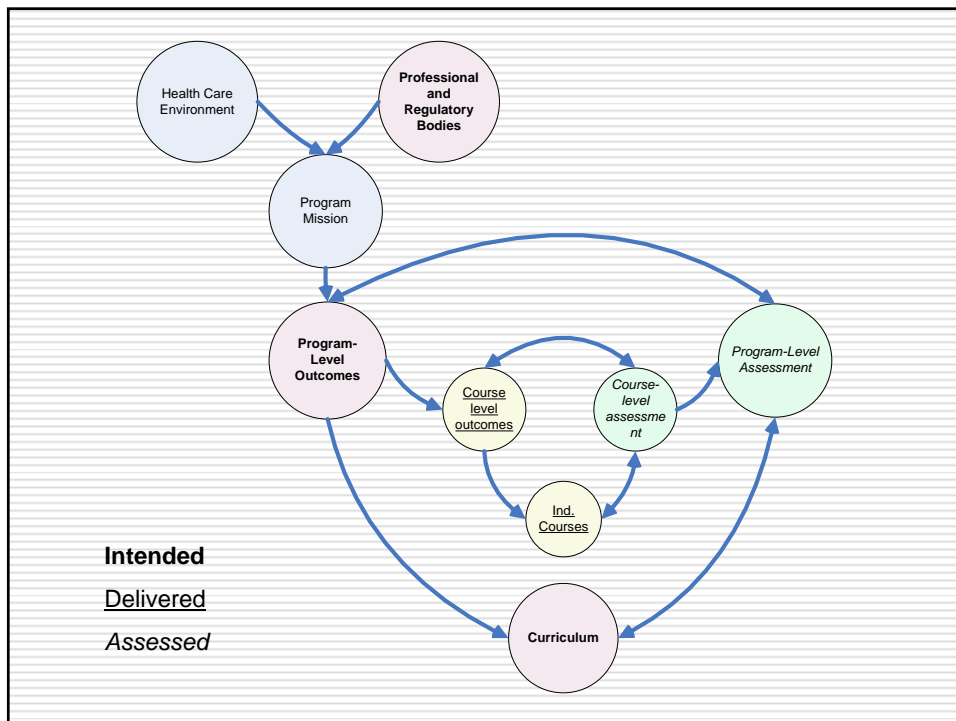
---

- Content or knowledge (i.e. ACPE Appendix B)
  - Outcomes and Competencies (Standard 12)
  - Ability-based outcomes or program outcomes or competencies
-

# Concordance

---

- Intended to Delivered
  - Delivered to Received
  - Intended to Received
  - Intended to Assessed
  - Assessed to Delivered
- 



## Curricular Map Sample

---

Ability Outcome	I. Counsel patients on drug therapies		
Objectives	A. Knows pharmacologic effects of therapy	Knowledge	PHR XXX
	B. Adapt communication to audience	Skill	PHR YYY
	C. Exhibit empathy toward patient	Attitude	PHR ZZZ

Zlatic, 2000

## Mapping Example – Program-Level

---

<b>I – Introduced</b> <b>R – Reinforced</b> <b>E - Emphasized</b>	Courses		
<b>Learning Outcome</b>	<b>PHR 661</b>	<b>PHR 673</b>	<b>PHR 664</b>
1. Verbally communicate a complex concept, idea or educational message in simple terms	I	R	E

## Curricular Mapping

---

- What did we (OSU) want to know?
    - Location – which courses
    - Degree of connection – what level of emphasis
    - How taught – teaching methods used
    - How assessed – how do we measure what students learn
- 

## Curricular Mapping

---

- Code
    - Degree of connection between course and outcome
      - Introductory / Level 1
      - Intermediate / Level 2
      - Emphasized / Level 3
-

## Curricular Mapping

---

### Code

- Pedagogy – how taught in the curriculum
    - Lecture
    - Lecture/discussion
    - Cases
    - Experiential
    - Independent study
- 

## Curricular Mapping

---

### Code

- Assessment – how is the outcome evaluated in the curriculum
    - Building blocks
    - Application or synthesis
    - Demonstration
-

## Curricular Mapping

---

### Other Considerations

- From whose perspective?
    - Student?
    - Faculty?
    - Preceptor?
    - Employer?
- 

## GROUP ACTIVITY (PART II)

---

- List in your workbook the elements you would like to explore at your home institution
    - Consider: What pressing questions about your curricular structure/delivery would you like to answer
    - Consider: Which of the preceding mapping elements may help answer these questions OR can you think of others
    - Example: What teaching methods are we using to deliver curriculum?
-

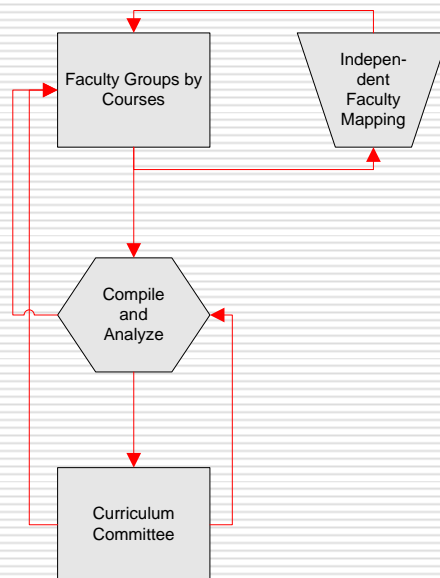
# Curricular Mapping

---

## □ Process

- Literature scan
  - Developed code with curriculum committee input
  - Pilot tested with curriculum committee members
- 

# Mapping Process



## Example Map Excerpt

Professional Practice Lab			
L	P	A	<b>ABO=Ability based outcome</b>
3	LD/E	A/D	Assure safe and accurate preparation and dispensing of medications
3	LD/E	A/D	Read and interpret written prescriptions

L = level of connection; P = pedagogy; A = assessment

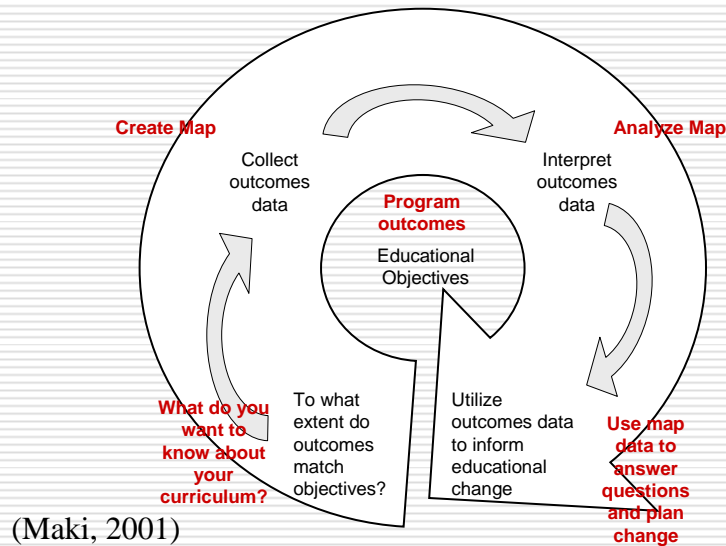
LD = lecture discussion E = experiential A = application D = demonstration

## GROUP ACTIVITY (PART III)

- List ways to involve faculty in the process
- Example: group meetings with faculty by course sequence



## Assessment Loop (Mapping Loop)



## Consider

- Plan for analysis
  - Who will analyze?
  - How will data be used?
- Objective here is to create a plan for how to address your local questions or issues that you generated in Group Activity II

## GROUP ACTIVITY (PART IV)

---

- Write at least 2 objectives for what you will do with or how you will use the data in the map.
  - Example: Ask teaching enhancement committee to review compiled data on pedagogy and produce a plan for improvement.
- 

Questions?

## Contact Information

---

Katherine Kelley, PhD  
Ohio State University  
College of Pharmacy  
614-292-5998

[kelley.168@osu.edu](mailto:kelley.168@osu.edu)

<http://www.pharmacy.ohio-state.edu/academics/assessment/index.cf>

---