Using Curriculum Mapping to Design, Scaffold and Assess Student Learning

Presented by Dr. Laura Sáenz, Associate Provost for Assessment and Continuous Improvement

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What are the goals for the presentation?

- Define curriculum maps and curriculum mapping
- Describe how to use curriculum maps at the program level
- Describe how to use curriculum maps at the course level

Focus Questions

- Do you know your program's intended student learning outcomes?
- Do you know the plan for assessing those outcomes?
- Do faculty regularly discuss the program's student learning outcomes?
- Have you considered how your course supports the overall program student learning outcomes?

What is a curriculum map?

- Visual representation of the alignment between intended learning outcomes and opportunities to learn in the program or course.
- Collaboration tool
- Communication tool
  - With students
  - Among faculty

What is the purpose for curriculum mapping?

- Curriculum mapping is a first step toward ***alignment*** of teaching, learning, and assessment practices.
- ***Alignment*** refers to the linking of intended student learning outcomes with the processes and practices needed to foster those outcomes.
- ***Not just a product, but a process!***

Hutchings, P. (2016). Aligning educational outcomes and practices. NILOA.

A Word of Caution

- Curriculum mapping can easily become a superficial exercise overly focused on content coverage.
- Top-down
  - Driven by administration
  - Focused on accountability

Effective Curriculum Mapping Process

- An effective curriculum mapping process engages faculty in identifying learning opportunities that ensure mastery of program outcomes.
- Bottom-up
  - Driven by faculty
  - Focused on evaluating where there are gaps in learning opportunities for students

Curriculum-mapping at the Program Level

- Two-dimensional matrix representing ***core program courses*** or ***experience***s on one axis and outcomes on the other

Courses	SLO 1	SLO 2	SLO 3
Course 1			
Course 2			
Course 3			
Course 4			
Course 5			

Basic Curriculum Map: Undergraduate Program

Core Program Requirements and Experiences	SLO 1	SLO 2	SLO 3	SLO 4
UTRGV 101	X	X		X
UTRGV 201	X		X	
UTRGV 301		X	X	
UTRGV 401	X	X	X	X
Service learning	X	X		

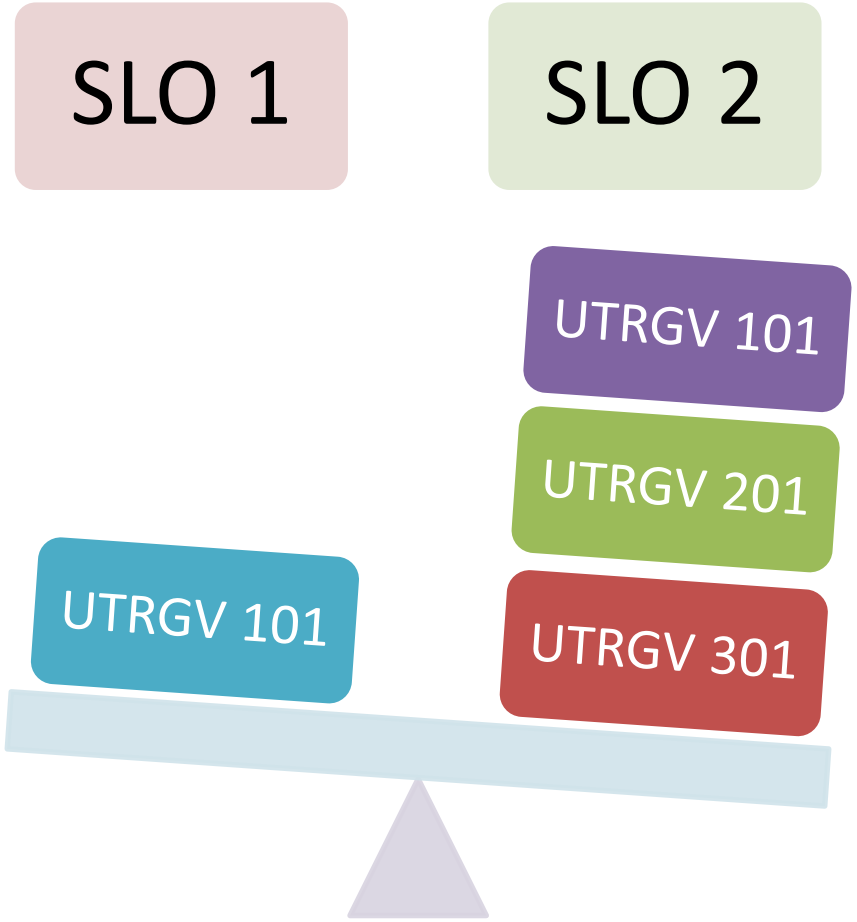
Basic Curriculum Map: Graduate Program

Core Program Requirements	SLO 1: Theory	SLO 2: Communication	SLO 3: Research
Courses	X	X	X
Qualifying Exam	X		X
Oral Exam	X	X	X
Dissertation	X		X
Dissertation Defense	X	X	X

Interdisciplinary Program: Curriculum Map

BA English Core Program Requirements	SLO 1	SLO 2	SLO 3	SLO 4	SLO 5
English Foundation Cluster	X	X	X	X	X
Literature Cluster		X			
Linguistics Cluster			X		
Rhetorical Writing Cluster				X	
Creative Writing Cluster					X
Concentrations Cluster: Literature		X			

Balancing Act



Questions to Consider

1) How important is this SLO to the program?

2) Is this an outcome that is more challenging to teach?

3) Can this SLO be addressed effectively in fewer courses than other SLOs require?

Curriculum Maps: Level of Emphasis

Core Program Requirements and Experiences	SLO 1	SLO 2	SLO 3	SLO 4
UTRGV 101	X	X		X
UTRGV 201	X		X	
UTRGV 301		X	X	
UTRGV 401	X	X	X	X
Service learning	X	X		

Black/Primary: majority of content addresses SLO

Medium Gray/Secondary: Addressed by a significant portion of the course

Light Gray/Tertiary: Addressed infrequently or to a minor extent

White/Nonexistent: Not addressed

What's wrong with this curriculum map?

Core Program Requirements and Experiences	SLO 1	SLO 2	SLO 3	SLO 4
UTRGV 101	X	X		X
UTRGV 201	X			
UTRGV 301		X		
UTRGV 401	X	X		X
Service learning	X	X		

What's wrong with this curriculum map?

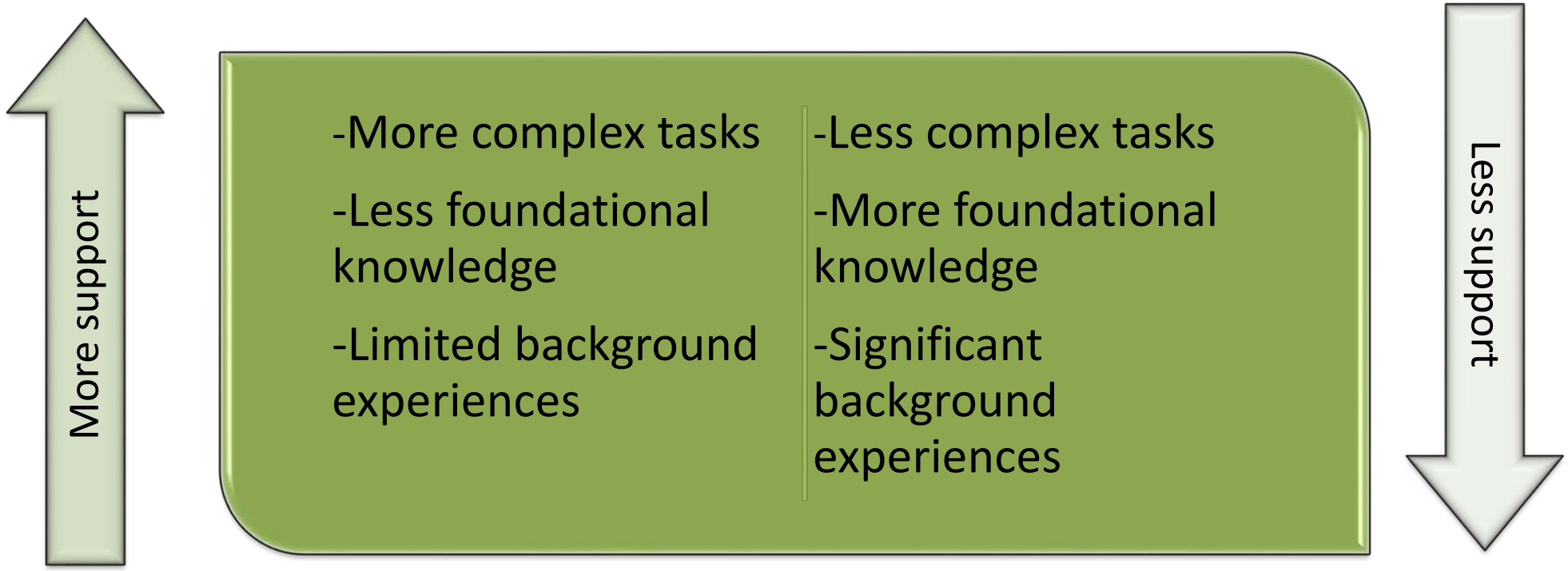
Core Program Requirements and Experiences	SLO 1	SLO 2	SLO 3	SLO 4
UTRGV 101	X	X		X
UTRGV 201	X		X	
UTRGV 301				
UTRGV 401	X	X	X	X
Service learning	X	X		

Scaffolding Teaching and Learning Experiences by Design through Curriculum Mapping

What is instructional scaffolding?

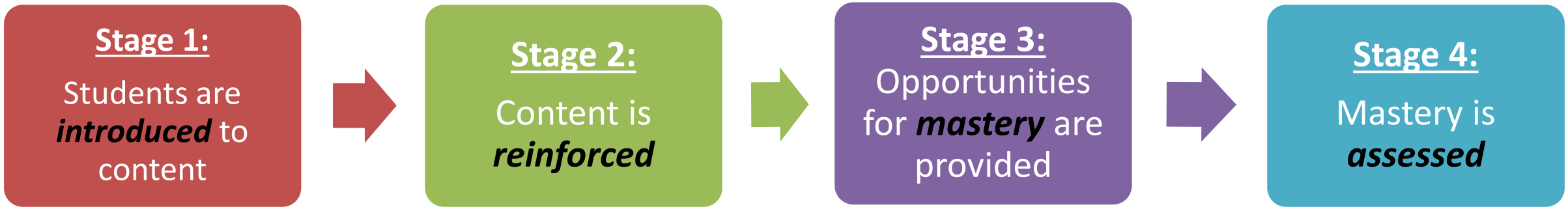
- *Way of thinking about how to support students as they go from **novice** to **expert**.*

What kind of support do students need?



Using Curriculum Maps to Scaffold Instruction by Skill Level

Curriculum maps can be used to help determine how the curriculum systematically builds skills and knowledge.



From Introduction to Mastery

Requirements and Experiences	SLO 1	SLO 2	SLO 3	SLO 4
UTRGV 101	I	I		I
UTRGV 202	R		I	
UTRGV 301		R		R
UTRGV 401		M	R	
UTRGV 404	M		M	M
E-Portfolio	M&A	M&A	M&A	M&A

I=Introduced

R=Reinforced/ Practiced

M=Mastered

A=Assessed for Program assessment

On Your Own: Scaffolding Assessment Tasks Introduction to Mastery

Requirements and Experiences	SLO 1	SLO 2	SLO 3	SLO 4
UTRGV 101				
UTRGV 202				
UTRGV 301				
UTRGV 401				
UTRGV 404				
E-Portfolio				

I=Introduced

R=Reinforced/ Practiced

M=Mastered

A=Assessed for Program assessment

EQS= Short Answer Exam questions

EQMC = Multiple-choice Exam Questions

S = Standardized Test

PO = Portfolio

O = Oral Presentation

P = Paper

I = Internship

L = Lab

Note: Refer to slide 21

On Your Own: Scaffolding Learning Opportunities Introduction to Mastery

Requirements & Experiences	SLO 1	SLO 2	SLO 3	SLO 4
UTRGV 101				
UTRGV 202				
UTRGV 301				
UTRGV 401				
UTRGV 404				
E-Portfolio				

I=Introduced

R=Reinforced/ Practiced

M=Mastered

A=Assessed for Program assessment

Learning Opportunities:

1. Readings
2. Videos
3. Group Discussions
4. Teamwork
5. Project-based learning
6. Lectures
7. Demonstrations
8. Class Discussions

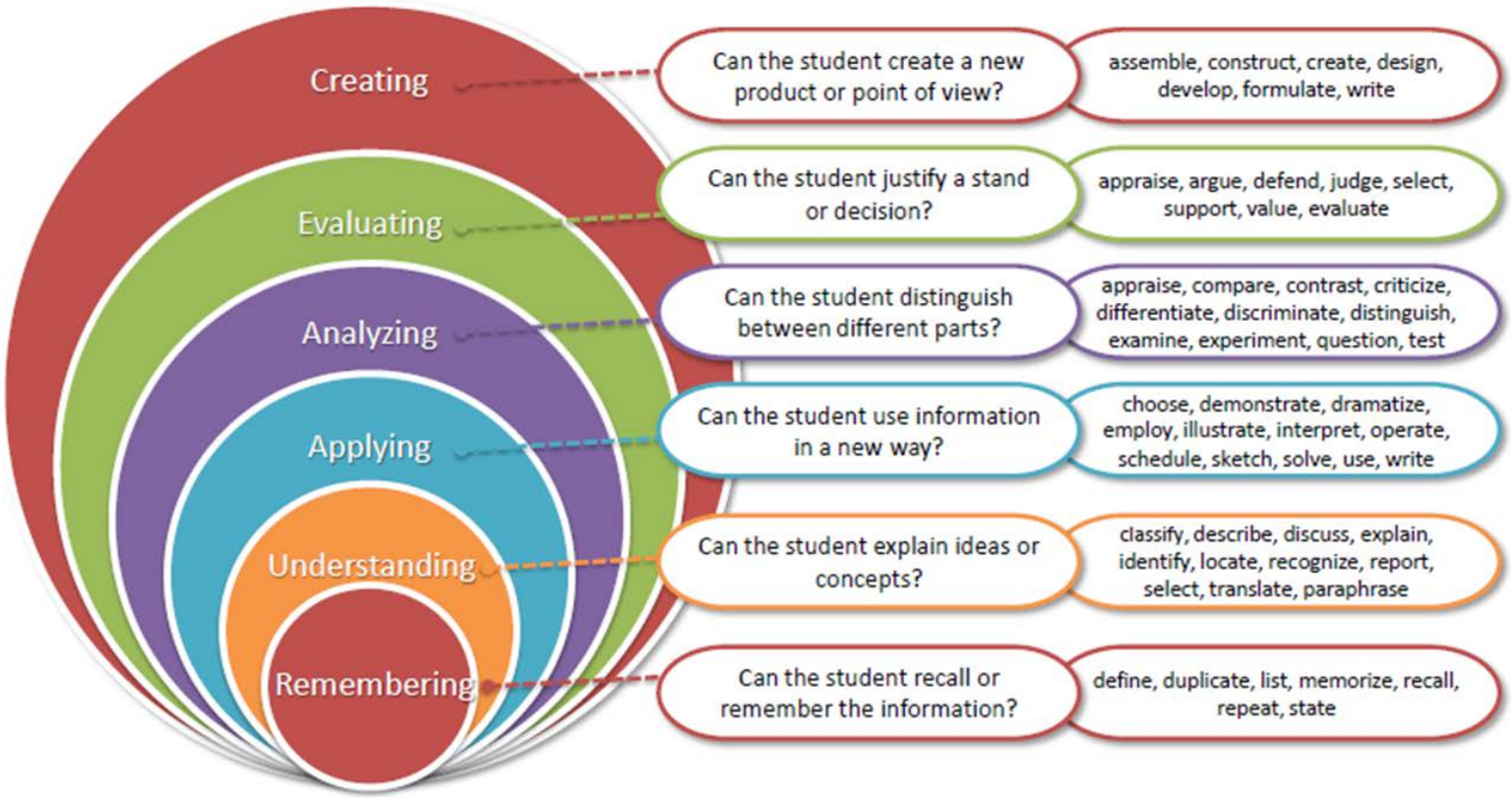
Note: Refer to slide 21

Learning Opportunities Worksheet

Program Student Learning Outcome (one outcome per worksheet)	**Key Assignments and Activities**		
	Introduced	**Reinforced/Practiced**	**Mastery**
	Course:	Course:	Course:
	Assignment/Assessment:	Assignment/Assessment:	Assignment/Assessment:
	Learning Experience/activity:	Learning Experience/activity:	Learning Experience/activity:
	How does this learning experience/activity help students learn this SLO?	How does this learning experience/activity help students learn this SLO?	How does this learning experience/activity help students learn this SLO?
	How is this an introductory level of learning opportunity for this SLO?	How is this a reinforced/practiced level learning opportunity for this SLO?	How is this a mastery level of learning opportunity for this SLO?

Curriculum Maps and Taxonomies of Learning

Bloom's Taxonomy (Revised)



Scaffolding through Taxonomies of Learning

Requirements and Experiences	SLO 1	SLO 2	SLO 3	SLO 4
UTRGV 101		R, U		R, U
UTRGV 202	AP, AN		R, U	
UTRGV 301		AP, AN		AP, AN
UTRGV 401		E	AP, AN	
UTRGV 404	E		E	E
E-Portfolio	E&C	E&C	E&C	E&C

R=Remember

U=Understand

AP=Apply

AN=Analyze

E=Evaluate

C=Create

On Your Own: Scaffolding Assessment Tasks

Requirements & Experiences	SLO 1	SLO 2	SLO 3	SLO 4
UTRGV 101				
UTRGV 202				
UTRGV 301				
UTRGV 401				
UTRGV 404				
E-Portfolio				

R=Remember

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EQS= Short Answer Exam questions

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S = Standardized Test

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Note: Refer to slide 26

On Your Own: Scaffolding Learning Opportunities

Requirements & Experiences	SLO 1	SLO 2	SLO 3	SLO 4
UTRGV 101				
UTRGV 202				
UTRGV 301				
UTRGV 401				
UTRGV 404				
E-Portfolio				

R=Remember

U=Understand

AP=Apply

AN=Analyze

E=Evaluate

C=Create

Learning Opportunities:

1. Readings
2. Videos
3. Group Discussions
4. Teamwork
5. Project-based learning
6. Lectures
7. Demonstrations
8. Class Discussions

Note: Refer to slide 26

How does your course support the program's student learning outcomes?

Course Number/Title:						
Course SLO	Course assessment or assignment for SLO	Course learning experience or activity for SLO	Program SLO the course SLO contributes to	Level of Emphasis (Primary, Secondary, or Tertiary)	Level of Skill (Introduced, Reinforced/Practiced, Mastery)	Level of learning/cognitive process (Remember, Understand, Apply, Analyze, Evaluate, Create)

Thank you!

For Questions:

Email: laura.saenz@utrgv.edu