Curriculum Mapping: A Roadmap for Curriculum Coherence and Student Achievement

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Agenda

- I. What is Curriculum Mapping?
- II. Steps in the Mapping Process
- **III.** Analyzing and Interpreting Maps
- **IV. Hands-On Exercise**
- V. Lessons Learned / Tips for Success
- VI. Questions / Discussion

I. What is Curriculum Mapping?

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What is Curriculum Mapping?

Curriculum Awareness

An ability of looking at programs in a holistic way
 at a level beyond individual courses – and
 making sure that program curriculum provides
 appropriate conditions for student achievement of
 intended program learning outcomes.

(Palomba & Banta, 1999)

Key Questions

- "How does the institution ensure that its degree programs demonstrate coherence in sequencing, increasing complexity, and linkages between and among program components?"
- How can we <u>document</u> and <u>demonstrate</u> the coherence of program curricula to accreditors, students, parents, colleagues, and legislators?

Underlying Philosophy

- Program curriculum is a
 - Complex dynamic system with
 - Interdependent components that are
 - Intentionally positioned relative to each other to
 - » Facilitate student achievement of intended learning outcomes

Basic Program Curriculum Map

	Program Outcome 1	Program Outcome 2	Program Outcome 3	Program Outcome 4	Program Outcome 5	Program Outcome 6
Course 1	Х		Х		Х	Х
Course 2	Х	Х	Х	Х	Х	
Course 3	Х				Х	Х
Course 4		Х				Х
Course 5		Х		Х	Х	
Course 6		Х		Х	Х	
Course 7	Х			Х		Х
Course 8					Х	Х
Course 9	Х				Х	
Course 10		Х		Х	Х	Х

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What is a Curriculum Map? Descriptive Definition

- A curriculum map is a visual representation of the structure of program curriculum.
- The map charts program courses, syllabi, classroom activities, and assessments as they relate to the intended program learning <u>outcomes</u>.

What is a Curriculum Map: Metaphors

- "A structure for all to engage in *collective dialogue* about the curriculum, instruction, and students' learning" (Uchiyama & Radin, 2009, p. 273)
- Program specification that represents "a deliberate process of *curriculum deconstruction* in order to understand better how the sum of the parts relates to the whole" (Jackson, 2000, p. 144)
- Representation of the *underlying logic of curricular design* (Maki, 2004, p. 37)
- *"Study pathway* report" (Lowe & Marshall, 2004)

What is a Curriculum Map: Metaphors

- "The *intellectual linkage*, that makes forty courses a *story of learning*" (Plater, 1998, p.11)
- "Orchestrating stages in the skill development of students" (Huba & Freed, 2000)
- "[A]n *advance organizer*, that is a set of principles or propositions that provide [students with] a cognitive structure to guide the incorporation of new information" (Ambrose et al., 2010, p. 53).
- The *picture on a jigsaw puzzle* that guides students collecting the pieces of college experience on the path to graduation (King, 1999)

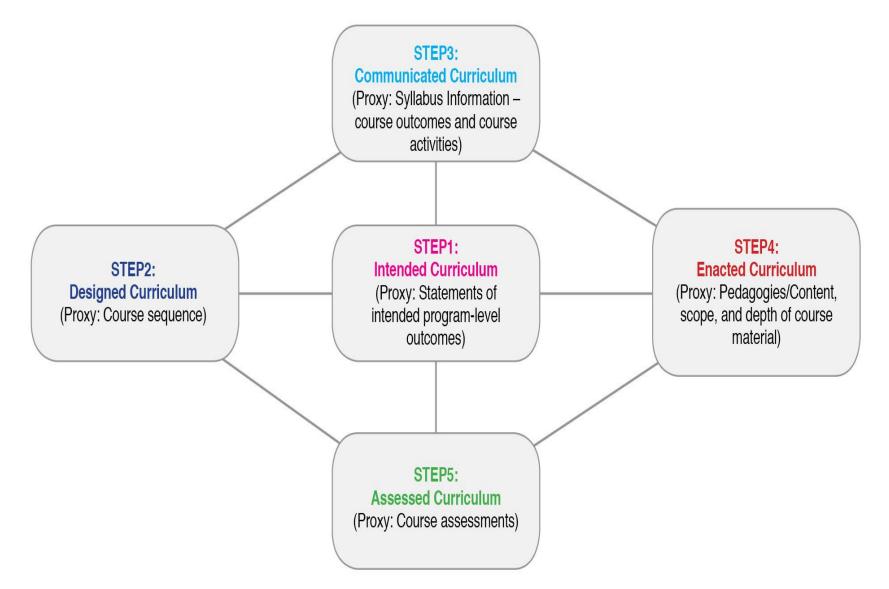
Types of Program Curriculum Maps

- Program Courses / Program Learning Outcomes
- Program Courses / General Education Competencies
- General Education Core Course / General Education Competencies

Why Engage in Curriculum Mapping?

 Offer "students more than just a course catalog, through comprehensive, personalized services to help them plan their careers and stay in school." (President Barack Obama, 2009, American Graduation Initiative)

Conceptual Framework



II. Steps in the Mapping Process

Example: A. A. Arts Program

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Curriculum Mapping Data Collection Instrument Two-dimensional data collection tool - Columns (Program *Outcomes*) • Sub Columns (for each program outcome) I. Communication of Program Outcomes

- in the Course Syllabus
- II. Level of Instruction
- III. Assessment of Program Outcomes

-Rows (Courses)

Curriculum Mapping Data Collection Instrument: Conceptual Framework

- Program Outcomes ~ *intended* curriculum
- List of Courses ~ *designed* curriculum
 - Sub-column 1: Syllabus ~ communicated curriculum
 - Sub-column 2: Level of Instruction ~
 enacted curriculum
 - Sub-column 3: Feedback ~ assessed curriculum

Curriculum Mapping Data Collection Steps

- 1. List program outcomes.
- 2. List program core courses.
- 3. Analyze course syllabi to determine alignment between course and program learning outcomes.
- 4. Make a professional judgment regarding the levels of instruction (I., E., R., A.)in the courses.
- 5. Analyze course syllabi and indicate whether students have opportunities to (i) demonstrate what has been learned for each program outcome and (ii) receive feedback in a formal way.

Curriculum Mapping Data Collection

- The glue that holds together the components of the curriculum mapping process is <u>faculty professional judgment</u> and integrity.
 - "The institution places primary responsibility for the content, quality, and effectiveness of the curriculum with its faculty." (SACS CS 3.4.10)

Curriculum Mapping Process: STEP 1

STEP <u>1</u>

Identify and list intended program learning <u>outcomes</u> in the top horizontal **rOW** (re: SACS CS 3.3.1.1/3.5.1, FR 4.2)

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Curriculum Mapping Process



CURRICULUM ALIGNMENT FOR STUDENT ACHIEVEMENT: Processes, Tools, and Outcomes

CURRICULUM MAPPING PROCESS -- STEP 1

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LEARNING (A) Studen demonstra outcome II projecta, te provided fo		make informed decisions.	conclusion is justified based on the empirical evidence related to observed phenomena.		solving skills; (7) Implement and evaluate a plan to work towards a goal or conclusion.		

Curriculum Mapping Process: STEP 2

STEP <u>2</u>

List program core (required) courses in the left vertical column (re: SACS CR 2.7.1; FR 4.4)

- In the order that a "typical" program major progresses through the program curriculum
- Most popular elective course in each distribution cluster can also be added (assumption: all courses in the given cluster similarly reflect given outcomes)

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CURRICULUM MAPPING PROCESS – STEP 2

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GENERAL EDUCATION CORE COURSES

Communications: ENG 101 Communication Skills I

Digital, Computer & Telecommunications: CSC 150

Computer Literacy Natural Sciences: BIO 100 Biological Science Natural Sciences: BIO 100 Biological Science Lab

Health & Physical Education: PED 100 Fundamentals of Fitness for Lif

Communications: ENG 102 Communication Skills II

Natural Sciences: PHY 100

Physical Science

Social Sciences: SOC 101 Introduction to Social Science

Mathematics: MTH 103 Contemporary Mathematics

Health & Physical Education: HED 100 Personal and Community Hea

Social Sciences: HIS 101 History of World Civilization I

Humanities: FIA 201 Basic Art Appreciation

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CURRICULUM ALIGNMENT FOR STUDENT ACHIEVEMENT: Processes, Tools, and Outcomes

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Curriculum Mapping Process STEPS <u>3</u>, <u>4</u>, <u>5</u>

1. WRITTEN COMMUNICATION: Student is able to produce texts appropriate for their purposes and audiences as reflected in: (a) Form, (b) Organization, (c) Content development, and (d) Language usage and style (syntax, vocabulary, grammar, and mechanics).

Outcome	Level of Instruction	Feedback and
Statement	(I , E , R , A)	Assessment
(X, M)	STEP 4	(F)
STEP <u>3</u>		STEP <u>5</u>

Curriculum Mapping Process: STEP 3

STEP <u>3</u>

Analyze course syllabi and indicate whether each *program* outcome is eXplicitly or iMplicitly reflected in the *course* outcomes. (re: SACS FR 4.6)

Why Take Step 3?

- Syllabi are a proxy for *designed curricula*
- Cognitive science research
 - We must be sure that program outcomes are highlighted and stressed in both the overall program design and in each course (cf. Svinicki, 2004)
- Being fair to students
 - If we want our students to achieve intended outcomes, we must inform students about those outcomes

Curriculum Mapping Process: STEP 3

STEP <u>3</u>

3.1 Review course syllabus to examine <u>course</u> outcomes in the context of <u>program</u> outcomes (to identify course outcomes related to the given program outcome)

3.2 Using professional judgment, determine the degree to which <u>program</u> outcomes are reflected among the <u>course</u> outcomes - eXplicit or iMplicit

Curriculum Mapping Process: STEP 3 STEP 3

Explicit -- *program* outcome that is fully and <u>directly</u> expressed or referenced in a *course* syllabus.

Implicit -- *program* outcome that is <u>indirectly</u> expressed or referenced in a *course* syllabus.

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Course Outcome Statement: Example

(X) EXPLICIT

Program Outcome: Outcome 5/Problem-Solving – Scientific Reasoning

Course Outcome (HIST 1301):

"At the end of the course, students will be able to ... describe how social scientists follow the scientific method to understand social phenomena...."

Course Outcome Statement: Example (X) EXPLICIT

Program Outcome: Outcome 5 / Problem Solving – Critical Thinking

Course Outcome (CUST 2370):

You will find that studying civilization will enable you to:

- 1. highlight a variety of perceptions that people have held through the ages
- show the options that individuals have used historically in making decisions and solving problems
- 4. understand relationships in time and space that are important for sound reasoning
- 5. illustrate with examples the roles of process, comparison and causation in history.

Course Outcome Statement: Example (M) IMPLICIT

Program Outcome: Outcome 1 -- Communication **Course Outcome (HIST 1302):**

Students will be able to discuss the evolution of twentieth-century American foreign policy and the influences which have shaped those policies in order to develop historical viewpoints which they can articulate and defend.

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	COMMUNICATIONS: SCM 285 Principles of Speech	IVI		E											E		
	CULTURAL ELECTIVE: PSY 340 Psychology of African Americans	E		E		E						I			E		

Curriculum Mapping Process: STEP 4

STEP 4

Make *professional judgments* and indicate whether each program outcome is Introduced, Emphasized, Reinforced, or Advanced in the course. (re: SACS CR 2.7.2/2.7.3)

*****See Handout: Rubric**

- Levels/Codes can be modified!
 - Many institutions merge E and R levels

Why Take Step 4?

- Proxy for *enacted curriculum*
 - "[Enacted] curriculum is behavioral, and may vary significantly across classrooms and from original design specification" (Ewell, 1997, p. 613).
- Integrative Learning
 - Development of integrative thinkers who "can see connections in seemingly disparate information and draw on a wide range of knowledge to make decisions. They adapt the skills learned in one situation to problems encountered in another" (AAC&U, 2002, pp. 21).

Why Take Step 4?

- Developmental nature of learning
 - Developmental perspective "manifests a logical order an order in which one form leads to another through differentiations and reorganizations required for the meaningful interpretation of increasingly complex experience" (Perry, 1970, p. 3).
 - The first step that educators need to take to effectively help students to achieve core learning outcomes "is to understand the developmental foundation that makes achievement of these outcomes possible" (Baxter Magolda & King, 2007, p. 491).

Why Take Step 4?

- Developmental nature of learning
 - Awareness of Prior Knowledge
 - What students "bring to the class will determine to a great extent what they take from it" (Svinicki, 2004, p. 223).
 - "Few faculty members are aware of what their entering students already know about the subject, and as a consequence they cannot be sure that the assumptions they make about their students are accurate. We more commonly overestimate skills, prior knowledge, and competencies than underestimate them" (Diamond, 2008, p.96).

General Factors Defining Levels of Instruction

1. Student readiness level

2. Instruction and learning activities

3. Scope of outcome coverage

Level of Instruction: Introduced

(I) STUDENTS ARE <u>INTRODUCED</u> TO CONTENT/SKILL

1. Students are not expected to be familiar with the content or skill at the collegiate level.

2. Instruction and learning activities focus on basic knowledge, skills, and/or competencies and entry-level complexity.

3. Only one or a few aspects of a complex program outcome is addressed in the given course.

Level of Instruction: Emphasized

(E) THE CONTENT / SKILL IS <u>EMPHASIZED</u> AND TAUGHT IN DEPTH

1. Students are expected to possess a basic level of knowledge and familiarity with the content or skills at the collegiate level.

2. Instruction and learning activities concentrate on enhancing and strengthening knowledge, skills, and expanding complexity.

3. Several aspects of the outcome are addressed in the given course, but these aspects are treated separately.

Level of Instruction: Reinforced

(R) THE CONTENT/SKILL IS <u>REINFORCED</u> WITH ADDITIONAL EXPOSURE TO THE INFORMATION

1. Students are expected to possess a strong foundation in the knowledge, skill, or competency at the collegiate level.

2. Instructional and learning activities continue to build upon previous competencies and increased complexity.

3. All components of the outcome are addressed in the integrative contexts.

Level of Instruction: Advanced

(A) THE CONTENT / SKILLS ARE <u>ADVANCED</u> and APPLIED IN MULTIPLE CONTEXTS

1. Students are expected to possess an advanced level of knowledge, skill, or competency at the collegiate level.

2. Instructional and learning activities focus on the use of the content or skills in multiple contexts and at multiple levels of complexity.

3. Outcome is applied in all of its complexity across multiple contexts or is turned reflexively on oneself.

STEP 4 *: <u>Course</u> Mapping Worksheet to facilitate I,E,R,A decisions

(*Optional)

*****See Rubric**

Curriculum Mapping Proce **'d**) (I, E, R, A) CURRICULUM ENT ACHIEVEMENT: ools, and Outcomes CURRICULUM MAPPING PROCESS STEPS – STEP 4 R SEMESTER: SELECTED GENERAL EDUCATION OUTCOMES 4. QUANTITATIVE REASONING 1. WRITTEN COMMUNICATION 2. NFORMATION 3. SCIENTIFIC REASONING ORAL COMMUNICATION TECHNOLOGY LITERACY Student is able to solve Student is considered to have Student is able to produce texts Student is able to: (1) Propose appropriate for their purposes Student is able to: (1) Use and relationship between observed problems within: (1) Numeric or oral communication. and audiences as reflected in: apply computers, software phenomena; (2) Design arithmetic contexts; (2) competency if he or she is able (a) Form; (b) Organization; (c) applications, and other experiments which test Conceptual contexts; (3) to express him or herself in a LEGEND Content development; (d) resources to achieve a wide Geometric contexts; (4) Data structured, meaningful, and hypotheses concerning Language usage and style variety of academic. proposed relationships: (3) representation and chance productive manner. The student (syntax, vocabulary, grammar, professional, and personal Predict logical consequences of element contexts. must also be able to convey **BIOUTCOME STATEMENT:** and mechanics). ocals: (2) Use a set of abilities observed phenomena and higher intentions or ideas in messages crafted to introduce. to solve problems, collect data, determine possible alternative The program outcome is manage information. outcomes; (4) Judge the inform, or persuade the listener. (E) EXPLICITLY or IN IMPLICITLY GENERAL communicate with others. degree to which a particular stated in the course syllabus as being one of the learning outcomes create effective presentations. conclusion is justified based on EDUCATION for this course. and use information to make the empirical evidence related Α CORE informed decisions. to observed phenomena. COURSES DELIVERY: Outcome atoment 2 Outcom atterment E R. (3) INTRODUCES - Students are 100 200 N R Α not expected to be familiar with the in the second content or skill at the obligate or 383 E S E 383 288 88 86 ER graduate level. Instruction and learning activities focus on basic COMMUNICATIONS: ENG 101 R R knowledge, skills, and/or Communication Skills I competencies and entry-level. DIGITAL COMPUTER & completely. E R TELECOMMUNICATIONS: CSC 150 (E) EMPHASIZES - Diudents are Computer Literacy expected to possess a basic level of knowledge and femiliarity with the NATURAL SCIENCES: BIO 100 А А R А content or skills at the collectate or Ε **Biological Science** brackuste level. Instruction and learning activilies concentrate on NATURAL SCIENCES: BIO 100L enhancing and strengthening knowledge, skills, and expanding А R А А R **Biological Science Lab** completely. HEALTH & PHYSICAL EDUCATION: PED 100 R E А (R) REWPORCES - Students are Fundamentals of Fitness for Life expected to possess a strong foundation in the knowledge, skill. COMMUNICATIONS: ENG 102 or competency at the collegiate or graduate level. Instructional and А А Communication Skills II ineming activities continue to build Α NATURAL SCIENCES: PHY 100 upon previous competencies and R E E R increased complexity Physical Science (A) APPLATS - Students are SOCIAL SCIENCES: SOC 101 R E R R expedied to possess an advanced Introduction to Social Sciences invel of knowledge, skill, or competency at the collegiste or MATHEMATICS: MTH 103 traduate level. Instructional and R А F А R Contemporary Mathematics learning activities focus on the use of the content or skills in multiple HEALTH & PHYSICAL EDUCATION: HED 100 contexts and at multiple levels of R 1 E А Personal and Community Health completely. SOCIAL SCIENCES: HIS 101 IS DEMONSTRATION OF А History of World Civilization II LEARNING: HUMANITIES: FIA 201 (70 Students are asked to I **Basic Art Appreciation** demonstrate their learning on the outcome through homework. HUMANITIES: HUM 210 projects, tests, etc. and are provided formal feedback. E E А R Humonities I COMMUNICATIONS: SCM 285 R R А Principles of Speech CULTURAL ELECTIVE: PSY 340 А А А А А Psychology of African Americans

Curriculum Mapping Process: STEP 5 STEP <u>5</u>

• Analyze course syllabi. Indicate (F) if students have opportunities to (i) demonstrate what has been learned on each program outcome and (ii) receive feedback in a formal way. (re: SACS CS 3.3.1.1/3.5.1)

Why Take Step 5?

- Assessed curriculum
 - "From our students' point of view, assessment always defines the actual curriculum" (Ramsden in Biggs & Tang, 2007, p. 169).
- Effective learning requires systematic feedback
 - Repeated testing better than repeated study for understanding and retention (Roediger & Karpicke, 2006)
- Identify *courses* to embed *program* outcomes assessment (re: SACS CS 3.3.1.1)

- Keep program assessment focused and manageable

Demonstration and Formal Feedback: Example

(F) <u>Program</u> Outcome 1 (Communication/Writing Competency)

Course (HIST 1302) syllabus:

"Students must complete at least three critiques of assigned scholarly articles. These critiques should be 4-5 pages, typed and double-spaced. They should have an introduction, thesis statement, body, and conclusion. Poor usage and spelling will reduce your grade. Please proofread your work!"

Demonstration and Formal Feedback: Example

() <u>Program</u> Outcome 1 (Communication/ Writing Competency)

Course (PE 1164) syllabus:

"There is one (1) article each student is expected to read, in addition to reading assignments from the text, and to write a critical review."

Curriculum Mapping Process



CURRICULUM MAPPING PROCESS -- STEP 5

[iiii] **Demonstrate** SELECTED GENERAL SEMESTER: **(F)** 6. ORAL COMMUNICATION 1. WRITTEN COMMUNICATION 2. NFORMATION 3. SCIENTIFIC REASONING. CRITICAL THINKING TECHNOLOGY LITERACY Student is able to produce texts Student is able to: (1) Proport Student is able to consistently Student is considered to have appropriate for their purposes Student is able to: (1) Use and relationship between observ and systematically: (1) Identify oral communication apply computers, software main ideas and/or themes; (2) competency if he or she is able and audiences as reflected in: phenomena; (2) Design (a) Form; (b) Organization; (c) to express him or herself in a applications, and other experiments which test Make comparative judgments LEGEND Content development: (d) resources to achieve a wide hypotheses concerning from data: (3) Determine the structured, meaninoful, and Language usage and style variety of academic, proposed relationships; (3) validity/ credibility and productive manner. The student (syntax, vocabulary, grammar, professional, and personal Predict logical consequences implication of a supposition; (4) must also be able to convey **D** OUTCOME STATEMENT: and mechanics). ocals: (2) Use a set of abilities observed observena and Identify limitations and his/her intentions or ideas in messages crafted to introduce, to solve problems, collect data determine possible alternation contradictions in an event (5) The program outcome is manage information. outcomes: (4) Judge the Analyze and evaluate inform, or persuade the listener. (E) EXPLICITLY & III IMPLICITLY GENERAL communicate with others degree to which a particular arouments and issues: (6) slated in the course syllabus as create effective presentations, conclusion is justified based (Demonstrate creative problembeing one of the learning outcomes EDUCATION F and use information to make the empirical evidence relate solving skills; (7) Implement for this course. CORE informed decisions. to observed phenomena. and evaluate a plan to work towards a goal or conclusion DIJ LEVEL OF CONTENT DELIVERY: COURSES F Outcome attenuent () Cutcom Statement (E, 1) 2 2 (8) INTRODUCES - Students are E R J 100 32 N R outoo not expected to be familiar with the 31 content or skill at the obligation or 282 Ξð 383 自然見 ESE 288 26 88 Ed preducte level. Instruction and learning activities focus on basic COMMUNICATIONS: ENG 101 Х х knowledge, skills, and/or Communication Skills I competencies and entry-level DIGITAL, COMPUTER & completely TELECOMMUNICATIONS: CSC 150 х (E) EMPHASIZES - Dudenis are expected to possess a basic level of Computer Literacy knowledge and familiarity with the NATURAL SCIENCES: BIO 100 х х х Х х content or skills at the collegiste or **Biological Science** anduste level. Instruction and learning activilies concentrate on NATURAL SCIENCES: BIO 100L enhancing and strengthening х х х х х F **Biological Science Lab** knowledge, skills, and expanding completely HEALTH & PHYSICAL EDUCATION: PED 100 х х (R) REWFORCES - Students are Fundamentals of Fitness for Life expected to possess a strong F foundation in the knowledge, skill, COMMUNICATIONS: ENG 102 х х or competency at the collegiate or Communication Skills II graduate level. Instructional and iseming activities continue to build NATURAL SCIENCES: PHY 100 upon previous competencies and х Х Х х х **Physical Science** Increased complexity (A) APPLIES - Budents are SOCIAL SCIENCES: SOC 101 χ х х expected to possess an advanced х Introduction to Social Sciences level of knowledge, skill, or competency at the collegiste or MATHEMATICS: MTH 103 х F graduate level. Instructional and х **Contemporary Mathematics** learning activities focus on the use of the content or skills in multiple HEALTH & PHYSICAL EDUCATION: HED 100 contexts and at multiple levels of х complexity Personal and Community Health F SOCIAL SCIENCES: HIS 101 **DEMONSTRATION OF** х History of World Civilization II LEARNING HUMANITIES: FIA 201 (00 Students are asked to х х х х **Basic Art Appreciation** demonstrate their learning on the F outcome Prouch homework. HUMANITIES: HUM 210 projects, tests, etc, and are х х х х Х provided formal feedback Humanities I COMMUNICATIONS: SCM 285 х F х х Principles of Speech CULTURAL ELECTIVE: PSY 340 х х х х х Psychology of African Americans

CURRICULUM ALIGNMENT FOR STUDENT ACHIEVEMENT: Processes, Tools, and Outcomes

* Quantitative Indicators (* Optional)

HANDOUT: Curriculum Mapping Steps

* Quantitative Indicators (Optional)

- (i) Outcome Communication score
- (ii) Outcome Saturation score
- (iii) Outcome Feedback Points score
 - (iv) Course Breadth score
 - (v) Course Depth score
 - (vi) Course Assessment Focus score

* Quantitative Indicators: A Word of Caution

- Facilitate comparative analyses (<u>not benchmarking</u>) *within* the program
 - -Scores
 - Indices
- "Although one can say that the larger the value of the index, the better the alignment, there is still no easy way to think about how big the alignment index must be to be considered 'good' " (Porter, 2002, p. 6).

III. Analyzing and Interpreting Maps

HANDOUTS

B.S., Management Information Systems

Guide for Analysis and Interpretation of Maps

* Exercise

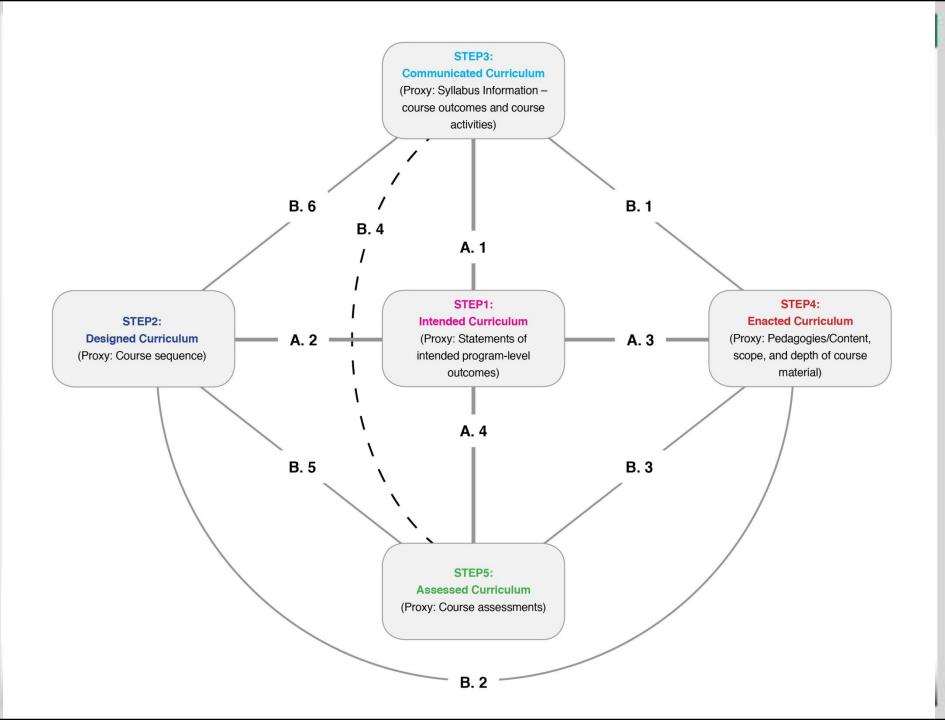
• Reflect on the sample general education outcomes map provided.

- What does the map tell you about the coherence of the hypothetical BS in MIS curriculum?
- Does this BS in MIS curriculum effectively afford the development of the intended institutional outcomes?

Structured Analysis of Curriculum Map Data

HANDOUT

Guide for Analysis and Interpretation of Curriculum Maps



Interpretation of Maps

- Curriculum Mapping is a *tool* to stimulate reflection and discussion.
 - Curriculum coherence can be defined "as the extent to which students and faculty find meaning in the curriculum" (Johnson & Ratcliff, p. 93).
- Results of a curriculum mapping analysis are not *"information for action."* They are *"food for thought and discussion"* as we align curricula for student achievement and success.

Interpretation of Maps

- Curriculum mapping provides a tool not only to *stimulate* thinking, it is also designed to help academics *organize* thinking about program curricula.
- "It is the interpretations of events (or constructs) within a *structured 'meaning making' environment* whereby learning can occur" (Sutherland & Katz, 2005, p. 257; emphasis added).

IV. Hands-On Exercise

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Holistic Analysis of Curriculum Maps

- 1. Are statements of intended program outcomes wellarticulated?
- 2. Do students receive appropriate syllabus guidance?
- 3. Do students have sufficient learning opportunities to develop program outcomes?
- 4. Is content organized in a logical manner to reflect increasing progression ?
- 5. Do courses provide students with opportunities to integrate program learning outcomes?
- 6. Are students provided with feedback on their progress to achieving intended program learning outcomes?

V. Lessons Learned / Tips for Success

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 Ensure that all degree programs have welldeveloped statements of intended learning outcomes

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- 2. Conduct syllabi review
 - Common format

- 3. Develop clear procedures for the curriculum mapping process
 - Program faculty collectively select courses to be mapped
 - Faculty members individually complete the map for the courses they teach
 - If several faculty members teach the same course, then they might choose to work collectively. Alternatively, course coordinator can complete the map for the course.
 - Program coordinator or department head compiles the program map
 - Faculty collectively analyze and interpret the program curriculum map

- 4. Design or adapt a user-friendly data collection tool
 - simple and straightforward to use;
 - require a minimum of background reading in order to be completed;
 - cover the core learning outcomes;
 - indicate whether explicit learner support is provided and whether the outcome is assessed; and
 - provide the facility to demonstrate students' progression in outcomes attainment over time

(Tariq et al. 2004)

5. Educate faculty about the curriculum mapping concept

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- Understandings
- Behaviors
- Attitudes

- 6. Consider developing Program Map Portfolio
 - To verify and confirm the information presented on the curriculum map,
 - To create a repository of materials supporting subsequent planning, assessment, and reporting activities, and
 - To document the substantial time and effort faculty and staff invest in developing and delivering courses.

Next Steps

- Student-led curriculum mapping (Romkey & Bradbury, 2007)
- Web-based, database-backed mapping system

• Mapping of co-curricular areas

Conclusion / Final Thoughts

- "…[C]ollege is meaningless without a curriculum, but it is more so when it has one that is meaningless." (Van Doren, 1943, quoted from Birnbaum, 2004, p. 118).
- "Thinking about the curriculum . . . [r]equires a willingness to accept surprise, ambiguity, and a certain unavoidable messiness. If the world does not always make sense, why should the curriculum?" (Rudolph, 1977 quoted from Birnbaum, 2004, p. 120.)

Conclusion / Final Thoughts

"To map learning is also to affirm the possibility of surprise – discovering that learning does, or does not, happen when and where, and how it was expected. ... Mapping learning teaches the contours, relationships, pathways, and distances of learning itself, and what comes to be known about learning, and how and where it happens can influence institutional policy and strategy for supporting student achievement" (Keeling et al., 2008, pp. 57-58).

Questions, Comments, Discussion

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Curriculum Mapping: A Roadmap for Curriculum Coherence and Student Achievement

Thank You!!

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