A background image showing a group of students sitting at a table in a cafeteria, eating and talking. The image is dimmed to allow text to be overlaid. A yellow horizontal bar is located at the top left of the image.

Institutional Effectiveness Outcomes Assessment

Curriculum Mapping

Dr. Kandeice Gibson
Institutional Planning and Effectiveness





Session Overview

Topics:

- Curriculum Effectiveness
- Learning Outcome Alignment
- What is Curriculum Map?
- Curriculum Mapping Principles and Process
- Evaluating the Curriculum Map
- IE Curriculum Map Template Overview
- Guest Speakers

Curriculum Effectiveness

According to Linda Suskie, **a great curriculum:**

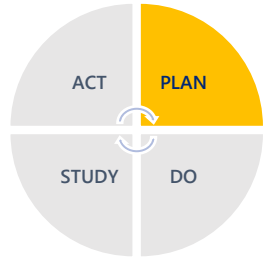
- Treats a learning outcome as a *promise*.
- Is *responsive* to the needs of students, employers, and society.
- Gives students ample, *diverse opportunities* to achieve core learning outcomes.
- Is *consistent* across venues and modalities.
- Is greater than the sum of its parts.
- Concludes with an integrative, synthesizing *capstone experience*.
- Is *focused* and simple.
- Have appropriate *progressive rigor*.
- Uses *research-informed* strategies to help students learn and succeed.



A collection of courses is not a program and, conversely, a program is more than a collection of courses. A true program has both coherence and rigor.

— Linda Suskie, Author and Higher Education Assessment Consultant

Learning Outcome Alignment



While 77% report that their institutions are currently involved in curriculum mapping of some kind, *only 50% indicate that all programs have learning outcomes and that those outcomes align* throughout the institution.

— Jankowski, Timmer, Kinzie, & Kuh.

What is a Curriculum Map?

Program Outcomes	Standards	Competencies	ABC 1000	ABC 1100	XYZ 1200	ABC 1300	XYZ 1400	ABC 1500	ABC 2000
Outcome 1	Standard 1	Competency 1, 5	I		R			M	
	Standard 7								M
Outcome 2	Standard 3		I	R	R	R	M		
	Standard 5	Competency 3		I					
Outcome 3	Standard 8	Competency 2			I				
Outcome 4	Standard 2	Competency 4				R		M	
	Standard 6		I	I	I	R	R		M
Outcome 5	Standard 4			I	R	M			

Dashboard

A single-screen visualization that shows:

- The program learning **outcomes**
- The **relationship** between the courses and the program learning outcomes
- How learning is **integrated** and **progresses** across the curriculum
- The **alignment** of varying standards and institutional outcomes to the key learning outcomes

What is a Curriculum Map?

Communication Tool

Helps to facilitate conversations about how the curriculum ensures student learning and preparation for post-secondary success.

Identify **gaps** in diverse and progressive learning opportunities

Address the **implications** of curricular changes to the key outcomes and standards

Develop **shared** knowledge and understanding of the students' learning needs for increased responsiveness

“Mapping opens up discussions about what outcomes mean, how they manifest in the curriculum, and how different courses foster shared learning outcomes.”

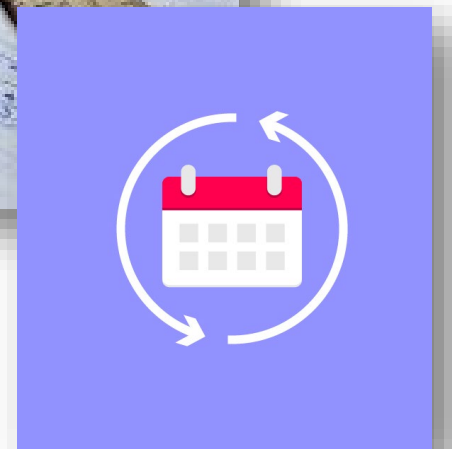
— National Institute for Learning Outcomes Assessment (NILOA)

What is a Curriculum Map?

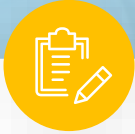
Planning Tool

Blueprint for program learning assessment.

- Summarizes where learning outcomes are *mastered*
- Identifies what learning outcomes have been *assessed*
- Can be used to create a rotational assessment *cycle*
- Provides an opportunity to build *coherence* and ensure intentional planning for student learning



Curriculum Mapping Principles



Electives

Elective courses are not included in a program curriculum map.



Course Options

A group of courses can be listed together if there is a shared learning outcome. Otherwise, they are treated as electives.



Mapped Courses

Course should only be mapped to a specific learning outcome if a significant part of the course is based on progress toward achieving the program learning outcome.



Use Codes

Use codes to indicate the level of learning is achieved in each Mapped Course for each program learning outcome.

— Linda Suskie, Author and Higher Education Assessment Consultant

Evaluating the Curriculum Map

Across the program courses, are all PSLOs/Standards addressed in a logical order?

Do all the key/core courses address at least one outcome?

Do multiple courses address the same outcomes, at the same levels?

Do some outcomes get more coverage than others?

Are all outcomes first introduced and then reinforced?

Are students expected to show high levels of learning too early?

Do students get practice on all the outcomes before being assessed, e.g., in the capstone?

How do assignments elicit demonstrations of particular learning outcomes? How are we assessing it and where?

How do individual faculty/courses each contribute to the collective enterprise of helping students to demonstrate outcomes?



Remember that mapping is as much about the process of seeing relationships as it is about completing a spreadsheet or any other kind of product.

— National Institute for Learning Outcomes Assessment

Institutional Effectiveness Curriculum Mapping																							
Program-Level Student Learning Outcomes (PSLOs)	FLDOE CTE Standards	Competency Mapping	FOUNDATION			CORNERSTONE COURSES				CORE COURSES				CAPSTO	OTHER GENERAL EDUCATION/ELECTIVES								
			MAR 1011	GEB 1011	MAN 2021	ACG2001 APA1111C	ECO 2013	ECO 2023	OST2335 / ENC1102	CGS1510 C/ OST2835	MKA 2701C	ISM 2200C	MAR 2644C	QMB 2100	N/A	ENC 1101	STA 2023	CGS 106 0C	SPC1024/ SPC1608	Gen Ed Hum.	Elect ive	Elect ive	Gen Ed Scie
			T3	T5	T8	T2	T4	T6	T7	T4	T6	T7	T8	T9	N/A	T1	T1	T2	T3	T5	T9	T10	T10
Financial Decision Making: Graduates will be able to...	01.0 Prepare and use financial information about business organizations to support decision making.	Critical Thinking				I																	
	07.0 Evaluate business and financial information to support internal decision making.	Critical Thinking	I		R		I	I	R		M	R	M	R									
Querying Data: Graduates will be able to design and build business applications using database management systems.	02.0 Manage business information using appropriate software.	Critical Thinking, Information			R					R	R	M	M										
	06.0 Design and build business applications using database management systems.	Information Literacy								I/R		M	M										
Data Requirements and Parameters: Graduates will be able to identify data requirements and	03.0 Describe information systems and requirements analysis. This description should identify the project goal, data storage, movement, security, quality, usage, and functional				R						I	M	M										
Analytics Reporting: Graduates will identify uses for reports and visual presentation of data, including forms, charts, graphs, wikis and other web applications.	05.0 Describe how data is organized and examine the business intelligence process used in transforming data to useful information. Demonstrate skills in analyzing data using spreadsheet software	Critical Thinking, Effective Communication			R					I	R	R/M	R/M										
	09.0 Demonstrate fundamental techniques and methods used in the analysis of computerized business activities, including consideration of information requirements, resources, and its	Critical Thinking								I	M	M	M										
Data Driven Narratives: Students will be able to present and articulate data driven narratives.	04.0 Demonstrate effective business communication and collaboration skills.	Effective Communication							R/M				R										
	04.10 Research and compose a document containing statistical information.	Mathematical & Scientific Reasoning												R									
Legal and Ethical Issues in Business: Students will be able to understand and describe the significance of legal	08.0 Describe the implications of professional values, ethics, and attitudes in business.			I	R																		

Institutional Effectiveness Curriculum Mapping

Institutional Effectiveness Curriculum Mapping																										
Program-Level Student Learning Outcomes (PSLOs)	FLDOE CTE Standards	Competency Mapping	IE Cycle Assessed	Assessment Method(s)	FOUNDATION			CORNERSTONE COURSES				CORE COURSES					CAPSTO	OTHER GENERAL EDUCATION/ELECTIVES								
					MAR 1011	GEB 1011	MAN 2021	ACG2001 APA1111C	ECO 2013	ECO 2023	OST2335/ ENC1102	CGS1510C/ OST2835C	MKA 2701C	ISM 2200C	MAR 2644C	QMB 2100	N/A	ENC 1101	STA 2023	CGS 1060 C	SPC10 24/ SPC16	Gen Ed Hum.	Elective	Elective	Gen Ed Scien	
					T3	T5	T8	T2	T4	T6	T7	T4	T6	T7	T8	T9	N/A	T1	T1	T2	T3	T5	T9	T10	T10	
Financial Decision Making: Graduates will be able to	01.0, 07.0	Critical Thinking			I		R	I	I	I	R		M	R	M	R										
Querying Data: Graduates will be able to design and build business applications using database management systems.	02.0, 06.0	Critical Thinking, Information Literacy	2021-2022 2020-2021 2019-2020	Project			R					I/R/A	R	M/A	M											
Data Requirements and Parameters: Graduates will be able to identify data requirements and parameters including	03.0	N/A	2019-2020	Quiz			R						I	M/A	M											
Analytics Reporting: Graduates will identify uses for reports and visual presentation of data, including forms, charts, graphs, wikis and other	05.0, 09.0	Critical Thinking, Effective Communication	2021-2022	Project			R					I	R/M	R/M	R/M/A											
Data Driven Narratives: Students will be able to present and articulate data driven narratives.	04.0, 04.10	Effective Communication, Mathematical & Scientific Reasoning	2018-2019	Project							R/M				R	R										
Legal and Ethical Issues in Business: Students will be able to understand and describe the significance of legal and ethical issues in a business environment.	08.0	N/A	2020-2021	Quiz		I	R																			
N/A																										

Institutional Effectiveness Curriculum Mapping																																
PSLOs	CAHIIM Domains	FLDOE CTE Standards	Competency Mapping	DIDACTIC FOUNDATION COURSES										LAB COMPETENCY					CLINICAL		CAPST	OTHER GENERAL EDUCATION/ELECTIVES										Certifications
				HIM 100	HIM 126	HIM 251	HIM 1110	HIM 243	HIM 201	HIM 221	HIM 265	HIM 250	HIM 125	HIM 1110	HIM 223	HIM 272	HIM 2112	HIM 1800	HIM 2810	HIM 2930	ENC 1101	MG F	HSC 100	HSC 1531	PSY 201	GE Scien	CGS 1540	PHI 260	GE Spec	CCA; RHIT		
				T2	T2	T2	T3	T3	T5	T5	T5	T5	T2	T3	T3	T5	T6	T4	T4	T6	T1	T1	T1	T1	T2	T3	T4	T4	T6	N/A		
Health Information Communication: Graduates will competently communicate understanding of the Health Record Management process. Project Management: Graduates will be able to understand the EHR (Electronic Health Record) Project Management process.	Domain 1 Foundational Concepts	Standard 1 Demonstrate an understanding of healthcare organizations and health	Diversity (Global Self Awareness)	I		I	I			I						R	M															
		Standard 6 Demonstrate an understanding of Health Information Technology.		I	I	I	I	I	I	I	R	R	R	R	R	R	M															
	Domain 2 Informatics, Analytics, and Data Use	Standard 3 Explore health informatics as an allied health		I					I	I						R	M															
		Standard 5 Identify the functions of a health record.		I		I					R			R	R	M																
	Domain 3 Data Structure, Content, and Information Governance	Standard 4 Demonstrate an understanding of health data concepts.	Critical Thinking, Information Literacy, Diversity	I			I		I			R				R	M															
Revenue Cycle Management: Graduates will be able to recognize the steps in the revenue process from initial encounter with the healthcare system to their final payment of balance.	Domain 4 Revenue Cycle Management	Standard 10 Apply policies, regulations, and standards to the management of information associated with treatment, payment, and operations (TPO).	Critical Thinking, Effective Teamwork, Information Literacy	I	I				I			R	R	R	R		R	M		N/A										N/A		
		Standard 7 Discuss classification systems, clinical vocabularies and terminologies.	Critical Thinking, Information Literacy	I	I			I			R	R	R	R		R	M															
	Domain 5 Health Law and Compliance	Standard 10 Apply policies, regulations, and standards to the management of information associated with treatment, payment, and operations (TPO).	Critical Thinking, Effective Teamwork, Information Literacy	I	I	I	I		I		I	I	R		R	R		R	M													
		Standard 9 Demonstrate compliance with laws, regulations, and standards that impact	Critical Thinking, Information Literacy	I	I	I	I		I		I	I	R		R	R		R	M													
		Standard 8 Evaluate ethical issues in Health Information Professions.	Critical Thinking, Effective Communication	I	I	I		I								R	M															
	Domain 6 Information Protection: Access, Use, Disclosure, Privacy, and Security	Standard 11 Demonstrate computer knowledge and skills.	Critical Thinking, Effective Teamwork, Information Literacy							I	I		R			R	R	M														
Health Information Teamwork: Graduates will be able to demonstrate leadership and teamwork skills needed to accomplish team goals and objectives for health information management procedures.	Domain 7 Organizational Management and Leadership	Standard 12 Demonstrate employability skills.	Critical Thinking, Effective Teamwork, Information Literacy			I										R	M															
		Standard 2 Demonstrate the ability to communicate and use interpersonal skills effectively.	Effective Communication	I							I					R	M															

Institutional Effectiveness Curriculum Mapping																																		
Program-Level Student Learning Outcomes (PSLOs)	CAHIM Domains	FLDOE CTE Standards	Competency Mapping	IE Cycle Assessed	Assessment Method(s)	DIDACTIC FOUNDATION COURSES										LAB COMPETENCY					CLINICAL		CAPST	OTHER GENERAL EDUCATION/ELECTIVES										Certifications
						HIM 100	HIM 126	HIM 251	HIM 1110	HIM 243	HIM 201	HIM 221	HIM 265	HIM 250	HIM 125	HIM 1110	HIM 223	HIM 272	HIM 211	HIM 1800	HIM 2810	HIM 2930	ENC 1101	MG F	HSC 100	HSC 1531	PSY 201	GE Scien	CGS 1540	PHI 260	GE Spec	CCA; RHIT		
						T2	T2	T2	T3	T3	T5	T5	T5	T5	T2	T3	T3	T5	T6	T4	T6	T6	T1	T1	T1	T1	T2	T3	T4	T4	T6			
Health Information Communication: Graduates will competently communicate understanding of the Health Record Management process.	Domain 1, 2	Standard 1, 3, 6	Diversity (Global Self Awareness)	2018-2019	Exam	I	I	I	I	I	I	I	I	I	R	R	R	R	R/A	R	M													
Project Management: Graduates will be able to understand the EHR (Electronic Health Record) Project Management process.	Domain 2, 3	Standard 4, 5	Critical Thinking, Information Literacy, Diversity	2017-2018 2016-2017	Exam	I			I		I	I				R			R/A	R	M													
Revenue Cycle Management: Graduates will be able to recognize the steps in the revenue process from initial encounter with the healthcare system to their final payment of balance.	Domain 4	Standard 7, 10	Critical Thinking, Effective Teamwork, Information Literacy			I	I			I	I				R	R	R	R		R	M													
Health Information Management Proficiency: Graduates will be able to demonstrate an understanding of health information technology, including knowledge of regulations and how to use and store health information data for healthcare application.	Domain 5, 6	Standard 8, 9, 10, 11	Critical Thinking, Effective Teamwork, Information Literacy	2021-2022 2019-2020	Exam	I	I	I	I		I		I	I	R	R	R	R	R	R	M	M/A												
Health Information Teamwork: Graduates will be able to demonstrate leadership and teamwork skills needed to accomplish team goals and objectives for health information management procedures.	Domain 7	Standard 2, 12	Critical Thinking, Effective Teamwork, Information Literacy	2021-2022 2019-2020	Project	R/A		I						I						R	M													
N/A																														N/A				

Work-in Progress Course-Level Example: Building Construction [Professor Felix Lorenzo, Program Manager]

BROWARD COLLEGE										
BUILDING CONSTRUCTION TECHNOLOGY PROGRAM										
FDOE Curriculum Alignment										
CIP# CCC0615100103 2019-2020 edition										
Report date: 05/06/2019										
Totals	BCN 1210	BCN1272	BCN2560	BCN2721C	BCT1706	BCT1770	BCT2040	BCT2720C	Optional	A.S. Equivalent
12	8	8	23	5	14	6	1			
5.05					✓					8.05
5.06									X	8.06
5.07									X	8.07
6.0 Plan, coordinate, schedule and control projects										
6.08								✓		9.08
6.15				✓						9.15
7.0 Understand various building inspections and required testing										
7.01				✓						10.03
7.02	✓			✓						10.01,10.02,10.04
8.0 Demonstrate an efficient understanding of construction documentation										
8.01				✓						12.01
8.02				✓						12.02
8.03				✓						12.03
9.0 Demonstrate appropriate math skills										
9.01		✓			✓					13.01
9.02				✓						13.02
9.03		✓			✓					13.03
9.04					✓					13.04
9.05					✓					13.05
10.0 Demonstrate employability skills (Optional)										
11.01				✓						15.01
11.02				✓						15.02
11.03				✓						15.03
11.04				✓						15.04
11.05				✓						15.05
11.06				✓						15.06

Example from Professor Lorenzo's In-Depth Map to each specific State Standard.

Work-in Progress Course-Level Example: Building Construction [Professor Felix Lorenzo, Program Manager]

Detailed Map (Level 1)

		Institutional Effectiveness Curriculum Mapping															Detailed Map (Level 1)								
Program-Level Student Learning Outcomes (PSLOs)	FLDOE CTE Standards	Competency Mapping	CORE COURSES														CAPSTO	OTHER GENERAL EDUCATION/ELECTIVES							
			BCN 1210	BCN 127 2	BCN 256 0	BCT 204 0	BCT 170 6	BCT 177 0	BCN 2721 C	BCT 2720	BCT 174 3	BCT 271 0	BCN 2253 C	BCT 277 1	BCT 276 0	BCT 176 7	N/A	ENC 1101	Gen Ed Mat	CGS 1060 C	Gen Ed Spc	Gen Ed Scie	Gen Ed Hum	Gen Ed Socl	
			T1	T1	T2	T3	T3	T3	T4	T6	T6	T7	T7	T8	T8	T9	N/A	T2	T4	T5	T5	T9	T10	T10	
Workplace Soft Skills Graduates will demonstrate professionalism soft skills.	01.0Communicate effectively.	Effective Communication	I	R	R	R	R	R	R	R	R	R	R	R	R	M		N/A							
	15.0Demonstrate employability skills.	Professionalism																							
	Construction Materials and Methods Graduates will be able to...	02.0Identify appropriate grade, quality use, and selection of building materials, and methods of		I		R	M																		
06.0Select and maintain construction site tools and equipment.			I												M										
Construction Cost Estimate Graduates will be able to develop a cost estimate for a building project.	03.0Draw, read and interpret drawings and specifications.		I	I		R	I	I	R	R			R	M											
	05.0Survey and investigate construction sites.											I	R												
	08.0Understand take off quantities and estimate costs.			I		I		R	R	R		R		M											
	13.0Demonstrate appropriate math skills.	Mathematical & Scientific			I			R	R					M											
Construction Management Graduates will demonstrate proficiency in construction management.	09.0Plan, coordinate, schedule and control projects.	Critical Thinking, Mathematical & Scientific					I		R	R				M		M									
	10.0Understand various tests and inspections.	Problem-Solving	I						R																
	11.0Select, train and supervise								I							I									
	12.0Demonstrate efficient office and administrative procedures.		I				R			M			R												
Construction Scheduling Graduates will demonstrate proficiency with construction	07.0Interpret basic designs and apply sound construction principles.	Critical Thinking, Mathematical & Scientific Reasoning,	I		R			R		M				M											
	Construction Law and Safety Graduates will be able to...	04.0Apply laws, codes, regulations and contract documents.						I		I		R			M	R									
14.0Demonstrate an understanding of basic science.		Mathematical & Scientific	I		R											M									
16.0Demonstrate an understanding of entrepreneurship.											I														
17.0Demonstrate the importance of health, safety and environmental management systems in organizations and their importance to organizational performance and regulatory																M									

Curriculum Mapping Champions



Dr. Nora Powell,
Dean of Health Science



Professor Felix Lorenzo
Program Manager, Building Construction

Why is Curriculum Mapping important to you?

How has Curriculum Mapping informed how you review, design, and assess your program?

How have you shared your Curriculum Map and engaged your faculty/colleagues in the process?

What lessons learned or advice would you give to those who will be engaging in this process soon?

Evaluation Practice

Underwater Basket Weaving, A.S.

Institutional Effectiveness Curriculum Mapping																
Program-Level Student Learning Outcomes (PSLOs)	FLDOE CTE Standards	Competency Mapping	FOUNDATION			CORNERSTONE		CORE					CAPSTONE	OTHER GENERAL		
			UBW 1000	UBW 1001	UBW 1002	UBW 1003	UBW 1004	UBW 1009	UBW 1010	UBW 1011	UBW 1012	UBW 1013	UBW 2000	ENC 1101	Gen Ed Math	Gen Ed Sci
			T1	T2	T3	T4	T6	T7	T5	T8	T2	T8	T9	T2	T4	T1
Underwater Basket Weaving Techniques Graduates will be proficient in basket weaving techniques.	01.0 Understand basket making techniques.	Effective Communication	I	R/M			R				M			N/A		
	4.0 Select appropriate designs that are appropriate for underwater weaving.	Critical Thinking			I		R		I	R			M			
Basket Materials Graduates will demonstrate and understanding of appropriate materials for	03.0 Identify appropriate grade, quality, use, and selection of basket materials.	Mathematical & Scientific Reasoning	I				R	R	R		M	M	M			
	08.0 Maintain appropriate tools and equipment.		I	R								M				
Basket Weaving Teamwork Graduates will demonstrate effective teamwork.	02.0 Collaborate effectively with a basket weaving team.	Teamwork											I/R/M			
	06.0 Communicate throughout the basket weaving process underwater.	Effective Communication		I	R				M							
	13.0 Demonstrate employability skills.			I	R				M							
Safety Graduates will demonstrate proficiency with underwater	05. Swim effectively		I	I	R		R	R	R	R	M	M	M			
	7.0 Understand underwater safety standards and procedures.	Problem-Solving	I	I	I					R/M						

What are some of the gaps in this curriculum map?



Thank you!

For additional questions or assistance, please contact:

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