ASSESSMENT 101

James Madison University
Keston Fulcher, Ph.D.

Queens College, August 2024

PARTICIPANT OUTCOMES

- Explain the basic steps in the assessment process
- Distinguish among beginning, developing, good, and advanced assessment reporting
- Develop an assessment plan for one student learning outcome (SLO)
- Discuss the fundamentals of applying interventions [pedagogy and curriculum] at the PROGRAM-LEVEL to improve student learning

OVERVIEW

9:00 AM - 10:15 AM

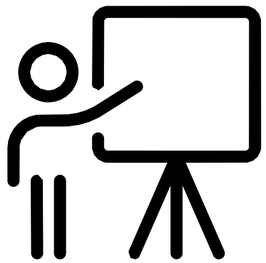
Introductions and Introducing Assessment (Forest View)

1:30 PM - 3:00 PM

Develop YOUR Assessment Plan

10:30 AM - Noon

The Assessment Components (SLOs, Curriculum Maps, Methodology)

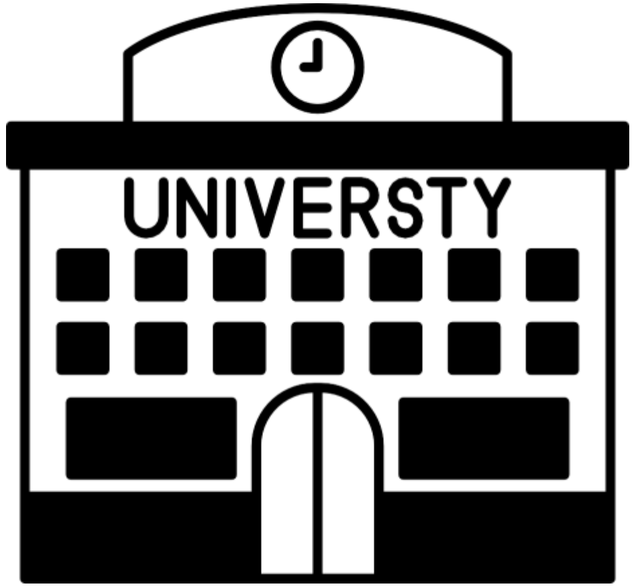


3:15 PM - 4:30 PM

Workshop Assessment Plans & Think About Learning Improvement

INTRODUCTIONS

Name



Role

One Thing
(you hope to learn)

WHAT IS PROGRAM ASSESSMENT?

…a systematic process for evaluating STUDENT LEARNING related to a program.

Two Main Purposes

- Accountability
- Improvement

ASSESSMENT CYCLE

1) State Learning Outcomes

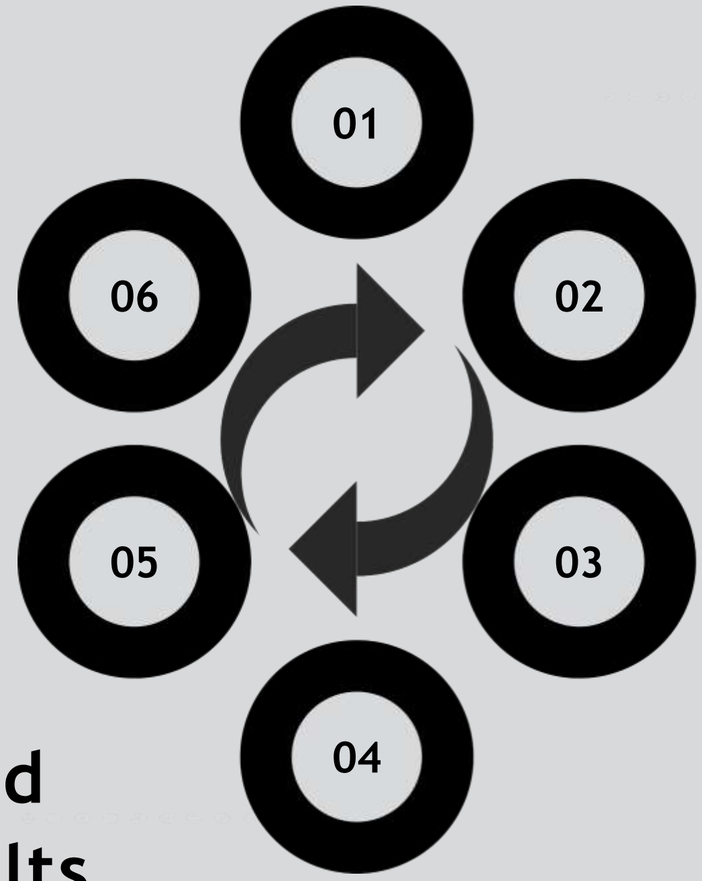
2) Map to Courses/ Experiences

3) Select Methods

4) Analyze and Interpret Results

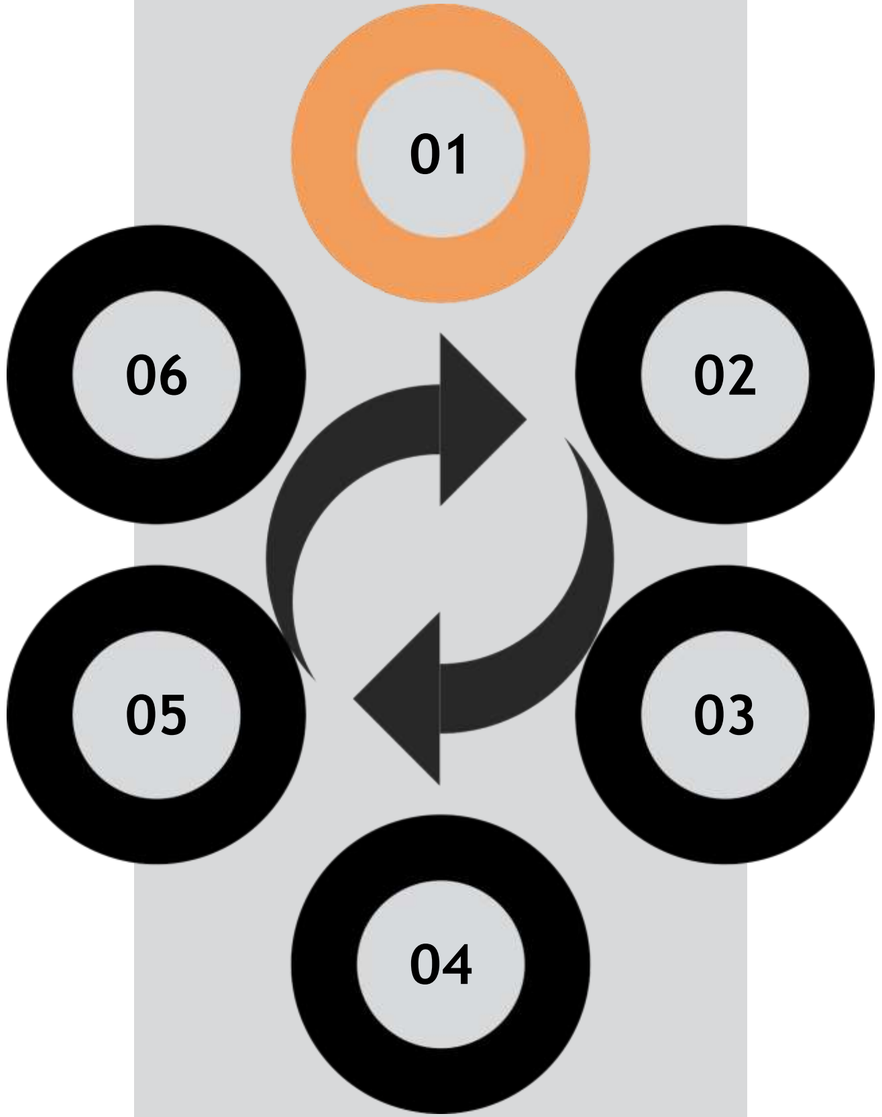
5) Report to Stakeholders

6) Use Results for Improvement



STEP 1: STATE LEARNING OUTCOMES

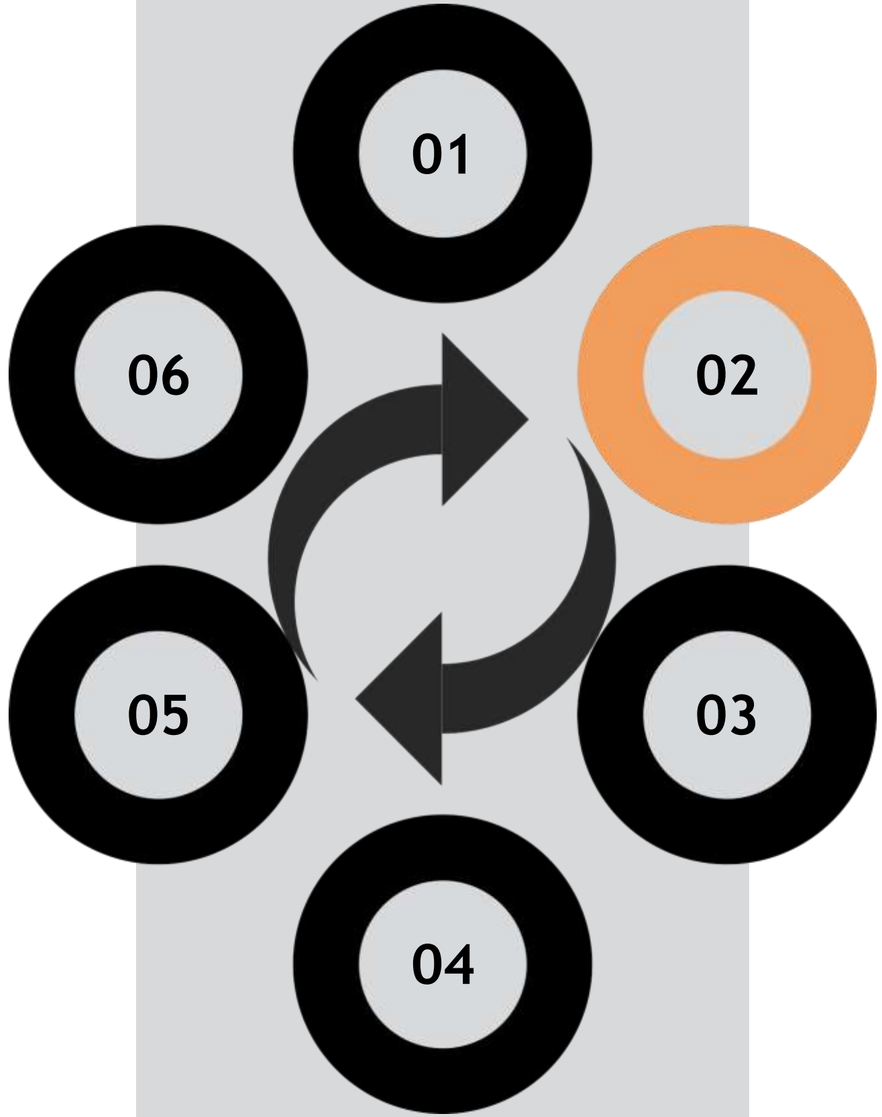
Student Learning Outcomes (SLOs) are what students should know, think, or do as a result of your program.



STEP 2: MAP SLOS TO COURSES/EXPERIENCES

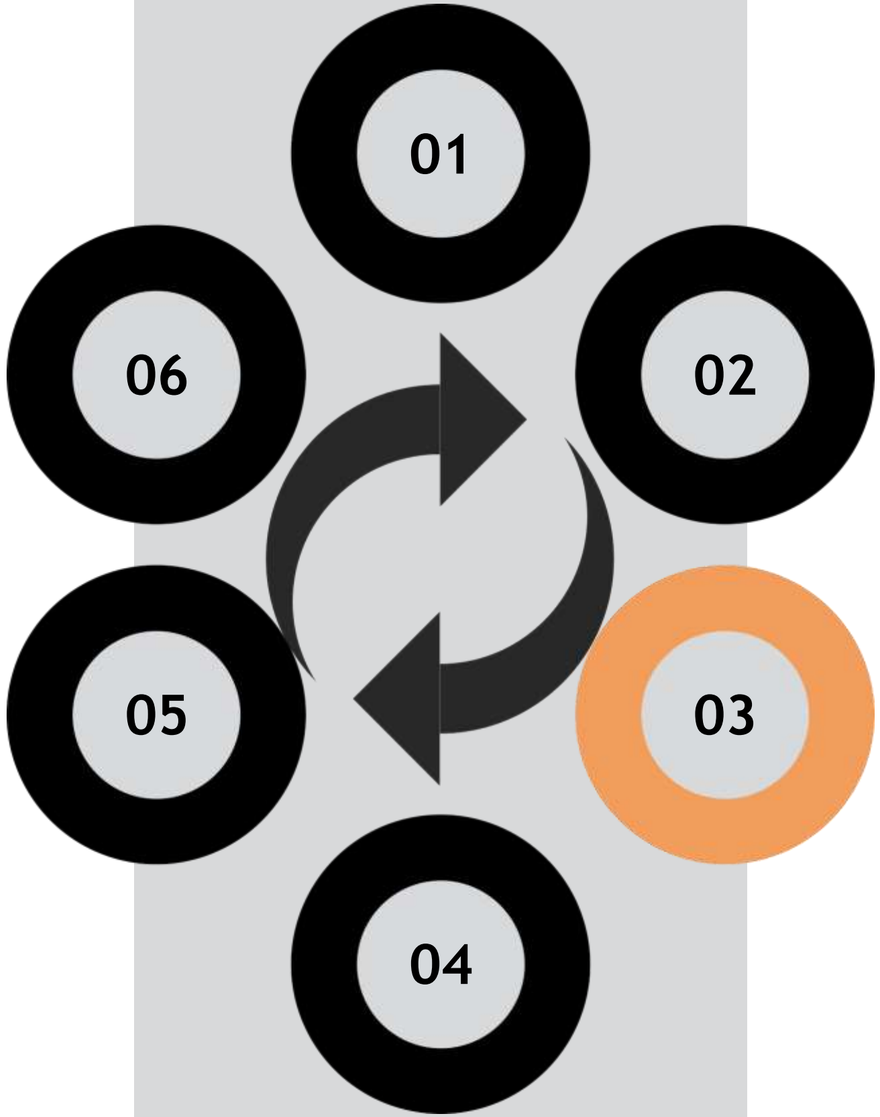
Identify courses/co-curricular activities in which students should be learning knowledge/skills articulated in SLOs.

Referred to as *Program Theory*
—How the design of a program should theoretically affect students



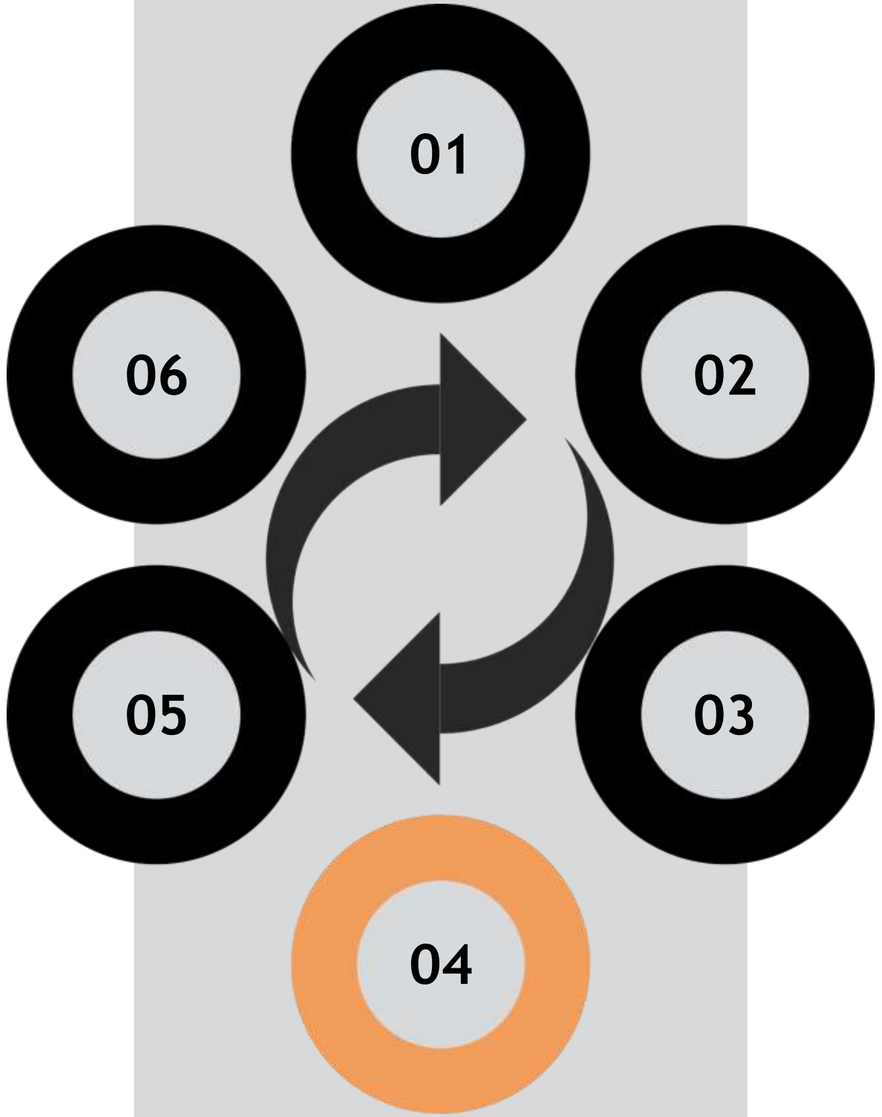
STEP 3: SELECT METHODS

Select instruments and data collection strategies to gather evidence about student achievement of SLOs.



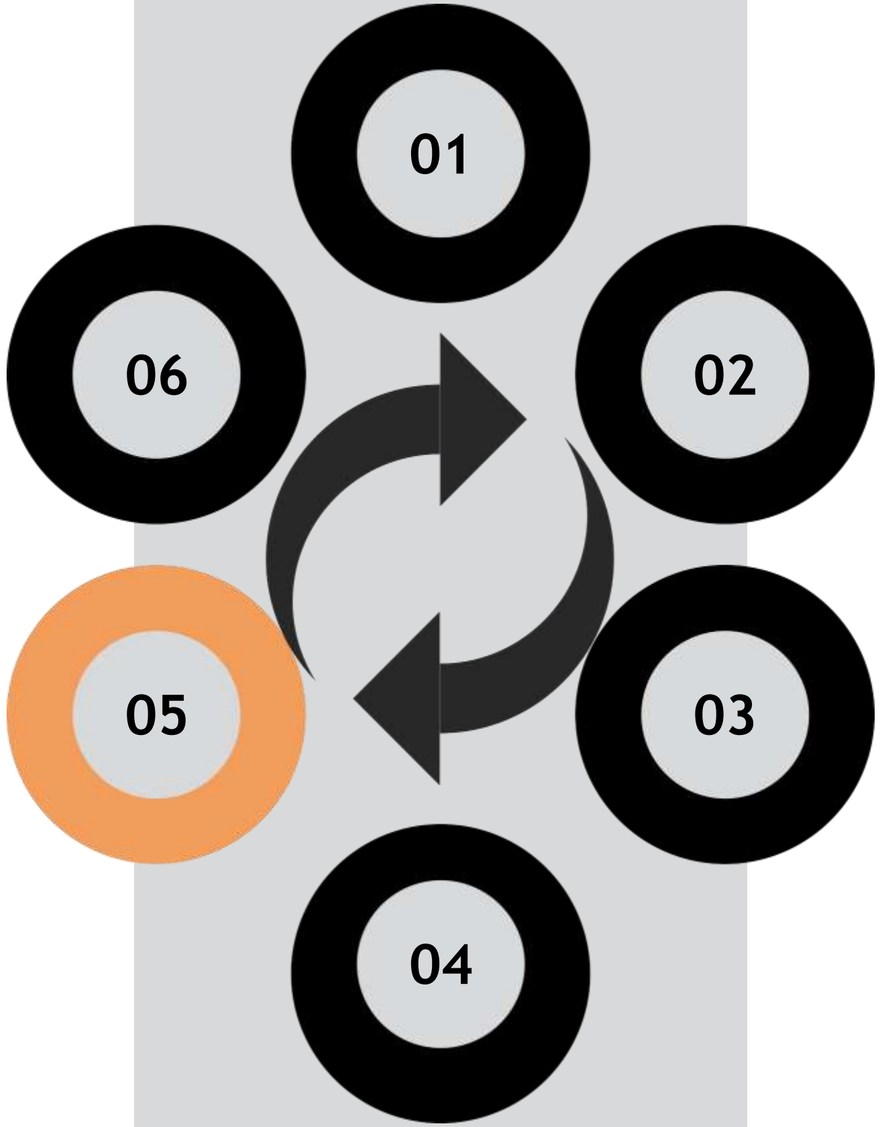
STEP 4: ANALYZE AND INTERPRET RESULTS

What did you find, and what does it mean relative to your SLOs?



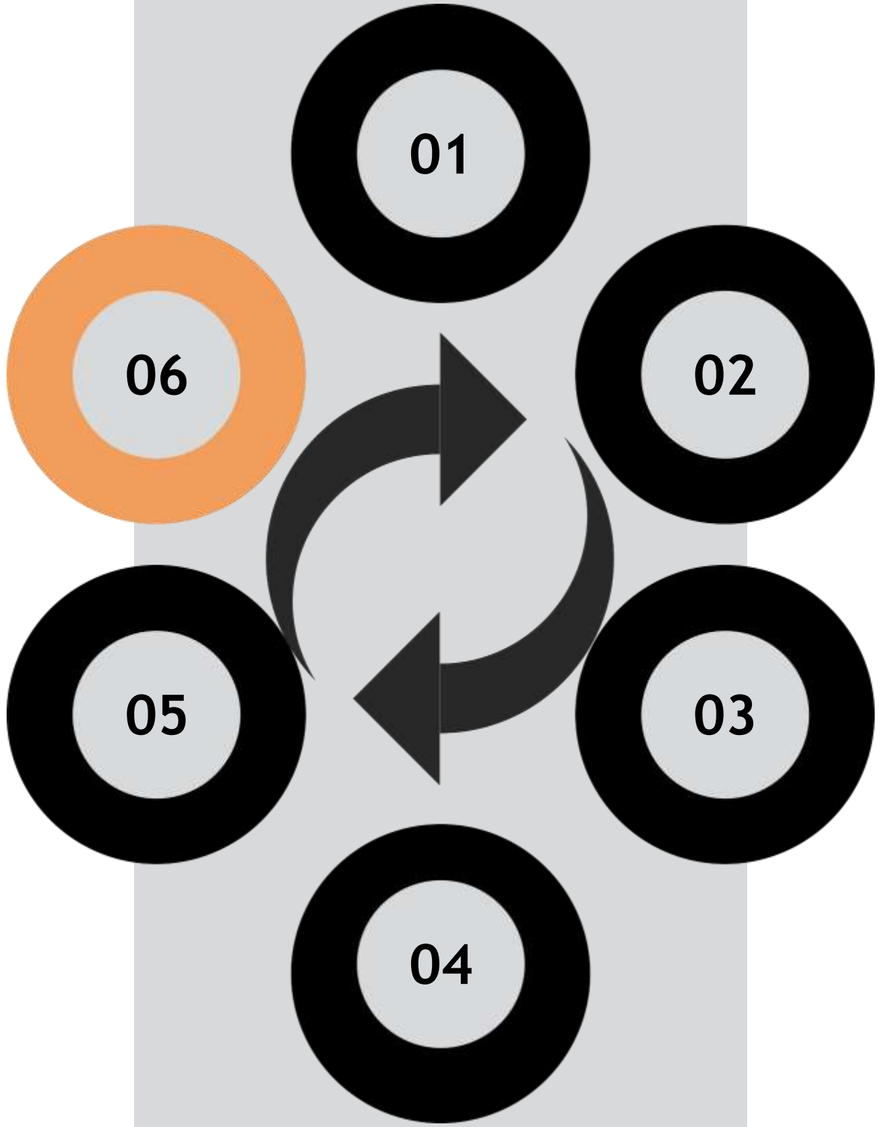
STEP 5: REPORTING TO STAKEHOLDERS

Identify stakeholders and what they want and need to know.



STEP 6: USING RESULTS FOR IMPROVEMENT

Program improvement influenced by evidence is the main purpose of assessment.



LET'S PRACTICE!

- Spend 3 minutes, examining the steps. Then...
- Turn to your partner.
- Explain the six steps of the assessment cycle.
- Try to do it without your notes.

LET’S WALK THROUGH AN EXAMPLE

Imagine an institution commits to teaching and assessing ethical reasoning…

What’s the first step?

DEFINITON/THEORY

Teaching for Improved Ethical Reasoning Functions

Spectator

Evaluate Actions

Agent

Generate Action

DEFINITON/THEORY

Ethical Reasoning in Action

Ethical Considerations

Decision Science Findings

Rich legacies of moral theories, considerations, and practical reasoning

Practical reasoning strategies from current decision sciences e.g. social psychology, behavioral economics and brain research.

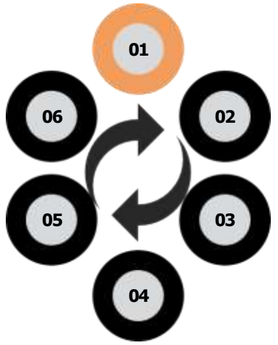
DEFINITON/THEORY

Decision-Affecting, Action Guiding, Reflective Questions

Interrogate intuitions – slow down decision-making
Multiple ethical considerations
Open-ended questions [not confirmatory]
Group / team process is best

STUDENT LEARNING OUTCOMES

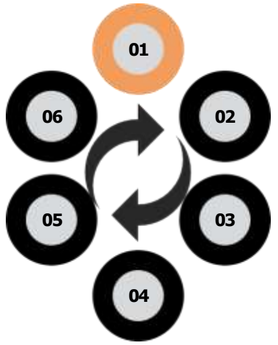
SLO 1	Memorization
SLO 2	Identification Simple
SLO 3	Identification Complex
SLO 4	Application Generic
SLO 5	Application Personal
SLO 6	Importance
SLO 7	Confidence



STUDENT LEARNING OUTCOME 5

To their own ethical situation or dilemma, students graduating from JMU will evaluate courses of action by applying (weighing and, if necessary, balancing) the considerations raised by the 8KQ.

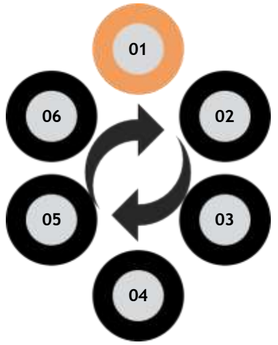
The Eight Key Questions (8KQ)



Which Apply?

Outcomes?
Rights?
Character?
Liberty?
Empathy?
Authority?
Responsibility?
Fairness?
Ethical Issue

Which Apply?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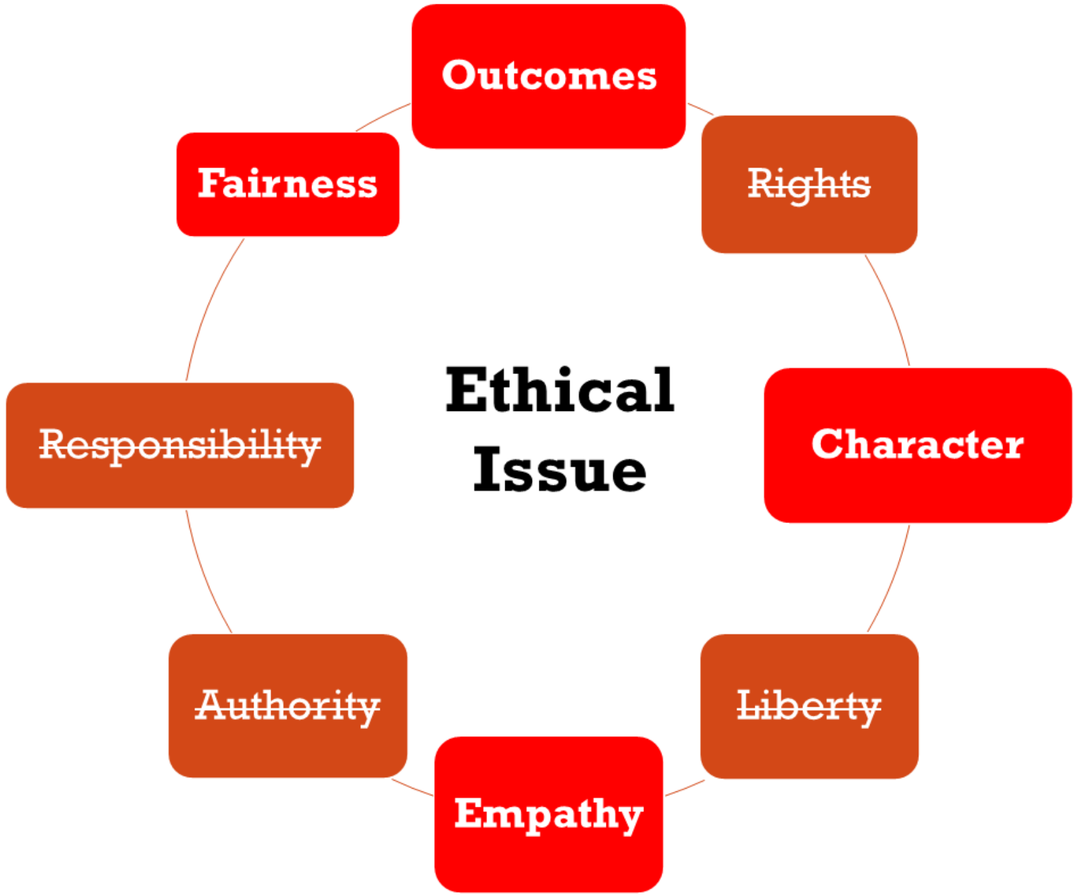
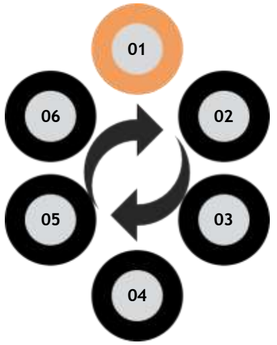
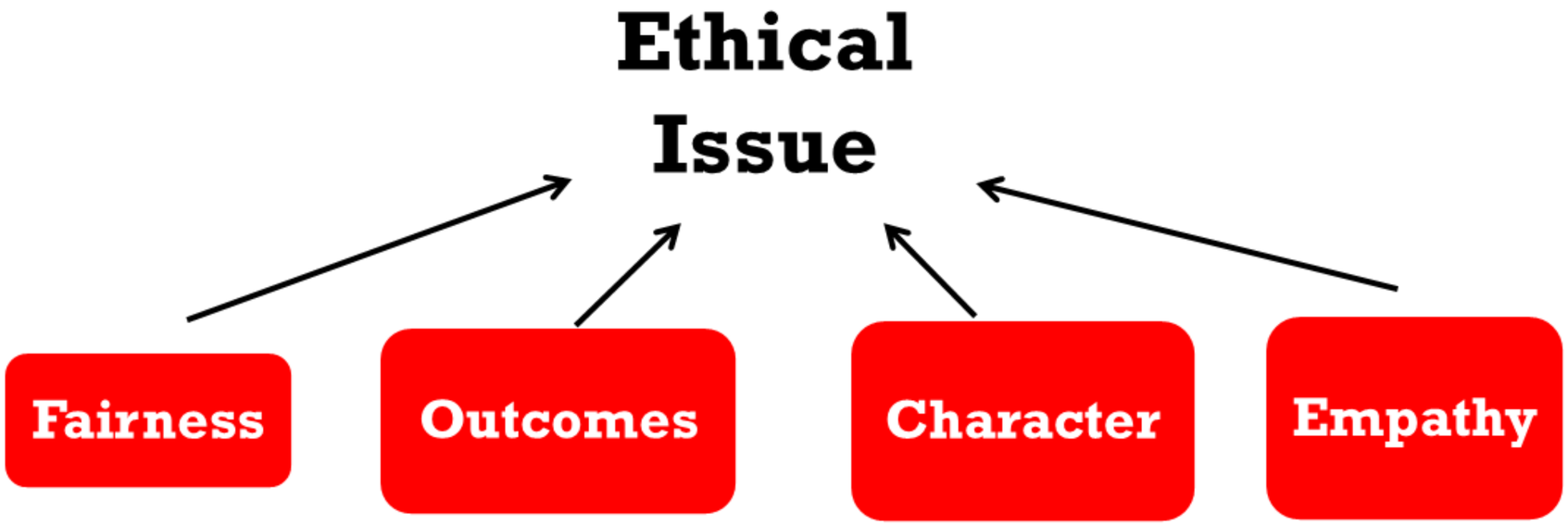
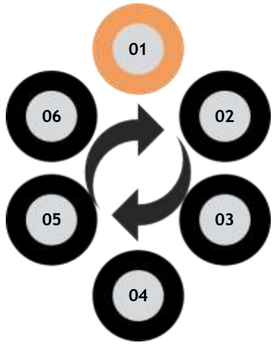

Outcomes
Rights
Character
Liberty
Empathy
Authority
Responsibility
Fairness
Ethical Issue

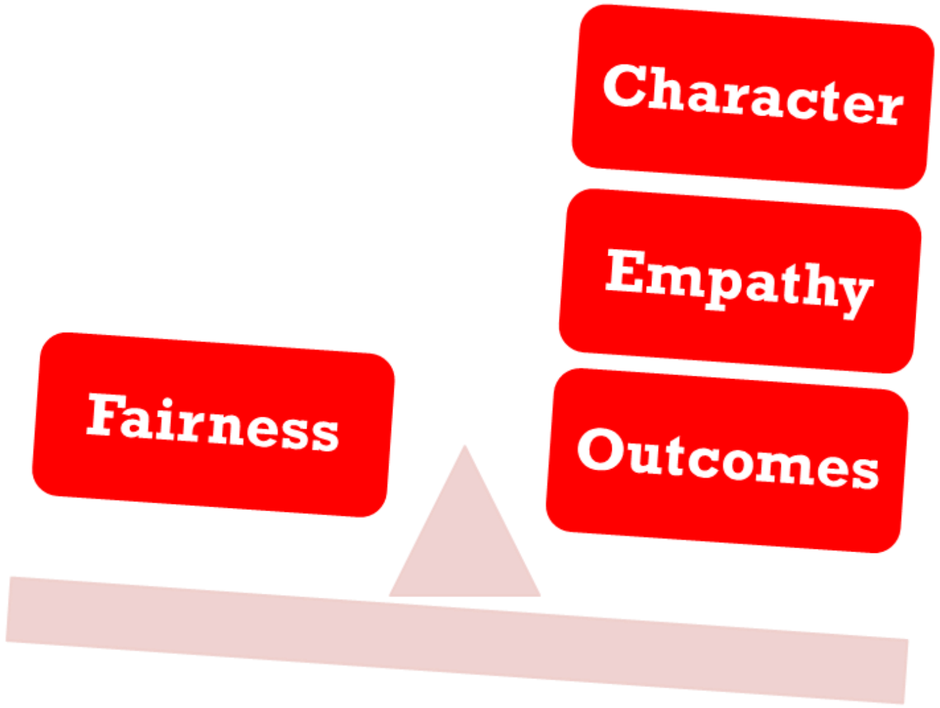
Conduct Analyses



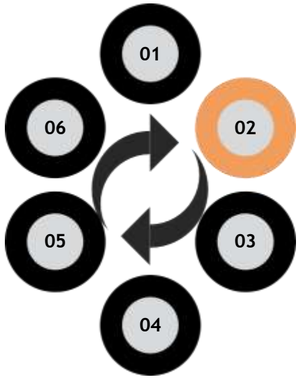


Weigh and Decide

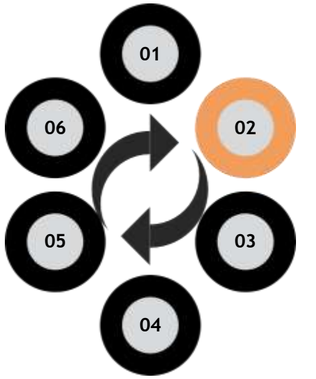




MAP SLOS TO COURSES/EXPERIENCES



Required Professional Development for Implementers		[redacted]
Indirect Interventions		
Direct Interventions		
SLO 1	Memorization	
SLO 2	Identification Simple	
SLO 3	Identification Complex	
SLO 4	Application Generic	
SLO 5	Application Personal	
SLO 6	Importance	
SLO 7	Confidence	
% of students affected during career, by 2020		
Intervention initiation		



JMU'S ORIENTATION

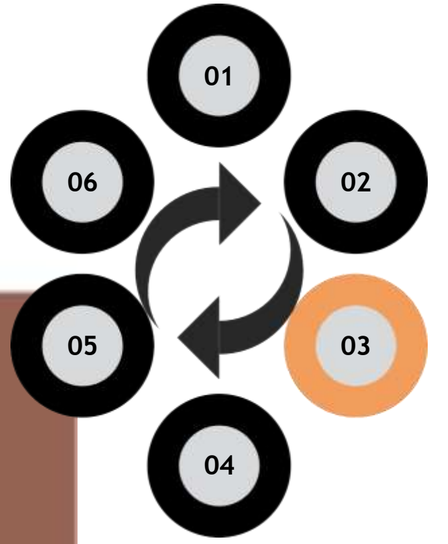
Hurricane Sharon

Watch the Hurricane Sharon video

Involves 4300+ incoming first-year students led by 150+ volunteer faculty and staff facilitators

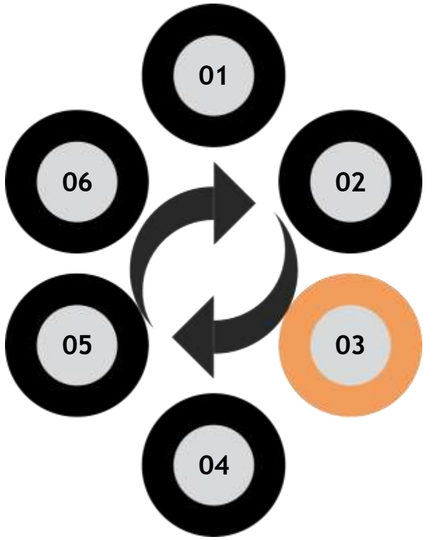
UNIVERSITY ASSESSMENT PLAN

	SLO 1: Memori -zation	SLOs 2 & 3: Identi- fication (Simple & Complex)	SLO 4: Application Generic	SLO 5: Application Personal	SLOs 6 & 7: Attitudinal	Data Collection:
Ethical Reasoning Recall Test						
Ethical Reasoning Identificati on Test						
Ethical Reasoning Essay						
Survey of Ethical Reasoning						



James Madison University's Ethical Reasoning Rubric

Insufficient 0	Marginal 1	Good 2	Excellent 3	Extraordinary 4	Score
A. Ethical Situation: Identifying ethical issue in its context					
[redacted]					
[redacted]					



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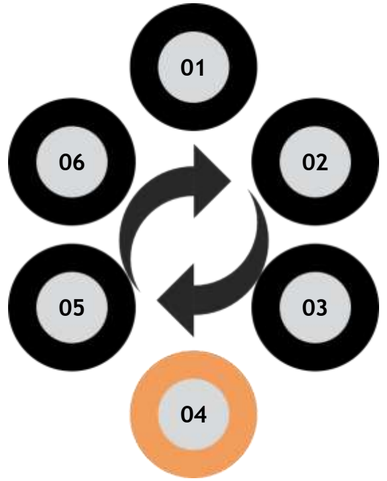
Ethical Reasoning Results:



Where do we want to be?
Where did we start?
Where are we now?

James Madison University's Ethical Reasoning Rubric

Insufficient 0	Marginal 1	Good 2	Excellent 3	Extraordinary 4	Score
A. Ethical Situation: Identifying ethical issue in its context					
No [illegible] options	Explicit reference to [illegible] options AND/OR [illegible] context given regarding decision [illegible]	Explicit but unorganized reference to decision option(s) and context		Meets criteria for *Excellent* AND… • Content treated with nuance • Builds tension with organization and word choice	
B. [illegible] Mentioning the 8 KQs or equivalent terms					
[illegible] one key question	Vague references to key questions OR only two key questions referenced	References four key questions	References six key questions	References all eight key questions	
C. Key Question Applicability: Describing which of the 8 KQs are applicable or not applicable to the situation and why					
No rationale provided for the applicability or inapplicability of any KQs to the ethical situation	Provides a rationale for the applicability or inapplicability of two key questions to the ethical situation		Provides a rationale for the applicability or inapplicability of six key questions to the ethical situation	For all eight questions provides a rationale for its applicability or inapplicability to the ethical situation	
SPECIAL NOTE: If author identifies fewer than the [illegible] criteria "D" and "E" can be scored no higher than (1) "Marginal"					
D. Ethical Reasoning: Analyzing individual KQs					
No attempt to analyze any of the referenced key questions	Analysis attempted using two or more key questions. Typically incorrect ascription of the key questions to the ethical situation. Account is unclear, disorganized, or inaccurate.	Analysis attempted using three or more key questions. Basically accurate ascription of the key questions to the ethical situation. Account is unclear or disorganized.	Analysis attempted using three or more key questions. Accurate ascription of the key questions to the ethical situation. Account is clear and organized.	Meets criteria for *Excellent* AND… Nuanced treatment of key questions, for example: • elucidates subtle distinctions • uses analogies or metaphors • considers different issues within same key question	
SPECIAL NOTE: If Criterion "D" is scored a 0 or 1 then Criterion "E" can be scored no higher than (1) "Marginal"					
E. Ethical Reasoning: Weighing the relevant factors and deciding					
No judgment is presented OR judgment presented with no rationale	Uses products of the analysis and provides some weighing to make a decision. Account is unclear, disorganized, or inaccurate.	Conveys weighing approach using analysis products. Provides an intelligible basis for judgment.	Meets criteria for *Good* AND… Logically terminates in decision that will be reached.	Meets criteria for *Excellent* AND… Products of analysis weighed to make judgment compelling.	

Baseline, 2013

Target, 2020

Where we are now, 2017

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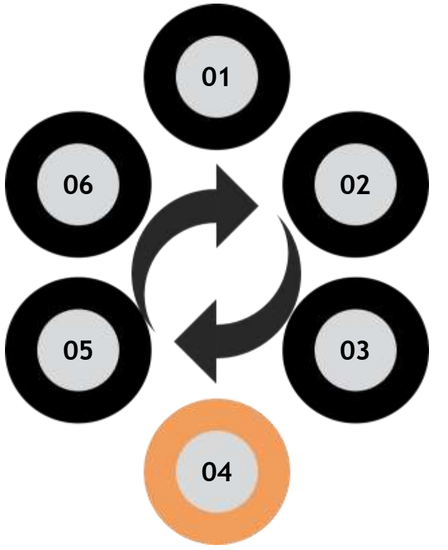
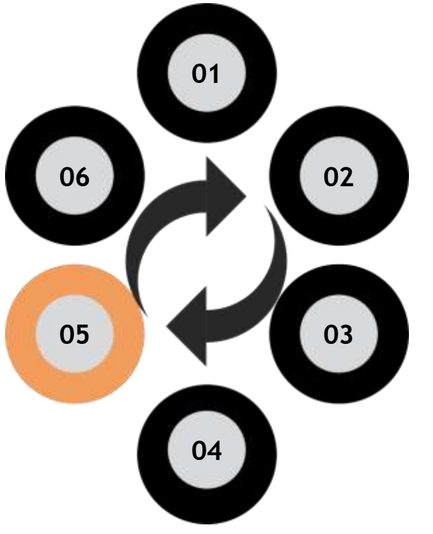
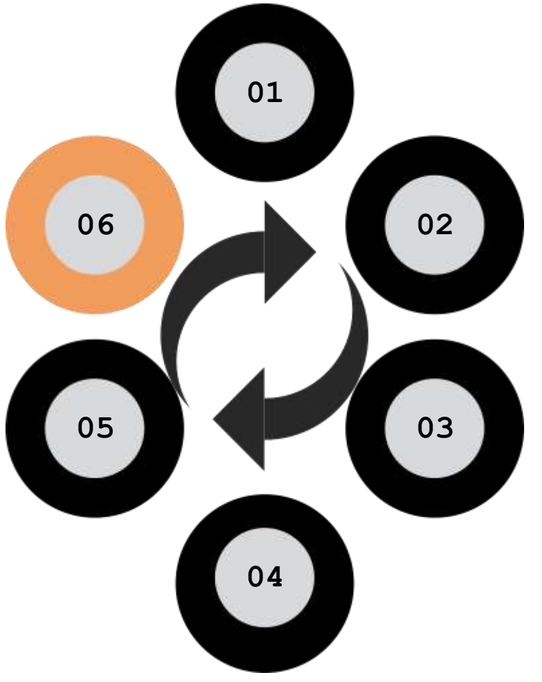
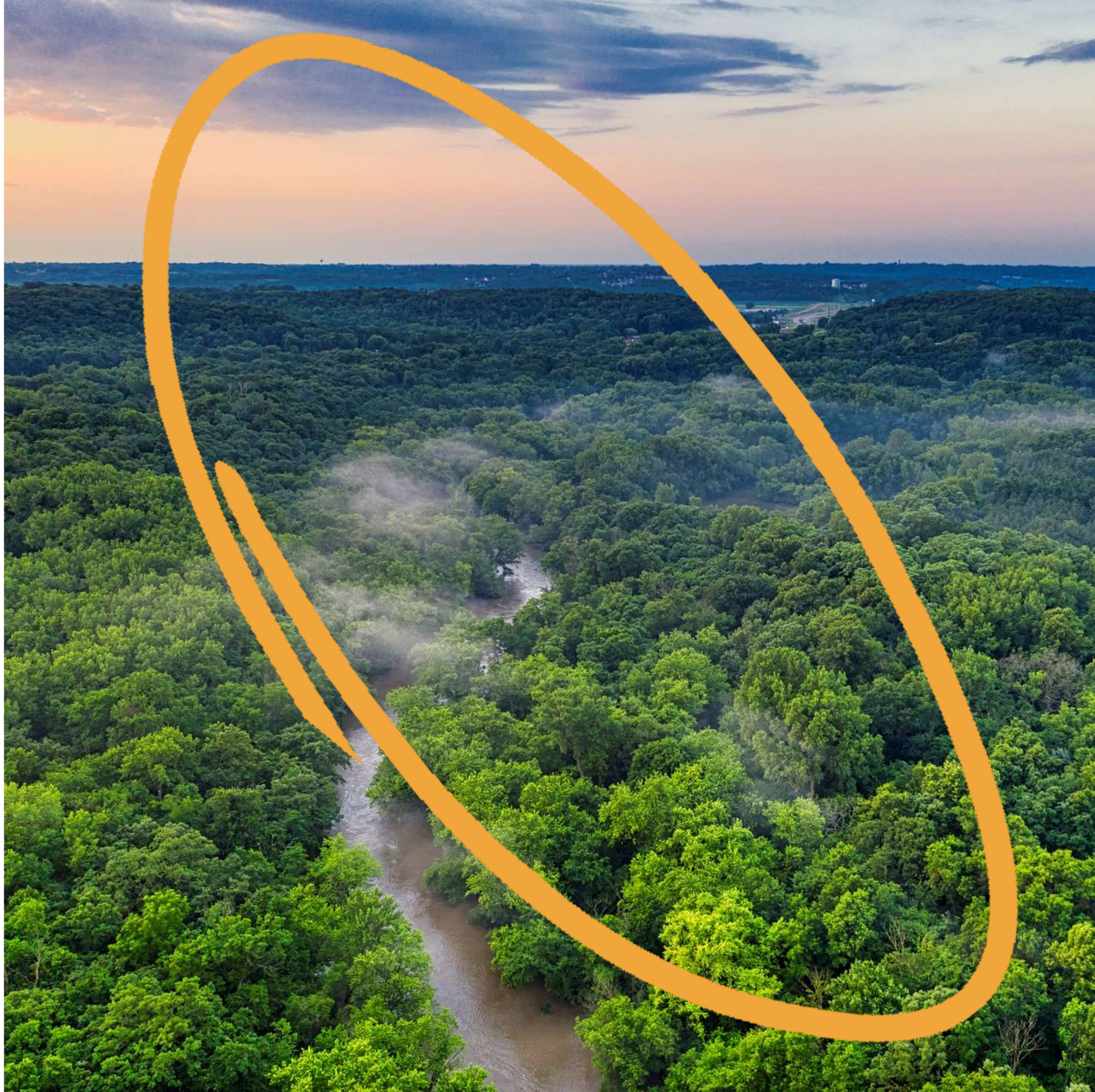




Required Professional Development for Implementers			Training Module	Training Module	Adv. Training Modules	Adv. Training Modules	Adv. Training Modules
Indirect Interventions		Welcome Book	↓	↓	↓	↓	↓
Direct Interventions		↓	Orientation	Freshman [illegible]	Residence Life Scenarios	Gen Ed [illegible]se	Course in Major
SLO 1	Memorization		1	2	1	2	2
SLO 2	Identification Simple		1	3	2	2	2
SLO 3	Identification Complex		1	3		2	2
SLO 4	Application Generic		1		1	3	3
SLO 5	Application Personal						1
SLO 6	Importance	1	2	2	1		1
SLO 7	Confidence			1		1	1
% of students affected during career, by 2020		99% freshmen	99 % freshmen	99.9% [illegible]shmen	~50% of fresh & soph	Approx. 5% of students	Approx. 20% of students
Intervention initiation		Summer 2013	Fall 2013	Fall 2014	Fall 2013	Fall 2013	Fall 2013





ACTIVITY

- Distinguish among four hypothetical reports; each gets progressively better (aligns with workshop's second intended outcome).

- Context
  - Program: AA 80's Pop Culture
  - SLO: Ethical reasoning
  - Bonus fun: Can you identify the program's famous faculty from their abbreviated names?

Time for
a break!

COMPONENTS OF AN ASSESSMENT PLAN

1) State Learning Outcomes

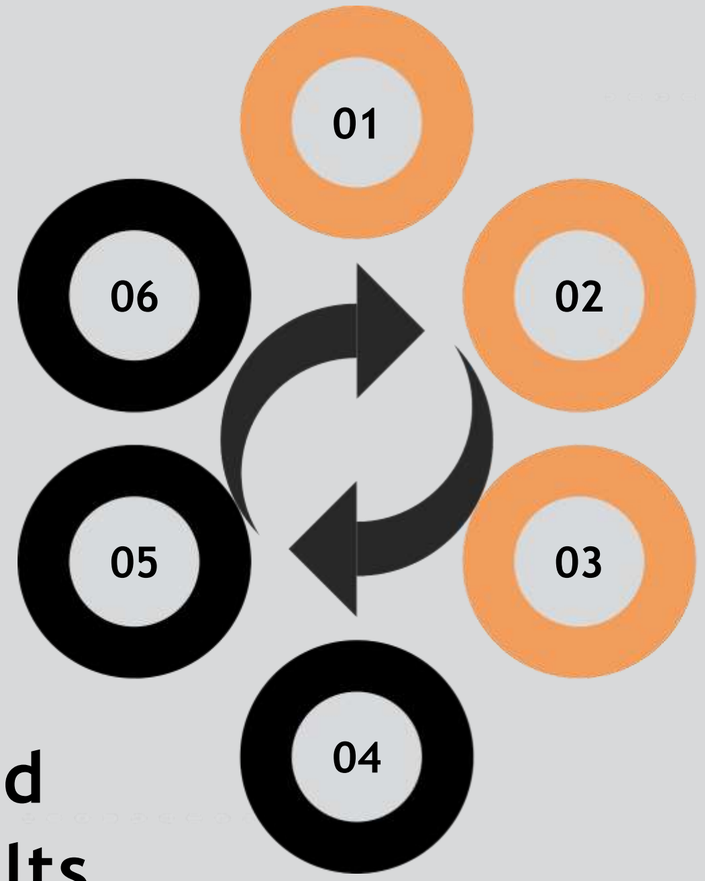
2) Map to Courses/ Experiences

3) Select Methods

4) Analyze and Interpret Results

5) Report to Stakeholders

6) Use Results for Improvement



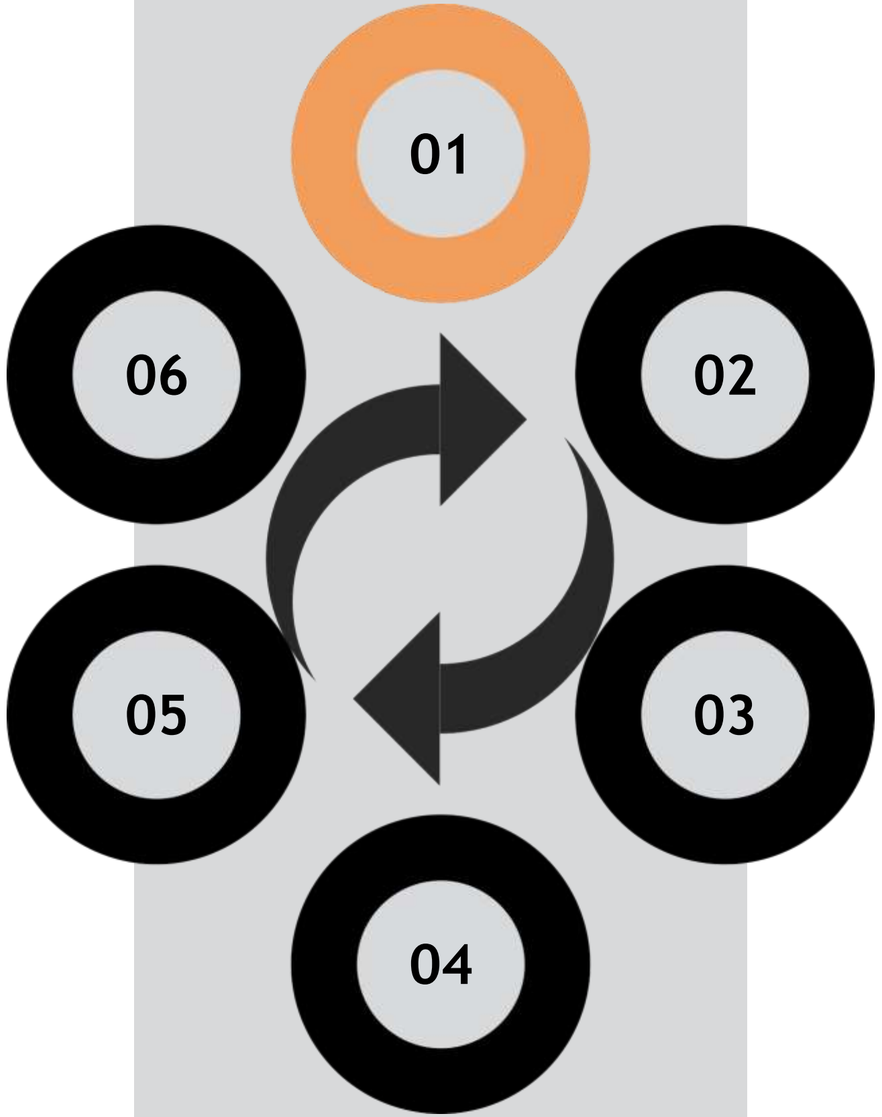
Question

What is the most important level, from a structural perspective?

STEP 1: STATE LEARNING OUTCOMES

Good Practices

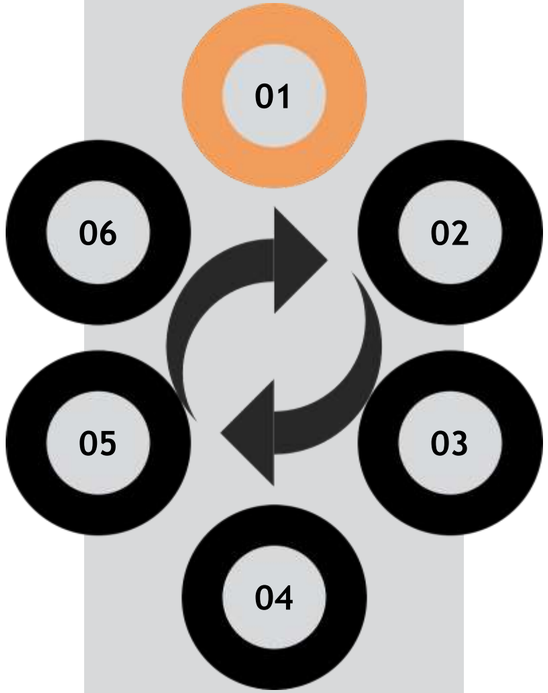
- Make outcomes student-centered, focused on what students will know, think, or do AS A RESULT OF YOUR PROGRAM
- Use clear, measurable, action verbs (avoid understand and know)
- Clarify skills/knowledge/attitudes
- Specify the student targeted



Student-Centered Outcomes

Program 1

Faculty will teach writing skills.



Program 2

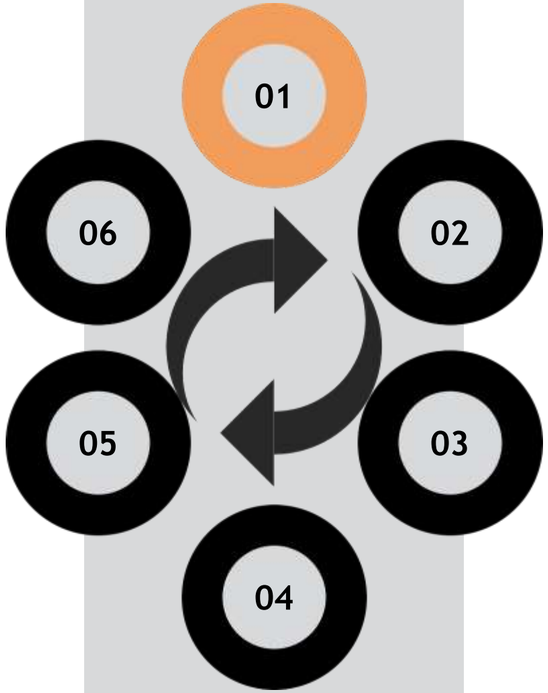
Students graduating from the BA program in 80s pop culture will write a cogent argument about how a political event in the 80s shaped pop culture. These papers should (a) contain a coherent argument, (b) use references appropriately, (c) be well organized, and (d) consist of sentence-level mechanics that aid readability.

Student-Centered Outcomes

Program 1

Faculty will teach writing skills.

Build student-centered outcomes (what students will know, think, or do).



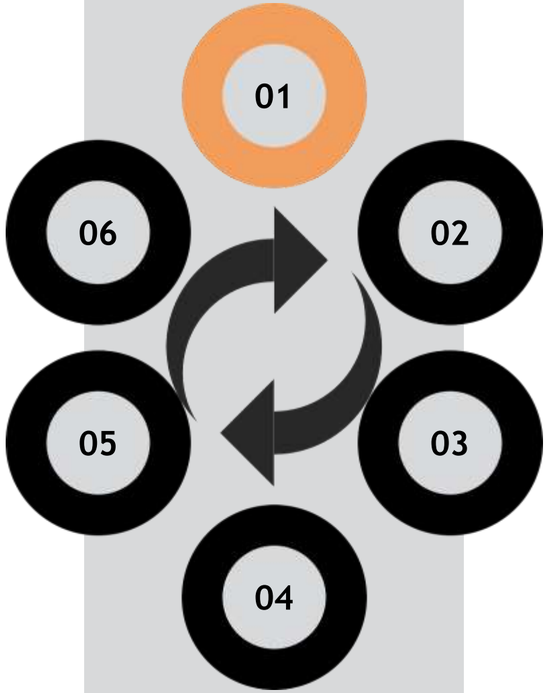
Program 2

Students graduating from the BA program in 80s pop culture will write a cogent argument about how a political event in the 80s shaped pop culture. These papers should (a) contain a coherent argument, (b) use references appropriately, (c) be well organized, and (d) consist of sentence-level mechanics that aid readability.

Use Clear and Measurable Verbs

Program 1

Students will understand basic writing skills.



Program 2

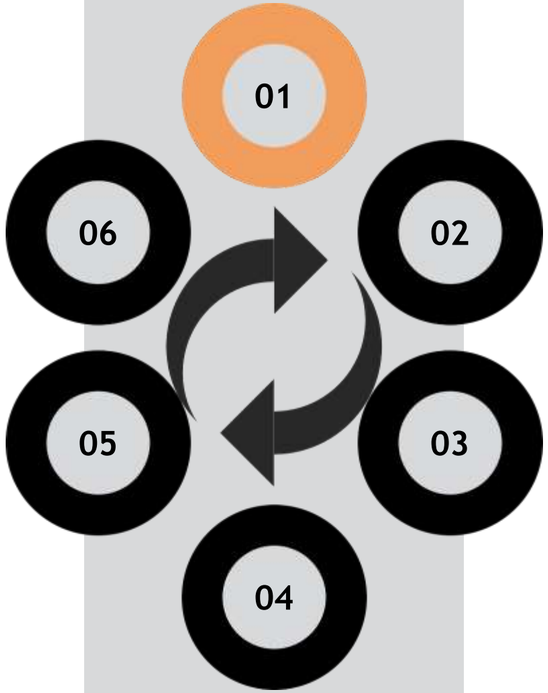
Students graduating from the BA program in 80s pop culture will write a cogent argument about how a political event in the 80s shaped pop culture. These papers should (a) contain a coherent argument, (b) use references appropriately, (c) be well organized, and (d) consist of sentence-level mechanics that aid readability.

Use Clear and Measurable Verbs

Vague

Students will understand basic writing skills.

Use clear verbs (avoid *understand* and *know*)



Clear

Students graduating from the BA program in 80s pop culture will write a cogent argument about how a political event in the 80s shaped pop culture. These papers should (a) contain a coherent argument, (b) use references appropriately, (c) be well organized, and (d) consist of sentence-level mechanics that aid readability.

Levels of Verbs

Bloom's Taxonomy

Less Complex

More Complex

Level	Description
Knowledge	Recognize facts, terms, and principles
Comprehension	Explain or summarize in one's own words
Application	Relate previously learned material to new situations
Analysis	Understand organizational structure of material; draw comparisons and relationships between elements
Synthesis	Combine elements to form a new original entity
Evaluation	Make judgments about the extent to which material satisfies criteria

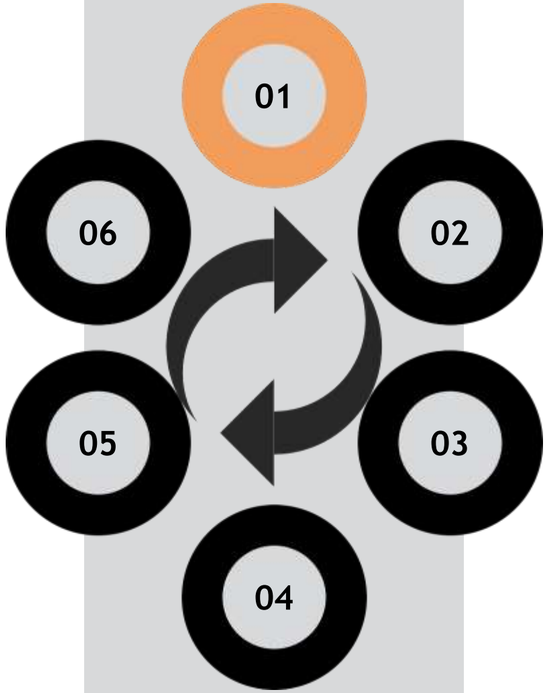
Examples of Verbs

Bloom's Level	Verbs
Knowledge	arrange, define,identify, label, list, match, name, order, recall, recognize, reproduce, select
Comprehension	classify, describe, discuss, explain, express, indicate, locate, report, restate, review, summarize,
Application	apply, demonstrate, dramatize, employ, give examples, illustrate, schedule, sketch, solve, use
Analysis	analyze,categorize, compare, contrast, diagram, differentiate, distinguish, illustrate, outline
Synthesis	arrange,collect, compose, construct, contrast, create, design, formulate,organize, plan, predict
Evaluation	appraise, argue, assess, criticize, critique, defend, estimate, evaluate, interpret, judge, rate

Clarify Skills/Knowledge/Attitudes

Program 1

Students will understand basic writing skills.



Program 2

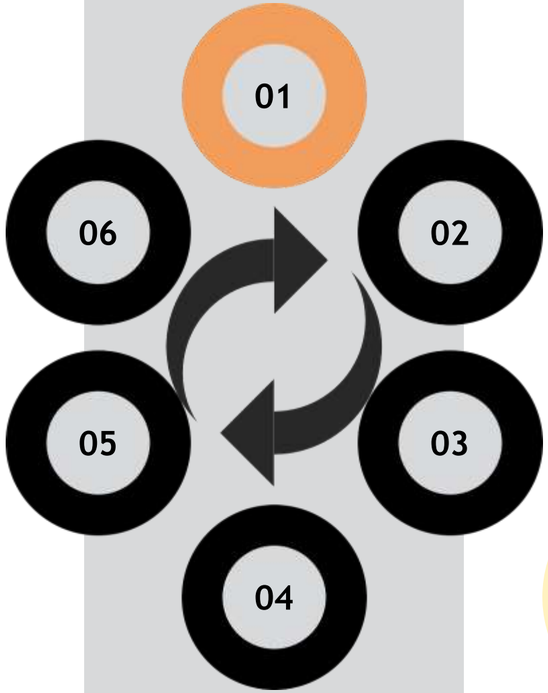
Students graduating from the BA program in 80s pop culture will write a cogent argument about how a political event in the 80s shaped pop culture. These papers should (a) contain a coherent argument, (b) use references appropriately, (c) be well organized, and (d) consist of sentence-level mechanics that aid readability.

Clarify Skills/Knowledge/Attitudes

Program 1

Students will understand basic writing skills.

Clarify skill/ knowledge/ attitudinal area



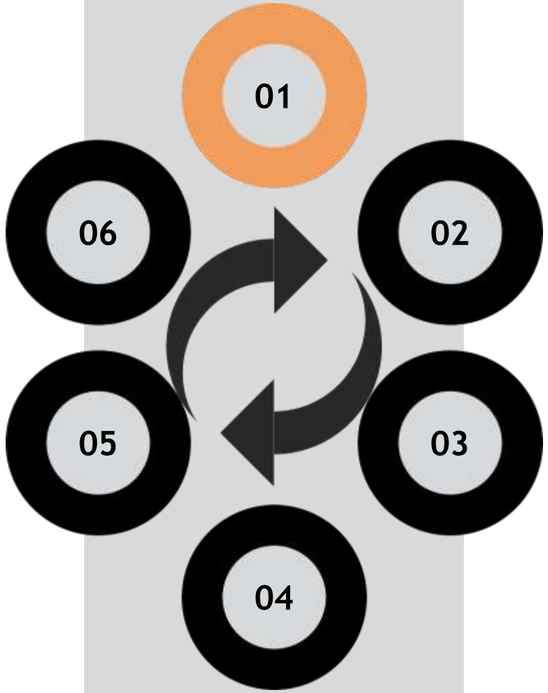
Program 2

Students graduating from the BA program in 80s pop culture will write a cogent argument about how a political event in the 80s shaped pop culture. These papers should (a) contain a coherent argument, (b) use references appropriately, (c) be well organized, and (d) consist of sentence-level mechanics that aid readability.

Specify the Intended Students

Program 1

Students will understand basic writing skills.



Program 2

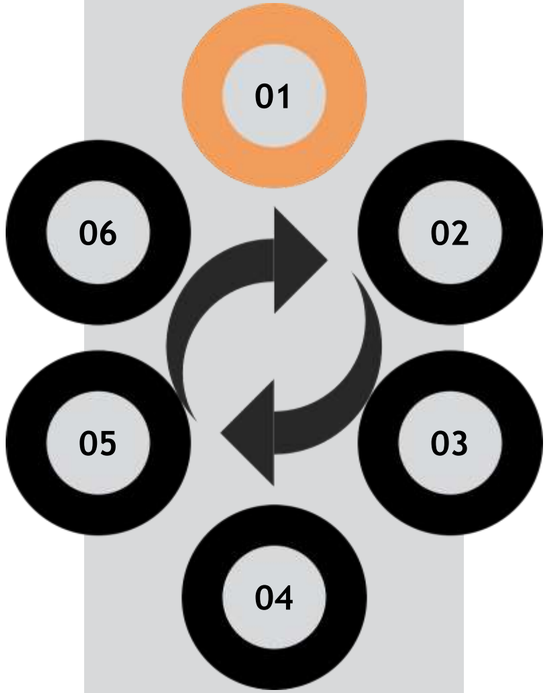
Students graduating from the BA program in 80s pop culture will write a cogent argument about how a political event in the 80s shaped pop culture. These papers should (a) contain a coherent argument, (b) use references appropriately, (c) be well organized, and (d) consist of sentence-level mechanics that aid readability.

Specify the Intended Students

Vague Students

Students will understand basic writing skills.

Specify what type/level of student



Specific Students

Students graduating from the BA program in 80s pop culture will write a cogent argument about how a political event in the 80s shaped pop culture. These papers should (a) contain a coherent argument, (b) use references appropriately, (c) be well organized, and (d) consist of sentence-level mechanics that aid readability.

LET'S PRACTICE!

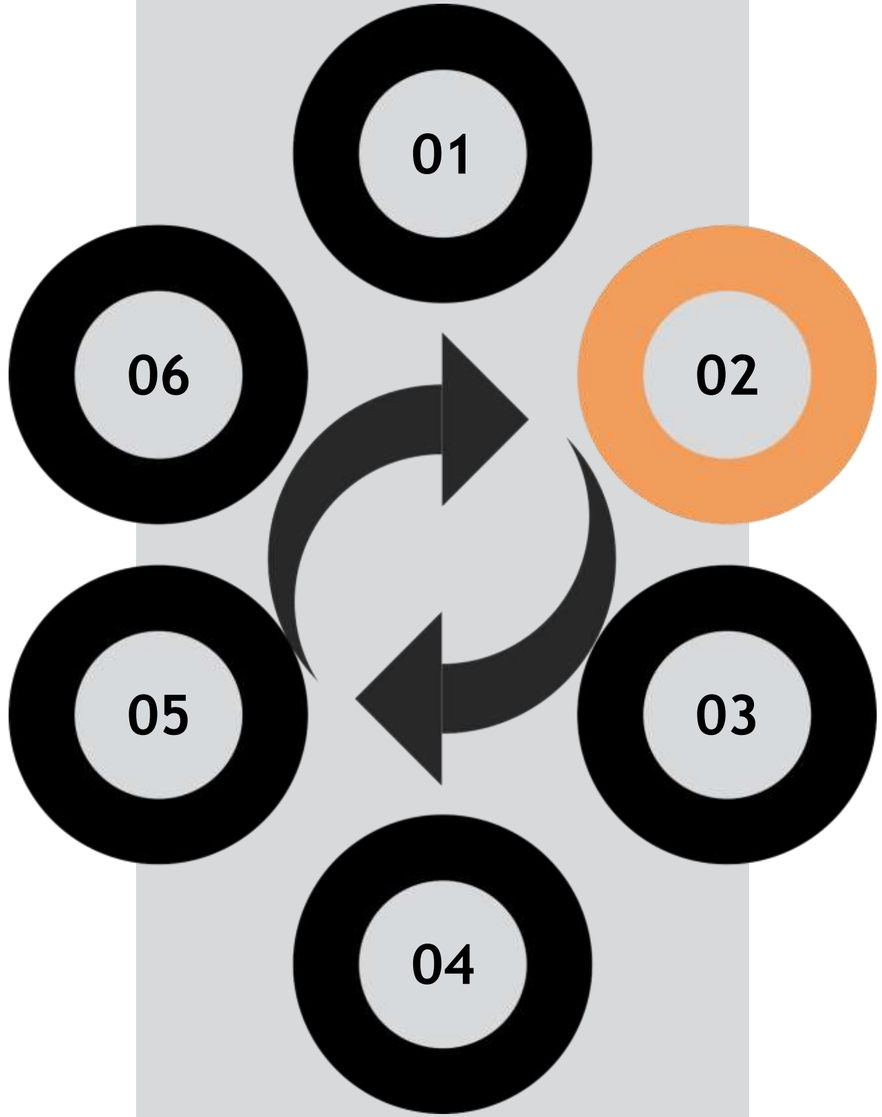
- Write one (or more) SLO(s) for your program...

- Remember to...
  - Make it student-centered
  - Use a good verb
  - Elaborate on the content area
  - Specify the level of student

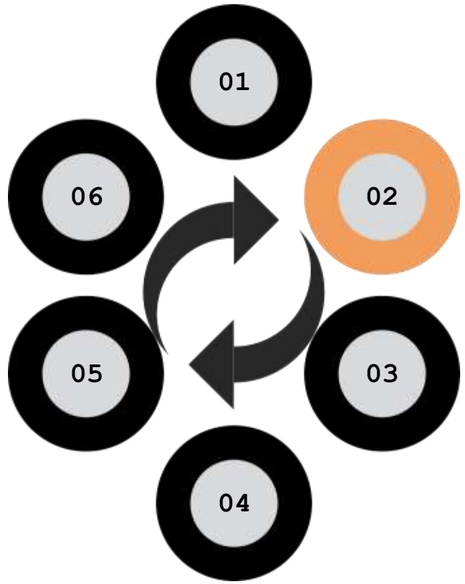
STEP 2: MAP SLO'S TO COURES/EXPERIENCES

Good Practices

- Map every course to at least one SLO.
- Address every SLO in at least one course.
- Convey the required level of coverage accurately in the curriculum map.



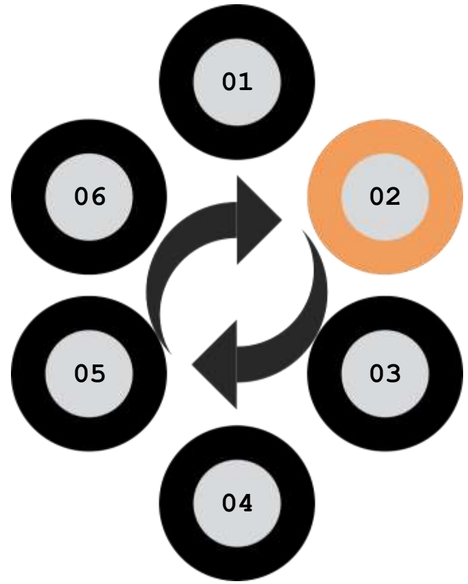
Mapping SLOs



Coverage of SLO: 0 =No Coverage; 1 = Slight Coverage; 2 = Moderate Coverage; 3 = Major Coverage

	SLO 1 (Identification of 80s Components)	SLO 2 (Research Methodology)	SLO 3 (Writing Critically)	SLO 4 (Oral Comm)
PCUL201 (Introduction to the 80s)	3	0	1	0
PCUL303 (80s TV and Movies	3	0	0	2
PCUL401 (80s Politics and Culture)	1	1	3	0
PCUL480 (Capstone)	0	2	2	2

SLO Coverage



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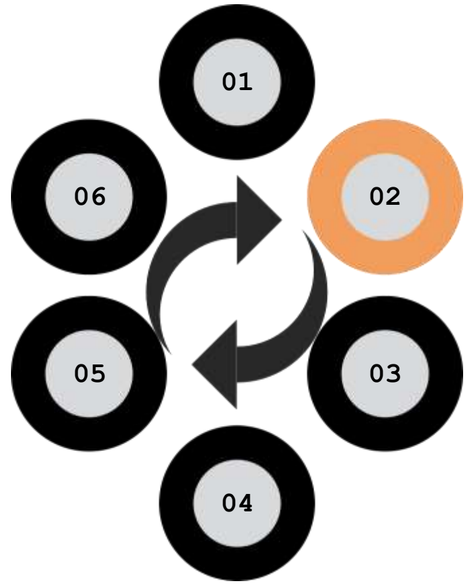
PCUL401 (80s Politics and Culture)	1	1	3	0
PCUL480 (Capstone)	0	2	2	2

Conveying Intensity



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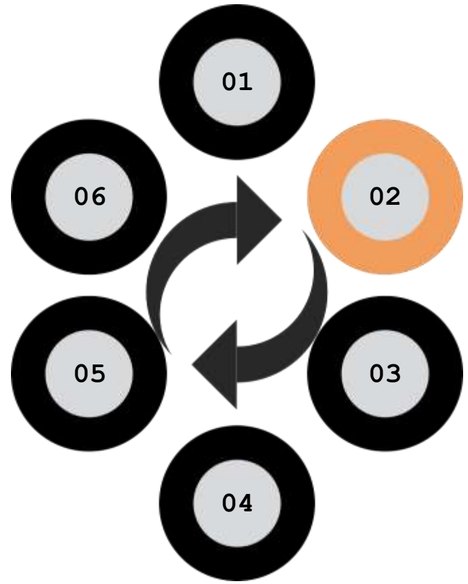
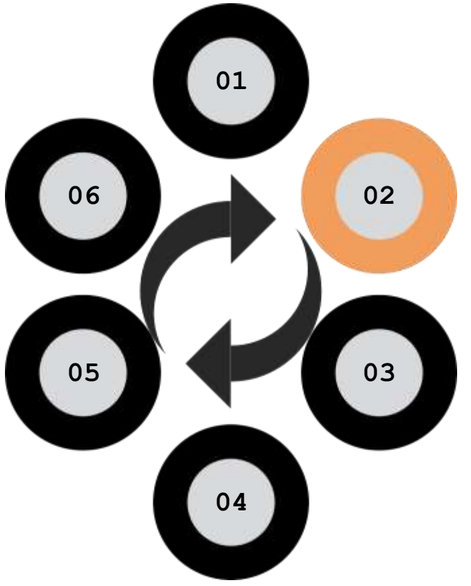
PCUL401 (80s Politics and Culture)	1	1	3	0
PCUL480 (Capstone)	0	2	2	2

What's Wrong?



Coverage of SLO: 0 =No Coverage; 1 = Slight Coverage; 2 = Moderate Coverage; 3 = Major Coverage

	SLO 1 (Identification of 80s Components)	SLO 2 (Research Methodology)	SLO 3 (Writing Critically)	SLO 4 (Oral Comm)
PCUL201 (Introduction to the 80s)	3	0	1	0
PCUL301 (80s Music)	0	0	0	0
PCUL302 (80s Fads)	3	0	1	2
PCUL303 (80s TV and Movies	3	0	0	2
PCUL480 (Capstone)	0	0	2	2



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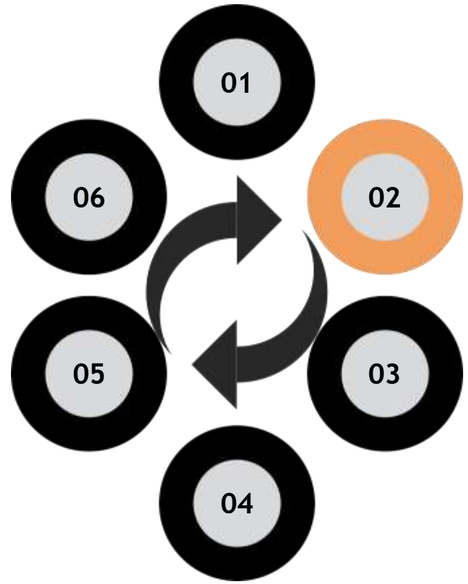
PCUL302 (80s Fads)	3	0	1	2
PCUL303 (80s TV and Movies	3	0	0	2
PCUL480 (Capstone)	0	0	2	

All SLOs are covered by at least one class

What's Wrong?



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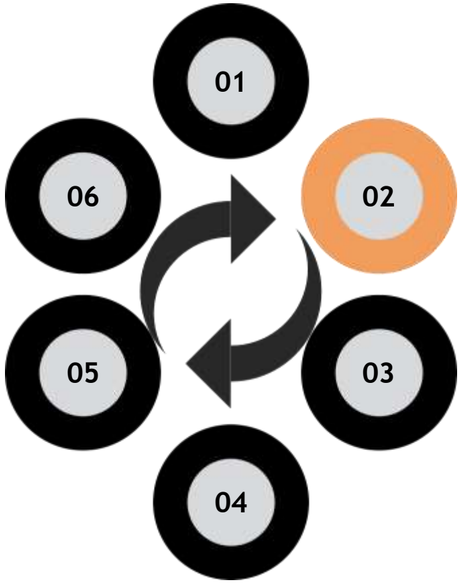
	SLO 1 (Identification of 80s Components)	SLO 2 (Research Methodology)	SLO 3 (Writing Critically)	SLO 4 (Oral Comm)
PCUL201 (Introduction to the 80s)	3	3	3	3
PCUL301 (80s Music)	3	3	3	3
PCUL302 (80s Fads)	3	3	3	3
PCUL303 (80s TV and Movies	3	3	3	3
PCUL480 (Capstone)	3	3	3	3



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PCUL201 (Introduction to the 80s)	3	3	3	3
PCUL301 (80s Music)	3			3
PCUL302 (80s Fads)	3	3	3	3
PCUL303 (80s TV and Movies	3			3
PCUL480 (Capstone)	3	3	3	

Intensity of coverage is conveyed accurately in the map

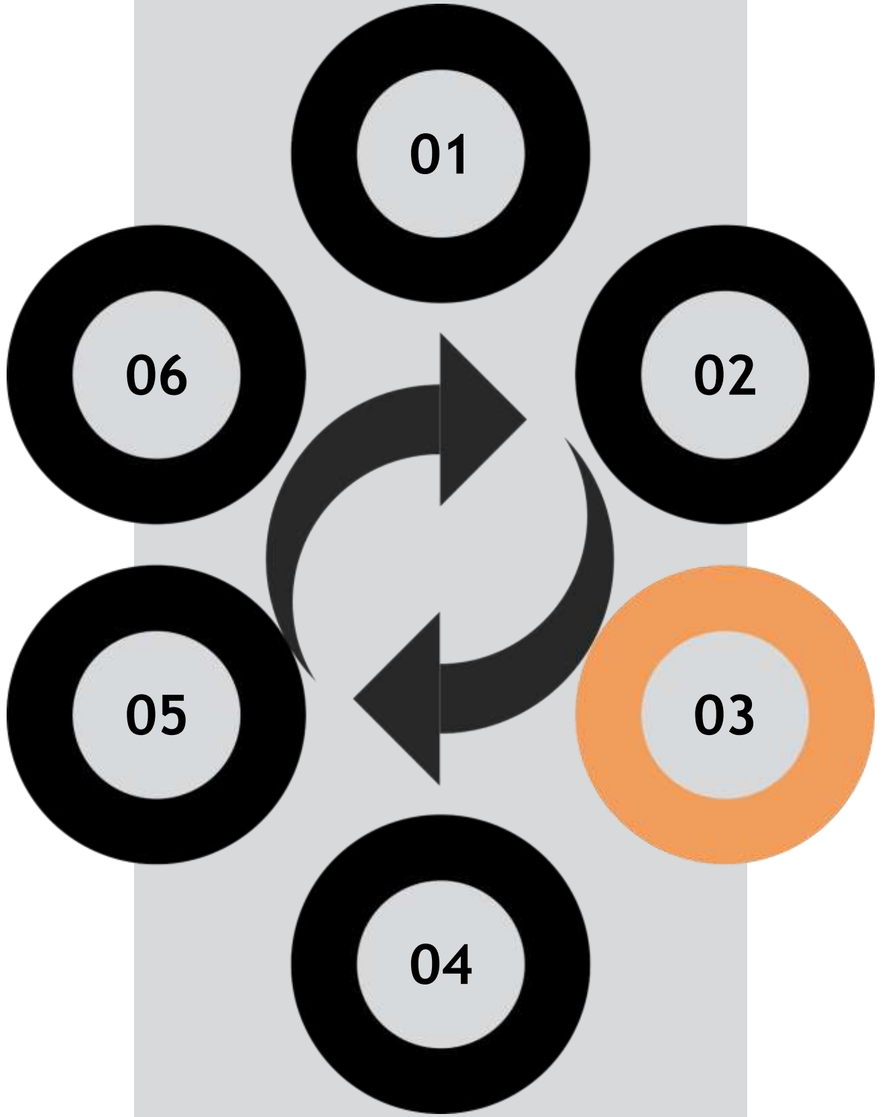
LET'S PRACTICE!

- Draft a curriculum map relative to your SLO(s)...
- Remember to...
  - Address every SLO in at least one course.
  - Convey the required level of coverage accurately in the curriculum map.

STEP 3: SELECT METHODS

Good Practices

- Match the instrument to the SLO
- Choose direct and/or indirect measures
- Establish criteria for success
- Select data collection method (for example, representative sampling or census)
- Collect additional reliability and validity information (advanced)



Methods for Assessing Learning

- Test
- Project
- Performance
- Case Study
- Research Project

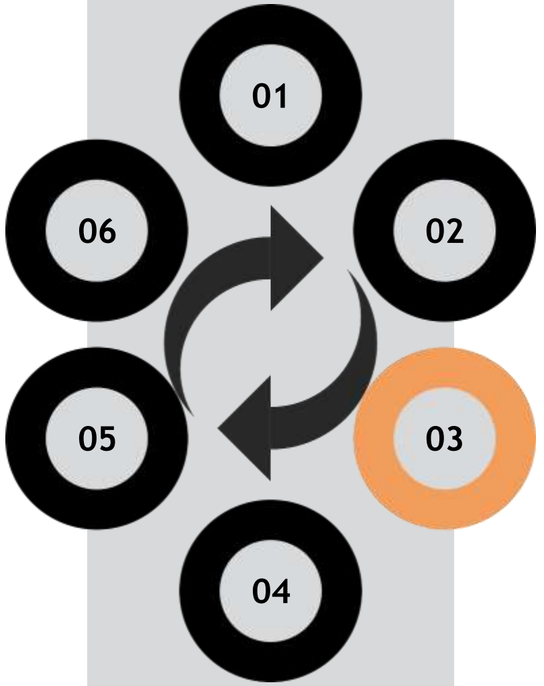
- Presentation
- Portfolio
- Brochure
- Internship
- Survey

Match Instrument to SLO

Program 1

Use final course grades in classes that emphasize writing.

Match the instrument to the SLO



Program 2

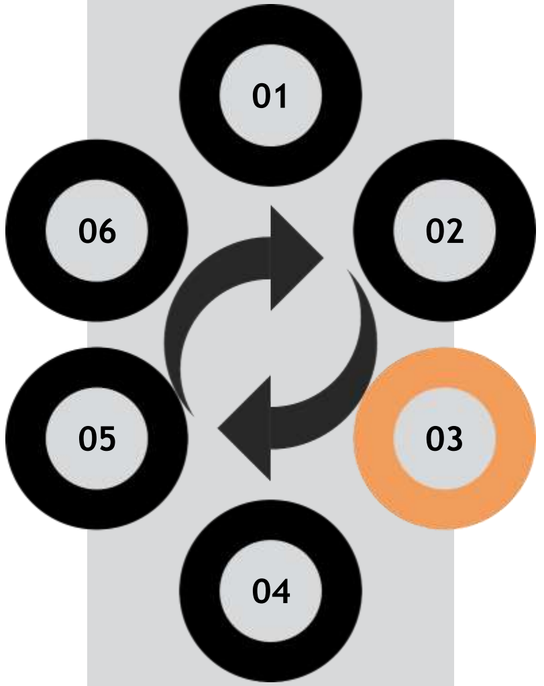
Use 80s Pop Culture writing rubric, which corresponds to objective 3 (writing critically). We adapted this rubric from JMU's official writing rubric. The initial rubric was chosen as a starting point because it represented writing similarly to how we articulated it. Specifically its Complexity trait corresponded to our ideas of a "cogent argument"…. We added a references trait….

Establish Criteria for Success

Program 1

Little context given as to what constitutes good or bad performance

Establish criteria for success



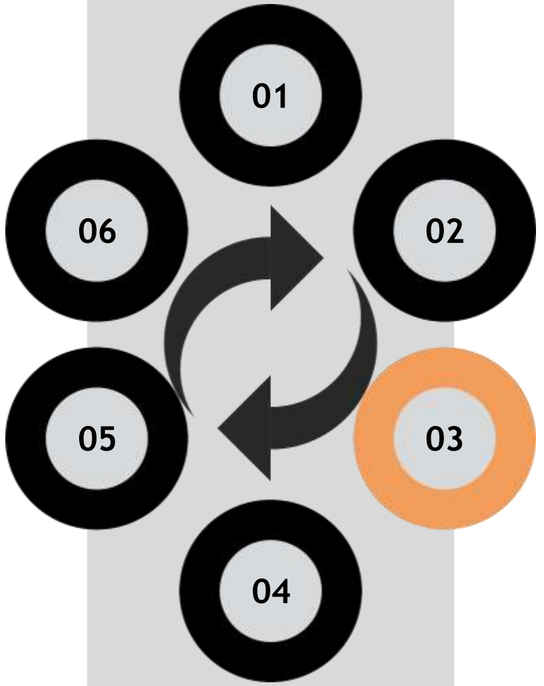
Program 2

Each trait on the rubric is evaluated on a four-point scale (1 = Beginning; 2 = Developing; 3 = Competent; 4 = Advanced) with corresponding behavioral anchors. For example, for the *Usage and Mechanics* trait a 3 connotes writing that "Is generally free of errors in mechanics, usage, grammar, or sentence structure. Reads smoothly. Problems do not compromise meaning." Given that these students are seniors, we endeavor for the average scores of this group to be at or higher than 3 for each writing trait, connoting competency or better.

Select Data Collection Method

Program 1

Twenty students submitted papers that were rated by faculty.



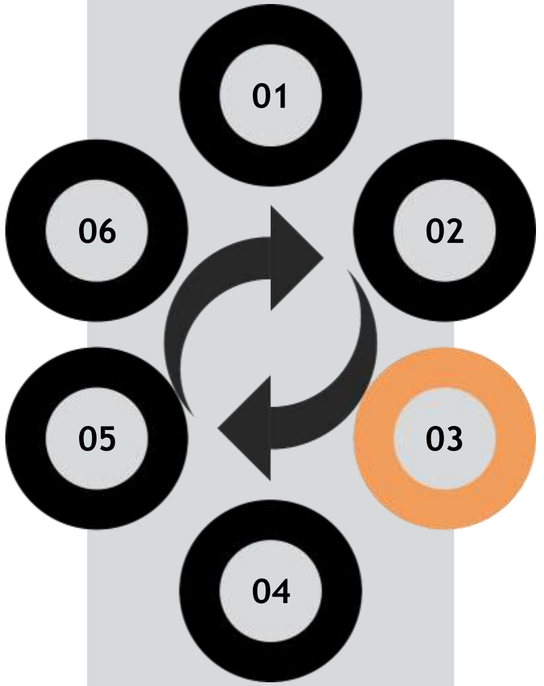
Program 2

All students in PCUL480 (our senior capstone) are required to complete a 10-page argumentative paper about how a political event in the 80s shaped pop culture. As this assignment is worth 25% of the course grade, students tend to give a good effort. Twenty papers, four from each section, are randomly selected. Two teams of two program faculty raters evaluate the papers, 10 papers per team. These four raters spend approximately an hour and a half on rater training at the outset to assist with inter-rater reliability.

Additional Reliability & Validity Information

Program 1

Two faculty members rated the 20 essays, 10 per member. They did not practice rating essays in common.



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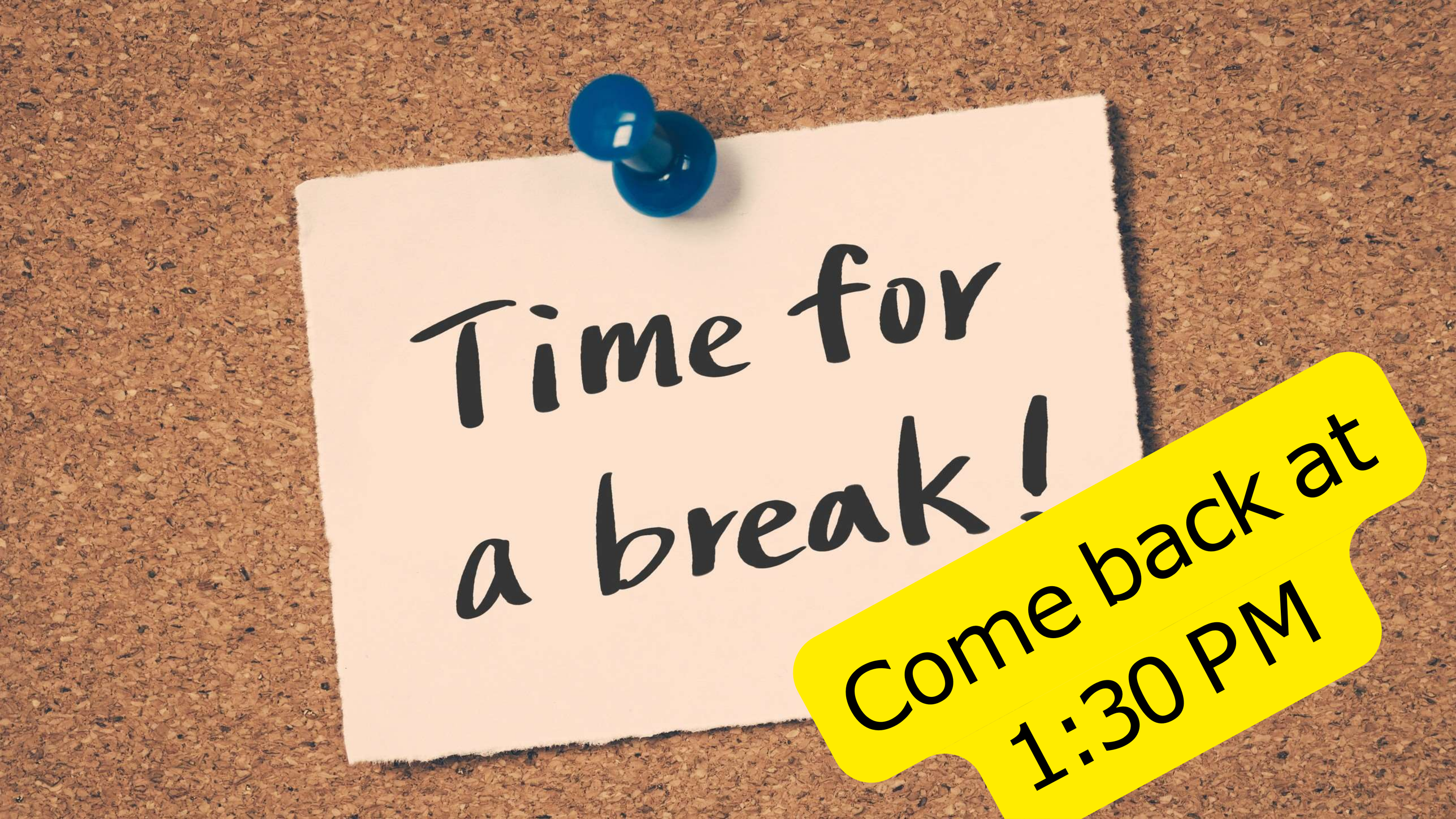
LET'S PRACTICE!

- Draft a methodology section relative to your SLO(s)...
- Remember to...
  - Match the instrument to the SLO
  - Choose direct and/or indirect measures
  - Establish criteria for success
  - Select data collection method (for example, representative sampling or census)
  - Collect additional reliability and validity information (advanced)


Time for
a break!
Come back at
1:30 PM

CREATE YOUR ASSESSMENT PLAN

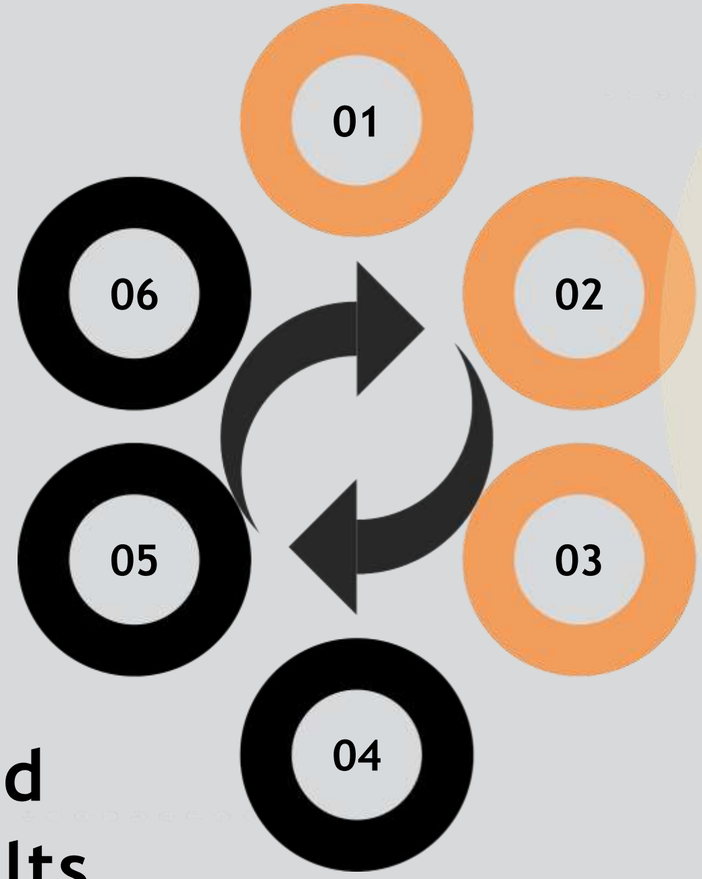
At Least 1

1) State Learning Outcomes

2) Map to Courses/ Experiences

3) Select Methods

See Worksheet



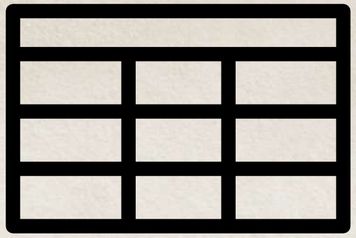
4) Analyze and Interpret Results

5) Report to Stakeholders

6) Use Results for Improvement

SLO (s)

Curriculum Map



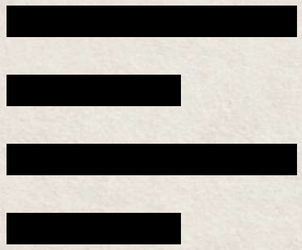
Methodology

By 3pm...
Post Your Plan on Wall

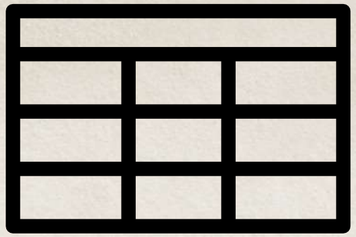
YOUR
OWN
WAY
Work Where You Like
Come back at
3:00 PM

Gallery Walk...

SLO (s)



Curriculum Map



Methodology

For each...

1. I like
2. I wonder
3. I wish

Debrief

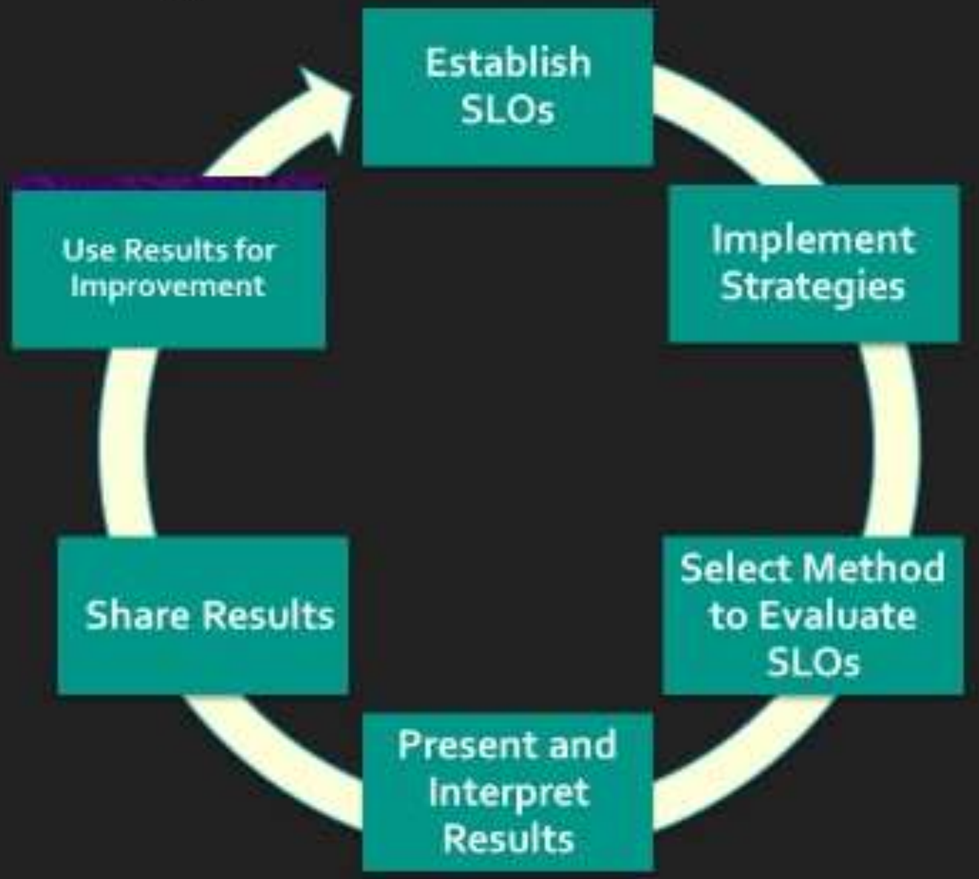
Food for
Thought

Implied Logic Model for Assessment

Better information about student learning → Better informed pedagogical strategies → Better (and more) student learning

Where's our evidence?

Assessment Cycle



Simple Model for Learning Improvement

Weigh Pig

Feed Pig

Weigh Pig

Additional Resources 👉 https://www.jmu.edu/assessment/pdia/index.shtml

Keston Fulcher in: fulchekh@jmu.edu

JMU JAMES MADISON UNIVERSITY