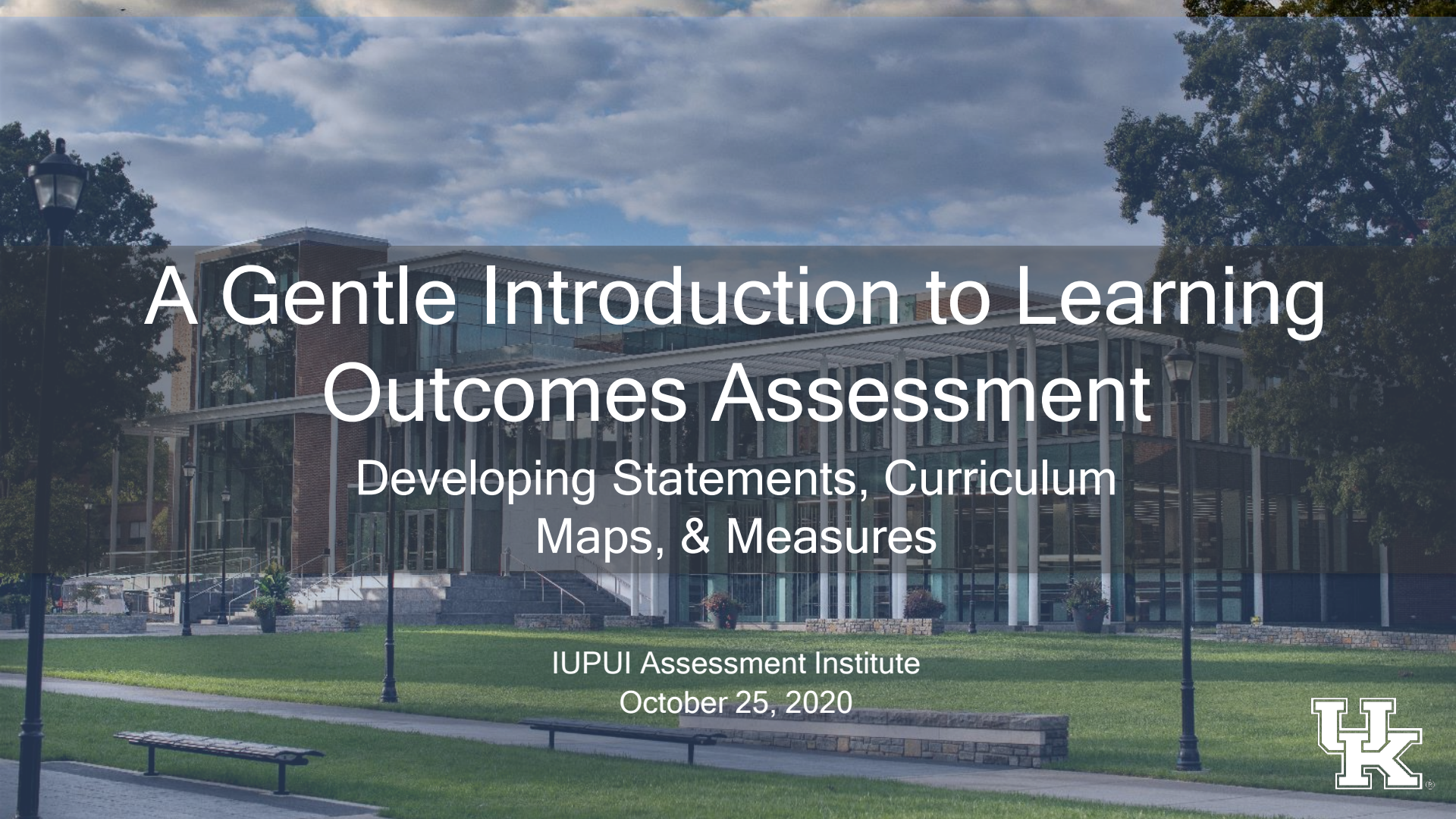

A Gentle Introduction to Learning Outcomes Assessment

Developing Statements, Curriculum Maps, & Measures

IUPUI Assessment Institute
October 25, 2020

While we're waiting…

- Take a few minutes to access the session materials
- Review the note-taking guide and consider what questions you have about assessment - we'll come back to this in a few minutes!

Facilitators

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2-min Activity

Type in the chat box in Zoom a few pieces of information so we can know who you are!

- Name
- Institution
- Role
- 1 thing you hope to learn during this session

Session Objectives

01 Evaluate the level of cognitive ability (Bloom's/Revised Bloom's Taxonomy) or learning dimension (Fink's Taxonomy) for a set of learning outcomes

02 Evaluate a program curriculum map demonstrating the relationship between program learning outcomes and required courses

03 Describe the purpose and uses of pre-/diagnostic, formative, and summative assessments

04 Explain the difference between direct and indirect assessment and provide examples of each

05 Evaluate the alignment of assessment instruments/measures with the program learning outcomes they are designed to measure

Outline

Part I: Developing Outcomes & Maps (50 min)

- The basics of writing of learning outcomes
- Learning taxonomies
- Curriculum mapping basics
- Evaluating curriculum maps

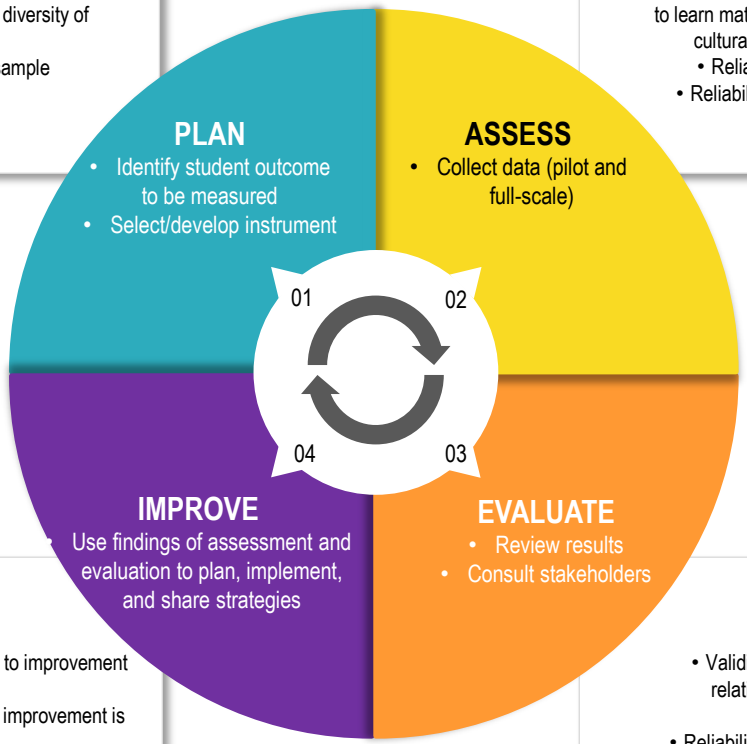
Coffee Break and Q&A (10 min)

Part II: Building a Plan (50 min)

- Types of assessment measures
- Desirable characteristics of assessments
- Choosing assessments
- Examples & practice

Q&A Wrap-up (25 min)

Assessment Cycle



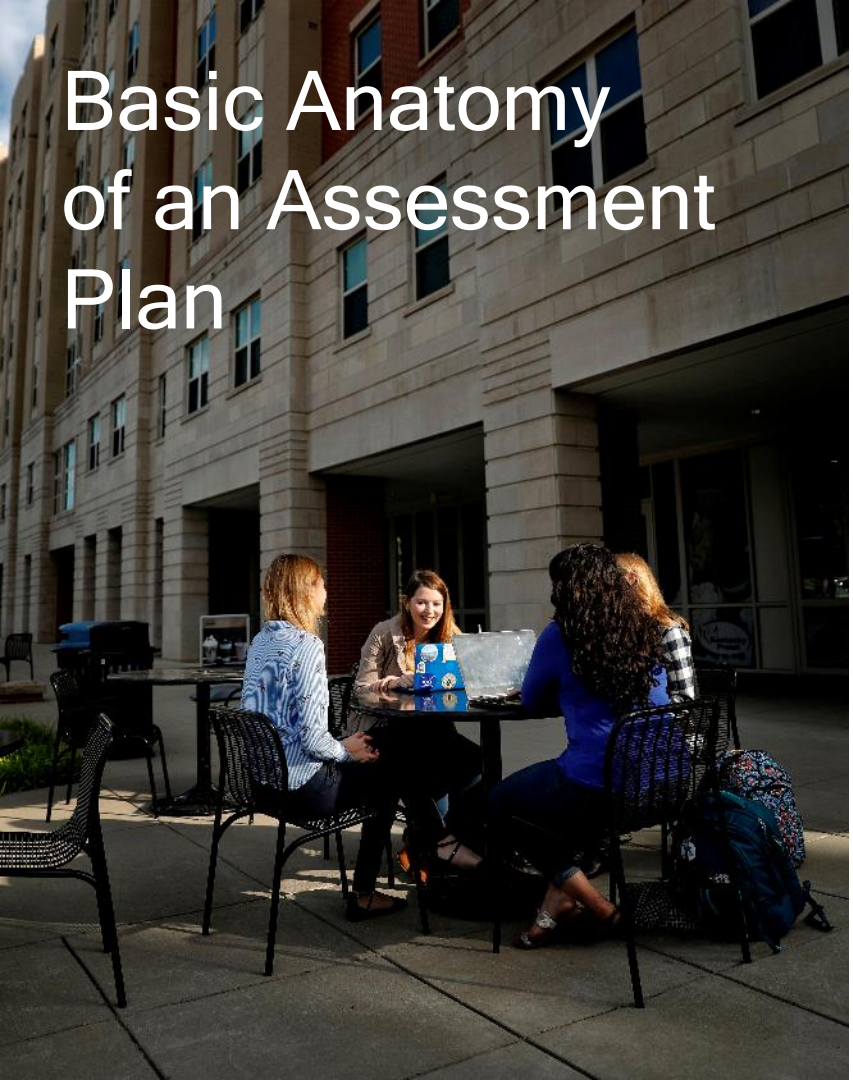
CONSIDERATIONS
- Fairness: consider context and diversity of students
- Validity: select representative sample
- Validity: evaluate
- instrument content

CONSIDERATIONS
- Fairness: ensure students have had opportunity to learn material by measurement date and no cultural bias exists within the assessment
- Reliability: establish interrater reliability
- Reliability: determine instrument reliability

CONSIDERATIONS
- Fairness: ensure that approach to improvement is equitable across population
- Validity: affirm that approach to improvement is data supported

CONSIDERATIONS
- Validity: establish validity by examining relationship between present data and other applicable measures
- Reliability: determine instrument reliability

Adapted from Cumming, T. & Miller, M.D. (2017). *Enhancing assessment in higher education: Putting psychometrics to work.* P. 158. Sterling, VA: Stylus



Basic Anatomy of an Assessment Plan

Learning Outcome Statements

What should our graduates be able to do?

Curriculum Map

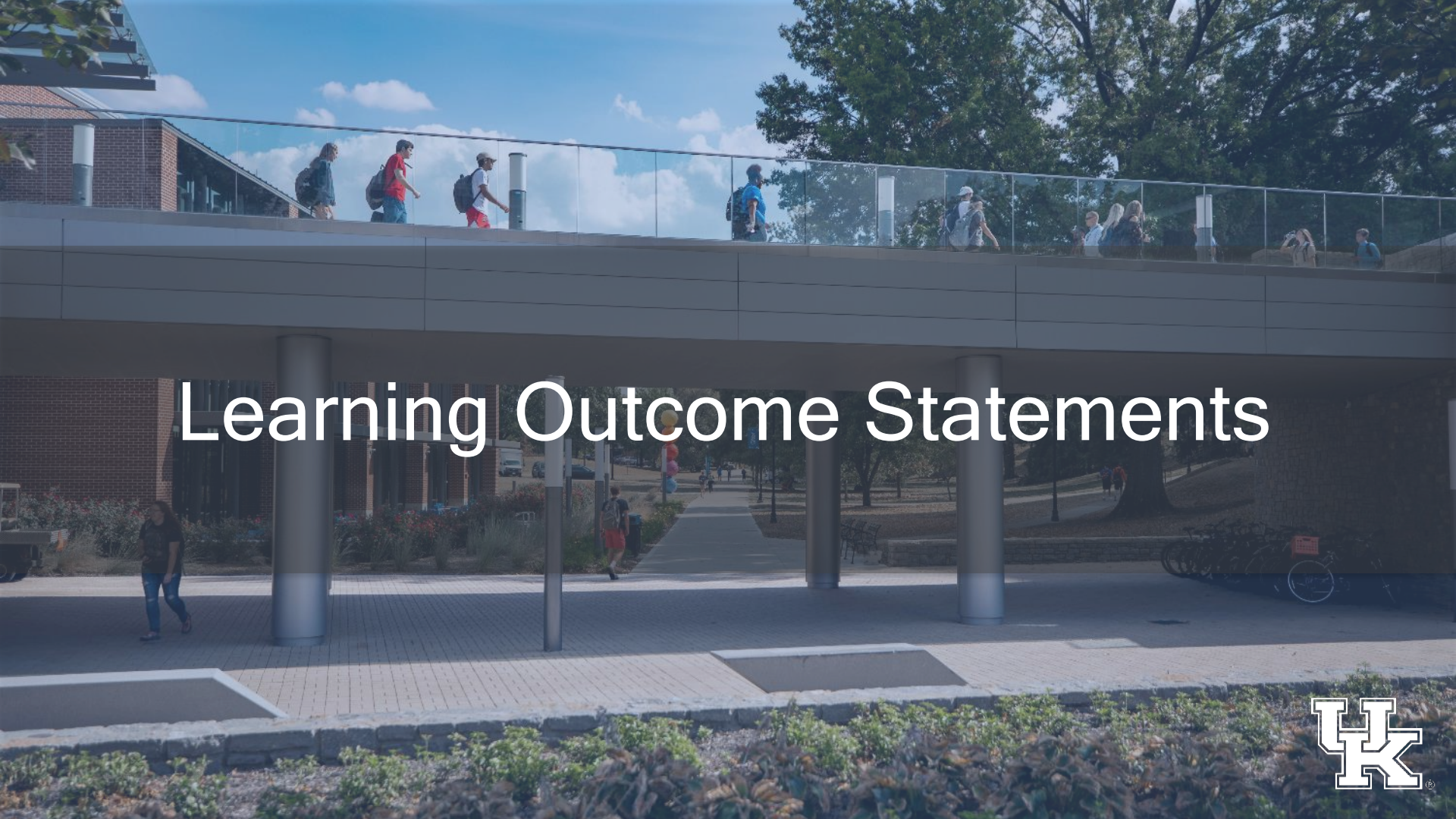
What learning experiences will develop these abilities in our graduates?

Assessment Measures (or Methods)

How will we know if our graduates have acquired these abilities?

Timeline

When will we gather, review, and make changes based on these data?

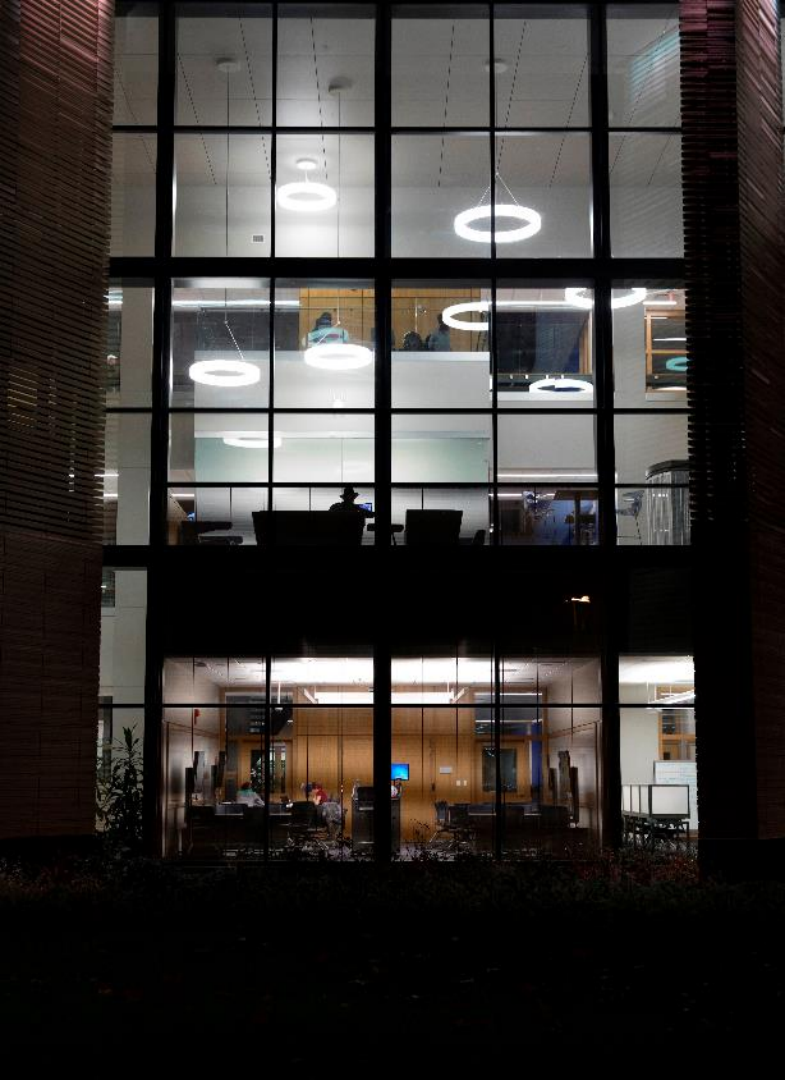


Learning Outcome Statements

What Are Student Learning Outcomes?

- Brief, action-oriented statements that describe what students are expected to know/be able to do at the end of an unit, course, or program
- Example:

  Students will be able to identify the key elements of design in any work of art (Fink, 2013)

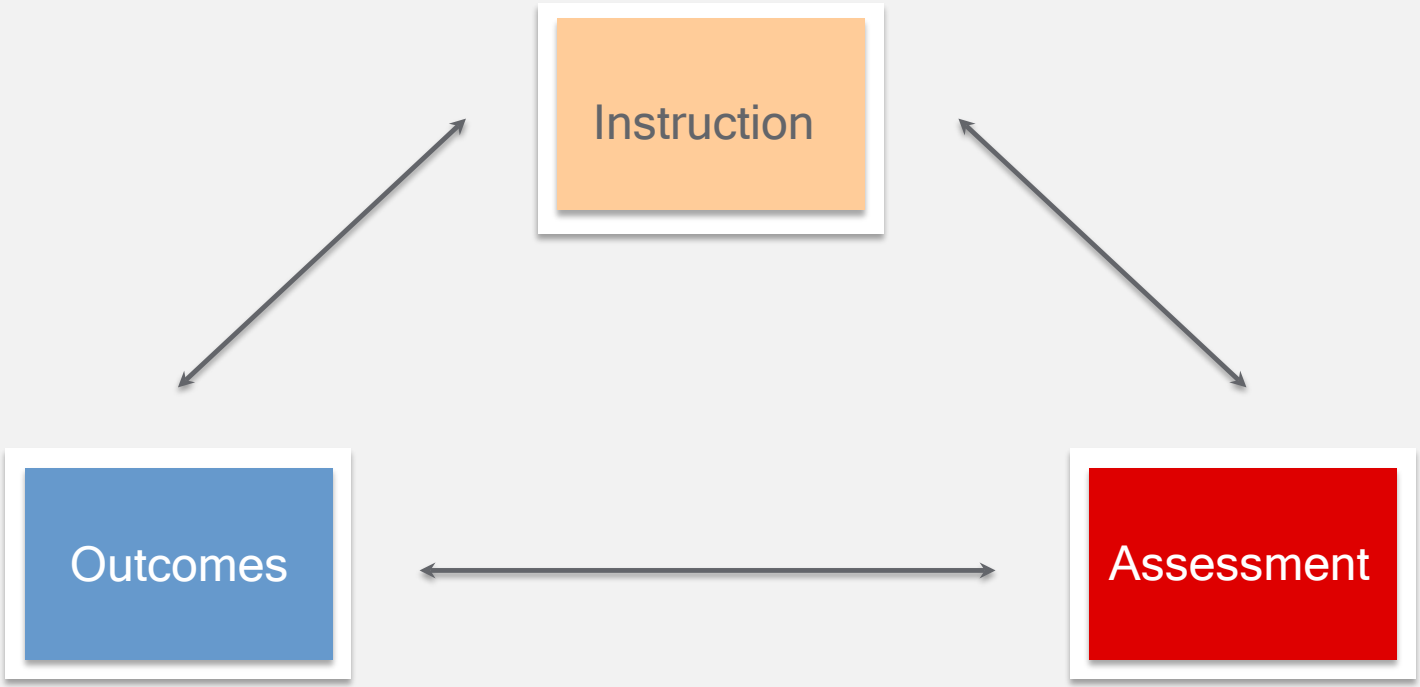


Why Do We Need Outcomes?

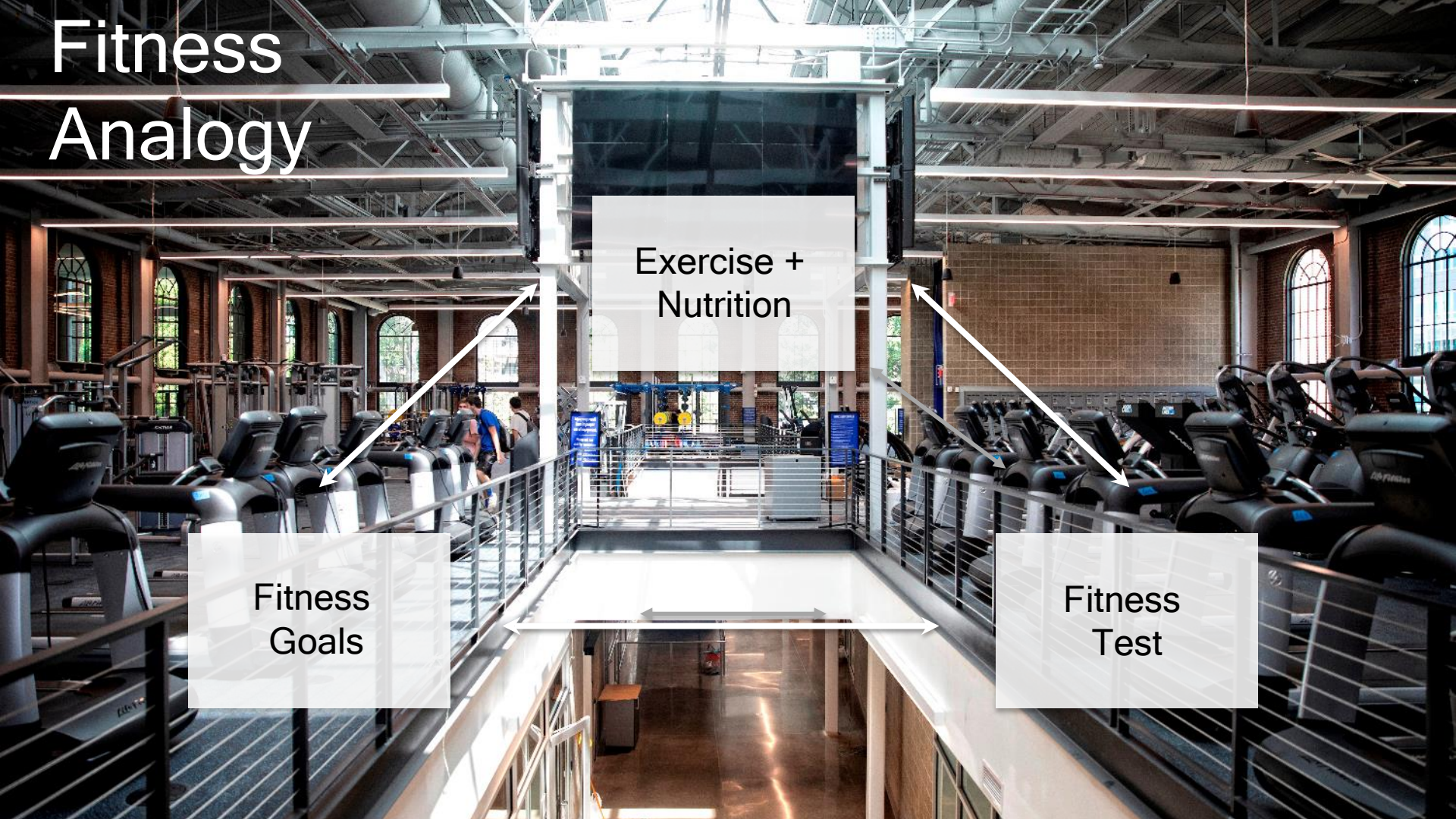
Outcomes help us

- Think about what students should *learn* instead of primarily what content we want to *teach*
- Prioritize content and skills (active vs. passive judgments)
- Organize course and program content, learning experiences, and assessments

Outcomes, Instruction, Assessment



Fitness Analogy



General Outcome Structure

Students will be able to

+ verb (desired action with material)

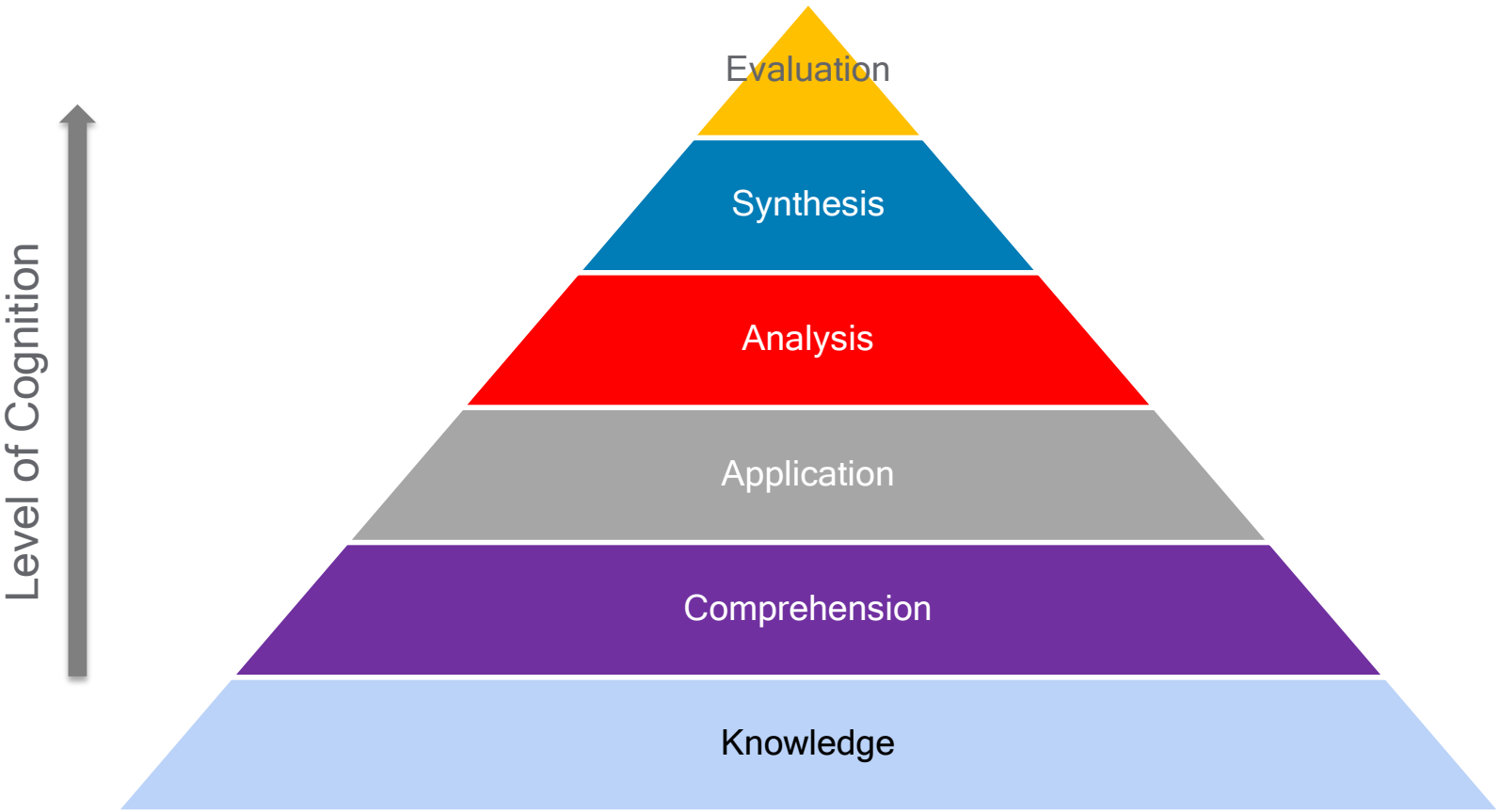
+ noun (material, subject, ideas, theories, etc.)

+ optional modifier (object skill/knowledge applied to)

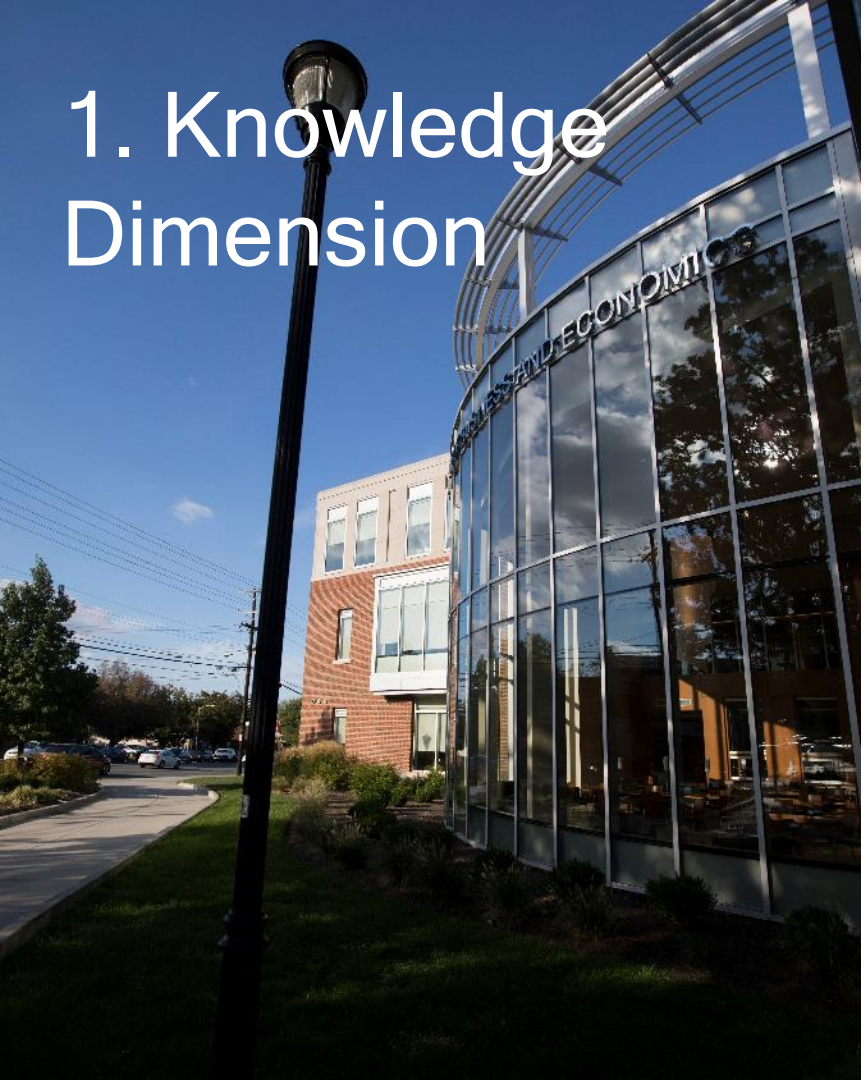
Example

Students will be able to apply legal and ethical principles in business [to organizational decision-making]

Bloom's Taxonomy (Cognitive)

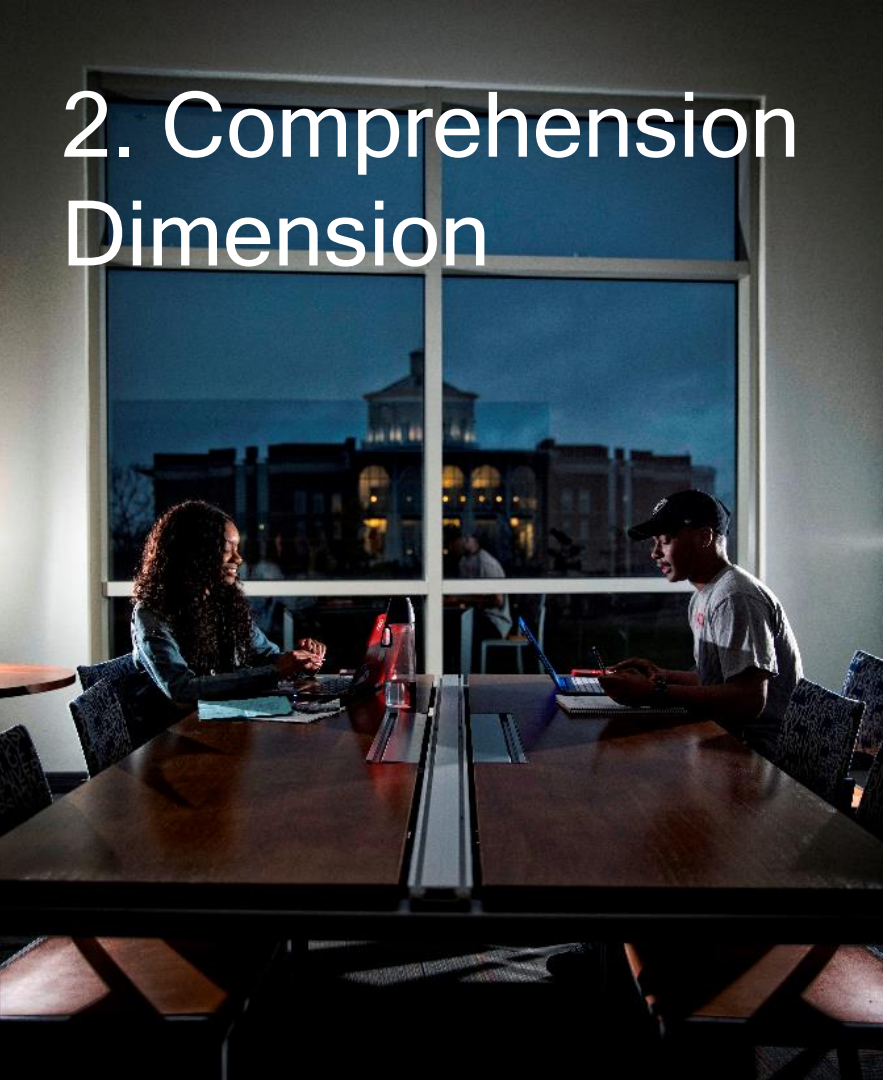


1. Knowledge Dimension



- **Specifics** (terms, facts)
- **Ways & means of dealing with specifics** (conventions, trends, classifications, criteria, methods)
- **Universals and abstractions** (principles, theories, & structures)

2. Comprehension Dimension



- **Translation** (i.e. paraphrase, representing equation in word form)
- **Interpretation** (i.e. re-ordering of ideas, interpret meaning of data)
- **Extrapolation** (i.e. drawing inferences, using data to predict future events)

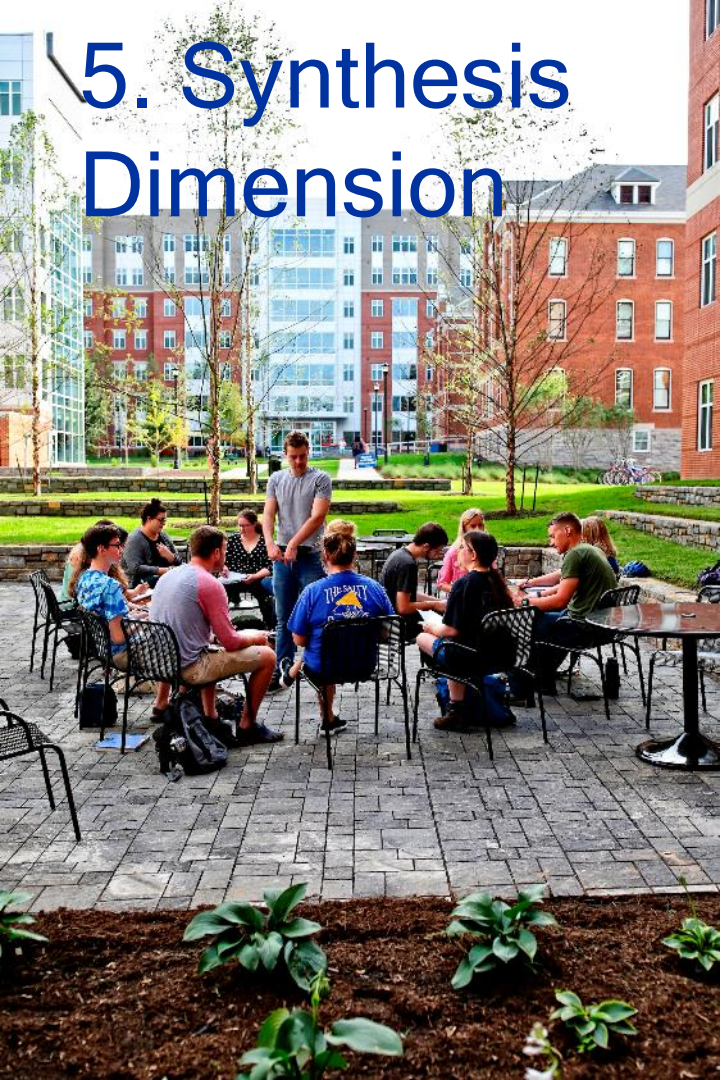
3. Application Dimension

Using ideas, theories, principles, and procedures

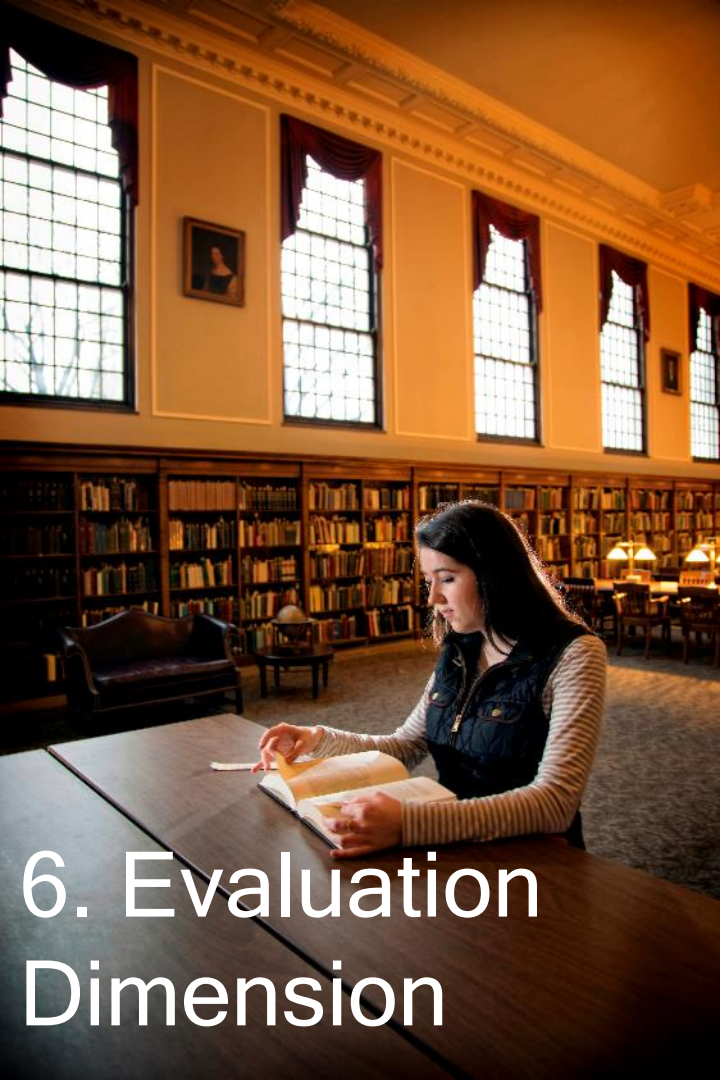
4. Analysis Dimension

- **Analysis of elements** (i.e. distinguish facts from hypotheses)
- **Analysis of relationships** (i.e. comprehending interrelationships among ideas in an article)
- **Analysis of organizational principles** (i.e. patterns in literature or techniques used in advertising)

5. Synthesis Dimension



- **Production of unique communication** (i.e. skill in organizing ideas in writing)
- **Production of a plan or proposed set of operations** (i.e. way of testing hypothesis or a lesson plan)
- **Derivation of a set of abstract relations** (i.e. ability to develop appropriate hypotheses or make generalizations)



6. Evaluation Dimension

Judgments in terms of:

A. **internal evidence** (i.e. judging by internal standards)

B. **external criteria** (i.e. using standards to determine ‘quality’ of work)

Using Bloom's Taxonomy (Cognitive)

Cognitive Level	Sample verbs for writing learning objectives				
Knowledge	• Acquire • Choose • Count • Define • Distinguish • Fill-in	• Find • Group • Identify • Indicate • Label • List	• Locate • Match • Memorize • Name • Outline • Point	• Quote • Recall • Recite • Recognize • Record • Repeat	• Reproduce • Select • State • Tabulate • Trace • Underline
Comprehension	• Associate • Change • Classify • Conclude • Compare • Contrast • Convert	• Demonstrate • Describe • Determine • Define • Differentiate • Discuss • Distinguish	• Fill in • Find • Generalize • Give examples • Group • Infer • Illustrate	• Interpret • Measure • Outline • Paraphrase • Predict • Prepare • Rearrange	• Recognize • Reorder • Represent • Reword • Show • Simplify • Summarize
Application	• Apply • Calculate • Choose • Classify • Collect • Compute • Construct	• Convert • Differentiate • Demonstrate • Develop • Discover • Estimate • Employ	• Expand • Examine • Experiment • Generalize • Illustrate • Graph • Investigate	• Locate • Make • Model • Organize • Operate • Plan • Perform	• Practice • Predict • Present • Produce • Relate • Restructure • Transfer

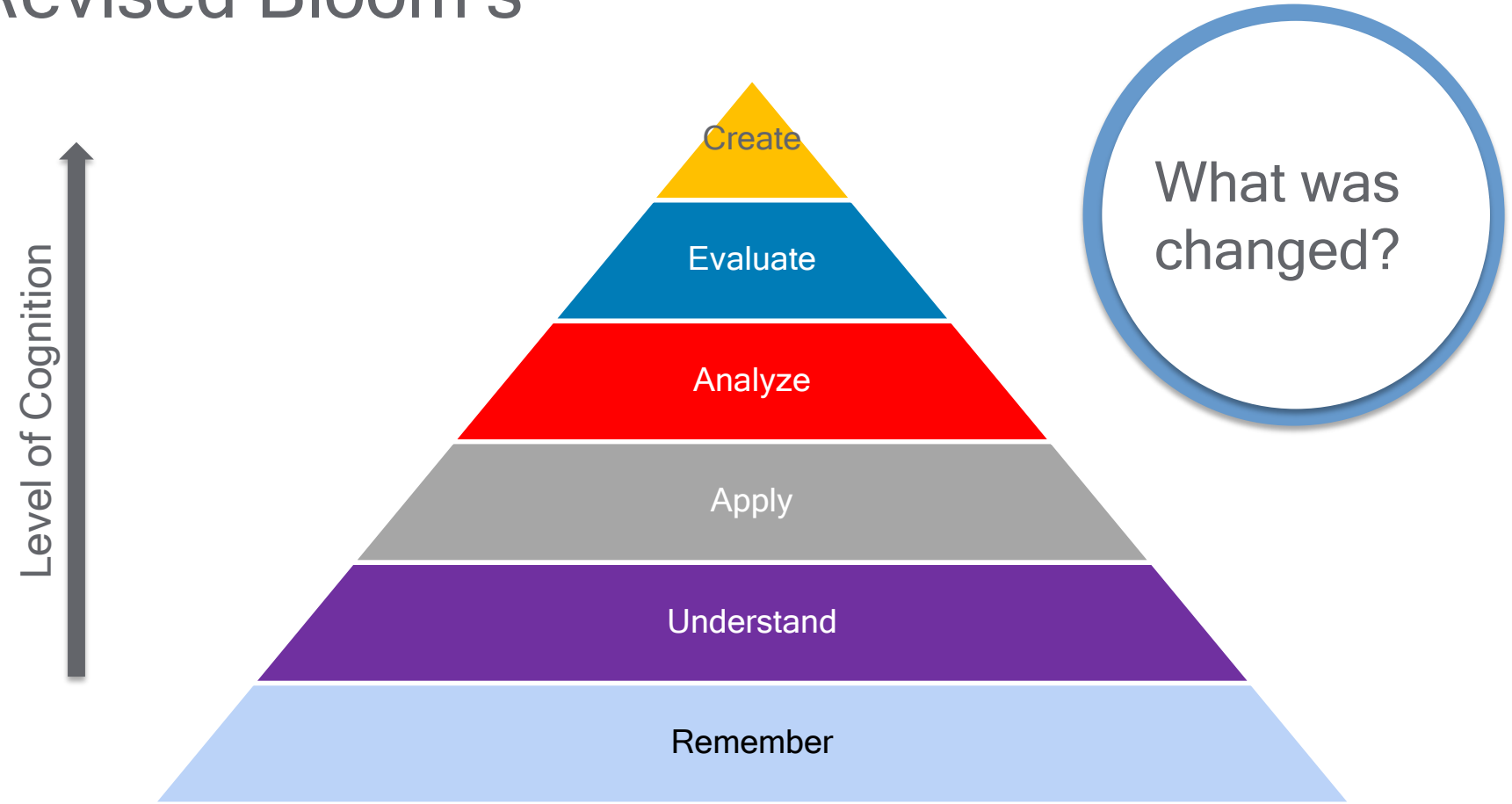
Using Bloom's Taxonomy (Cognitive)

Cognitive Level	Sample verbs for writing learning objectives				
Analysis	• Analyze • Categorize • Classify • Compare • Contrast • Criticize	• Debate • Detect • Determine • Diagram • Differentiate • Discover	• Divide • Examine • Formulate • Generalize • Group • Infer	• Inspect • Order • Outline • Recognize • Relate • Sort	• Transform • Uncover • Search • Select • Separate • Simplify
Synthesis	• Arrange • Blend • Build • Categorize • Combine • Compile • Compose	• Construct • Create • Deduce • Derive • Design • Develop • Document	• Explain • Form • Generalize • Generate • Integrate • Modify • Organize	• Perform • Plan • Predict • Prepare • Produce • Propose • Rearrange	• Relate • Reorganize • Specify • Summarize • Synthesize • Transmit • Write
Evaluation	• Appraise • Argue • Assess • Choose • Compare • Conclude	• Consider • Contrast • Criticize • Decide • Defend • Determine	• Discriminate • Distinguish • Evaluate • Grade • Interpret • Judge	• Justify • Measure • Rank • Rate • Relate • Score	• Select • Standardize • Summarize • Support • Test • Verify

Using Bloom's Taxonomy (Cognitive)

Dimension	Example
Knowledge	Identify the major historical visions of a united Europe
Comprehension	Able to distinguish among confederal, federal, and unitary systems of government
Application	Demonstrate to peers how to resolve conflicts by helping them negotiate agreements
Analysis	Determine the effects of instructional technology on library media programs and school curricula
Synthesis	Develop a valid research hypothesis and design an appropriate experiment to test the hypothesis
Evaluation	Assess the appropriateness of the conclusions from published research studies based on the study design and data presented.

Revised Bloom's



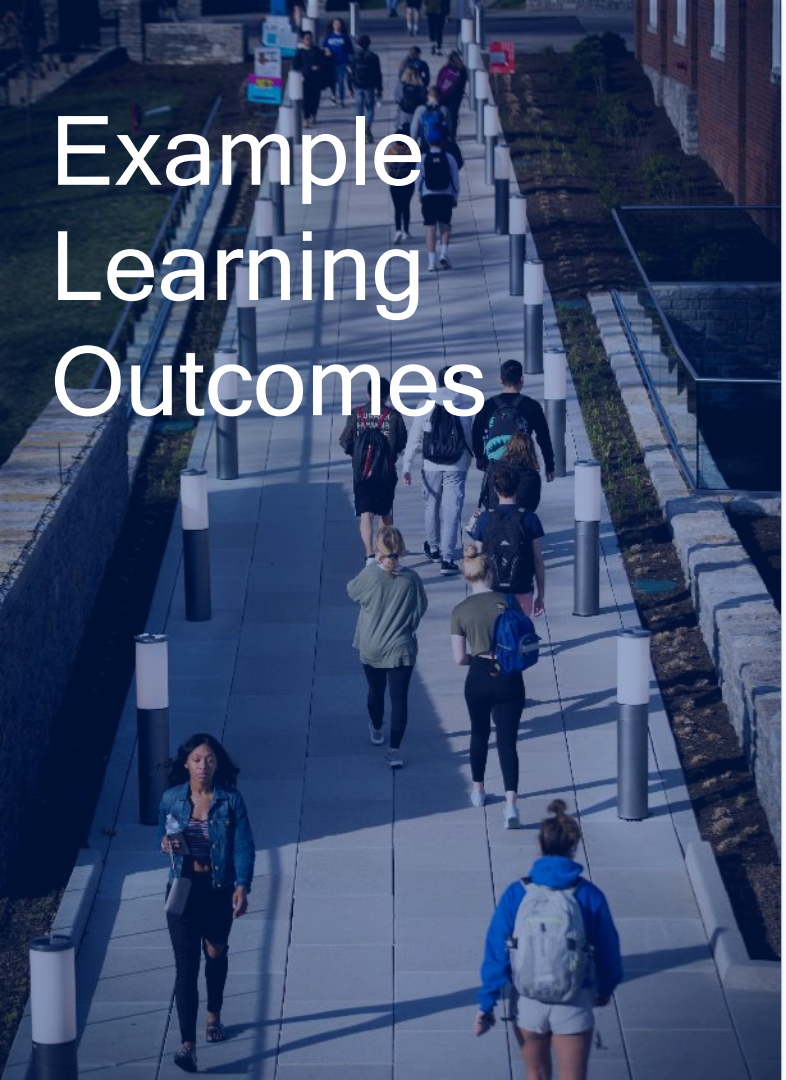
Old v. Revised Taxonomy

- Still a hierarchy
- Nouns to verbs
- "Overlap" between levels is more acceptable in revised taxonomy
- "Understand" replaced "Knowledge" which allowed for creation of 2nd domain for knowledge

5-minute Activity

The next slide presents some example learning outcome statements.

Review the outcomes and tell us in the chat box what level (or levels of Bloom's Taxonomy) you think each one addresses.



Example Learning Outcomes

1. Students will be able to demonstrate and evaluate equine handling skills and production management practices.
2. Students will produce effective marketing materials for a nonprofit arts organization by using research techniques, identifying target audiences, formulating strategies, and aligning each one with the organization's brand.
3. Relate cultural products, traditions, and institutions of their own culture(s) to those of target culture(s)

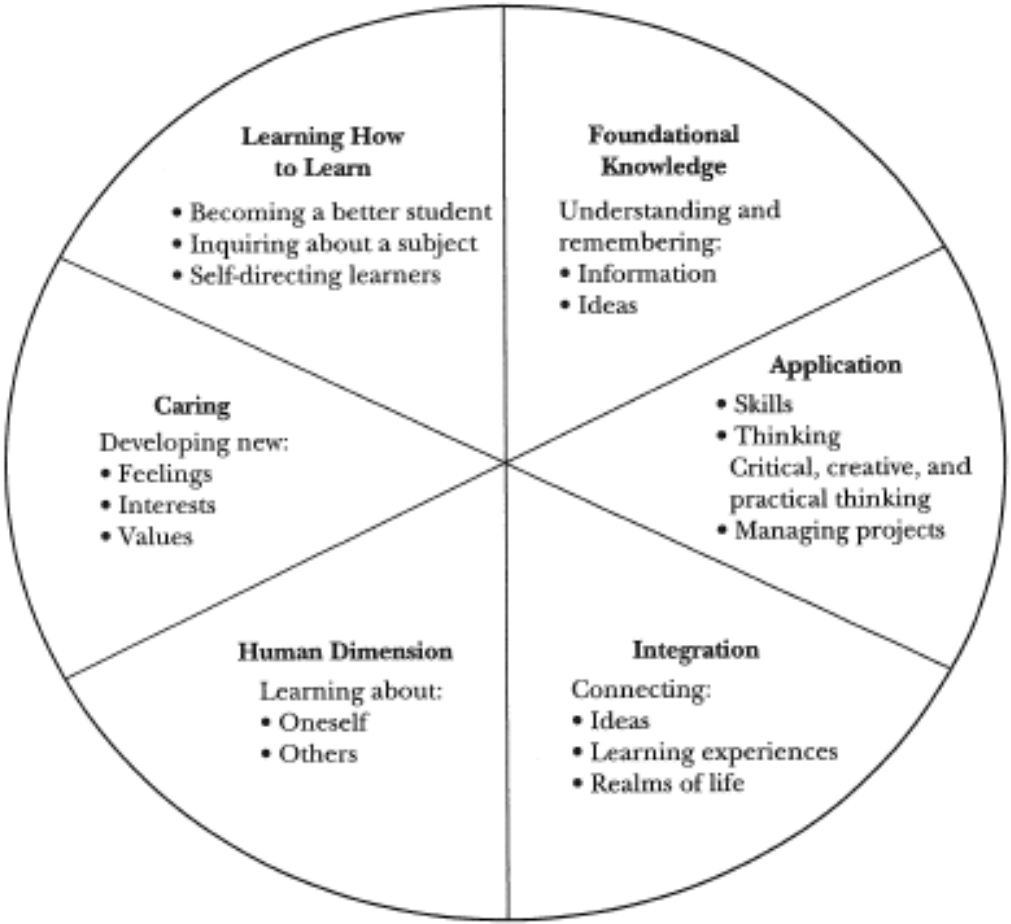
**See PPT notes for suggested levels.*

Taxonomy for Significant Learning

Need For A New Taxonomy

- Fink (2013) suggests learning = some kind of change in the learner
- Bloom's [cognitive] taxonomy restricts the types of learning
- Fink views learning not as a hierarchy but as consisting of interconnections between types of experiences, knowledge, skills

FIGURE 2.1. TAXONOMY OF SIGNIFICANT LEARNING.



Taxonomy for Significant Learning

Foundational Knowledge

- Understand or recall information & ideas
- Basis for other types of learning
- More than accumulation of "random facts"

Application

- Perform some "action" with knowledge
- Applications include
  - Skills
  - Managing complex projects
  - Thinking (critical, creative, and practical)

Integration

- Students can connect different ideas, content areas, theories, etc.
- May be connections between ideas & life experiences

Taxonomy for Significant Learning

Human Dimension

- Learning about self
- Journey toward self-authorship
- Learning about others
- Personal & social competence
- Reciprocity of learning about self/others

Caring

- Learning can change how students view/care about something
- Categories:
  - Feelings, interests, values
  - Focus of caring

Learning to Learn

- Learn about the process of learning
- Categories:
  - How to be better student
  - How to construct new knowledge
  - How to be self-directed learner

Example: Medicine

Dimension	Example
Foundational Knowledge	Explain fundamental biomedical concepts, terms, processes, and system interactions
Application	Propose evidence-based therapeutic treatments
Integration	Connect knowledge of patient populations and health delivery processes in making diagnoses and therapeutic recommendations
Human Dimension	Reflect upon one's personal strengths and weaknesses as a healthcare professional
Caring & Valuing	Engage in the profession by demonstrating a personal commitment to its continual improvement
Learning How to Learn	Develop a personal plan to become a better healthcare professional

Example: Fine Art

Dimension	Example
Foundational Knowledge	Discuss the ideas, forms, and significant works of art in the traditions developed by cultures from around the world
Application	Produce original artwork using a variety of skills, techniques, materials, and media
Integration	Use historical and cultural knowledge from art history with studio art practice
Human Dimension	Consider the role of art making in the larger social context
Caring & Valuing	Recognize importance of fulfilling ethical and social responsibilities and being an active participant in the community
Learning How to Learn	Critique own work using proper vocabulary to discuss the subject, form, content, and context

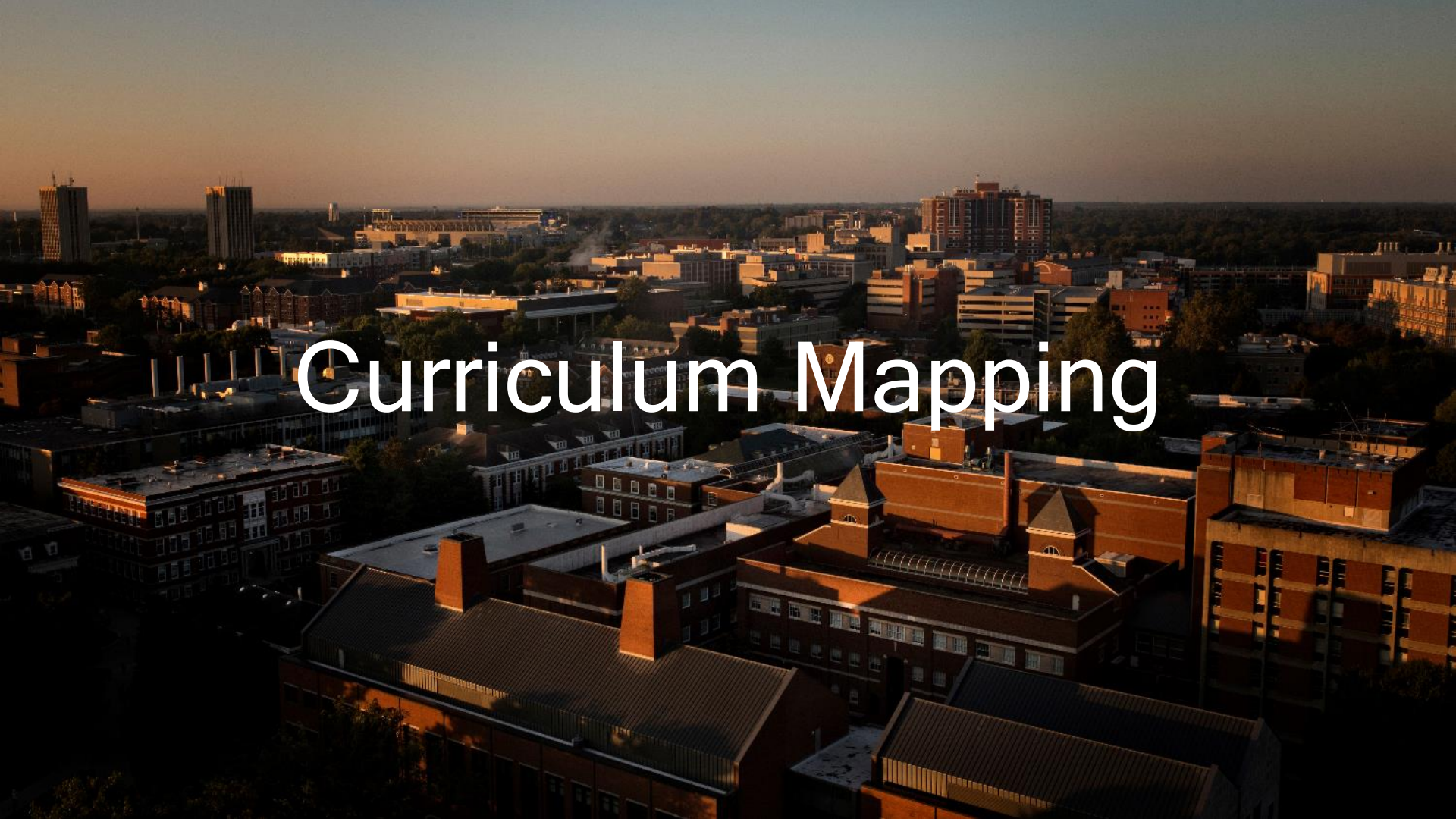
Additional Practice (5 min)

Consider how the following outcome statements could be improved:

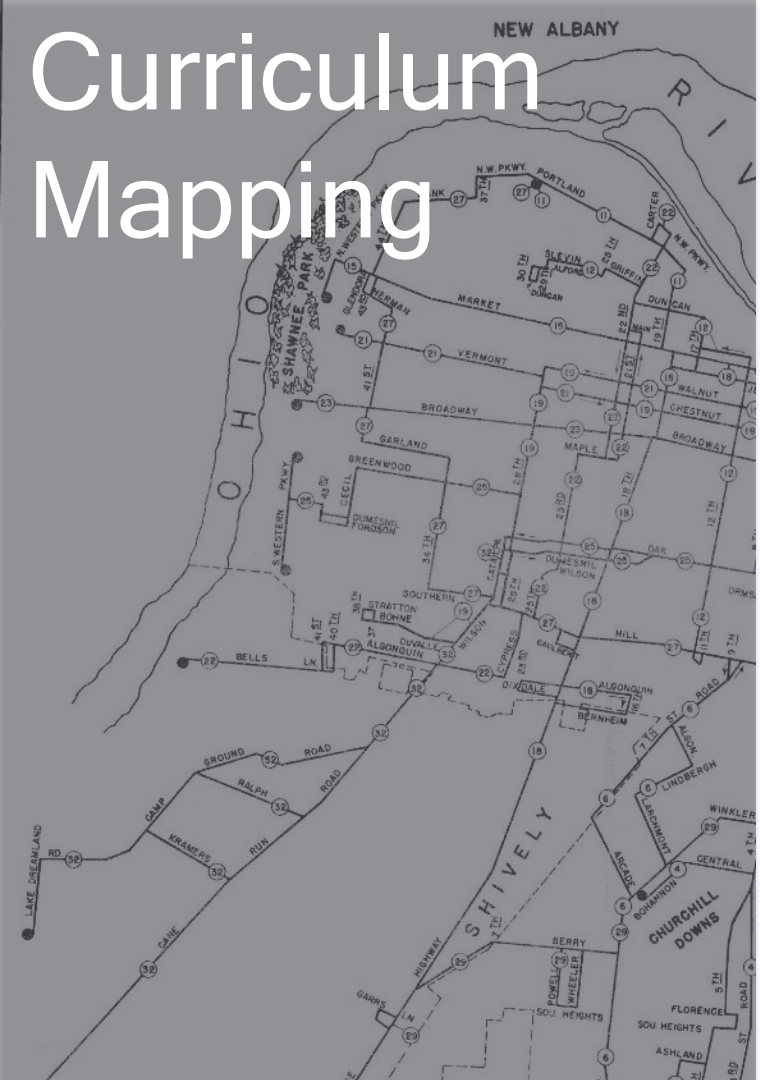
1. Demonstrate an appreciation of ethical ethical responsibilities

2. Students will demonstrate an understanding of contemporary cybersecurity issues.

3. For this outcome, graduates will demonstrate the ability to verify/categorize students' level of learning performance in a defensible way. way.


Curriculum Mapping

Curriculum Mapping



- Multiple types of mapping
- Common purposes include aligning
  - Course content, learning experiences, objectives, and assessment
  - Course content or objectives to program outcomes
  - Course assessments to program outcomes

Learning Outcome Mapping

- Prepare a “matrix” of courses and outcomes
  - (Optional) can include assessments
  - Indicate if an outcome is covered in a course & level: “introductory,” “reinforced,” or “mastery” level

Course	PSLO1	PSLO2	PSLO3	PSLO4	PSLO5	PSLO6	PSLO7	PSLO8	PSLO9	PSLO10
Example: EDP 548	*I*		*R*			*R*	*I*		*I*	
	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

	PSLO1	PSLO 2	PSLO 3	PSLO 4	PSLO 5	PSLO 6	PSLO 7	PSLO 8	PSLO 9	PSLO 10	PSLO 11	PSLO 12	PSLO 13	PSLO 14	PSLO 15	PSLO 16	PSLO 17
Domain 1																	
Dept 111							I	I									
Dept 212					I	I											
Dept 213					R	M											
Dept 314	I		I														
Dept 315							M	M									
Domain 2																	
Dept 101																	
Dept 151		I		I													
Dept 252		R		R													
Dept 253																	
Dept 354									I	I							
Dept 355									M								
Dept 458																	I
Domain 3																	
Dept 231													I	I			
Dept 332												R			R		
Dept 333												R	M			R	
Dept 434											R						
Dept 435														R			
Domain 4																	
Dept 203	I																

	PSLO 1	PSLO 2	PSLO 3	PSLO 4
Pre-major				
Dept 100	I	I	I	I
Dept 125	I	I		
Dept 215	I	I	I	I
Core Courses				
Dept 218	I	I	I	I
Dept 223	R	R	I	R
Dept 311	R	R	I	R
Dept 312	R	R	I	R
Dept 313	R	R	I	R
Dept 314	R	R	I	R
Upper Elective				
Dept 495	M	M	R	M
Dept 499	M	M	R	M
Dept 500	M	M	R	M
Dept 534	M	M	R	M
Dept 535	M	M	R	M
Dept 561	M	M	R	M
Dept 562	M	M	R	M
Dept 563	M	M	R	M
Dept 564	M	M	R	M
Dept 565	M	M	R	M
Dept 566	M	M	R	M
GCCR				
Dept 427	M	M	R	M
Dept 430	M	M	R	M
Dept 440	M	M	R	M
Dept 456	M	M	R	M
Dept 460	M	M	R	M
Dept 552	M	M	R	M

Public Health, Bachelor

Courses and Activities Mapped to Public Health, Bachelor

	Outcome			
	Knowledge Demonstrate knowledge of public health from an interdisciplinary perspective.	Evidence-based problem solving Show competency in ethical issues, social responsibility, and problem solving using evidence-based concepts in core public health areas.	Relationships Show competency in relationship-building and team dynamics to plan and promote public health and reduce health disparities.	Integrated Communications Apply theories and concepts to communicate the interconnectedness among the physical, social, and environmental aspects of population health
Pre-Major for Pre-BPH				
CPH 201 Introduction to Public Health	I			
GRN 250 Aging in Today's World	I			
BST 330 Statistical Thinking for Population Health	I	I		
Core (Major) Courses				
HSM 241 Health and Medical Care Delivery Systems	R		I	I
CPH 310 Disease Detectives: Epidemiology in Action	R	R		
CPH 320 Fundamentals of Environmental Health	R			
CPH 440 Foundations of Health Behaviors	R		R	
CPH 470 Public Health Capstone	A	A		A
CPH 472 Public Health Profession and Practice	A		A	

Legend : I Introduced R Reinforced A Applied X General Alignment

Mapping Considerations

- Discuss with all faculty
- Verify each outcome addressed at each level (I, R, M)
- Examine map for gaps and unnecessary duplication
- If all boxes are checked, may indicate:
  - Map filled out incorrectly
  - Outcomes too broad

10-minute Break and Q&A

Part II: Building an Assessment Plan

Recap: Assessment Plan

- Learning outcomes
- Curriculum map
- Assessment measures
- Timeline

What is a “good” assessment?

- Aligned with learning outcomes AND intended purpose
- Lead to reliable and valid conclusions about student learning
- Produce sufficient detail to diagnose student strengths & weaknesses

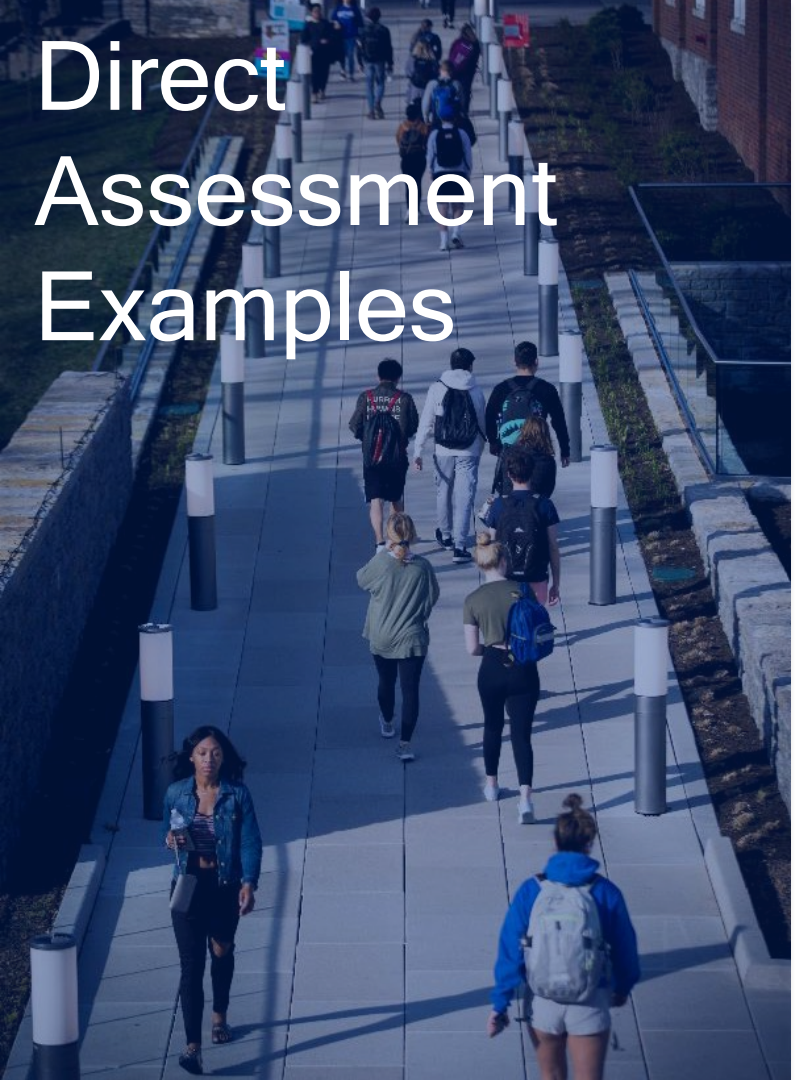

Types of Assessments

Direct Assessments

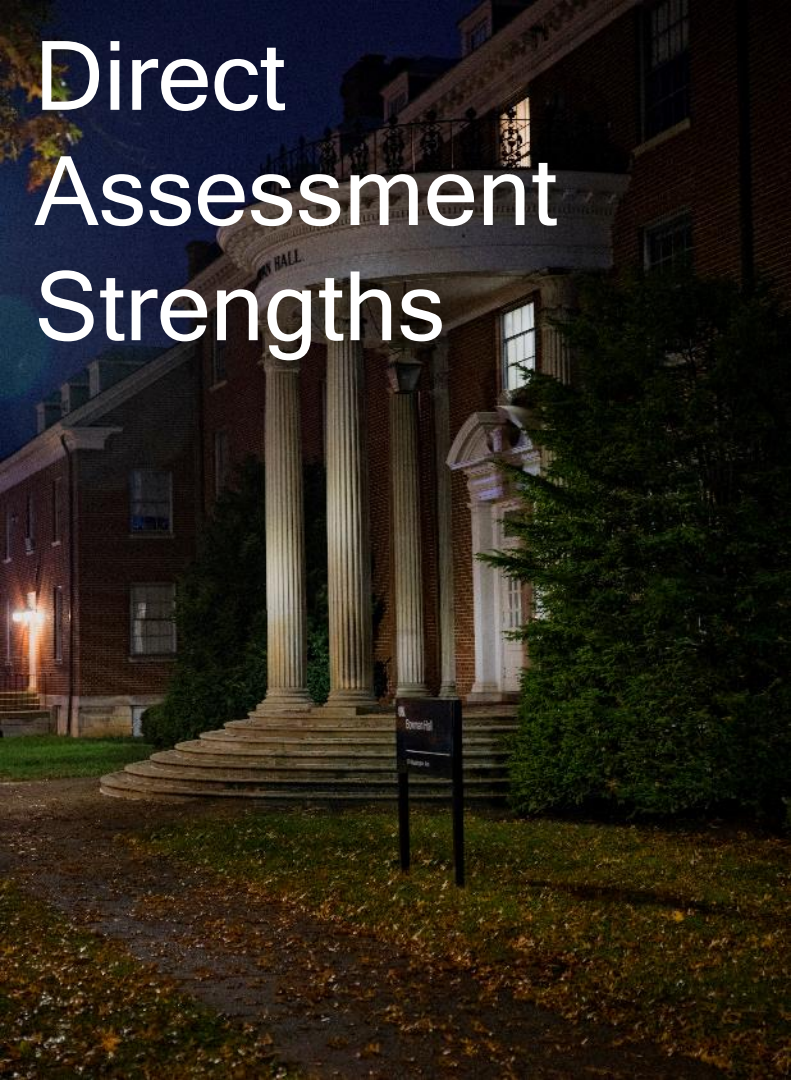
Definition: provides tangible, visible, self-explanatory, compelling evidence of what students have and have not learned

Suskie, L. (2009). *Assessing student learning: A common sense guide.* San Francisco, CA: Jossey Bass

Direct Assessment Examples



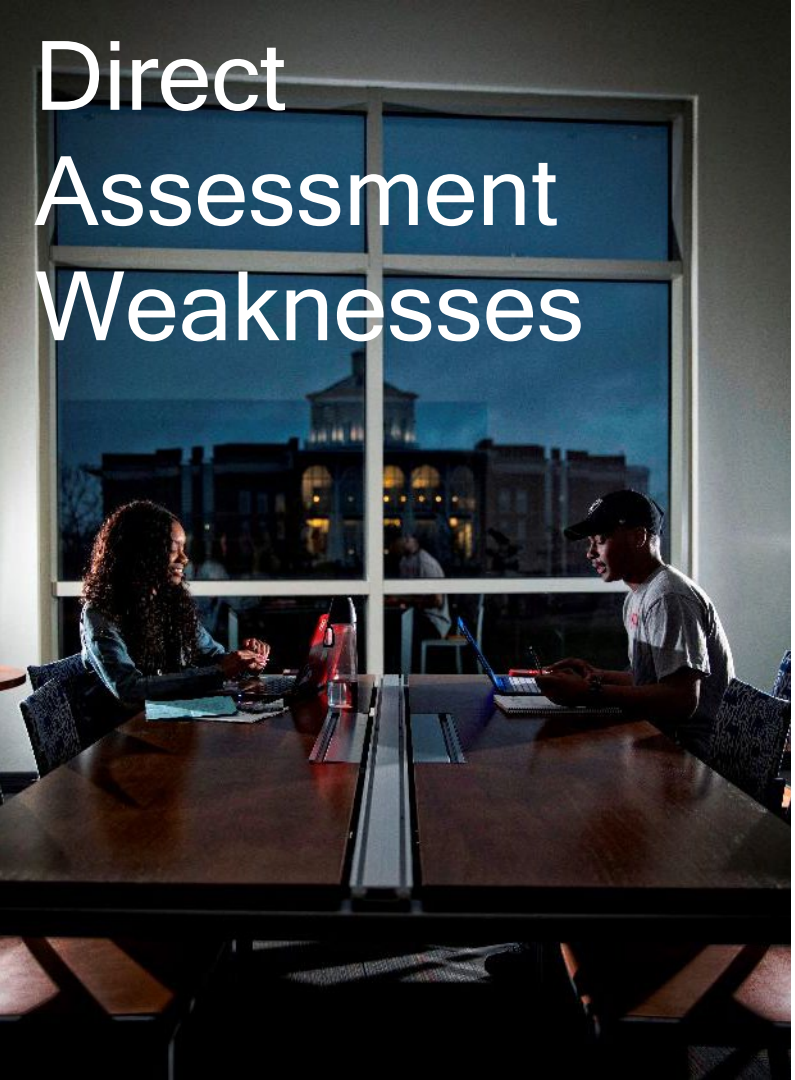
- Traditional assessments
  - Exams
  - Quizzes
- Performance assessments
  - Lab experiments
  - Music or other artistic performance
  - Physical exercise or activity
  - Papers, projects, reports



Direct Assessment Strengths

- Students must actually “show what they know”
- Produce empirical data
- [Relatively] easy to align exams and rubrics to multiple learning outcomes

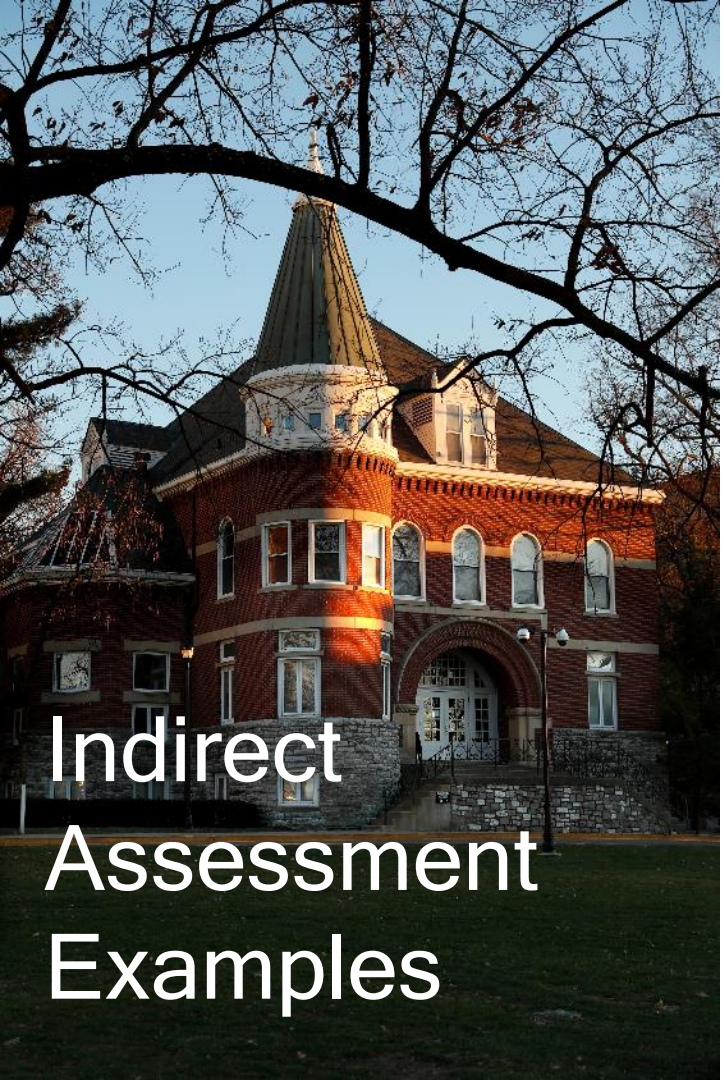
Direct Assessment Weaknesses



- May require significant class time
- Highly structured nature can limit types of learning captured (i.e. factual and procedural v. metacognitive)
- Standardized tests may have poor alignment
- Creating effective exams, rubrics, etc. requires considerable training and skill

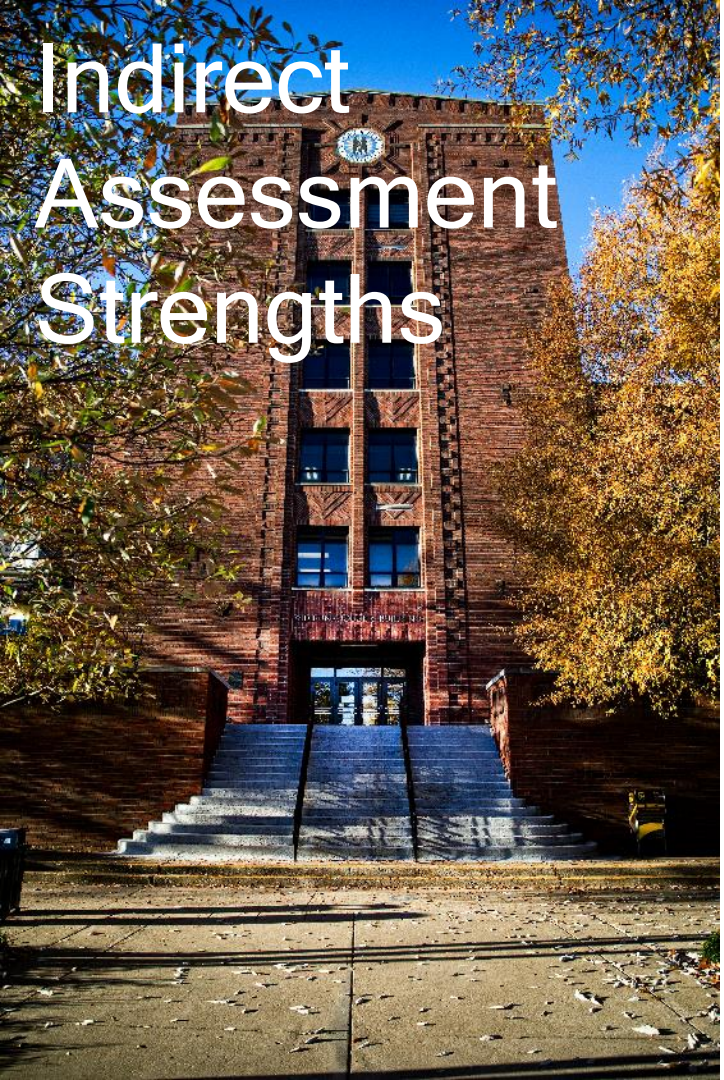
Indirect Assessments

Indirect assessment measures consist of “proxy” signs that students are learning by ascertaining the perceived extent or value of learning experiences.



Indirect Assessment Examples

- Reflections, learning logs, journals
- Self-ratings
- Interviews
- Focus groups
- Informal instructor observations
- Peer assessment



Indirect Assessment Strengths

- Opportunity for reflection about material and own thinking/ learning
- Allows students' voices to be heard
- Can shed light on learning strategies, challenges, & other types of learning
- Can often be completed outside of class time

Indirect Assessment Weaknesses

- Includes impressions, views, attitudes and no “tangible” evidence
- Interpretation can be difficult, time consuming
- Students may respond how they think the teacher wants them to
- May have low participation in some cases (i.e. teaching evals)
- Can be susceptible to bias (i.e. halo effect on surveys)

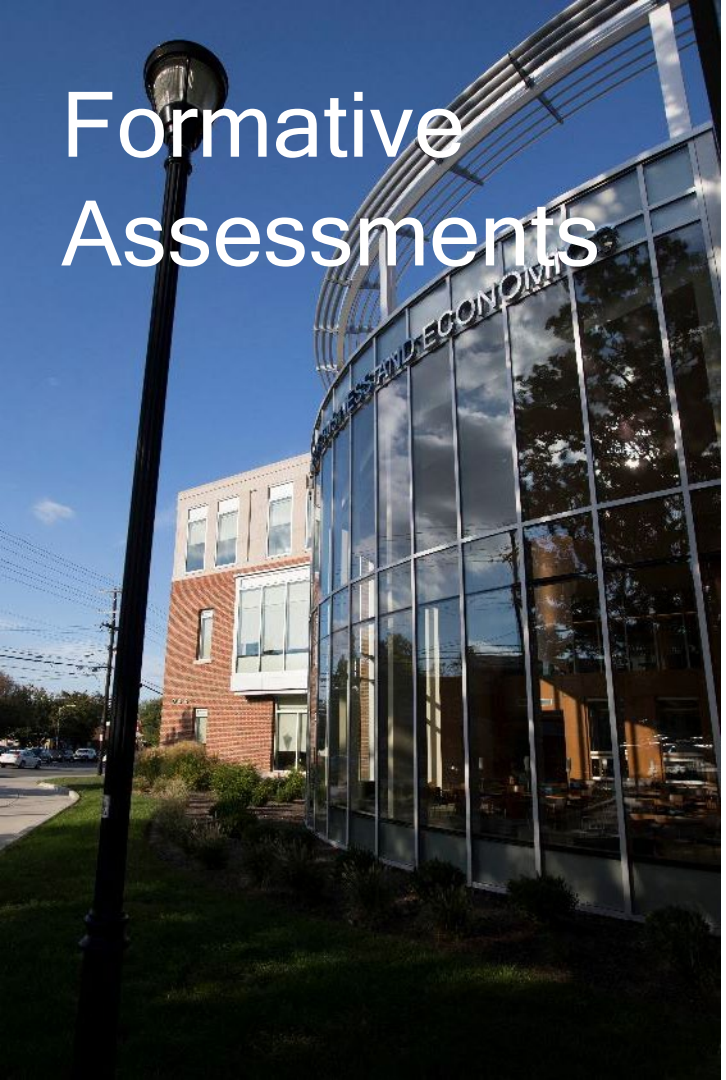
Summative & Formative

Summative Traits

- Occurs after unit is complete
- Provides feedback on whole of teaching & learning for unit
- Often involve judging performance against an established benchmark
- Moderate- to high-stakes

Summative Examples

- Major exams (i.e. mid-terms, finals)
- Standardized tests
- “Term” papers
- Projects
- Performances (i.e. recital)
- Class presentation
- Final learning log or reflection
- Showcase portfolio



Formative Assessments

Formative assessments are administered during instruction of an educational unit for the purpose of:

- providing feedback on students' strengths and weaknesses
- assisting instructors in planning future instruction
- guiding students towards self-directed learning

Cizek, G.J. (2010). An introduction to formative assessment. In H.L. Andrade & G.J. Cizek, *Handbook of formative assessment*.

Formative Assessment Formats

- Often shorter and less formal than summatives
- Many of the same formats can be used as summative assessments
  - Quizzes
  - Papers
  - Performance tasks
- Could also include
  - Various indirect measures (thumbs up/down, reflections)
  - Homework
  - Assignment drafts

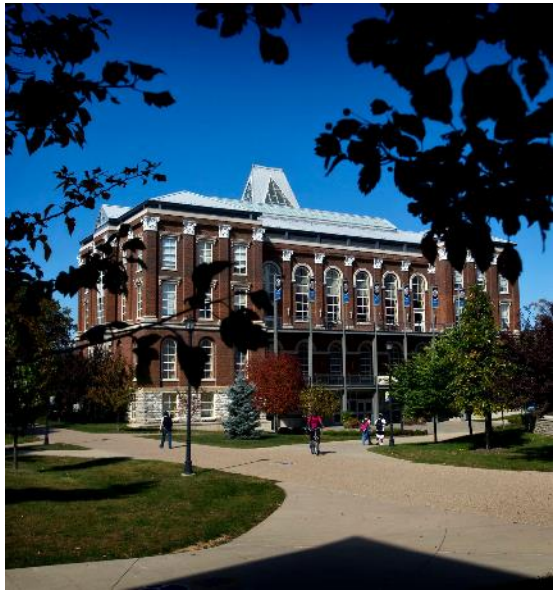
Summative v. Formative

	Formative	Summative
Purpose	Monitor and improve instruction and student learning	Document student performance on a unit; make decisions about student progressions, classification, etc.
Time of assessment	During instruction	After instruction is completed
Assessment techniques	Examples include informal observation, listening/responding to student questions, discussions, quizzes, homework, as well as traditional formats (papers, exams, projects)	Tests, final exams, reports, formal presentations, projects, papers
Use of information	Improve or modify instruction while it is ongoing	Judge what and how much students have learned and identify systematic student errors
Structure	Can be formal or informal; often flexible format	Fixed, formal, standardized for all students

Adapted from McMillan, J.H. (2001). *Classroom assessment: Principles and practice for effective instruction.*

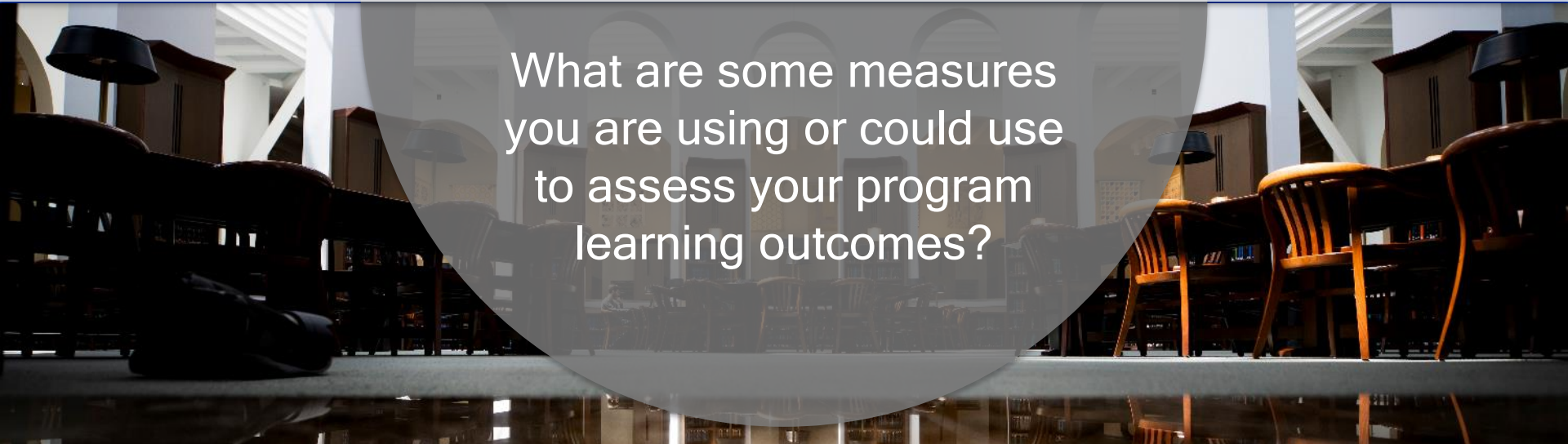
Key Takeaways

- Consider using a combination of direct & indirect measures
- Summative preferred over formative but there are advantages of using both





3-min Activity



What are some measures you are using or could use to assess your program learning outcomes?


Reliability & Validity

Reliability

Reliability refers to the precision of a measurement procedure.

- Reliability is
  - An important trait of any assessment
  - A necessary *precondition* for validity
- The amount or extent of measurement error present impacts the reliability of the assessment results

Possible Sources of Measurement Error

Individual Student

Examples:

- Test anxiety
- Illness
- Motivation

Environment

Examples:

- Classroom (noise, temperature
- Computer v. paper
- Time
- Calculator access or scratch paper

Instrument

Examples:

- Different versions (i.e. “A” and a “B”)
- Item flaws
- Type of instrument or method

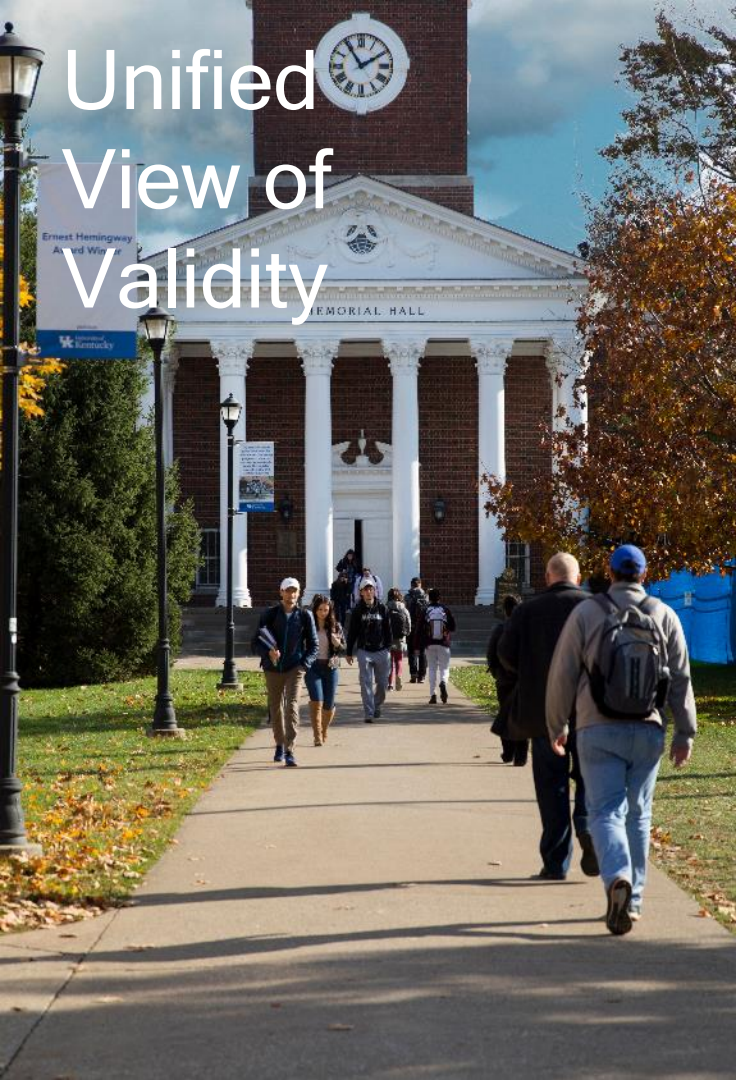
Rater

Examples:

- Rater experience & training with rubric
- Rater knowledge & ability to observe
- Rater biases

Validity

Validity has to do with the degree to which test scores provide information that is relevant to the inferences that are to be made from them.



Unified View of Validity

- Validity is not property of an instrument
- Validity is not a binary judgment
  - Gather multiple forms of evidence to make a case validity exists
- Validity is about the appropriateness of the conclusions we draw & decisions we make based on the results
- Construct validity is the overarching “type” of validity

Applying Reliability + Validity Theory

1. Ensure proper alignment of each measure with intended outcome(s)
   - Examples: exam blueprint, analytic rubric with criteria mapped to specific outcome(s)

Applying Reliability + Validity Theory

2. Use multiple measures of the same outcomes

- Ideally, use different types of assessments
- Scores can be correlated (same students) or, at minimum, compared at aggregate level if benchmarks have been established

Applying Reliability + Validity Theory

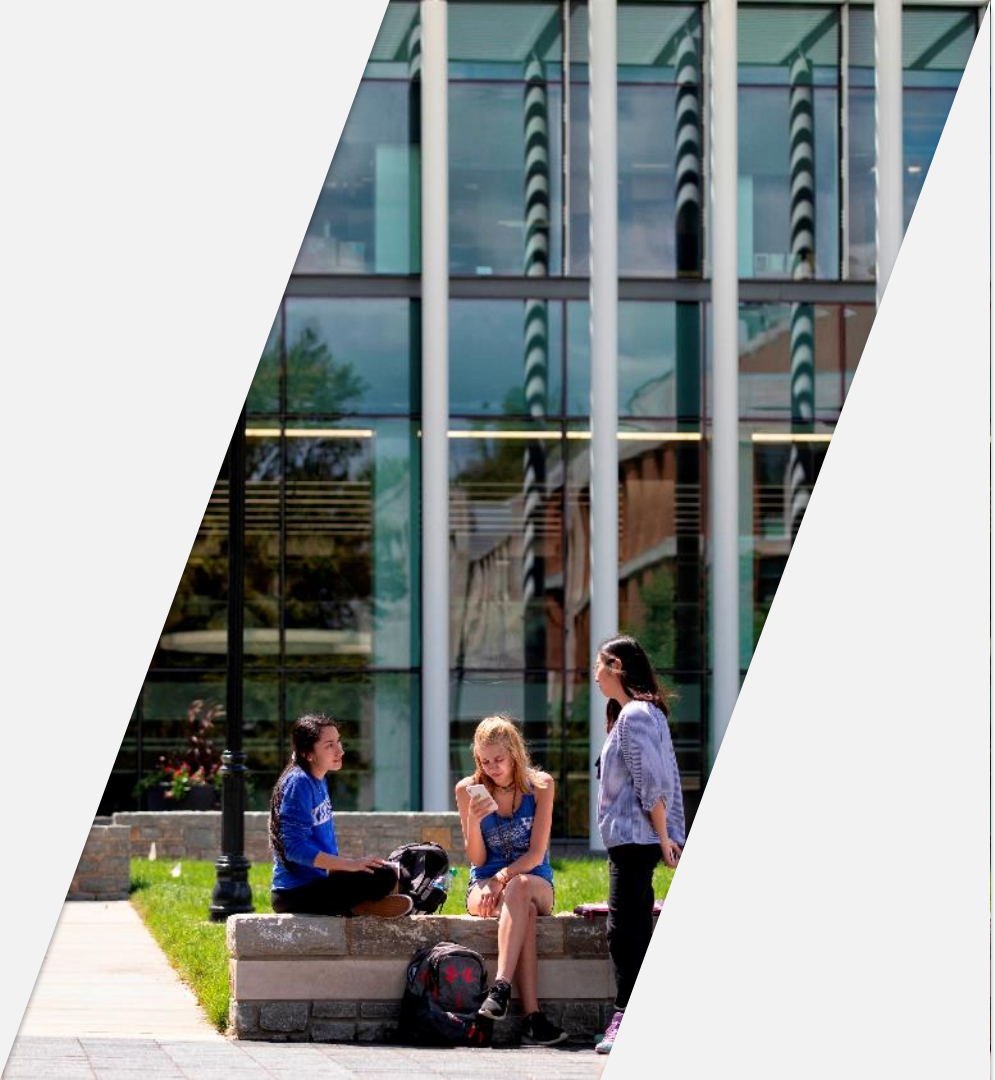
3. Appropriate sampling of student population

- For example, English majors and not History& Philosophy
- Representative of all students in program
- Sufficient number of artifacts

Applying Reliability + Validity Theory

4. Design measures that produce sufficient detail

- Single overall score rarely provides enough insight
- One way to obtain more detail is use an analytic rubric with multiple criteria for each outcome



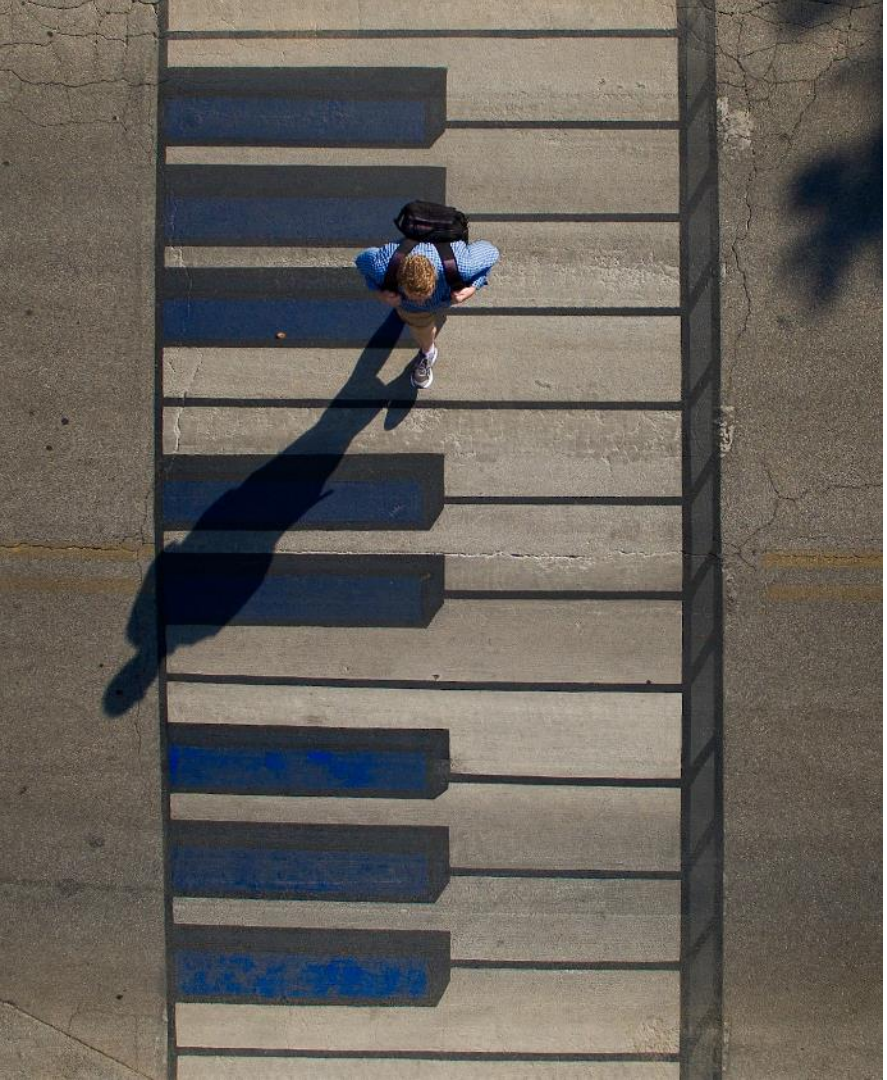
Applying Reliability + Validity Theory

5. Use multiple evaluators for a sample of a performance assessment scored with a rubric

Timeline

Course Considerations

- When is each course from which a measure will be obtained taught?
- How many students are typically enrolled in these courses?
- Are data needed from multiple sections or years of the same course?

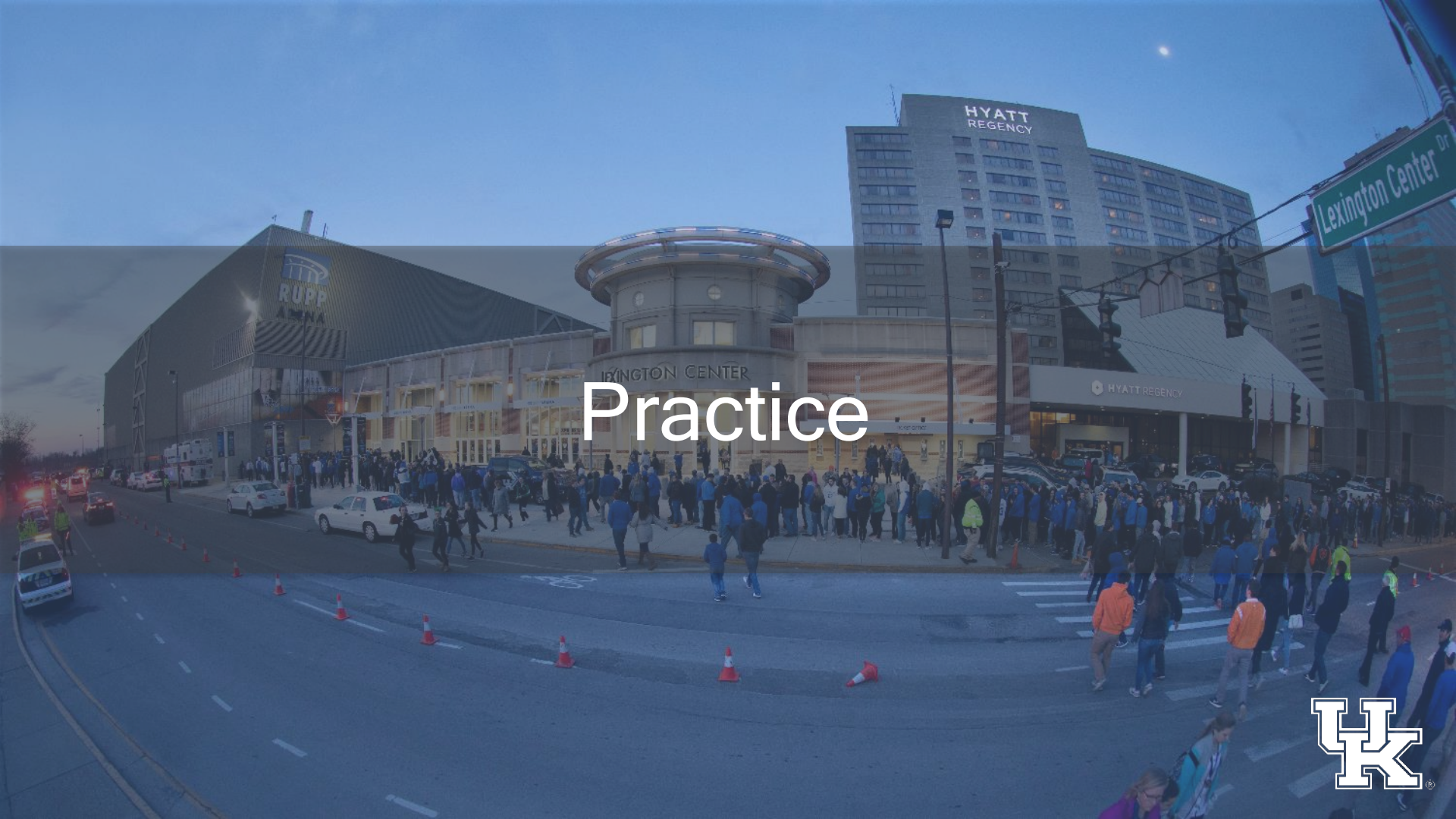


Data Collection

- Should data be collected when available or at end of the year?
- How easy or challenging is it to obtain data for each measure?

Reporting & Review

- How long will it take to analyze the data and create a report?
- With whom should data be shared and when should this occur?
- Who needs to be involved in decision-making?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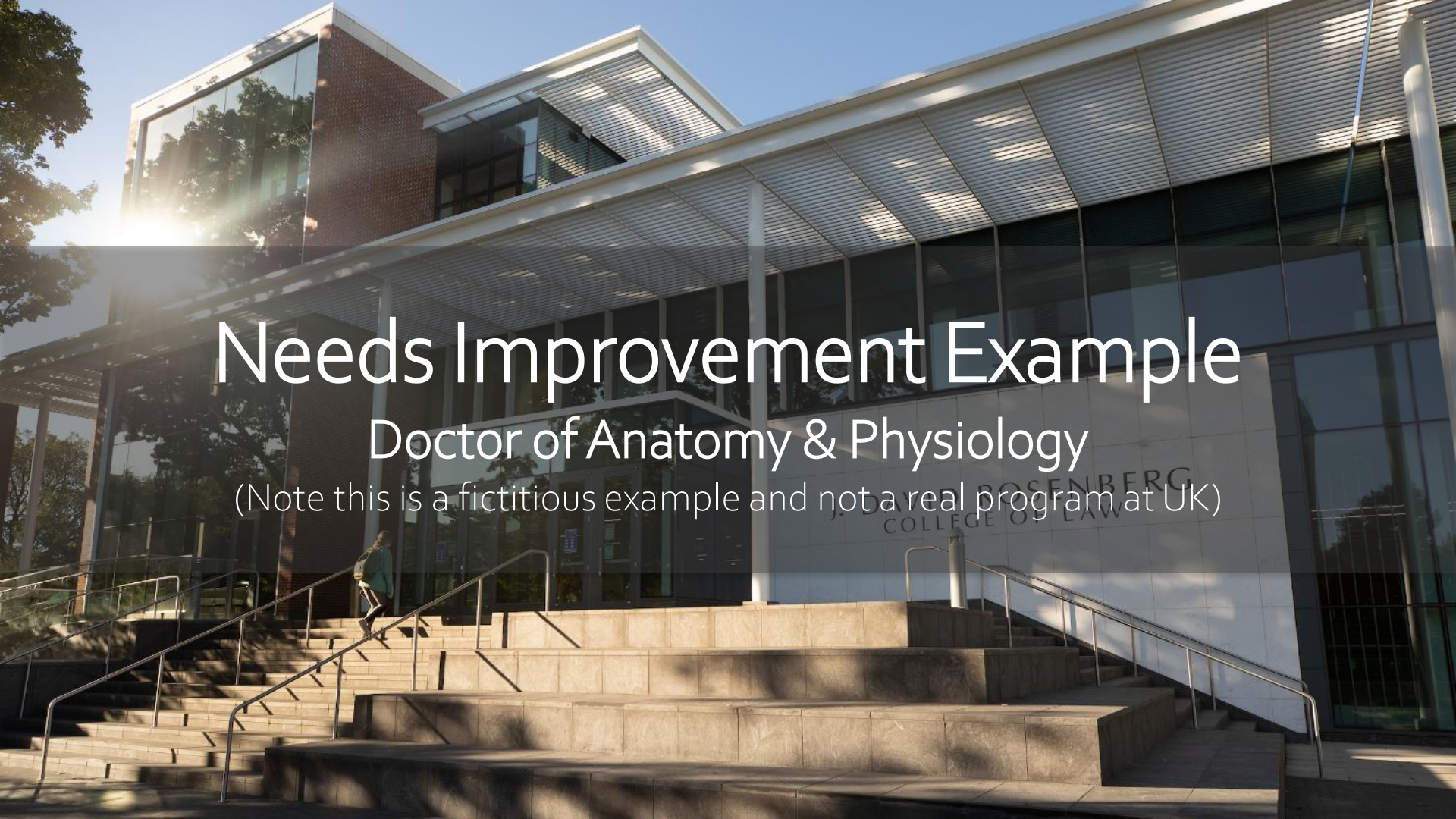
Practice

Good Example

Equine Science



Needs Improvement Example

Doctor of Anatomy & Physiology

(Note this is a fictitious example and not a real program at UK)

Questions?

- Return to your original list of questions from today
- Were any of your questions not answered yet?
- What other questions do you still have?

Thank you!

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Director of Institutional Effectiveness
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REFLECTION WORKSHEET

Fall 2020 PSLO Workshop #1
Developing and Evaluating Learning Outcomes and Curriculum Maps

Identify 2-3 questions that you have about the new program-level student learning outcomes assessment process; developing or revising learning outcome statements (or learning goals); or creating or evaluating a program curriculum map.

Write those questions in the blanks provided below. Return to this worksheet throughout the session to log answers to these questions if they have been addressed. If not, please ask your questions during the Q&A sessions that are built into the workshop or after the session.

Question 1: _____

_____

_____

Answer to Question 1:

Question 2: _____

_____

_____

Answer to Question 2:

REFLECTION WORKSHEET

Fall 2020 PSLO Workshop #1
Developing and Evaluating Learning Outcomes and Curriculum Maps

Answer to Question 2 (continued)

Question 3: _____

Answer to Question 3:

Bloom's Taxonomy of Educational Objectives and Writing Intended Learning Outcomes Statements

Bloom's Original Taxonomy (1956)

Bloom's Original Taxonomy of the Cognitive Domain					
Cognitive Level	**Sample Verbs to Use in Writing Intended Student Learning Outcomes**				
Knowledge	Acquire Choose Count Define Distinguish Fill-in	Find Group Identify Indicate Label List	Locate Match Memorize Name Outline Point	Quote Recall Recite Recognize Record Repeat	Reproduce Select State Tabulate Trace Underline
Comprehension	Associate Change Classify Conclude Compare Contrast Convert Demonstrate Describe Determine	Define Differentiate Discuss Distinguish Estimate Expand Explain Express Extend Extrapolate	Fill in Find Generalize Give examples Group Infer Illustrate Interpolate Interpret Measure	Outline Paraphrase Predict Prepare Put in order Rearrange Recognize Reorder Reorganize Represent	Retell Reword Rewrite Restate Show Simplify Suggest Summarize Transform Translate
Application	Apply Calculate Choose Classify Collect information Compute Construct Convert Differentiate Demonstrate Derive	Determine Develop Discover Discuss Distinguish Employ Estimate Examine Expand Experiment Express in a discussion	Generalize Graph Illustrate Interpret Interview Investigate Locate Make Manipulate Model Modify Operate	Organize Participate Perform Plan Practice Predict Prepare Present Produce Prove Put into action Put to use	Put together Record Relate Restructure Select Show Solve Track Transfer Translate Use Utilize
Analysis	Analyze Categorize Classify Compare Contrast Criticize Debate Deduce	Detect Determine Diagram Differentiate Discover Discriminate Distinguish Divide	Draw conclusions Examine Formulate Generalize Group Identify (parts) Illustrate	Infer Inspect Order Outline Point out Recognize Relate Search	Select Separate Simplify Sort Subdivide Take apart Transform Uncover

Bloom's Original Taxonomy of the Cognitive Domain					
Cognitive Level	**Sample Verbs to Use in Writing Intended Student Learning Outcomes**				
Synthesis	Arrange Blend Build Categorize Combine Compile Compose Constitute Construct Create	Deduce Derive Design Devise Develop Document Explain Form Formulate Generalize	Generate Imagine Integrate Invent Make up Modify Originate Organize Perform Plan	Predict Prepare Prescribe Present (an original work) Produce Propose Rearrange Reconstruct Relate	Reorganize Revise Rewrite Specify Suppose Summarize Synthesize Tell Transmit Write
Evaluation	Appraise Argue Assess Award Choose Compare Conclude	Consider Contrast Criticize Critique Decide Defend Describe	Determine Discriminate Distinguish Evaluate Grade Interpret Judge	Justify Measure Rank Rate Recommend Relate Score	Select Standardize Summarize Support Test Validate Verify

The Revised Bloom's Taxonomy (2001)

Revised Bloom's Taxonomy of the Cognitive Domain					
Cognitive Level	**Sample Verbs to Use in Writing Intended Student Learning Outcomes**				
Remembering	Define Duplicate	Identify List	Name Recall	Recognize Reproduce	Retrieve Tell
Understanding	Calculate Categorize Clarify Classify Compare	Conclude Contrast Describe Discuss Exemplify	Expand Explain Identify Illustrate Infer	Interpret Locate Match Outline Paraphrase	Predict Report Restate Summarize Translate
Applying	Carry out Classify	Demonstrate Execute	Illustrate Implement	Practice Solve	Use Utilize
Analyzing	Appraise Attribute Compare Contrast	Deconstruct Detect Differentiate Discriminate	Distinguish Examine Formulate Infer	Integrate Organize Parse Relate	Select Sequence Structure Test
Evaluating	Appraise Check Coordinate	Critique Defend Detect	Dispute Judge Monitor	Prioritize Rate Reconstruct	Select Support Verify
Creating	Change Combine Compile	Compose Construct Create	Design Formulate Generate	Hypothesize Improve Invent	Plan Predict Produce

FINK'S TAXONOMY (Fink, *Creating Significant Learning Experiences,* 2013)

Example Action Verbs for Each Dimension of Learning

Dimension	Action Verbs				Objects
FOUNDATIONAL KNOWLEDGE – What key information, ideas, perspectives are important for learners to know?					
Understanding and Remembering (developing a full understanding of the concepts associated with a subject to a degree that allows explanations, predictions, etc.)	Associate Compare Contrast Define Describe	Explain Give example Identify Illustrate Indicate	List Name Paraphrase Predict Recite	Recognize Repeat Restate Tell	Facts, concepts, theories, relationships, models, perspectives, structures, organizations, purposes, proposals, problems, results, conclusions, plans
APPLICATION – What kinds of thinking, complex projects, and skills is it important for learners to be able to do/manage?					
Critical Thinking (analyzing and critiquing issues and situations)	Analyze Assess Audit Catalog Categorize Classify Compare	Contrast Decipher Deduce Derive Determine Diagram Differentiate	Dissect Distinguish Examine Formulate Hypothesize Infer Interpret	Label Locate Measure Organize Query Separate Trace	Ideas, issues, situations, proposals, processes, results, conclusions, theories, assumptions
Practical Thinking (developing problem-solving and decision-making capabilities)	Advise Answer Apply Calculate Certify Choose	Consult Debate Decide Determine Diagnose Evaluate	Give evidence Judge Justify Predict Prescribe Propose	Prove Rank Select Solve Suggest Test	Problems, issues, conundrums
Creative Thinking (creating new ideas, products, and perspectives)	Abstract Adapt Amend Author Compose Construct	Convert Create Design Develop Devise Discover	Draw Envision Experiment Fabricate Imagine Improve	Refine Reform Sketch Theorize Transform Write	Ideas, plans, products, objects, premises, perspectives, models, theories
Managing Complex Projects (being able to coordinate and sequence multiple tasks in a single project/case and/or multiple projects/cases)	Administer Assign Coach Communicate Complete Conduct	Coordinate Delegate Develop Evaluate Facilitate Follow Up	Guide Implement Manage Organize Plan Prioritize	Strategize Supervise Summarize Teach Time-line Train	Tasks, timelines, cases, projects
Performance Skills (developing capabilities in carrying out psycho-motor activities)	Conduct Demonstrate Do	Employ Execute Exhibit	Operate Perform Produce	Set up Use	Procedures, routines, processes, maneuvers, interviews
INTEGRATION – What connections should learners be able to recognize and make within and beyond this learning experience?					
Interdisciplinary Learning (connecting ideas, disciplines, perspectives, contexts) **Learning Communities** (connecting people) **Learning and Living/Working** (connecting different realms of life)	Associate Combine Compare	Concept map Connect Contrast	Correlate Differentiate Integrate	Link Relate Synthesize	Ideas, disciplines, perspectives, contexts, people, domains, realms
HUMAN DIMENSION – What should learners learn about themselves and about interacting with others?					
Interpersonal Relationships (with peers, supervisors, patients, others) **Self-Authorship** (learning to create and take responsibility for one's own life) **Leadership** (becoming an effective leader) **Ethics, Character Building** (living by ethical principles) **Multicultural Education** (being cultural-ly sensitive in interactions with others) **Working as a Member of a Team** (knowing how to contribute to a team) **Citizenship** (of one's profession, com-munity, nation state, other political entity) **Environmental Ethics** (having ethical principles in relation to nonhuman world)	Acquire Advise Advocate Balance Be aware of Behave Collaborate Communicate Comply Cooperate Critically reflect Decide to Demonstrate Describe	Educate Embody Empathize Express Feel confident Give feedback Help Influence Initiate Inspire Interact with Involve Lead Mediate	Mobilize Motivate Negotiate Nurture Offer Promote Protect Reconcile Reform Resolve conflict Respect Respond sensitively	See oneself as Serve as role model Settle Share Show Suggest Support Suspend judgment Sustain Take res-ponsibility Unite	Ethics, morality, principles, attitudes, values, beliefs, premises, conflicts; personal, social, cultural, and environmental implications

Example Action Verbs for Each Dimension of Learning (cont.)

Dimension	Action Verbs				Objects
CARING – What changes in learners' feelings, interests, values are important?					
Wanting to Be a Good Learner (wanting to master, achieve high standards) **Becoming Excited About a Particular Activity/Subject** (developing a keen interest) **Developing a Commitment to Live Right** (i.e., deciding to take care of one's health/well-being, live by a certain code)	Agree to Be ready to Commit to Decide to Demonstrate	Develop Discover Explore Express Get excited about	Identify Pledge Recognize value of Renew interest	Revitalize Share State Take time to Value	Attitudes, beliefs, feelings, interests, opinions, values
LEARNING HOW TO LEARN – What should learners learn about learning, engaging in inquiry, and becoming self-directed?					
How to Be a Better Learner (engaging in self-regulated learning or deep learning) **How to Inquire and Construct Knowledge** (how to engage in the scientific method, historical method, other forms of inquiry) **How to Pursue Self-Directed or Intentional Learning** (developing a learning agenda and plan, becoming an intentional learner, becoming skilled in autodidaxy, being a reflective practitioner)	Construct knowledge about Describe how to Develop a learning plan Frame useful questions Generalize knowledge Identify sources and resources Identify your learning style & barriers Identify what you need to know Inquire		Predict performance Reflect Research Self-assess Self-regulate Self-monitor Set a learning agenda Take responsibility for Transfer knowledge		Learning, acquisition of knowledge and skills, self-improvement, self-direction, accountability

Program-level Student Learning Outcomes Assessment Plan Template

Academic Degree Programs

University of Kentucky

INSTRUCTIONS

The faculty of each academic program, degree or certificate, are asked to complete this plan template during the 2019-20 academic year to guide assessment of the program-level student learning outcomes (PSLOs) during the upcoming cycle. Assessment plans are due to the Office of Strategic Planning & Institutional Effectiveness (OSPIE) no later than **April 15, 2020** and should be submitted to the appropriate college and program folder in SharePoint.

A Quick Start Guide and other documentation as well as dates for live training sessions are provided on the OSPIE website. Training resources and session topics range from an overview of the new assessment process to principles and practice for student learning outcome assessment. Questions can be directed to OSPIE staff.

Reading the Quick Start Guide prior to completing the new plan template is strongly encouraged.

ABOUT THE PROGRAM

College or School (*example: College of Arts & Sciences*)	Arts and Sciences
Degree Type (*example: BA or MS*)	BS and BA
Program Name (*example: History*)	Biology

Please provide the mission statement for the program. If one does not currently exist, provide the department or college mission statement.

The mission of the Biology Undergraduate Program is to provide a curriculum that enables and encourages students to learn and apply the fundamental concepts and methods of biology. Students should learn to critically evaluate evidence, formulate and test hypotheses, solve problems, and gather, interpret and discuss scientific data.

(Optional) Include any additional information about the program's history, development, or structure that may be beneficial in understanding the curriculum and how student learning is assessed.

Biology is one of the largest majors at the University of Kentucky (with over 1500 students), and attracts students looking for a broad, rigorous education in the life sciences. Many of our majors are interested in pursuing health-related careers (medicine, pharmacy, veterinary, dental, etc.), but we also attract students interested in careers in scientific research, and those interested in industry jobs or natural resource management. The Biology program offers several unique features, such as the hands-on upper division labs in all of our core courses, the opportunity to get involved in research as soon as the first year of school, and the wide array of research-active labs supervised by faculty offering independent research projects.

In 2008-2009, the Biology Department embarked on an ambitious restructuring of its undergraduate curriculum. First, we developed a new Introductory Biology I course (BIO 148) that introduces the themes of biodiversity, evolution, and Mendelian genetics in the first semester. This course is followed by a systems level exploration of biological complexity in the second semester (BIO 152). Second, we eliminated the typical freshman introductory wet-lab course, which we found to be largely ineffective and a waste of resources, and replaced this with a computer-based "dry" lab course (BIO155) that focuses on the process of science, scientific literacy, and bioinformatics. This change allowed us to shift laboratory resources to all of our sophomore/junior, 300-level core courses, such that we now have hands-on, meaningful laboratory exercises embedded into our Genetics, Cell Biology, Ecology, and Evolution courses. We also added flexibility to the Biology major by introducing a B.A. option (in addition to the B.S. option), which allows students wishing to minor in a non-STEM discipline more room in their course schedule to take coursework related to their minor. To encourage our students to engage in hands-on research experience, we offer the BIO 395 (Mentored Research) course, and allow students to apply up to six credits of independent research towards their upper-level elective requirements. Finally, to help our students tailor their Biology degree to their interests, in 2018 we began offering the option to declare a track within the Biology degree. To complete a track, students must take 12 upper-level elective hours in eligible coursework for that track.

ASSESSMENT CYCLE

All programs that do not have specialized accreditation and are not located in a department/college with a specialized accreditation should follow a 4-year PSLO assessment cycle. Programs that have specialized accreditation(s) or are within a college that has a comprehensive accreditation can develop an alternate PSLO and periodic review cycle in consultation with OSPIE.

Which cycle will the program being using?

☒ 4-year cycle [What does this look like?]

☐ Other (accredited programs/departments only)

If the program has selected "other" for the assessment and periodic review cycle, please append a copy of the proposed cycle and a brief justification to this plan.

ASSESSMENT COORDINATION AND RESOURCES

Individual(s) coordinating program-level student learning outcomes assessment

First and Last Name	Title/Position	Email
Jennifer Osterhage	Assistant Professor/Director of Undergraduate Studies	Jennifer.osterhage@uky.edu

Other individuals providing oversight, coordination, or support for assessment

First and Last Name	Title/Position

Ann Morris	Associate Professor/ Associate Chair for Education
Vincent Cassone	Professor/ Chair

(Optional) Other utilized resources for assessment (e.g. software such as rubrics or portfolios, evaluator stipends, etc.)

The Biology Undergraduate Affairs Committee members will serve as the Assessment Coordination Committee. Other faculty members may participate in the evaluation of student work. See appendices for rubrics utilized.

PROGRAM-LEVEL STUDENT LEARNING OUTCOMES

Please list the program-level student learning outcomes (PSLOs). If applicable, indicate which, if any, outcomes are required by your specialized accreditor(s) [What is this?]. Bachelor's degree programs must also indicate which outcome(s) map to the university's GCCR (Graduation Composition & Communication Requirement). The GCCR is not a requirement for certificates, graduate, or professional programs.

Space for up to 10 PSLOs has been provided below, but this does not imply that 10 outcomes are required. Program faculty should decide the appropriate number based on the design of the curriculum. Most programs have 3-8 outcomes, depending on the length of the program. If more than 10 lines are needed, either insert more lines into the table or submit a request to OSPIE@uky.edu for a template with additional lines for PSLOs.

PSLO #	Program-level Student Learning Outcome Statement (How should these be written?)	Required by Specialized Accreditor(s)?	Mapped to GCCR? (Undg degrees only)
1	**The nature of science** Students will be able to describe how new scientific knowledge is gained. They will be able to implement the scientific method to formulate and test hypotheses. They will be able to distinguish valid scientific evidence from unsubstantiated opinion.	☐	☐
2	**The conceptual foundations and knowledge base of biology** Students will demonstrate a clear understanding of the most important and fundamental theories and ideas in contemporary biology, such as evolution, unity and diversity of life, structure and function, information flow, exchange, and storage; pathways and transformations of energy and matter; and systems.	☐	☐
3	**The collection and analysis of biological data** Students will be able to gather reliable data for specific purposes using established laboratory and field methods. They will be able to analyze their data statistically, present results in tabular and graphical form, and interpret results accurately.	☐	☐

4	**The analysis and integration of scientific research (GCCR)** Students will be able to critically analyze and integrate scientific research in one or more forms of scientific writing (e.g. traditional research paper, review article, or public science piece) and in oral presentations.	☐	☒
5	**The communication of scientific research (GCCR)** Students will be able to present and discuss the concepts, methods, and results of biological research in writing and oral presentations.	☐	☒
6	**The Value of Science** Students will appreciate fundamental scientific values such as the process of scientific inquiry, ethical action in all stages of scientific practice, and connections across disciplines.	☐	☐

Please provide a brief description of the process used to develop or revise current PSLOs and the extent to which program faculty were involved. If applicable, provide discussion of any attempts to align PSLOs with professional or accreditation standards, employer expectations and job skills, graduate program curricula, etc. If PSLOs are taken directly from an accreditor, discuss whether (and how) the PSLO statements were reviewed by the faculty to ensure they were comprehensive.

Our PLSOs were drafted during our 2008-2009 curriculum restructuring. Faculty were extensively involved in the process. In 2016, our PLSOs were revised by the Biology Undergraduate Affairs Committee after consultation with members of OSPIE. The changes were discussed at a faculty meeting in 2016, and feedback from faculty was incorporated into our current PLSOs. Our program has no professional or accreditation standards.

CURRICULUM MAP

Please create a map of the PSLOs to the curriculum. All required courses should be included in the left-hand column, and all PSLOs should span across the remaining columns. If desired, specific elective courses or elective "tracks" can be included (recommended). The purpose of the curriculum map is to show where each PSLO is emphasized within the curriculum. The level at which each PSLO is taught within a given course should be indicated as follows: introductory (I); reinforced (R); or mastery (M). Each PSLO should have at least an instance of I, R, and M across the curriculum, with the exception of certain graduate programs where introductory knowledge is provided at the undergraduate level. For assistance in developing a curriculum map, please visit the OSPIE website or contact the OSPIE team.

Course	PSLO1	PSLO2	PSLO3	PSLO4	PSLO5	PSLO6
BIO 148	I	I				
BIO 152	I	I				
BIO 155	I	I	I	I	I	I
BIO 303	R	R	R	R	R	R
BIO 304	R	R	R	R	R	R
BIO 315		M	M	R	R	R
BIO 350 or 430G	M	M	M	R	R	M
BIO 325	M	M	M	M	R	M
BIO 425	Choose an item.	M	Choose an item.	M	M	M

CHE 105/107/111/113	I	I	Choose an item.	Choose an item.	Choose an item.	Choose an item.
CHE 230/231/232	R	R	R	Choose an item.	Choose an item.	Choose an item.
PHY 211/213	I	I	R	Choose an item.	Choose an item.	Choose an item.
MA 137/138/123	I	I	Choose an item.	Choose an item.	Choose an item.	Choose an item.
STA 296	I	I	Choose an item.	Choose an item.	Choose an item.	Choose an item.
Biology Tracks (Electives)		M	M			M
Biology GCCR elective				M	M	

I = Introduced; indicates that students are introduced to the outcome

R = Reinforced and opportunity to practice; indicates the outcome is reinforced and students afforded opportunities to practice

M = Mastery at the senior or exit level; indicates that students have had sufficient practice and can now demonstrate mastery

ASSESSMENTS

Assessment Instrument/ Measure Name	**PSLO(s) Mapped to**	**Assessment Type** (Direct or Indirect)	**Assessment Instrument/Measure Description** (What is this?)	**Assessment Instrument/Measure Rationale** (What is this?)	**Benchmark or Goal** (If Available) (What is this?)	**Course(s)** (If applicable)	**Rubric or Example Appended?**
Analysis of Lab Reports in BIO 155, BIO 325 and 350	1, 3	Direct	Samples of students' lab reports from three courses, BIO 155 (Introductory Biology Lab I), BIO 325 (Ecology), and BIO 350 (Animal Physiology), were scored by faculty volunteers using the Lab Report rubric (Appendix A). This allows us to directly compare reports from 100-level and 300-level courses. The Lab Report Rubric was developed by the Undergraduate Affairs Committee in 2019.	In each of the laboratory courses included, students gather reliable data for specific purposes using established laboratory and field methods, interpret their data statistically and present results in tabular or graphical form. The lab report rubric directly assesses students' ability to collect, represent and explain these data. The rubric also contains sections to evaluate the students' abilities to formulate and test hypotheses. Analysis of reports from students at the 100- and 300- levels give us a snapshot of student learning at multiple points in our curriculum.	90% of the laboratory reports written by students in 300 level courses will be rated at 3 or above for each category of the rubric	BIO 155 (Introductory Biology I Lab) BIO 325 (Ecology) BIO 350 (Animal Physiology)	

BIO 199 and 395 Poster Presentations	1, 3	Direct	During the UK Showcase of Undergraduate Scholars in faculty members evaluate a random selection of the poster presentations of our BIO 199 (Research Experience in Biology) and BIO 395 (Independent Biology Research) students. Students are evaluated using the rubric attached in three general categories - problem/hypothesis, experimental design/procedures, and results/discussion.	The rubric is directly aligned to components of the scientific method. Specifically, the rubric evaluates students' abilities to clearly state a hypothesis/driving principle, describe experimental design and procedures, and discuss results, including whether or not they support the hypothesis being tested. These are all integral pieces of the scientific method. By assessing the student learning outcome at two points in our curriculum, near the beginning and end, we can obtain a clear picture of the strengths and weaknesses of our program and value added. The weakness of this measure is that not all students complete BIO 199 and BIO 395	85% of BIO 395 students will receive a score of accomplished (3) or exemplary (4) for each section of the rubric and BIO 395 students will have, on average, higher scores than BIO 199 students.	BIO 199 BIO 395	

Exam questions in core courses (BIO 148, 303, 304, and 315)	2	Direct	20-30 question multiple-choice questions were developed by the instructors of the BIO 148, BIO 152, BIO 304, and BIO 315 courses to assess major course concepts. Each question was linked to a component of the PLSO. Pre-assessments will be given during the first week of class and reassessed at the end of the semester. Student performance on each questions of the pre- and post-test will be compared to examine student learning gains.	Measure was chosen because questions are directly linked to course learning outcomes, assess knowledge of the foundational concepts described in PSLO2, and provide an objective measures of student knowledge. The assessment of learning in first-year courses (BIO 148 and 152) and in a second or third year course (BIO 303, 304, 315) is advantageous because we can measure student learning in real time as they progress through the curriculum and address strengths and weaknesses in these courses as they are identified.	Students will average above 70% correct for each question assessed	BIO 148 (Introductory Biology I) BIO 152 (Introductory Biology II) BIO 303 (Evolution) BIO 304 (Genetics) BIO 315 (Cell Biology)	☒
BIO 425 Capstone Exam/Instrument	2, 6	Direct and Indirect	25 question multiple-choice exam developed and administered in our capstone seminar BIO 425 (Seminar) course. The assessment	The assessment instrument designed for and administered to our upper-level majors in BIO 425 is well-aligned with the PSLO	85% of students will score above 70% on the assessment	BIO 425	☒

			instrument was developed by the Undergraduate Affairs Committee in August 2015. The first 20 questions were designed to test core concepts directly pertaining to the PSLO that were addressed and reinforced through multiple courses in the curriculum. Many of the questions addressed common misconceptions identified in earlier courses. The last five questions on the assessment instrument are indirect measures to assess students' values in relation to connections between disciplines and their ability to distinguish scientific evidence from opinion.	and addresses concepts that are reinforced at multiple points in the curriculum. We will implement the exam as part of BIO 425 because the course is required, serves as a capstone experience, and is usually taken during a student's senior year (77% seniors enrolled in the course).			
Plagiarism/Ethics quiz in BIO 155 and BIO 350	6	Indirect	After a lesson in plagiarism and ethical practices, students completed a quiz in BIO 155 and BIO 350. Questions assessed the				☒

			ability of students to recognize plagiarism and unethical scientific practice				
BIO 350 Exam Questions	1	Direct	As part of an exam in the course, students are asked the following 5 questions: 1. What is science? 2. What are the goals of scientific inquiry? 3. How is scientific knowledge gained? 4. How are new scientific discoveries integrated into existing knowledge? 5. Why is saying something is "just a theory" not correct in the context of what you understand about the scientific process? Answers to these questions will be scored against a rubric that was developed by the Undergraduate Affairs Committee based on the position statement on the	The measure is directly aligned with the PSLO and provides an objective measure of students' understanding of the scientific method. Specifically, these questions were developed and evaluated by our Undergraduate Affairs Committee based on the National Science Teachers' Association position statement on the Nature of Science. Therefore, we believe that analysis of these questions directly measures students' understanding of the scientific method as defined by a national organization.	75% of students will score	BIO 350	☐

			Nature of Science by the National Science Teachers' Association.				
Analysis of Written Assignments in GCCR-approved courses	1, 4, 5	Direct	A sample of student writing assignments representing at least 25% of majors will be chosen randomly from the 8 GCCR-approved courses. All eight courses will be represented. Artifacts will be scored using the modified Written Communication VALUE rubric.	The rubric was modified to measure students' ability to distinguish valid scientific evidence from unsubstantiated opinion and to critically analyze and integrate scientific evidence.	85% of BIO students will receive a score of accomplished (3) or exemplary (4) for each section of the rubric	GCCR approved courses (8 total)	☒
Analysis of Oral presentations in BIO 425	1, 4, 5	Direct	A sample of student oral presentations representing at least 25% of majors will be chosen randomly from BIO 425 sections. Presentations will be scored by the course instructor using the modified Oral Communication VALUE rubric.	The rubric was modified to measure students' ability to distinguish valid scientific evidence from unsubstantiated opinion and to critically analyze and integrate scientific evidence.	85% of BIO 395 students will receive a score of accomplished (3) or exemplary (4) for each section of the rubric	BIO 425	

Percentage of graduating seniors participating in independent research	6	Indirect	Determine whether each graduating senior participated in independent research (BIO 394, 395, 397, 398) through an analysis of student schedules.	Analysis of the percentage of graduating seniors who participate in independent research is a direct measure for the last component of PSLO #3 (Students will have the opportunity to conduct independent research in biological laboratories).	50% of graduating seniors will complete independent research	BIO 394 BIO 395 BIO 397 BIO 398	☐

Analysis of oral presentations (GCCR)	4, 5	Direct	Samples of student oral presentations from BIO 425 were scored by course instructors using the Oral Communication Rubric. The rubric was designed by the Director of Undergraduate Studies (DUS) in Biology in consultation with the Undergraduate Affairs Committee (UAC). It is modified from the Oral Communication VALUE rubric	The criteria evaluated by the rubric is directly linked to the PSLOs and oral GCCR requirement.	75% of students will achieve at least Level 3 for all categories of the Oral Communicati on Rubric.	BIO 425	☒
Grades in GCCR courses	4, 5	Indirect	Determine the number of students earning an average grade of C or better on designated GCCR assignments	This measure ensured that the GCCR grade requirements are being fulfilled.	95% of all students will earn a C or better on GCCR assignments		☒
Percentage of students presenting research and/or authoring a publication	6	Indirect	Determine whether each graduating senior presented research at a conference or was listed as an author on a publication.				☐

ASSESSMENT REPORTING CYCLE

Please complete the chart below by providing the requested information for each learning outcome. Note: space for up to 10 PSLOs has been provided. If space for additional PSLOs are needed, either insert additional rows into the table or contact the OSPIE staff to receive a customized template.

PSLO #	Semester/ Year(s) Data Collected	Year(s) Results Submitted to OSPIE (see Results Report Definition)	Year(s) Reflection Report Submitted to OSPIE (see Reflection Report Definition)	Year(s) Action Report Submitted to OSPIE (see Action Report Definition)
1	Fall 2020	Summer 2021	Summer 2023	Summer 2024
2	Fall 2020	Summer 2021	Summer 2023	Summer 2024
3	Fall 2020	Summer 2021	Summer 2023	Summer 2024
4	Fall 2021	Summer 2022	Summer 2023	Summer 2024
5	Fall 2021	Summer 2022	Summer 2023	Summer 2024
6	Fall 2021	Summer 2022	Summer 2023	Summer 2024

FEEDBACK AND SUPPORT ON PSLO ASSESSMENT PLAN

Each program has the option of receiving formative feedback on its new or revised PSLO assessment plan from OSPIE staff members. OSPIE staff can provide suggestions for improvement to learning outcome statements, overall assessment plan design, curriculum mapping, standard setting, individual assessment tools, etc. If your program would like to receive feedback on its assessment plan, please indicate below:

☐ Yes, we would like to receive feedback.

☐ No thank you, not at this time.

If there are questions the program director or faculty did not have the opportunity to ask prior to submission of the PSLO assessment plan, and you would like to schedule a brief consultation with OSPIE staff, please indicate below:

☐ Yes, we would like to schedule an individual or group consultation.

☐ No thank you, not at this time.

Program-level Student Learning Outcomes Assessment Plan Template

Academic Degree Programs
University of Kentucky

INSTRUCTIONS

The faculty of each academic program, degree or certificate, are asked to complete this plan template during the 2019-20 academic year to guide assessment of the program-level student learning outcomes (PSLOs) during the upcoming cycle. Assessment plans are due to the Office of Strategic Planning & Institutional Effectiveness (OSPIE) no later than **June 15, 2020** and should be submitted to the appropriate college and program folder in SharePoint.

A Quick Start Guide and other documentation as well as dates for live training sessions are provided on the OSPIE website. Training resources and session topics range from an overview of the new assessment process to principles and practice for student learning outcome assessment. Questions can be directed to OSPIE staff.

Reading the Quick Start Guide prior to completing the new plan template is strongly encouraged.

ABOUT THE PROGRAM

College or School (*example: College of Arts & Sciences*) College of Agriculture, Food and Environment

Degree Type (*example: BA or MS*) BS

Program Name (*example: History*) Community and Leadership Development (CLD)

Please provide the mission statement for the program. If one does not currently exist, provide the department or college mission statement.

The Bachelor of Science in Community & Leadership Development prepares students to be professionals who engage in communities of place, practice, interest, and identity through diverse modalities of education, leadership, and communication.

(Optional) Include any additional information about the program's history, development, or structure that may be beneficial in understanding the curriculum and how student learning is assessed.

Formed in the College of Agriculture in 2002, the Department of Community & Leadership Development brought faculty from rural sociology, agricultural education, agricultural communication, and program-and-staff development together in one unit. Our faculty has strong disciplinary training in such fields as communication, education, geography, anthropology, and rural sociology and takes pride in their disciplinary homes. The BS-CLD reflects our commitment to developing and empowering students through multidisciplinary, applied social science courses. As of January 2020, there are 145 majors, which makes CLD the sixth largest among 19 major programs available in the College of Agriculture, Food, and Environment.

ASSESSMENT CYCLE

Program-level Student Learning Outcomes Assessment Plan Template

Academic Degree Programs
University of Kentucky

All programs that do not have specialized accreditation and are not located in a department/college with a specialized accreditation should follow a 4-year PSLO assessment cycle. Programs that have specialized accreditation(s) or are within a college that has a comprehensive accreditation can develop an alternate PSLO and periodic review cycle in consultation with OSPIE.

Which cycle will the program being using?

☒ 4-year cycle [What does this look like?]

☐ Other (accredited programs/departments only)

If the program has selected "other" for the assessment and periodic review cycle, please append a copy of the proposed cycle and a brief justification to this plan.

ASSESSMENT COORDINATION AND RESOURCES

Individual(s) coordinating program-level student learning outcomes assessment

First and Last Name	Title/Position	Email
Keiko Tanaka	Director of Undergraduate Studies	ktanaka@uky.edu

Other individuals providing oversight, coordination, or support for assessment

First and Last Name	Title/Position
Denise Nally	Staff Support Associate I

(Optional) Other utilized resources for assessment (e.g. software such as rubrics or portfolios, evaluator stipends, etc.)

Qualtrics for submitting assessment scores by anonymized reviewers; Canvas to train external evaluators for CLD 497 posters and presentations.

PROGRAM-LEVEL STUDENT LEARNING OUTCOMES

Please list the program-level student learning outcomes (PSLOs). If applicable, indicate which, if any, outcomes are required by your specialized accreditor(s) [What is this?]. Bachelor's degree programs must also indicate which outcome(s) map to the university's GCCR (Graduation Composition & Communication Requirement). The GCCR is not a requirement for certificates, graduate, or professional programs.

Space for up to 10 PSLOs has been provided below, but this does not imply that 10 outcomes are required. Program faculty should decide the appropriate number based on the design of the curriculum. Most programs have 3-8 outcomes, depending on the length of the program. If more than 10 lines are needed, either insert more lines into the table or submit a request to OSPIE@uky.edu for a template with additional lines for PSLOs.

PSLO #	**Program-level Student Learning Outcome Statement** (How should these be written?)	**Required by Specialized Accreditor(s)?**	**Mapped to GCCR?** (Undg degrees only)
	Students completing the undergraduate program in Community and Leadership Development (CLD) will:	☐	☐
1	Synthesize theories and concepts associated with community and leadership development by: (a) interpreting the key concepts such as community, leadership, learning, communication, education, and development;(b) comparing social science theories on such concepts as power, inequality, justice, conflict, order, change, diversity, and engagement; (c) analyzing institutional processes critical in community development and change (e.g., policy-making, taxes, block grants, decision-making); and (d) applying social science theories and concepts to solve challenges common in communities.	☐	☐
2	Implement methods of science-based inquiry on issues concerning community and leadership development by: (a) developing community-based research proposals, evaluation plans, or research paper; (b) applying community-engaged methodology to a project; (c) assessing and applying ethical concerns and standards in the professional	☐	☐

PSLO #	Program-level Student Learning Outcome Statement (How should these be written?)	Required by Specialized Accreditor(s)?	Mapped to GCCR? (Undg degrees only)
	context; and (d) demonstrating social science research skills (e.g., information and media literacy, research paper writing, citations).		
3	Apply community engagement strategies to work for, with, and in the diverse communities of place, practice, interest, and identities.	☐	☐
4	Create effective oral, written, and digital communication by: (a) developing and critiquing communication materials; (b) producing effective visual and oral presentations; and (c) demonstrating competency in academic or professional writing.	☐	☒

Please provide a brief description of the process used to develop or revise current PSLOs and the extent to which program faculty were involved. If applicable, provide discussion of any attempts to align PSLOs with professional or accreditation standards, employer expectations and job skills, graduate program curricula, etc. If PSLOs are taken directly from an accreditor, discuss whether (and how) the PSLO statements were reviewed by the faculty to ensure they were comprehensive.

Our discussion on the revised PSLOs began at the CLD Undergraduate (UG) Committee in August 2019. The CLD UG Committee met every other week to draft the new mission statement and the revised PSLOs. The CLD faculty has been informed at the monthly department meeting on the progress of PSLO revisions. At the October and November meetings, the faculty members discussed and finalized the mission statement and PSLOs. All CLD instructors, both faculty and non-faculty instructors, participated to draft the curriculum map. The first draft of the entire CLD PSLO Assessment Plan was presented at the February department meeting. In early March, two morning meetings were held to further revise the curriculum map and PSLOs. The CLD Department approved the final version at the departmental meeting on April 17, 2020.

CURRICULUM MAP

Please create a map of the PSLOs to the curriculum. All required courses should be included in the left-hand column, and all PSLOs should span across the remaining columns. If desired, specific elective courses or elective "tracks" can be included (recommended). The purpose of the curriculum map is to show where each PSLO is emphasized within the curriculum. The level at which each PSLO is taught within a given course should be indicated as follows: introductory (I); reinforced (R); or mastery (M). Each PSLO should have at least an instance of I, R, and M across the curriculum, with the exception of certain graduate programs where introductory knowledge is provided at the undergraduate level. For assistance in developing a curriculum map, please visit the OSPIE website or contact the OSPIE team.

Course	PSLO1a	PSLO1b	PSLO1c	PSLO1d	PSLO2a	PSLO2b	PSLO2c	PSLO2d	PSLO3	PSLO4a	PSLO4b	PSLO4c
Core Courses												
CLD 260	I/R	I		I/R		I	I	I	I/R	I	I	I
CLD 305	R	R	R	R	I/R	I/R	I/R	R	R	R		R
CLD 320	I	I		I					I	I	I	I
CLD 362							I			I/R	I/R	I/R
CLD 370	R	R		R	R					R		
CLD 430	R		R	R	R	R			R		R	
CLD 490	M	M	M	M	M	M	M	M	M	M	M	M
CLD 497									M	M	M	M
Elective Courses												
CLD 102[1]	I	I	I	I	I	I	I	I	I	I	I	I
CLD 325	R									R/M	R/M	R/M
CLD 380[2]	I/R	I/R	I/R	I/R				I/R		R	R	R
CLD 400	R/M									R/M	R/M	R/M
CLD 402	I	I					I			I/R	I/R	I/R
CLD 404	R	R					R			R	R	R
CLD 420	R									R/M	R/M	R/M
CLD 478				R		R	R		R	R	R	R
CLD 560		M	R/M	R/M	M	M		R/M		R/M	R	R

Notes: [1]CLD 102 satisfies UK Core-Social Science. [2]CLD 380 satisfies UK Core-Global Dynamics.
I = Introduced; indicates that students are introduced to the outcome
R = Reinforced and opportunity to practice; indicates the outcome is reinforced and students afforded opportunities to practice
M = Mastery at the senior or exit level; indicates that students have had sufficient practice and can now demonstrate mastery

ASSESSMENTS

Please complete the chart below by listing each assessment on a separate row, and including the requested information. Except for outcomes that focus on students' values or beliefs, at least 1 assessment should be direct. Ideally, all outcomes should have at least 2 assessments. If available, append a copy of the assessment measure/instrument (e.g. scoring rubric or sample questions) to this report. If a goal/target has already been set or can be set for a given measure/instrument, this should be included in the table. Otherwise, the program will need to determine and specify a target/goal when results are first reported for that instrument/measure. Note: space for only 15 instruments/measures have been provided. If space for additional assessment instruments/measures are needed, either insert additional rows into the table or contact OSPIE staff to receive a customized template with additional lines.

Assessment Instrument/ Measure Name	**PSLO(s) Mapped to**	**Assessment Type** (Direct or Indirect)	**Assessment Instrument/Measure Description** (What is this?)	**Assessment Instrument/Measure Rationale** (What is this?)	**Benchmark or Goal** (If Available) (What is this?)	**Course(s)** (If applicable)	**Rubric or Example Appended?**
CLD 305 Final grant proposals (Year 1, Fall)	1abcd, 2abcd	Direct	Students individually complete the final grant proposals, which is 15 double-spaced pages in length. Papers are scored by the course instructor(s) using a standard rubric developed by the CLD UG Committee. A sample of 10-12 papers will be selected from the section taught in the fall semester of 2020 and scored by the instructor. Non-CLD majors will be excluded from the results. From the sample, 5 will be scored by two external reviwers to determine interrater agreement.	This measure was selected for three reasons. First, it satisfies the Composition component of Graduation Composition and Communication (GCCR) requirement. Second, the assignment requires students to design a community-based project that synthesizes theories and concepts in CLD and justify using the data from scientific-based inquiry. Third, this is one of the most challenging courses for CLD majors. The CLD UG Committee considers the assessment of this course will help redesigning this course. Each proposal is 15 pages long. The average annual enrollment in CLD 305 over the last three years is 48. Our sample size represents 25% of the CLD majors enrolled in this course in a year	75% of students will score 3.0 or better out on each criterion (on a 4-point scale)	CLD 305: Research Methods in Community & Leadership Development	☐

Assessment Instrument/ Measure Name	PSLO(s) Mapped to	Assessment Type (Direct or Indirect)	Assessment Instrument/Measure Description (What is this?)	Assessment Instrument/Measure Rationale (What is this?)	Benchmark or Goal (If Available) (What is this?)	Course(s) (If applicable)	Rubric or Example Appended?
CLD 490 Portfolio with selected individual and group assignments (Year 1, Spring)	1abcd, 2abcd	Direct	For assessment, we wil use students' "portfolios" which include a series of individual (e.g., reflections, self-assessment narratives) and group (e.g., reports, presentations) assignments in the course. The instructor(s) will select which assignments to be included in the portfolio. In consultation with the instructor, the CLD Undergraduate Committee will develop rubrics to assess a sample of these portfolios. We will treat each portfolio as an artifact rather than treating each assignment within the portfolio as an independent artifact. On average, 40 students enroll in CLD 490 per year. We will sample 10 portfolios from the section taught in the spring semester of 2021, which are scored by the instructor. From the sample, 5 will be assessed by an external reviewer to determine interrater agreement.	CLD 490 is one of the two required senior capstone courses in the curriculum. Only CLD majors are enrolled. All majors take this course in the last semester before their graduation. The portfolio consists of a series of individual and group assignments. The course serves as an effective instrument to evaluate each student's outcome from the curriculum. This measure provides evidence of student achievement at the end of program and multiple criteria on rubric align directly to all the SLOs. Over the last three years, this course has been taught by different faculty members and undergone several changes. The CLD UG Committee hopes to use assessment results to recommend a set of further revisions for the course in order to strengthen its role in the curriculum.	85% of students will score 3.0 or better out on each criterion (on a 4-point scale).	CLD 490: Senior Capstone Seminar in Community & Leadership Development	☐

Assessment Instrument/ Measure Name	PSLO(s) Mapped to	Assessment Type (Direct or Indirect)	Assessment Instrument/Measure Description (What is this?)	Assessment Instrument/Measure Rationale (What is this?)	Benchmark or Goal (If Available) (What is this?)	Course(s) (If applicable)	Rubric or Example Appended?
CLD 260: Individual writing assignments (Year 2, Fall)	3, 4abc	Direct	Students individually complete several writing assignments (the number may vary among instructors). In consultation with the instructors, the CLD UG Committee will select the writing assignment to be used for assessent. All assignments, submitted by CLD majors will be scored by the instructors using a standard rubric developed by the CLD UG Committee in consultation with the instructors. Expected sample will be between 25-30 over two sections taught in the fall semester of 2021. This represents rougly a half of all CLD majors enrolled in CLD 260 in a given academic year.	CLD 260 serves as the most critical introductory course in this curriculum. Both CLD majors and minors are required to take this course. Since each instructor use different assignments, the selection for an assignment to be used for assessment requires consulation with the both instructors teaching CLD 260 in the fall of 2021. Annually, approximately 120 students are enrolled in the course, of which a half are CLD majors. The sample size of 25-30 represents approximately a half of the CLD majors taking CLD 260 in a given year. To determine interrater agreement, an external reviewer will score 5 assignments from the sample.	60% of students will score 3.0 or better out on each criterion (on a 4-point scale)	CLD 260: Community Portraits	☐

Assessment Instrument/ Measure Name	PSLO(s) Mapped to	Assessment Type (Direct or Indirect)	Assessment Instrument/Measure Description (What is this?)	Assessment Instrument/Measure Rationale (What is this?)	Benchmark or Goal (If Available) (What is this?)	Course(s) (If applicable)	Rubric or Example Appended?
CLD 497 Final Practicum Poster & Presentation (Year 2, Spring)	3, 4abc	Direct	Students individually complete the final posters and present them at the Academic Showcase in the final week in the Spring semester. Posters are scored by evaluators for their oral and visual qualities, using standard rubrics (one for oral, the other for visual) developed by the CLD UG Committee. No sampling will be done.	This is the final product of one of the two required senior capstone courses in the curriculum. Only CLD majors are enrolled. All majors take this course in the last spring semester before their graduation. Their posters are presented in the event which brings about 70+ participants, including CLD faculty members, MS-CLD students, and students' practicum supervisors and parents. This measure provides evidence of student achievement near end of program and multiple criteria on rubric align directly to outcomes 3 and 4. For the last three years, external evaluators (CLD instructors, MS-CLD students) have been used to assess the quality of posters and presentations. We have been using the attached rubrics since the spring semester of 2018. For the 2021-22 academic year, in collaboration with the course instructor, the CLD-UG Committee will develop a Canvas-based training program to all evaluators.	85% of students will score 3.0 or better out on each criterion (on a 4-point scale)	CLD 497: Senior Capstone Practicum in Community & Leadership Development	☒

ASSESSMENT REPORTING CYCLE

Please complete the chart below by providing the requested information for each learning outcome. Note: space for up to 10 PSLOs has been provided. If space for additional PSLOs are needed, either insert additional rows into the table or contact the OSPIE staff to receive a customized template.

PSLO #	Semester/ Year(s) Data Collected	Year(s) Results Submitted to OSPIE (see Results Report Definition)	Year(s) Reflection Report Submitted to OSPIE (see Reflection Report Definition)	Year(s) Action Report Submitted to OSPIE (see Action Report Definition)
1	Fall 2020 (CLD 305) Spring 2021 (CLD 490)	Summer 2021	Summer 2023	Summer 2024
2	Fall 2020 (CLD 305) Spring 2021 (CLD 490)	Summer 2021	Summer 2023	Summer 2024
3	Fall 2021 (CLD 260) Spring 2022 (CLD 497)	Summer 2022	Summer 2023	Summer 2024
4	Fall 2021 (CLD 260) Spring 2022 (CLD 497)	Summer 2022	Summer 2023	Summer 2024

FEEDBACK AND SUPPORT ON PSLO ASSESSMENT PLAN

Each program has the option of receiving formative feedback on its new or revised PSLO assessment plan from OSPIE staff members. OSPIE staff can provide suggestions for improvement to learning outcome statements, overall assessment plan design, curriculum mapping, standard setting, individual assessment tools, etc. If your program would like to receive feedback on its assessment plan, please indicate below:

☒ Yes, we would like to receive feedback.

☐ No thank you, not at this time.

If there are questions the program director or faculty did not have the opportunity to ask prior to submission of the PSLO assessment plan, and you would like to schedule a brief consultation with OSPIE staff, please indicate below:

☒ Yes, we would like to schedule an individual or group consultation.

☐ No thank you, not at this time.

CLD 497 Senior Practicum in Community & Leadership Development

Final Oral Presentation Judging Sheet Judge's Name: _____

This is a cooperative educational program between the Community and Leadership Development (CLD) majors at the University of Kentucky and approved employers who furnish facilities and instruction that help students acquire the skills and knowledge required in their chosen field. Between January 15 and April 29, 2020, students were asked to work on a "project", designed with your supervisor, over the minimum of 150 hours service at this practicum site. In the presentation, students were instructed to give a 5-minute presentation about their project on the following elements: (a) What is the project about? (b) What objectives/goals did the project try to achieve? (c) How was the project implemented? (d) What adjustments were made to address/overcome challenges encountered? (e) What lessons were learned from the project?

Criteria				
Is this presentation effective in communicating to multiple audiences what this student aimed to achieve from his/her practicum project? (10 points)				
Is this presentation effective in communicating to multiple audiences what this student did in his/her practicum project? (10 points)				
Is this presentation effective in communicating to multiple audiences what this student learned from his/her practicum project? (10 points)				
Is this presentation effective in maintaining his/her audience's attention? (5 points)				
Are good language skills used? (5 points)				
Does the student show poise in delivering this presentation? (5 points)				
Is this presentation delivered smoothly without any interruptions? (5 points)				
Does this presentation include the information required? (5 points)				
Is length of this presentation meets the assigned time limit? (5 points)				
Is information presented in a logical sequence? (10 points)				
Is information presented in a logical sequence? (10 points)				
Based on this presentation, did this student make sufficient progress toward meeting his/her goals/objectives of this practicum project? (20 points)				
TOTAL				

Please add your comments on the back/next page of this form.

COMMENTS.

CLD 497 Senior Practicum in Community & Leadership Development

Final Visual Poster Judging Sheet Judge's Name: _____

This is a cooperative educational program between the Community and Leadership Development (CLD) majors at the University of Kentucky and approved employers who furnish facilities and instruction that help students acquire the skills and knowledge required in their chosen field. Between January 15 and April 29, 2020, students were asked to work on a "project", designed with your supervisor, over the minimum of 150 hours service at this practicum site. On this poster, students were instructed to include the following elements, though these elements did not need to be used as "headings": (a) project title, practicum site name, student name, and supervisor name; (b) a very brief overview of your partner organization; (c) objectives or goals of the project; (d) approaches and activities used to achieve objectives/goals; (e) key challenges faced and adjustments made; and (f) key achievements and lessons. Posters must include both texts and images to communicate their key points.

Rank	**Student's Name**	***Effective information communication about practicum experience***				***Effective visual organization of information*** (10 points)	**TOTAL POINTS**
		What this student's goals in his/her project (10 points)	What this student did to achieve those goals (10 points)	What this student accomplished (10 points)	What this student learned from this experience (10 points)		

Please add your comments on the back/next page of this form.

Program-level Student Learning Outcomes Assessment Plan Template

Academic Degree Programs

University of Kentucky

INSTRUCTIONS

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A Quick Start Guide and other documentation as well as dates for live training sessions are provided on the OSPIE website. Training resources and session topics range from an overview of the new assessment process to principles and practice for student learning outcome assessment. Questions can be directed to OSPIE staff.

Reading the Quick Start Guide prior to completing the new plan template is strongly encouraged.

ABOUT THE PROGRAM

College or School (*example: College of Arts & Sciences*)	College of Agriculture, Food and Environment
Degree Type (*example: BA or MS*)	BS
Program Name (*example: History*)	Equine Science and Management

Please provide the mission statement for the program. If one does not currently exist, provide the department or college mission statement.

UK Ag Equine Programs serves as the front door to equine work being done at UK, representing the breadth and depth of all things equine in the college. It exemplifies the college's long-term commitment to serving the equine industry and horse enthusiasts regionally, nationally and internationally. The mission of the program is to discover, share and apply new knowledge on the health, performance and management of horses, enhancing the signature status of Kentucky's equine industry.

(Optional) Include any additional information about the program's history, development, or structure that may be beneficial in understanding the curriculum and how student learning is assessed.

The University of Kentucky's Equine Science and Management undergraduate degree program is one of three pillars of equine excellence in the College of Agriculture, Food and Environment's Equine Programs. Education, research and extension/outreach are the hallmarks of a land-grant institution and equine programming at UK checks each of those boxes with robust offerings.

The Equine Science and Management program is one of only three standalone four-year equine undergraduate programs connected to a land-grant university in the U.S. All students are required to take courses in the major, which provide a strong foundation in equine science, management and business. Additionally, they can customize their education through at least one of the three emphasis areas available in the major: equine science; equine management and industry; and communications and leadership.

The emphasis area of equine science will provide students with a strong background in basic sciences, preparing them for admission and success in graduate or professional school programs, including pre-vet, pre-med, pre-dentistry, as well as careers in such areas as laboratory research assistants, breeding technicians, pharmaceutical sales representatives or technical representatives for the feed industry.

In equine management and industry, students learn skills related to marketing, operations and management of equine businesses. This will prepare individuals for careers as farm managers, business managers for equine enterprises, breed associations and sales associates. This emphasis area also introduces students to the diversity of the equine industry through courses in equine law, sales, careers, event planning, marketing and human resources.

The communications and leadership emphasis area is suited for students who are interested in leadership roles in business, breed associations or non-profit equine organizations and cooperative extension. They will enhance their communication skills and be required to take courses in community dynamics, leadership development and agriculture communication.

In addition, students have many opportunities for career and industry growth outside the classroom via academic enrichment in internships or study abroad options, leadership via the program's student ambassador program – Wildcat Wranglers – or participation on one of nine equine clubs and teams.

Students have multiple opportunities to apply learning in work-relevant contexts. The required 150-hour internships, as well as internships students complete outside of curricular requirements, prepare students for work either directly in the equine industry or in affiliated careers. In addition to the internships, there are numerous other interactions with employers, such as the job-shadowing assignment, attending industry events and hosting guest speakers. Career development begins with a strengths assessment during freshman year and progresses through a path to professionalism outlined by the program for the subsequent years.

The Equine Science and Management program recently became one of 10 signature programs in Kentucky to become certified in the Essential Employability Qualities program. The program is required to collect assessment data for the Essential Employability Qualities (EEQ) program and therefore will be collecting additional data throughout the year in addition to the regular program-level SLO data. A plan has been put in place in conjunction with our Program Level SLO assessment plan.

ASSESSMENT CYCLE

All programs that do not have specialized accreditation and are not located in a department/college with a specialized accreditation should follow a 4-year PSLO assessment cycle. Programs that have specialized accreditation(s) or are within a college that has a comprehensive accreditation can develop an alternate PSLO and periodic review cycle in consultation with OSPIE.

Which cycle will the program being using?

☒ 4-year cycle [What does this look like?]

☐ Other (accredited programs/departments only)

If the program has selected "other" for the assessment and periodic review cycle, please append a copy of the proposed cycle and a brief justification to this plan.

ASSESSMENT COORDINATION AND RESOURCES

Individual(s) coordinating program-level student learning outcomes assessment

First and Last Name	Title/Position	Email
Kristen Wilson, M.S.	Academic Coordinator	Kristen.wilson@uky.edu

Other individuals providing oversight, coordination, or support for assessment

First and Last Name	Title/Position
Dr. Kristine Urschel	Director of Undergraduate Studies / Associate Professor
Savannah Robin, M.S.	Internship Coordinator
Dr. Camie Heleski	Senior Lecturer
Dr. Mary Rossano	Associate Professor

(Optional) Other utilized resources for assessment (e.g. software such as rubrics or portfolios, evaluator stipends, etc.) - NONE

PROGRAM-LEVEL STUDENT LEARNING OUTCOMES

Please list the program-level student learning outcomes (PSLOs). If applicable, indicate which, if any, outcomes are required by your specialized accreditor(s) [What is this?]. Bachelor's degree programs must also indicate which outcome(s) map to the university's GCCR (Graduation Composition & Communication Requirement). The GCCR is not a requirement for certificates, graduate, or professional programs.

Space for up to 10 PSLOs has been provided below, but this does not imply that 10 outcomes are required. Program faculty should decide the appropriate number based on the design of the curriculum. Most programs have 3-8 outcomes, depending on the length of the program. If more than 10 lines are needed, either insert more lines into the table or submit a request to OSPIE@uky.edu for a template with additional lines for PSLOs.

PSLO #	Program-level Student Learning Outcome Statement (How should these be written?)	Required by Specialized Accreditor(s)?	Mapped to GCCR? (Undg degrees only)
1	Students will define, analyze and articulate their knowledge of equine science and management content. A. Students will define and analyze industry terms, practices, and topics at various levels. B. Students will demonstrate and evaluate equine handling skills and production management practices. C. Students will construct a summative project that draws on current research, scholarship and techniques in the equine industry.	☒	☐
2	Students will apply their knowledge by synthesizing local, national and/or global issues within the equine industry.	☒	☐
3	Students will communicate effectively and professionally through written, oral and visual modes of communication. (GCCR) A. Students will construct a variety of communication pieces to articulate topics within the equine industry. B. Students will construct a variety of professionalism pieces to help prepare them for future careers. C. Students will present equine and professionalism topics through various oral communication methods.	☒	☒

PSLO #	Program-level Student Learning Outcome Statement (How should these be written?)	Required by Specialized Accreditor(s)?	Mapped to GCCR? (Undg degrees only)
4	Students will execute scientifically informed and ethical decisions by utilizing critical thinking, analytical reasoning and/or problem-solving skills.	☒	☐
5	Students will work effectively in diverse environments as an individual or as a collaborative team.	☒	☐

Please provide a brief description of the process used to develop or revise current PSLOs and the extent to which program faculty were involved. If applicable, provide discussion of any attempts to align PSLOs with professional or accreditation standards, employer expectations and job skills, graduate program curricula, etc. If PSLOs are taken directly from an accreditor, discuss whether (and how) the PSLO statements were reviewed by the faculty to ensure they were comprehensive.

In 2017, the Equines Science and Management program went through a curriculum mapping exercise to identify gaps, duplication and other areas for improvement. As part of this process, faculty and staff as well as stakeholders were able to aid in the process of revising our program level SLOs. Furthermore, once we started the Essential Employability Qualities (EEQ) certification process in Fall 2018, we revised our SLOs even further to map to the eight EEQs, establish benchmarks and identify the assessment tools needed to measure the data we wanted to report. In addition to UK's assessment reporting requirements, we much also submit regular assessment reports to keep the EEQ certification as a program.

CURRICULUM MAP

Please create a map of the PSLOs to the curriculum. All required courses should be included in the left-hand column, and all PSLOs should span across the remaining columns. If desired, specific elective courses or elective "tracks" can be included (recommended). The purpose of the curriculum map is to show where each PSLO is emphasized within the curriculum. The level at which each PSLO is taught within a given course should be indicated as follows: introductory (I); reinforced (R); or mastery (M). Each PSLO should have at least

an instance of I, R, and M across the curriculum, with the exception of certain graduate programs where introductory knowledge is provided at the undergraduate level. For assistance in developing a curriculum map, please visit the OSPIE website or contact the OSPIE team.

Course	PSLO1	PSLO2	PSLO3	PSLO4	PSLO5
ASC 101: Domestic Animal Biology	I				
EQM 101: Intro to the Horse and Horse Industry	I	I		I	I
EQM 105: Equine Behavior and Handling	I				I
EQM 106: Intro to Equine Careers	I	I	I	I	I
EQM 305: Equine Industry Issues (GCCR)	R	R	I, R	R	
ASC 320: Equine Management	R				
ASC 310: Equine Anatomy	R				
EQM 351: Equine Health and Diseases	R				
EQM 399: ESMA Internship	R	R	R	R	R
EQM 490: ESMA Senior Capstone	M	M	M	M	M
AEC 302: Ag Management Practices	I, R				

I = Introduced; indicates that students are introduced to the outcome

R = Reinforced and opportunity to practice; indicates the outcome is reinforced and students afforded opportunities to practice

M = Mastery at the senior or exit level; indicates that students have had sufficient practice and can now demonstrate mastery

ASSESSMENTS

Please complete the chart below by listing each assessment on a separate row, and including the requested information. Except for outcomes that focus on students' values or beliefs, at least 1 assessment should be direct. Ideally, all outcomes should have at least 2 assessments. If available, append a copy of the assessment measure/instrument (e.g. scoring rubric or sample questions) to this report. If a goal/target has already been set or can be set for a given measure/instrument, this should be included in the table. Otherwise, the program will need to determine and specify a target/goal when results are first reported for that instrument/measure. Note: space for only 15 instruments/measures have been provided. If space for additional assessment instruments/measures are needed, either insert additional rows into the table or contact OSPIE staff to receive a customized template with additional lines.

Assessment Instrument/ Measure Name	**PSLO(s) Mapped to**	**Assessment Type** (Direct or Indirect)	**Assessment Instrument/Measure Description** (What is this?)	**Assessment Instrument/Measure Rationale** (What is this?)	**Benchmark or Goal** (If Available) (What is this?)	**Course(s)** (If applicable)	**Rubric or Example Appended?**
EQM 101 Pre-Post test	1A	Direct	Students will complete a pretest at the beginning of the semester and post questions via the final exam in our introductory equine course typically taken first semester. This course is offered in both fall and spring.	The assessment committee feels that this will give us baseline data that reflect the key equine knowledge all students should know graduating from the program.	In each semester, 80% of students will earn a score of 80% or greater on the final exam on a series of questions that were pre-selected by the course instructor and/or assessment committee.	EQM 101	☒

Course exam equine knowledge question database	1A	Direct	Exam questions on various key equine knowledge areas will be created and inventoried and linked to subtopic areas within an excel document database. Scores on those topic areas will be collected each semester.	The assessment committee feels that this will help us track the key equine knowledge all students should know graduating from the program.	In each semester, 80% of the students will earn a score of 80% or greater within each class on a series of questions that were pre-selected by the course instructor and/or assessment committee	EQM 105, EQM 351, ASC 310 and ASC 320	In development
EQM 105 Skills Self - Assessment	1B	Indirect	Students will be given a skills pretest self-evaluating their horse handline skills	The assessment committee feels that this will give us baseline data that reflect the key equine horse handling skills all students should know graduating from the program.	N/A	EQM 105	☒

Equine Skills Lab Practical Score Sheets – EQM 105 ASC 320	1B	Direct	Students will be assessed at the end of the semester through a final lab practical on a variety of equine related handling skills and production management practices	The assessment committee feels that this will help us track the key horse handling skills and production management practices all students should know graduating from the program.	EQM 105: In each semester, 80% of students will earn a score of 80% or greater in basic equine handling skills (including leading the horse, grooming and turnout, haltering, knot tying and round pen work) on the EQM 105 lab practical exam. ASC 320: In each semester, 80% of the students will earn a score of 80% or greater in the following pre-selected categories: concentrate feeds, hays, first aid, body condition scores, TPR, pasture evaluation and fecal egg counts on the ASC 320 laboratory practical exam.	EQM 105 and ASC 320	☒
EQM 305: Scientific Power Point Grading Rubric	1C	Direct	Students will be assessed on their main projects in each course and will be assessed on the Report of Research/Background Information (blue highlighted) specifically for this SLO.	The assessment committee feels that this will help to demonstrate that students are able to construct a summative project utilizing many resources and techniques.	EQM 305: In each semester, 80% of students or student groups will earn a grade of 80% or greater in the relevant sections of the Scientific Power Point rubric on the final project in EQM 305.	EQM 305	☒

	3A		Students will be assessed on the Scientific Power Point as a visual communications method in this GCCR course.	The assessment committee feels like this rubric will aid in measuring the student's ability to produce a visual communications piece on an equine industry topic	EQM 305: In each semester, 80% of students will earn a grade of 80% or greater overall score on the Scientific power point presentation in EQM 305.		
	3C		Students will receive a presentation style score on the Scientific Power Point Rubric (green highlighted section) and this will help to evaluate their ability to present effectively	The assessment committee feels that this will help to demonstrate that students are able to communicate effectively	EQM 305 (PowerPoint): In each semester, 80% of students will earn a grade of 80% or greater on the presentation style section of the Scientific Power Point Evaluation rubric in EQM 305.		
	4		Students will receive a blending of science and ethics score (yellow highlighted) and this will	The assessment committee feels that this will help to demonstrate that students are able to think critically	EQM 305: In each semester, 80% of students will earn a grade of 80% or greater on the blending of science and ethics section on the EQM 305: Scientific Power Point Grading Rubric.		

			help to assess their ability to think critically about ethical topics				
EQM 490 Scientific Power Point Grading Rubric	1C 4	Direct	Students will be assessed on their main projects in each course and will be assessed on the Report of Research/Background Information (blue highlighted) specifically for this SLO. Students will receive a blending of science and ethics score (yellow highlighted) and this will help to assess their ability to think critically about ethical topics	The assessment committee feels that this will help to demonstrate that students are able to construct a summative project utilizing many resources and techniques. The assessment committee feels that this will help to demonstrate that students are able to think critically in groups	EQM 490: In each semester, 85% of the student teams will earn a grade of 85% or greater in the relevant sections of the Scientific Power Point rubric on the final project in EQM 490. EQM 490: In each semester, 85% of students will earn a grade of 80% or greater on the blending of science and ethics section on the EQM 490: Scientific Power Point Grading Rubric.	EQM 490	☒

EQM 305 Contentious Topic Paper Rubric	2	Direct	Students are required to complete a contentious topics paper on an equine related issue and these will be graded using the EQM 305 Contentious Topic Paper Rubric.	The assessment committee feels like this rubric will aid in measuring many areas of this SLO and a cumulative grade on the rubric for the overall project will be used as our data collected.	EQM 305: In each semester, 80% of students will earn a grade of 80% or greater on the contentious topic paper in EQM 305 using the Contentious topic paper rubric.	EQM 305	☒
EQM 399 Internship Poster Rubric	3A	Direct	Students create a poster each semester on an issue or item analysis they choose to work on as part of their internship and present these posters at the end of the semester at the ESMA Internship Showcase.	The assessment committee feels like the Content and Quality of Visual Display section of this rubric will be a good measurement of this SLO	In each semester, 80% of students will earn a grade of 80% or greater on the Content and Quality of Visual Display section of the Internship poster rubric.	EQM 399	☒
	3C		Students will communicate effectively through written and oral modes of communication and	The assessment committee feels like the poster presentation section of this	In each semester, 80% of students will earn a grade of 80% or greater on the poster presentation section of the EQM 399 internship poster rubric.		

			participate in an internship showcase with a poster presentation.	rubric will be a good measurement of this SLO			
Resume Grading Rubric	3B	Direct	Students create a resume and cover letters in this course after being taught the basics of developing them to start their professionalism component of our curriculum.	The assessment committee feels like the Resume grading rubric score for the overall assignment will demonstrate their ability to create both professionalism pieces.	In each semester, 90% of students will earn a grade of 90% or greater on each of the resume assignment utilizing the resume grading rubric. In each semester, 80% of students will earn a grade of 80% or greater on each of the cover letter assignment utilizing the resume grading rubric.	EQM 305	☒
Professional Growth Plan Grading Rubric	3B	Direct	Students are given the opportunity to do a professional growth plan in the first year within the program in EQM 106 and then explore it again during their internship experience (i.e. EQM 399)	The assessment committee feels like the status levels created for the grading rubric will be easy to track through the student's various progressions of the professional growth plan.	In each semester of EQM 106, 80% of students will earn a status of level 2 or greater in their professional growth plan utilizing the Professional Growth Plan Rubric. In each semester of EQM 399, 85% of students will earn a status of level 4 on their professional	EQM 106 and EQM 399	☒

					growth plan utilizing the Professional Growth Plan Rubric.		
e-Portfolio Grading Rubric	3B	Direct	Students in Senior Capstone will create an e-portfolio highlighting their undergraduate career and various communication pieces they've created during their time here. Students will be given the formative rubric to use when creating the e-Portfolio and the summative rubric will be used for grading.	The assessment committee feels like this project will help to showcase our students when applying for future jobs, especially their ability to communicate in various ways	In each semester of EQM 490, 85% of students will earn a score of 85% or higher on the e-Portfolio assignment utilizing the Auburn e-Portfolio summative grading rubric.	EQM 490	☒
EQM 305 Mock Interview Score Sheet	3C	Indirect	Students participate in mock interviews with industry professionals and are assigned based on their future career goals.	The assessment committee feels that by having outside reviewers score our students that will give us a good grasp of where our students are	EQM 305 (mock interview): In each semester, 85% of students will earn a rating of average (3) or above (on a 5-point Likert scale) on the mock interview rating scale. This will be assessed by the	EQM 305	☒

			Interviewers will score students during the interview process.	with being effective communicators during the interview process	industry professionals conducting the interviews with the students enrolled within the course.		
EQM 490 Debate Grading Rubric	4	Direct	Students are required to participate in team debates on hot industry topics showcasing their ability to think and communicate about industry issues effectively. Taking a stand, side and defending it.	The assessment committee allows students to showcase their ability to research topics, take a side and defend it based off of their knowledge and skills obtained during their undergraduate career.	EQM 490: In each semester, 80% of student teams will earn a rating of average or above on the EQM 490 Group Debate grading rubric.	EQM 490	☒
EQM 490: White Paper Grading Rubric for Teams	4	Direct	Students are required to complete a white paper on a contentious topic or industry issue as a team in the ESMA Senior Capstone Course and this paper will be graded using this rubric.	The assessment committee feels like this rubric will aid in measuring many areas of this SLO and a cumulative grade on the rubric for the overall project will be used as our data collected.	EQM 490: In each semester, 85% of student teams will earn a grade of 85% or greater on the EQM 490: White Paper Grading Rubric for the team project.	EQM 490	☒

Teamwork Assessment Tool	5	Indirect	Students are required to work in a group setting on the final capstone project by writing a paper and presenting a presentation on an industry topic or issue. Students will assess their teammates on a variety of teamwork areas.	Teamwork is an essential skill and students will be able to evaluate their team experience and team member's contributions by utilizing this assessment tool	EQM 490: In each semester, 80% of students will receive an overall rating of very good or higher on their team contribution component of the teamwork assessment tool for both the written paper and the power point presentation.	EQM 490	☒
EQM 105 Teamwork Equine Assisted Leadership Assessment	5	Indirect	Students will assess their personal leadership and teamwork skills through a pre and post self-assessment before and after the equine leadership activity as part of the EQM 105 lab.	This class is usually taken freshmen or sophomore year and the assessment committee feels like it will give good preliminary data to have on students at the beginning of the program in regard to leadership and teamwork skills and thoughts.	The goal of this assignment is to introduce the concept of teamwork and leadership skills through an equine related activity and give them an opportunity to reflect about the experience.	EQM 105	☒

EQM 399 Supervisor Evaluation	5	Indirect	Students are required to complete a 150-hour internship. During this experience students are evaluated by their supervisors through online evaluations. One section of the evaluation form includes the supervisor scoring the student on their ability to adapt and collaborate.	The assessment committee feels that by having an external scorer, via the internship supervisor, that it will help us to get a more accurate score of the student's ability to work in teams and adapt in different environments giving us a real world view of how they would work within the industry in these types of environments.	EQM 399: In each semester, 85% of students will receive a rating of 4 or higher (on a 5point Likert scale) for adaptability and collaboration on the EQM 399 Supervisor Evaluation given at the completion of the internship.	EQM 399	☒

ASSESSMENT REPORTING CYCLE

Please complete the chart below by providing the requested information for each learning outcome. Note: space for up to 10 PSLOs has been provided. If space for additional PSLOs are needed, either insert additional rows into the table or contact the OSPIE staff to receive a customized template.

PSLO #	**Semester/ Year(s) Data Collected**	**Year(s) Results Submitted to OSPIE** (see Results Report Definition)	**Year(s) Reflection Report Submitted to OSPIE** (see Reflection Report Definition)	**Year(s) Action Report Submitted to OSPIE** (see Action Report Definition)
Example	*Fall / 2020*	*Summer 2021*	*Summer 2023*	*Summer 2024*
1A	Fall 2021 and Spring 2022	Summer 2022	Summer 2023	Summer 2024
1B	Fall 2021 and Spring 2022	Summer 2022	Summer 2023	Summer 2024
1C	Fall 2020 and Spring 2021	Summer 2021	Summer 2023	Summer 2024
2	Fall 2020 and Spring 2021	Summer 2021	Summer 2023	Summer 2024
3A	Fall 2020 and Spring 2021	Summer 2021	Summer 2023	Summer 2024
3B	Fall 2020 and Spring 2021	Summer 2021	Summer 2023	Summer 2024
3C	Fall 2020 and Spring 2021	Summer 2021	Summer 2023	Summer 2024
4	Fall 2020 and Spring 2021	Summer 2021	Summer 2023	Summer 2024
5	Summer 2021, Fall 2021 and Spring 2022	Summer 2022	Summer 2023	Summer 2024

FEEDBACK AND SUPPORT ON PSLO ASSESSMENT PLAN

Each program has the option of receiving formative feedback on its new or revised PSLO assessment plan from OSPIE staff members. OSPIE staff can provide suggestions for improvement to learning outcome statements, overall assessment plan design, curriculum mapping, standard setting, individual assessment tools, etc. If your program would like to receive feedback on its assessment plan, please indicate below:

☒ Yes, we would like to receive feedback.

☐ No thank you, not at this time.

If there are questions the program director or faculty did not have the opportunity to ask prior to submission of the PSLO assessment plan, and you would like to schedule a brief consultation with OSPIE staff, please indicate below:

☐ Yes, we would like to schedule an individual or group consultation.

☒ No thank you, not at this time.

Program-level Student Learning Outcomes Assessment Plan Template

Academic Degree Programs
University of Kentucky

INSTRUCTIONS

The faculty of each academic program, degree or certificate, are asked to complete this plan template during the 2019 -20 academic year to guide assessment of the program-level student learning outcomes (PSLOs) during the upcoming cycle. Assessment plans are due to the Office of Strategic Planning & Institutional Effectiveness (OSPIE) no later than **April 15, 2020** and should be submitted to the appropriate college and program folder in SharePoint.

A Quick Start Guide and other documentation as well as dates for live training sessions are provided on the OSPIE website. Training resources and session topics range from an overview of the new assessment process to principles and practice for student learning outcome assessment. Questions can be directed to OSPIE staff.

Reading the Quick Start Guide prior to completi ng the new plan template is strongly encouraged.

ABOUT THE PROGRAM

College or School *(example: College of Arts & Sciences)*	Fine Arts
Degree Type *(example: BA or MS)*	MA
Program Name *(example: History)*	Arts Administration

Please provide the mission statement for the program. If one does not currently exist, provide the department or college mission statement.

Dynamic and innovative, the University of Kentucky Department of Arts Administration leads national and international initiatives in teaching, research, professional and community service to educate and inspire responsible arts leaders, artists, and entrepreneurs.

(Optional) Include any additional information about the program's history, development, or structure that may be beneficial in understanding the curriculum and how student learning is assessed.

All programs that do not have specialized accreditation and are not located in a department/college with a specialized accreditation should follow a 4-year PSLO assessment cycle. Programs that have specialized accreditation(s) or are within a college that has a comprehensive accreditation can develop an alternate PSLO and periodic review cycle in consultation with OSPIE.

Which cycle will the program being using?

☐ 4-year cycle [What does this look like?]

☐ Other (accredited programs/departments only)

If the program has selected "other" for the assessment and periodic review cycle, please append a copy of the proposed cycle and a brief justification to this plan.

ASSESSMENT COORDINATION AND RESOURCES

Individual(s) coordinating program-level student learning outcomes assessment

First and Last Name	Title/Position	Email
Yuha Jung	Associate Professor/DGS	yuha.jung@uky.edu
Joe French	Instructional Designer	joe.french@uky.edu

Other individuals providing oversight, coordination, or support for assessment

First and Last Name	Title/Position
Rachel Shane	Chair of the Department of Arts Administration

(Optional) Other utilized resources for assessment (e.g. software such as rubrics or portfolios, evaluator stipends, etc.)

PROGRAM-LEVEL STUDENT LEARNING OUTCOMES

Please list the program-level student learning outcomes (PSLOs). If applicable, indicate which, if any, outcomes are required by your specialized accreditor(s) [What is this?]. Bachelor's degree programs must also indicate which outcome(s) map to the university's GCCR (Graduation Composition & Communication Requirement). The GCCR is not a requirement for certificates, graduate, or professional programs.

Space for up to 10 PSLOs has been provided below, but this does not imply that 10 outcomes are required. Program faculty should decide the appropriate number based on the design of the curriculum. Most programs have 3-8 outcomes, depending on the length of the program. If more than 10 lines are needed, either insert more lines into the table or submit a request to OSPIE@uky.edu for a template with additional lines for PSLOs.

PSLO #	Program-level Student Learning Outcome Statement (How should these be written?)	Required by Specialized Accreditor(s)?	Mapped to GCCR? (Undg degrees only)
Example	*Graduates will be able to critically evaluate scientific literature related to drugs and disease to enhance clinical decision-making.*	☐	☐
1	Students will produce effective marketing materials for a nonprofit arts organization by using research techniques, identifying target audiences, formulating strategies, and aligning each one with the organization's brand.	☐	☐
2	Students will build a comprehensive fundraising plan by developing a donor profile, identifying appropriate and relevant forms of giving, recognizing effective techniques to build relationships with donors, and constructing an evaluation plan to determine the effectiveness of the overall plan.	☐	☐

3	Students will examine the operational functions essential to sustain nonprofit arts organizations by constructing a leadership and governance structure, analyzing the financial condition of an organization, and discovering relevant laws and ethics.	☐	☐
4	Students will formulate a programming plan for a nonprofit arts organization by determining the need, writing a proposal, developing an audience, planning for implementation, and evaluating its effectiveness.	☐	☐

Please provide a brief description of the process used to develop or revise current PSLOs and the extent to which program fac ulty were involved. If applicable, provide discussion of any attempts to align PSLOs with professional or accreditation standards, employer expectations and job skills, graduate program curricula, etc. If PSLOs are taken directly from an accreditor, discuss whether (and how) the PSLO s tatements were reviewed by the faculty to ensure they were comprehensive.

Since our program is fully online and we have access to all course syllabi, content, and assignments via Canvas, no other faculty was involved in revising the previous PSLOs. However, our instructional designer, Joe French, was heavily involved in revising PSLOs and putting this plan together as he has been involved in developing and revising most of our courses offered in the MA program. The field of arts administration does not have accreditation standards for its higher education programs as of now; however, graduate curriculum standards (suggested) of the Association of Arts Administration Administrators were consulted in creating the program and developing the PSLOs.

CURRICULUM MAP

Please create a map of the PSLOs to the curriculum. All required courses should be included in the left-hand column, and all PSLOs should span across the remaining columns. If desired, specific elective courses or elective "tracks" can be included (recommended). The purpose of the curriculum map is to show where each PSLO is emphasized within the curriculum. The level at which each PSLO is taught within a given course should be indicated as follows: introductory (I); reinforced (R); or mastery (M). Each PSLO should have at least an instance of I, R, and M across the curriculum, with the exception of certain graduate programs where introductory knowledge is provided at the undergraduate level. For assistance in developing a curriculum map, please visit the OSPIE website or contact the OSPIE team.

Course	PSLO1	PSLO2	PSLO3	PSLO4	PSLO5	PSLO6	PSLO7	PSLO8	PSLO9	PSLO10
AAD 500				*I*						
AAD 565				*M*						
AAD 600	*I*	*I*								
AAD 620			*M*							
AAD 625			*R*							
AAD 630	*R*									
AAD 640		*R*								
AAD 650			*I*							
AAD 690				*R*						
AAD 730	*M*									
AAD 740		*M*								

I = Introduced; indicates that students are introduced to the outcome
R = Reinforced and opportunity to practice; indicates the outcome is reinforced and students afforded opportunities to practice
M = Mastery at the senior or exit level; indicates that st udents have had sufficient practice and can now demonstrate mastery

ASSESSMENTS

Please complete the chart below by listing each assessment on a separate row, and including the requested information. Except for outcomes that focus on students' values or beliefs, at least 1 assessment should be direct. Ideally, all outcomes should have at least 2 assessments. If available, append a copy of the assessment measure/instrument (e.g. scoring rubric or sample questions) to this report. If a goal/target has already been set or can be set for a given measure/instrument, this should be included in the table. Otherwise, the program will need to determine and specify a target/goal when results are first reported for that instrument/measure. Note: space for only 15 instruments/measures have been provided. If space for additional assessment instruments/measures are needed, either insert additional rows into the table or contact OSPIE staff to receive a customized template with additional lines.

Assessment Instrument/ Measure Name	**PSLO(s) Mapped to**	**Assessment Type** (Direct or Indirect)	**Assessment Instrument/Measure Description** (What is this?)	**Assessment Instrument/Measure Rationale** (What is this?)	**Benchmark or Goal** (If Available) (What is this?)	**Course(s)** (If applicable)	**Rubric or Example Appended?**
Example: SPIE 430 Final Paper	*1,3*	*Direct*	*Students complete the final paper individually on a relevant & timely topic related to program assessment. Papers are scored by the course instructor using a standard rubric developed by members of the department curriculum committee. No sampling will be done; however, non-SPIE majors will be excluded from the results. The scores for criteria 1-2 will be used for PSLO1 and criteria 4-7 for PSLO3 (see attached rubric).*	*Measure was chosen because it provides evidence of student achievement near end of program and multiple criteria on rubric align directly to outcomes 1 & 3. Curriculum committee recently (2018) reviewed assignment instructions, rubric, and samples of student work to ensure good alignment with outcomes. In the future, multiple evaluators will be used to score a sample of student work and estimate reliability (interrater agreement) of the rubric.*	*95% of students will earn a 3 or better on each criterion (on a 4-point scale)*	*SPIE 430: Advanced Program Assessment Design*	☒

AAD 630 Course Presentation Project, Part 2: Situation Analysis	1	Direct	Students, individually, complete this part 2, of 5, incremental assignments that contribute to the final presentation. This assignment contributes to a thorough strategic marketing plan for an arts organization. An instructor-created grading rubric will be used to evaluate student submissions. No sampling will be done.	Measure was chosen because it provides evidence of student achievement for a key step (situation analysis) in the strategic marketing process for a nonprofit arts organization. We may need to determine how well the grading rubric aligns with our efforts to assess the PSLO.	95% of students will earn more than 90 out of 100.	AAD 630: Marketing research and planning for arts organizations	☐
AAD 630 Course Presentation Project, Part 4: Market Analysis	1	Direct	Students, individually, complete this part 4, of 5, incremental assignments that contribute to the final presentation. This assignment contributes to a thorough strategic marketing plan for an arts organization. An instructor-created grading rubric will be used to evaluate student submissions. No sampling will be done.	Measure was chosen because it provides evidence of student achievement for a key step (market analysis) in the strategic marketing process for a nonprofit arts organization. We may need to determine how well the grading rubric aligns with our efforts to assess the PSLO.	95% of students will earn more than 90 out of 100.	AAD 630: Marketing research and planning for arts organizations	

AAD 730 Final Presentation Project, Part 2: Holiday Advertisement	1	Direct	Students, individually, complete this project, which is part 2 of 6, that contributes to a final presentation. Specifically, this project involves designing an advertisement or promotion for an arts organization that the student has chosen. The design choices within this advertisement should be based on the strategic marketing plan that was completed in AAD 630. An instructor-created grading rubric will be used to evaluate student submissions. No sampling will be done.	Measure was chosen because it provides evidence of student achievement toward one of the key steps (designing an advertisement) in the overall marketing process for a nonprofit arts organization. We may need to determine how well the grading rubric aligns with our efforts to assess the PSLO.	95% of students will earn more than 90 out of 100.	AAD 730: Marketing strategies and application for arts organizations	☐
AAD 640 Assignment: Project A: Comprehensive Development Plan Project Document	2	Direct	Students, individually, complete this comprehensive plan that outlines the fundraising needs, strategy, and goals for a nonprofit arts organization. An instructor-created grading rubric will be used to evaluate student	Measure was chosen because it provides evidence of student achievement toward developing a comprehensive fundraising strategy for a nonprofit arts organization. We may need to determine how	95% of students will earn more than 90 out of 100.	AAD 640: Principles of fundraising	☐

			submissions. No sampling will be done.	well the grading rubric aligns with our efforts to assess the PSLO.			
AAD 740 Project, Part 6: Planned Giving Brochure	2	Direct	Students will complete this project individually that includes details of planned giving program and techniques, one of the fundraising methods of nonprofit arts organizations. An instructor-created grading rubric will be used to evaluate student submissions. No sampling will be done.	Measure was chosen because it provides evidence of student achievement toward developing a high-level fundraising program/method of planned giving, which is an important aspect of the PSLO. We may need to determine how well the grading rubric aligns with our efforts to assess the PSLO.	95% of students will earn more than 90 out of 100.	AAD 740: Fundraising Techniques	☐
AAD 740 Project, Part 7: Evaluation Design	2	Direct	Students complete an evaluation of the strategic development plan individually. An instructor-created grading rubric will be used to evaluate student submissions. No sampling will be done.	Measure was chosen because it provides evidence of student achievement toward evaluating a comprehensive development plan and strategies used, which is an important aspect of the PSLO. We may need to determine how well	95% of students will earn more than 90 out of 100.	AAD 740: Fundraising Techniques	

				the grading rubric aligns with our efforts to assess the PSLO.			
AAD 620 Project, Part 6: Board Structure and Expectations	3	Direct	Students complete a thorough plan for how the board of directors will be structured as well as how it will operate by outlining the types of members, developing a hierarchy, explaining the board's duties, and planning a sample one-day retreat. This is an individual project that is due three weeks after it has been assigned. An instructor-created grading rubric will be used to evaluate student submissions. No sampling will be done.	Measure was chosen because the structure and responsibilities of a board of directors is a very large part of operating a nonprofit organization, an important aspect of the PSLO. We may need to determine how well the grading rubric aligns with our efforts to assess the PSLO.	95% of students will earn more than 90 out of 100.	AAD 620: Management and leadership in the arts	☐
AAD 625 Project, Part 6: Financial Condition Assessment	3	Direct	Students complete this paper individually analyzing the financial condition of an arts organization. An instructor-created	Measure was chosen because it provides evidence of students' understanding of financial analysis on a deeper level that is	95% of students will earn more than 90 out of 100.	AAD 625: Financial management for arts organizations	☐

			grading rubric will be used to evaluate student submissions. No sampling will be done.	directly related to the PSLO. We may need to determine how well the grading rubric aligns with our efforts to assess the PSLO.			
AAD 690 Project Part 14: The Board of Directors & the Executive Summary	4	Direct	Students complete this paper individually summarizing important aspects of the new program proposal (i.e., executive summary of the proposal). An instructor-created grading rubric will be used to evaluate student submissions. No sampling will be done.	Measure was chosen because it provides evidence of students' understanding of new program development and evaluation that is directly related to the PSLO. We may need to determine how well the grading rubric aligns with our efforts to assess the PSLO.	95% of students will earn more than 90 out of 100.	AAD 690: Creating and evaluating new arts programs	☐

ASSESSMENT REPORTING CYCLE

Please complete the chart below by providing the requested information for each learning outcome. Note: space for up to 10 PS LOs has been provided. If space for additional PSLOs are needed, either insert additional rows into the table or contact the OSPIE staff to receive a customized template.

PSLO #	Semester/ Year(s) Data Collected	Year(s) Results Submitted to OSPIE (see Results Report Definition)	Year(s) Reflection Report Submitted to OSPIE (see Reflection Report Definition)	Year(s) Action Report Submitted to OSPIE (see Action Report Definition)

Example	*Fall / 2020*	*Summer 2021*	*Summer 2023*	*Summer 2024*
1	Spring/2021	Summer 2021	Summer 2023	Summer 2024
2	Spring/2021	Summer 2021	Summer 2023	Summer 2024
3	Spring/2022	Summer 2022	Summer 2023	Summer 2024
4	Spring/2022	Summer 2022	Summer 2023	Summer 2024

FEEDBACK AND SUPPORT ON PSLO ASSESSMENT PLAN

Each program has the option of receiving formative feedback on its new or revised PSLO assessment plan from OSPIE staff members. OSPIE staff can provide suggestions for improvement to learning outcome statements, overall assessment plan design, curriculum mapping, standard setting, individual assessment tools, etc. If your program would like to receive feedback on its assessment plan, please indicate below:

☐ Yes, we would like to receive feedback.

☐ No thank you, not at this time.

If there are questions the program director or faculty did not have the opportunity to ask prior to submission of the PSLO assessment plan, and you would like to schedule a brief consultation with OSPIE staff, please indicate below:

☐ Yes, we would like to schedule an individual or group consultation.

☐ No thank you, not at this time.