COMPETENTLY DESIGNED: BUILDING CAPACITY TO SUPPORT THE COMPETENCY-BASED REVOLUTION

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WORKSHOP GOALS

- Participants will….
  - Learn the shared design elements and emerging practices in healthy and robust CBE programs
  - Better understand how to effectively design and build instructional modules based on competency-based learning pedagogy through using a customized and interactive workbook
  - Identify benefits for programs based on demonstrated learning and not seat time
  - Explore barriers for competency-based learning
  - Discover how instructional design can positively impact the competency-based revolution

TODAY'S AGENDA

- Defining Competency-Based Education (CBE)
- CBE Landscape
- CBE Shared Design Principles
- Backward Design
- Building a Competency through Backward Design
- Benefits & Barriers of CBE

INTRODUCTIONS

Laurie Dodge

- Vice Chancellor; Vice Provost @ Brandman University
- Chair, Competency-Based Education Network (C-BEN)
- Team Member of Brandman's First CBE Direct Assessment Program
- WASC Senior Accreditation Liaison Officer

Charla Long

- Higher Education Consultant
  - Public Agenda – National CBE initiatives supported by The Bill & Melinda Gates Foundation and Lumina Foundation
  - EDUCAUSE – Coach to BMI and BMA teams focused on CBE innovations
  - Wide Range of Institutional Clients
- C-BEN

WHAT IS CBE?

WHAT IS CBE?

- Competency-based education (CBE)is focused on **actual** student **learning**, and the **application** of that learning, rather than time spent in class/on material.

- Learners' **progress** is **measured** when they **demonstrate** their competence through a **system** of **rigorous assessments**, meaning they **prove** they have **mastered** the knowledge and skills, **required** for a particular **competency** or area of study.

CBEN CBE DEFINITION

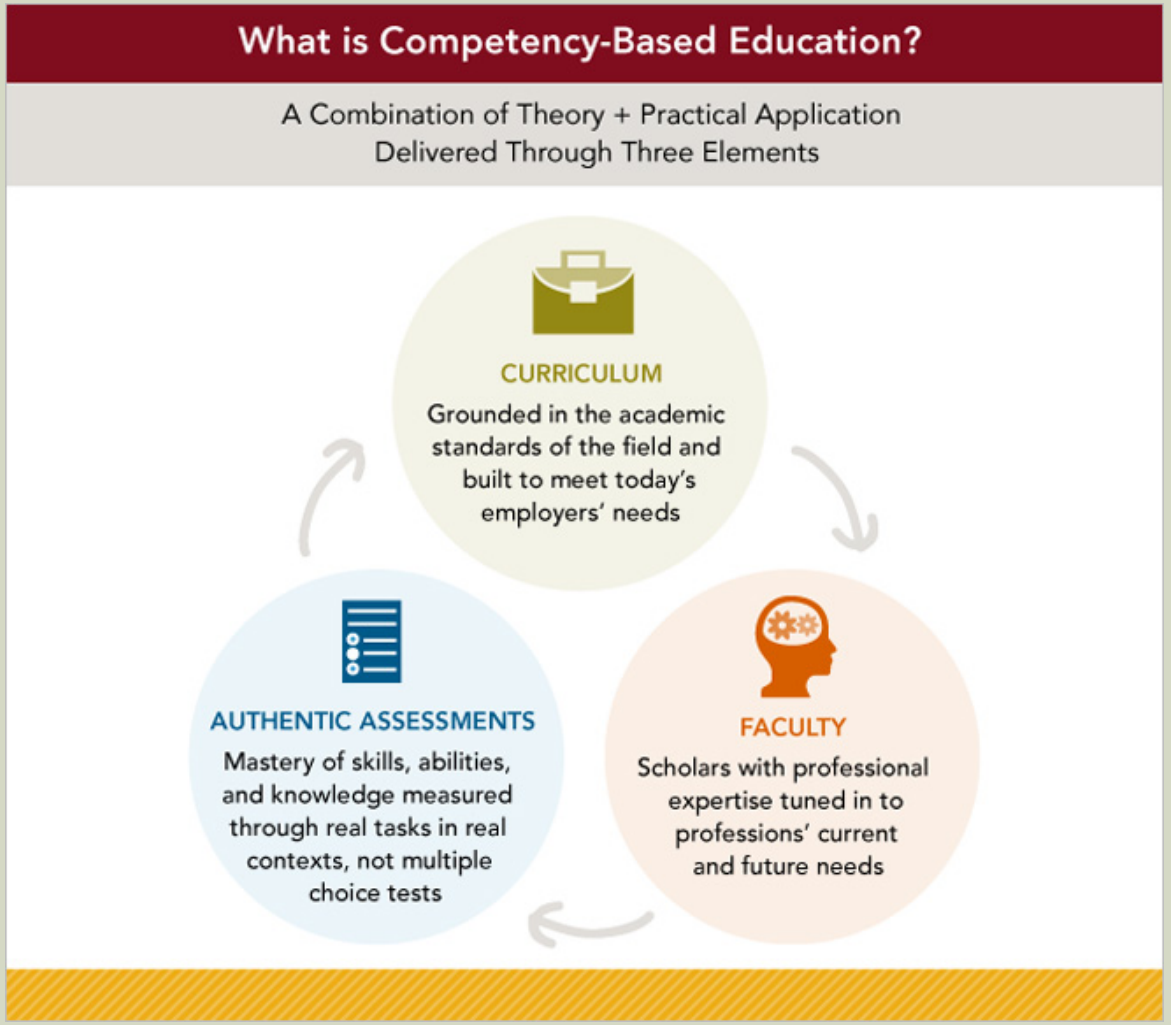
- Competency-based education is a flexible way for students to get credit for what they know, build on their knowledge and skills by learning more at their own pace, and earn high-quality degrees, certificates, and other credentials that help them in their lives and careers.
- Students in these programs show what they know and how well they know it by participating in multiple ways of evaluating learning.
- This is another choice for learning that many colleges and universities offer through a variety of programs, with a full array of support services to help students as needed.

THE CRAC DEFINITION

"An accreditor will consider a program to be competency-based when all of the courses (for the program, for general education, for the major) have learning goals expressed as competencies approved at the program level (i.e., any instructor teaching a course will teach it as a competency-based course) and each student is required to demonstrate mastery of every competency in a course to earn credit… for such course."

(Regional Accreditors Announce Common Framework for Defining and Approving Competency-Based Education Programs)

TO SUMMARIZE CBE



Source: Capella University

CBE LANDSCAPE

WIDE RANGE OF MODELS NATIONALLY

CBE Framework Continuum

Course-based, integrates discrete competencies into a single course

No courses, no credit hours, know competencies, and graduate

Learning measured by seat time and teacher-created assessments

Learning measured by direct assessment

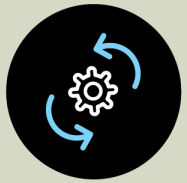
WHO'S ENGAGED?

SHARED DESIGN PRINCIPLES

SHARED DESIGN ELEMENTS

CLEAR, CROSS-CUTTING AND SPECIALIZED COMPETENCIES

COHERENT, COMPETENCY DRIVEN PROGRAM & CURRICULUM DESIGN



EMBEDDED PROCESS FOR CONTINUOUS IMPROVEMENT

ENABLING & ALIGNED BUSINESS PROCESSES & SYSTEMS

ENGAGED FACULTY AND EXTERNAL PARTNERS

FLEXIBLE STAFFING ROLES AND STRUCTURES

SHARED DESIGN ELEMENTS CONTINUED

LEARNER CENTERED

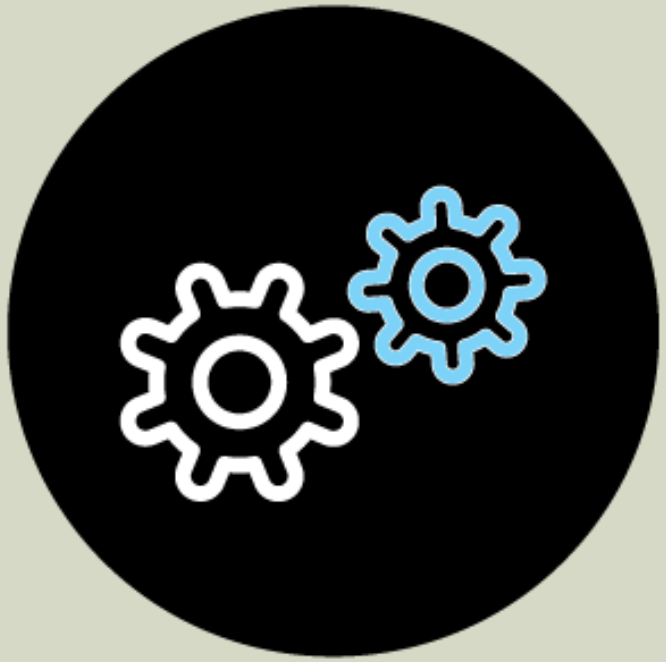
NEW OR ADJUSTED FINANCIAL MODELS

MEASURABLE AND MEANINGFUL ASSESSMENTS

PROFICIENT AND PREPARED GRADUATES

CLEAR, CROSS-CUTTING AND SPECIALIZED COMPETENCIES

COHERENT, COMPETENCY-DRIVEN PROGRAM & CURRICULUM DESIGN



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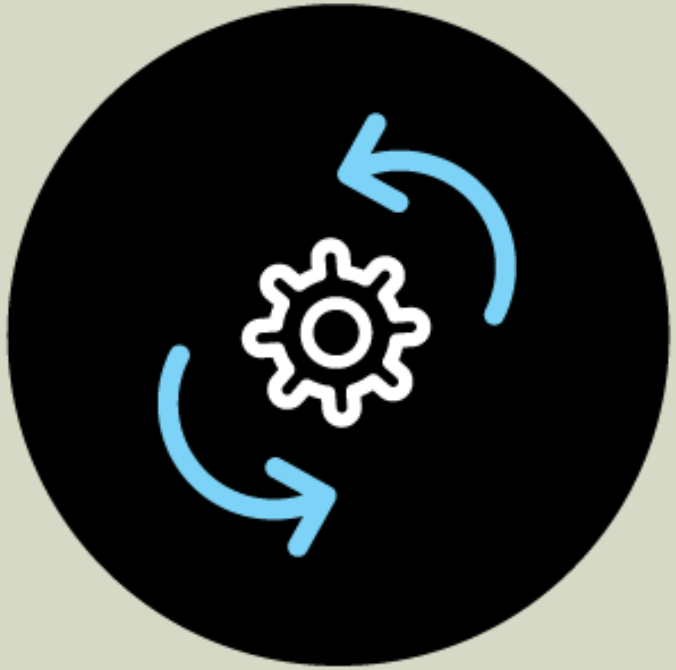

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BACKWARD DESIGN FOR COMPETENCIES

BUILDING A COMPETENCY PROGRAM: TWO APPROACHES

Deconstruction-Reconstruction

Framework Origin

DECONSTRUCTION-RECONSTRUCTION

Steps for Decon-Recon

1. For each course in credit-hour program, separate each course learning outcomes(CLOs).
2. Categorize individual CLOs into similar groups (buckets).
3. Label “bucket”(oral comm)
4. Write overarching competency statement.

The New CBE Program

FRAMEWORK ORIGIN

Steps

1. Builds on an existing, predefined notion of a credential (industry-standards, certifications, licensure).
2. Categorize outcomes competencies into similar groups (buckets).
3. Label “bucket”(oral comm)
4. Write overarching competency statement.
5. Conduct gap analysis.

Brandman University Faculty

LEVERAGE EXISTING FRAMEWORK - DQP

DEGREE QUALIFICATIONS PROFILE (DQP): STUDENT PERFORMANCE

Proficiencies organized in five broad categories.

- **Specialized Knowledge.** Beyond the vocabularies, theories, and skills of fields of study, Addresses what students in *any* specialization should demonstrate with respect to the specialization.
- **Broad and Integrative Knowledge.** This category asks students at all degree levels covered in the *DQP* to consolidate learning from different broad fields of study — the humanities, arts, sciences, and social sciences.
- **Intellectual Skills.** Both traditional and non-traditional cognitive operations are included: analytic inquiry, use of information resources, engaging diverse perspectives, ethical reasoning, quantitative fluency, and communicative fluency.
- **Applied and Collaborative Learning.** This element of the *DQP* emphasizes what students can *do* with what they know, demonstrated by innovation and fluency in addressing unscripted problems in scholarly inquiry, at work and in other settings outside the classroom.
- **Civic and Global Learning.** Responsibilities both to democracy and to the global community, this fifth area of learning addresses the integration of knowledge and skills in applications that facilitate student engagement with and response to civic, social, environmental and economic challenges at local, national and global levels.

(Adelman, C., Ewell, P., Gaston, P., & Schneider, C., 2014, p. 5-6)

LEVERAGE EXISTING FRAMEWORK - LEAP

Liberal Education and America's Promise (LEAP) Used at over 400 schools

The Essential Learning Outcomes

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Beginning in school, and continuing at successively higher levels across their college studies, students should prepare for twenty-first-century challenges by gaining:

Knowledge of Human Cultures and the Physical and Natural World

- Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts

Focused *by engagement with big questions, both contemporary and enduring*

Intellectual and Practical Skills, including

- Inquiry and analysis
- Critical and creative thinking
- Written and oral communication
- Quantitative literacy
- Information literacy
- Teamwork and problem solving

Practiced extensively*, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance*

Personal and Social Responsibility, including

- Civic knowledge and engagement—local and global
- Intercultural knowledge and competence
- Ethical reasoning and action
- Foundations and skills for lifelong learning

Anchored *through active involvement with diverse communities and real-world challenges*

Integrative and Applied Learning, including

- Synthesis and advanced accomplishment across general and specialized studies

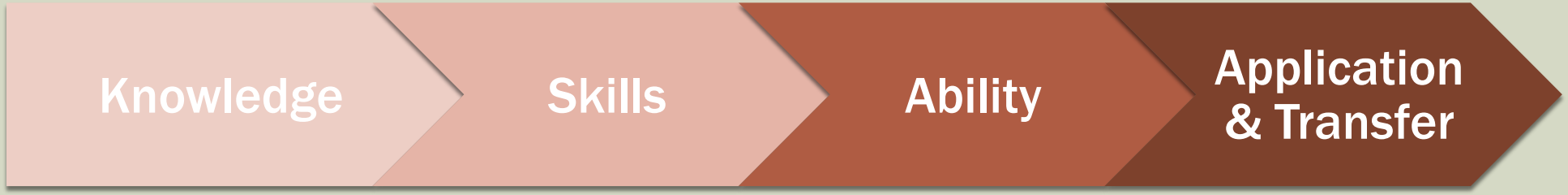
Demonstrated *through the application of knowledge, skills, and responsibilities to new settings and complex problems*

LEVERAGE EXISTING DATA BASES – O*NET DATA

BACKWARD DESIGN

STEPS	TRADITIONAL	BACKWARD DESIGN
Step One	**Course Description and Course Learning** Outcomes -Catalog Course Description & Objectives	**Competency Statement** -List the big idea or concepts that you want students to know or be able to do. Use Bloom's Taxonomy.
Step Two	**Educational Journey** -Readings, demonstrations, activities, assignments, videos, etc.	**Assessment Evidence** -Test Blueprint aligned with outcomes -Summative Assessment demonstrating mastery
Step Three	**Assessment Evidence** (Exams, Projects, Presentations)	**Educational Journey**

COMPETENCIES DEFINED



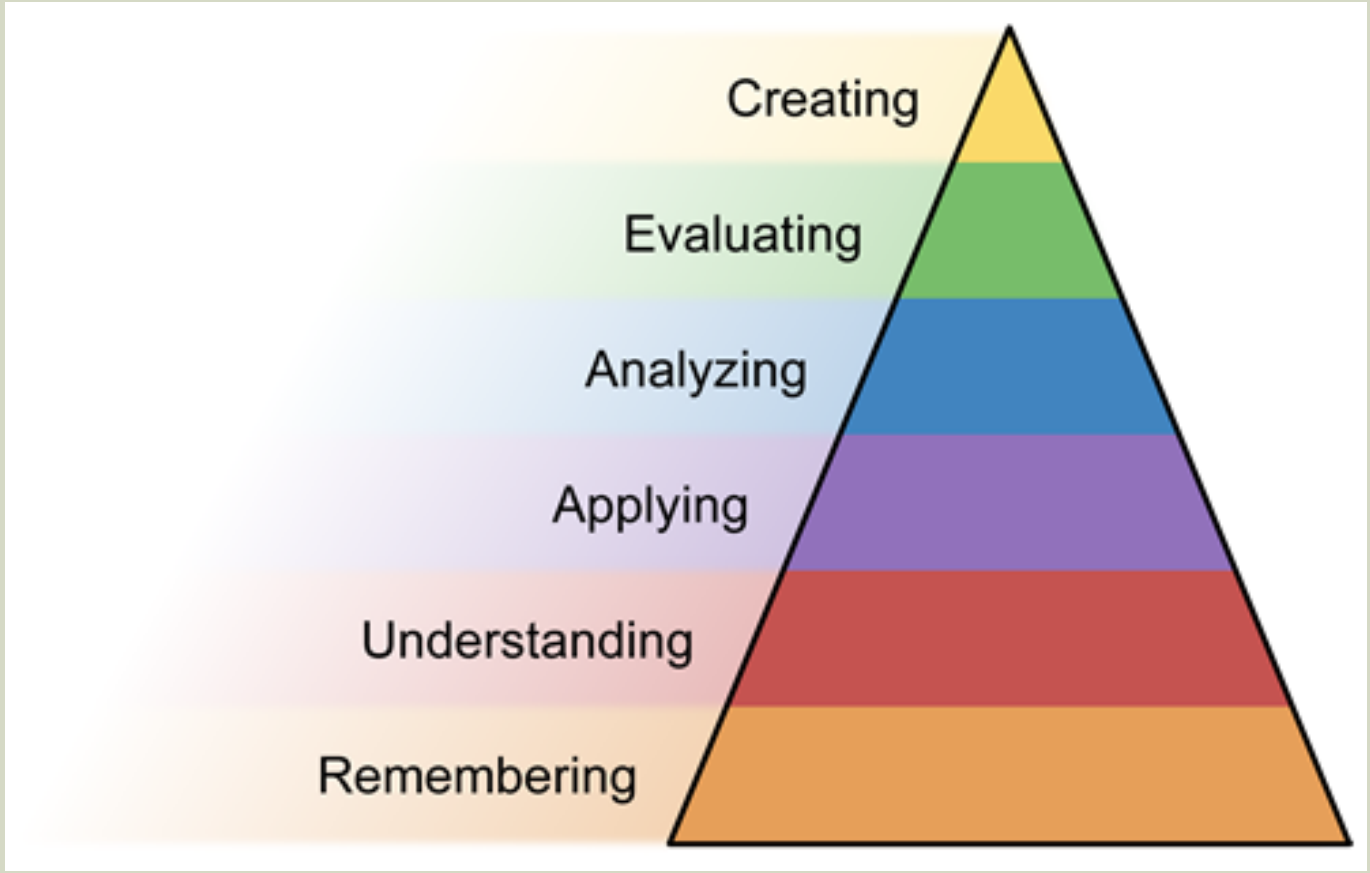
Knowledge	Skills	Ability	Application & Transfer
What do I need to *know*? What theories or ideas?	What do I need to be able to *do*?	What dispositions must I display?	Where must I be able to apply these KSAs, and at what level?

Understands the theory of XXX, and has the skills and dispositions to successfully apply all of these at the *beginning* level in XXX situation.

Focus on what's needed to be successful - outcomes.

LEVELS OF MASTERY

- Bloom's Taxonomy as a useful guide for degree level expectations



BACKWARD DESIGN STEP ONE: COMPETENCY STATEMENTS

- Good Strategies
  - Use Bloom's Taxonomy considering the appropriate level of learning.
  - Ensure outcomes are clear & understandable "Can Do" statements.
  - Check to see that outcomes are measurable and assessable.

A. Write a Competency Statement
B. Write Objectives that support and align to the overarching competency statement

STEP ONE: IMPLEMENTING AND MONITORING A BUSINESS PLAN (EXAMPLE)

- Prepare a business plan and evaluate organizational performance.
- Objectives
  - Summarize research that supports the marketplace need for the new venture.
  - Create a marketing plan for the target consumers.
  - Devise a financial forecast for the first year of the business implementation.

WORKBOOK TIME…STEP ONE: COMPETENCY STATEMENT AND OBJECTIVES

1. Based on your selected program, write one overarching competency statement using Bloom's Taxonomy.
2. Write 2-3 objectives that support and align to the overarching competency statement.

STEP ONE: COMPETENCY STATEMENT DISCUSSION

- What were effective strategies for writing the competency statement and objectives?
- Challenges?
- How do you know if objectives are aligned to the competency statement?

STEP TWO: CREATE ASSESSMENTS…KEY QUESTIONS

- KEY QUESTION: How do you know student "can do" what you claim they can do?
  - Create and utilize consistent, reliable, and valid assessments
  - What will students "do" to demonstrate mastery?
- AND…
  - How will the reliability of the assessment been established?
  - Does the assessment actually cover the competency it's suppose to measure? Is the assessment comprehensive?
  - Does it predict the ability to perform outside the assessment?
  - Who will create the assessments? Qualifications? Approval Process?

START WITH THE END IN MIND

What claim do we make?	Signature Assignment: How will we assess?
Students can comply with regulatory ethical standards and responsibilities involving patient and business records. (CCE Standard 4D)	**Simulation** – Student will participate in a virtual simulation where student must review a patient file and identify that all components of a patient file are complete, accurate, and compliant with record keeping requirements. **Clinical Observation** – Student will engage with a QA audit where a practitioner did not complete an appropriate history and examination and must complete a file audit report to provide remediation feedback. **Written Exam** – Student will be able to recall the required components of a properly completed patient file and associated parameters meeting all record keeping guidelines to ensure files are complete, accurate, and compliant.

STEP TWO: CREATE ASSESSMENTS

A. Write Signature Assignment for Summative Assessment.
B. Identify Rubric Criteria.
C. Complete Rubric Cells.

- What will students demonstrate and "do" that represents evidence of mastery of the competency?
- What are the key component(s) of each objective that should be included in the rubric?

STEP TWO: IMPLEMENTING AND MONITORING A BUSINESS PLAN (EXAMPLE)

A. Signature Assignment: Develop a business plan for a new venture or existing privately owned business. Include research, analysis, marketing plans, operations, financial forecast, and detailed implementation steps.

Objectives	Criteria
Summarize research that supports the marketplace need for the new venture.	Research Currency Number of Sources Analysis Format
Create a marketing plan for the target consumers.	Marketing Plan 10 Components Alignment to Target
Devise a financial forecast for the first year of the business implementation.	Financial Forecast Data Base Prediction Evidence Data Analysis

CONSISTENT, WELL-DEFINED RUBRICS

B. Identify Rubric Criteria

	Beginning 1	Developing 2	Accomplished 3	Exemplary 4
Objective or formance	Description of identifiable performance characteristics reflecting a beginning level of performance.	Description of identifiable performance characteristics reflecting development and movement toward mastery of performance.	Description of identifiable performance characteristics reflecting mastery of performance.	Description of identifiable performance characteristics reflecting the highest level of performance.
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STEP TWO: CREATE ASSESSMENTS

C. Complete Rubric Cells

Criteria	Beginning	Emerging	Mastery	Exemplary
Research Currency				
Research Analysis				
Marketing Plan (one criteria for each component or bundle some				
Financial Forecast Prediction				
Financial Forecast Analysis				

WORKBOOK TIME…STEP TWO: CREATE ASSESSMENTS

A. Summative Assessment: Describe in full what students must demonstrate and do that represents evidence of mastery of competency (student learning).
B. Identify Criteria for Rubrics based on the over-arching competency and aligned with each objective.
C. Complete Rubric Cells.

STEP TWO: CREATE ASSESSMENTS DISCUSSION

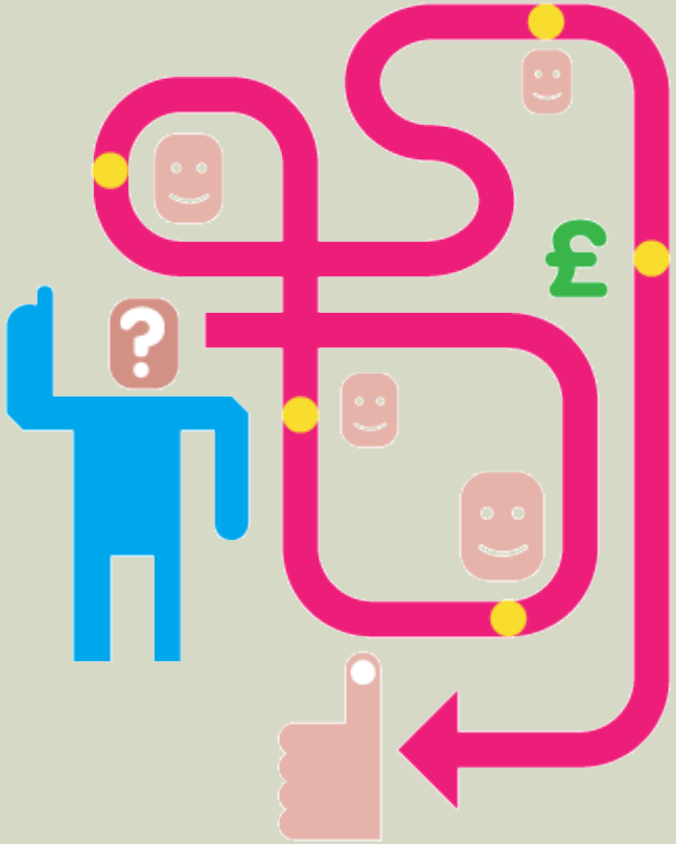
- Do the Signature Assignments represent evidence of mastery of the competency?
- Is the Signature Assignment clearly written and addresses all aspects assessed in the rubric?
- How will you defend your assessments (reliability, validity)?

STEP THREE: DETERMINE THE EDUCATIONAL JOURNEY

- KEY QUESTION: Do the learning activities ensure adequate coverage for each objective and the over-arching competency outcomes?
- AND…
  - Are the learning activities aligned to the objective?
  - Are the learning activities aligned to the appropriate level of learning (Bloom's Taxonomy)?
  - Does the student have an opportunity to practice? Are their formative assessments as part of the educational journey?
  - Are various learning styles addressed? Accommodations for ADA?

STEP THREE: DETERMINE THE EDUCATIONAL JOURNEY

- Based on the objective/criteria select the appropriate learning activities to ensure adequate coverage for each objective/ criteria.
- A learning plan or template will assist in the development of the educational journey.
- Align educational journey with each outcome.



EDUCATIONAL JOURNEY IDEAS

- Ideas for Content
  - Open Education Resources
  - Digital Content (published?)
  - Websites
  - Videos
  - Podcasts
  - Books
  - Journal Article
- Ideas for Activities
  - Check for understanding or quizzes
  - Reflection or Journal
  - Worksheets
  - Outlines
  - Drafts
  - Self-Assessments

Guidelines for Educational Journey

- ❑ Ensure that content is aligned to objectives/criteria. Do not need to teach everything you know. Focus on student learning.
- ❑ Make material interesting and engaging.
- ❑ Build opportunities for students to check for understanding (formative assessment).
- ❑ Consider collaboration and/or networking for students.
- ❑ Build foundations for tutoring or additional academic assistance.

WORKBOOK TIME…STEP THREE: DETERMINE THE EDUCATIONAL JOURNEY

- Based on the objective and/or criteria, select the appropriate learning activities to ensure adequate coverage for each objective and/or criteria.

DETERMINE THE EDUCATIONAL JOURNEY

#1 Objective and/or Criteria	Readings	Multimedia	Journal Reflection	Formative Assessment	Other

QUESTIONS