



Connecting the Dots

Mapping objectives to assessments using the Design Canvas
BONUS: Cognitive Apprenticeship



What college are you teaching in?

- Science
- Business
- Architecture, Arts, Humanities
- Agriculture, Forestry, Life Sciences
- Education
- CECAS
- Behavioral, Social, and Health Sciences

Associate

Dr. Erica Walker

Professor, Department of Graphic Communications



CT2 Faculty Institute, 2022
@ebwalker101 | eblack4@clermson.edu

NAME: _____ DATE: _____

OBJECTIVE TO ASSESSMENT MAPPING

LEARNING OBJECTIVE	ASSESSMENT	ASSESSMENT

NAME: _____ DATE: _____

LESSON DESIGN CANVAS

Learning Objective	Task	Assessment

Context- Types of knowledge required for expertise

Domain Knowledge	Subject matter-specific concepts, facts, and procedures
Heuristic Strategies	Generally applicable techniques for accomplishing tasks
Control Strategies	General approaches for directing one's solution process
Learning Strategies	Techniques about how to learn new concepts, facts, and procedures

Methods- Ways to promote the development of expertise

Modeling	Teacher performs a task
Coaching <td>Teacher guides students as they perform a task</td>	Teacher guides students as they perform a task
Scaffolding <td>Teacher provides support as students perform a task</td>	Teacher provides support as students perform a task
Discovery <td>Students discover or reinvent their knowledge and thinking</td>	Students discover or reinvent their knowledge and thinking
Reflection <td>Teacher enables students to compare themselves with others</td>	Teacher enables students to compare themselves with others
Explanation <td>Teacher invites students to pose and solve their own problems</td>	Teacher invites students to pose and solve their own problems

Sequencing- Keys or ordering learning activities

Increasing complexity	Meaningful tasks gradually increasing in difficulty
Increasing diversity <td>Practice a range of situations to emphasize broad application</td>	Practice a range of situations to emphasize broad application
Global to local skills <td>Focus on conceptualizing the whole task before executing the parts</td>	Focus on conceptualizing the whole task before executing the parts

Sociology- Social characteristics of learning

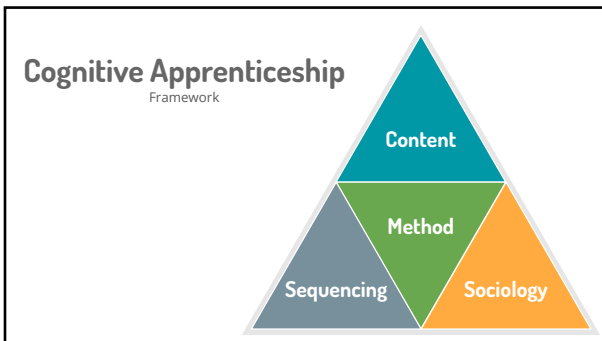
Situated learning	Students learn in the context of working on realistic tasks
Community of practice <th>Communicating about different ways to accomplish meaningful tasks</th>	Communicating about different ways to accomplish meaningful tasks
Extensive motivation <th>Students are personal goals to work skills and outcomes</th>	Students are personal goals to work skills and outcomes
Cooperation <th>Students work together to accomplish their goals</th>	Students work together to accomplish their goals

Table 2. Principles for designing a cognitive apprenticeship environment in the classroom (Collins & Kopp, 1995)

4

Cognitive Apprenticeship = Today's Apprenticeship

- Built on the model of **traditional apprenticeships**.
- Guide students through the **cognitive and metacognitive** processes necessary to perform tasks.
- Learning is focused on the process of cognition and teaching students how to replicate those thought processes.



Start at the beginning:
What do we want our students to learn?



+ Domain knowledge
+ Strategies (heuristic, control, learning strategies)

Lead towards Expertise



Cognitive Apprenticeship

Method



Watching
Modeling



Doing
Coaching & Scaffolding



Reflecting
Articulation & Reflection



Applying
Exploration

Sequencing

Sociology

NAME: _____ DATE: _____

OBJECTIVE TO ASSESSMENT MAPPING

LEARNING OBJECTIVE	ASSIGNMENT	ASSESSMENT

The diagram illustrates a progression from Learning Objectives (represented by a green dot) to Assignment (represented by a blue dot) to Assessment (represented by an orange dot), which finally leads to a rocket launch (represented by a black dot). The rocket is orange and red with a blue window and yellow flames.

Learning Objectives

The foundation & scaffolding of your course

The diagram illustrates a progression from Learning Objectives (represented by a green dot) to Assignment (represented by a blue dot) to Assessment (represented by an orange dot), which finally leads to a rocket launch (represented by a black dot). The rocket is orange and red with a blue window and yellow flames.

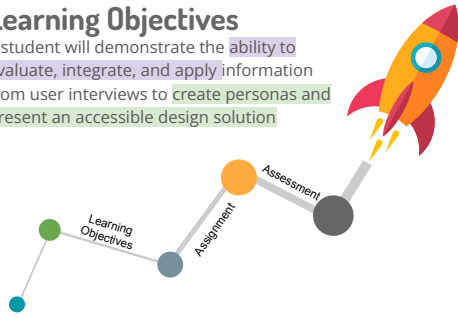
Learning Objectives

If the student has learned [subject], then they will be able to [show this(action)] by completing this [assessment].

The diagram illustrates a progression from Learning Objectives (represented by a green dot) to Assignment (represented by a blue dot) to Assessment (represented by an orange dot), which finally leads to a rocket launch (represented by a black dot). The rocket is orange and red with a blue window and yellow flames.

Learning Objectives

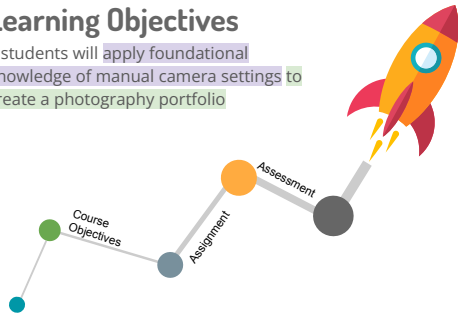
...student will demonstrate the ability to evaluate, integrate, and apply information from user interviews to create personas and present an accessible design solution



13

Learning Objectives

...students will apply foundational knowledge of manual camera settings to create a photography portfolio



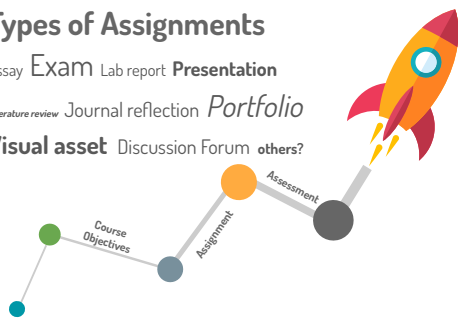
14

Types of Assignments

Essay Exam Lab report **Presentation**

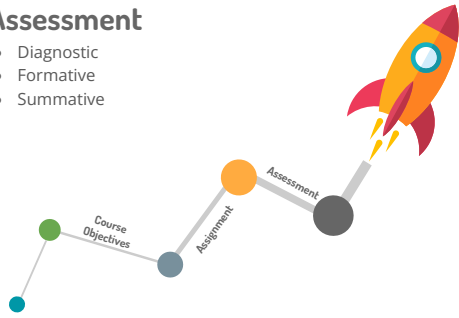
Literature review Journal reflection *Portfolio*

Visual asset Discussion Forum others?



Assessment

- Diagnostic
- Formative
- Summative



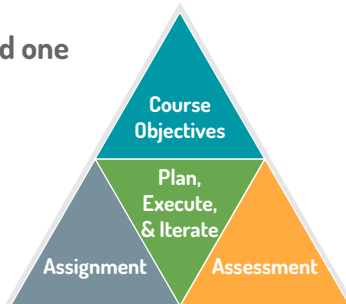
Learning Objectives Activity

1. Working with a partner, name something you want to teach in your class
2. As a team, work on turning the teaching goal into a course objective

REMEMBER:

- Specific learning goal -> action student will use to demonstrate learning -> assessment
- Write from the student's perspective
- Use Bloom's Taxonomy- <http://bit.do/blooms-tax>
- Think about how you can measure student learning
- **Can you include a CT2 element?**

Mapping, round one



@ebwalker



**THANK
YOU**
