Backward Design

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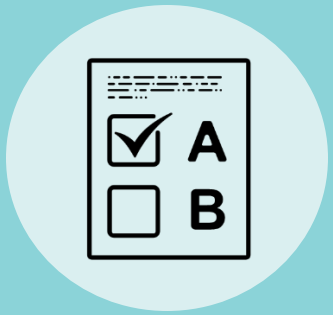
Begin with the end in mind



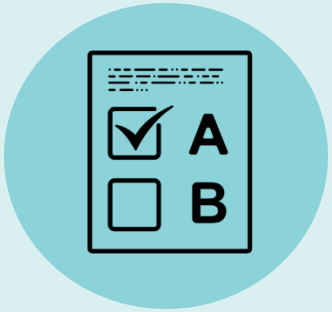
Develop assessment plan

Plan learning activities

Traditional Model

Begin with learning objectives

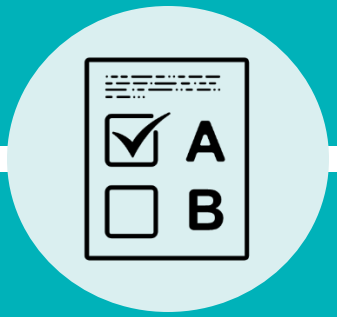
Plan learning activities



Develop a plan to assess competencies

Backward Design Steps

#1
Identify
Desired
Results



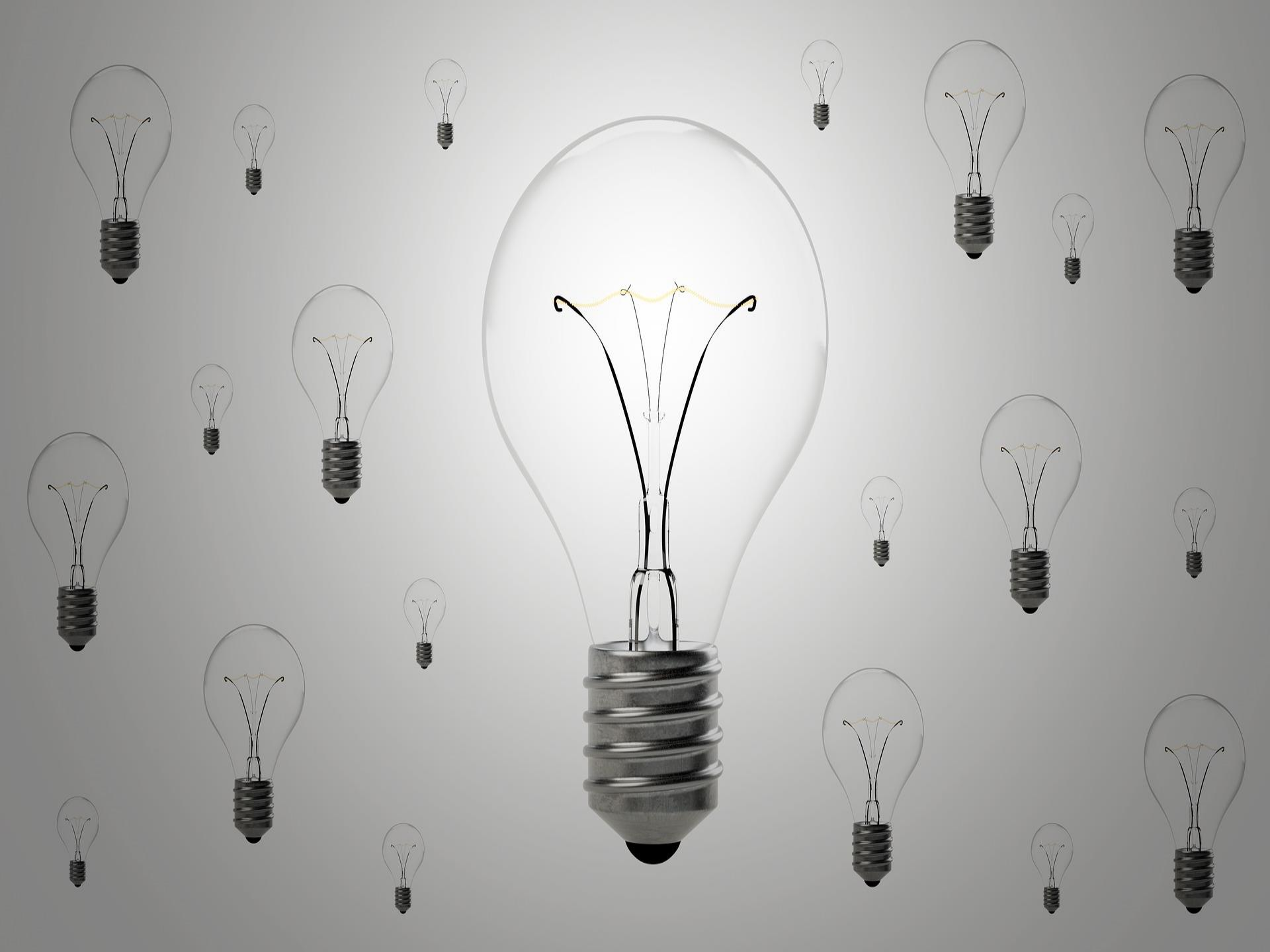
#2
Determine
Assessment
Evidence

#3
Plan Learning
Experiences

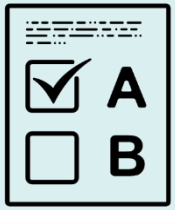
Step 1:
Identify Desired Results

What should the students know, understand, and be able to do?


RESULTS



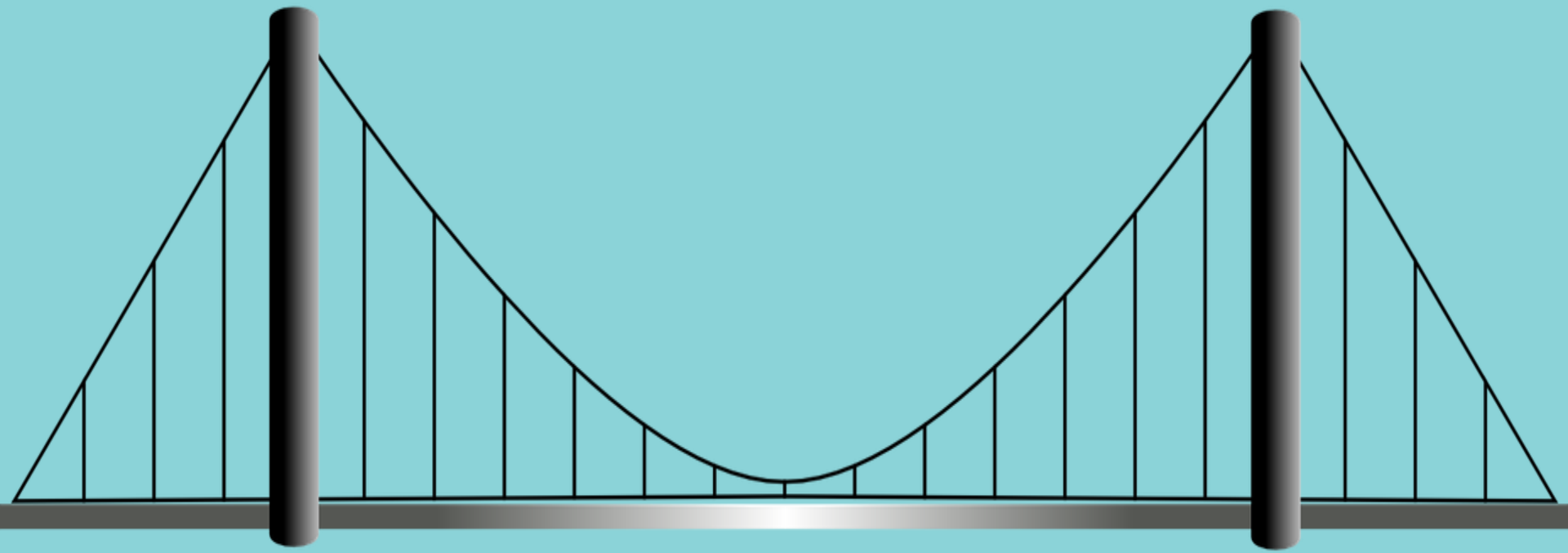
Step 2: Determine Assessment Evidence



How will we determine if the desired results occurred?

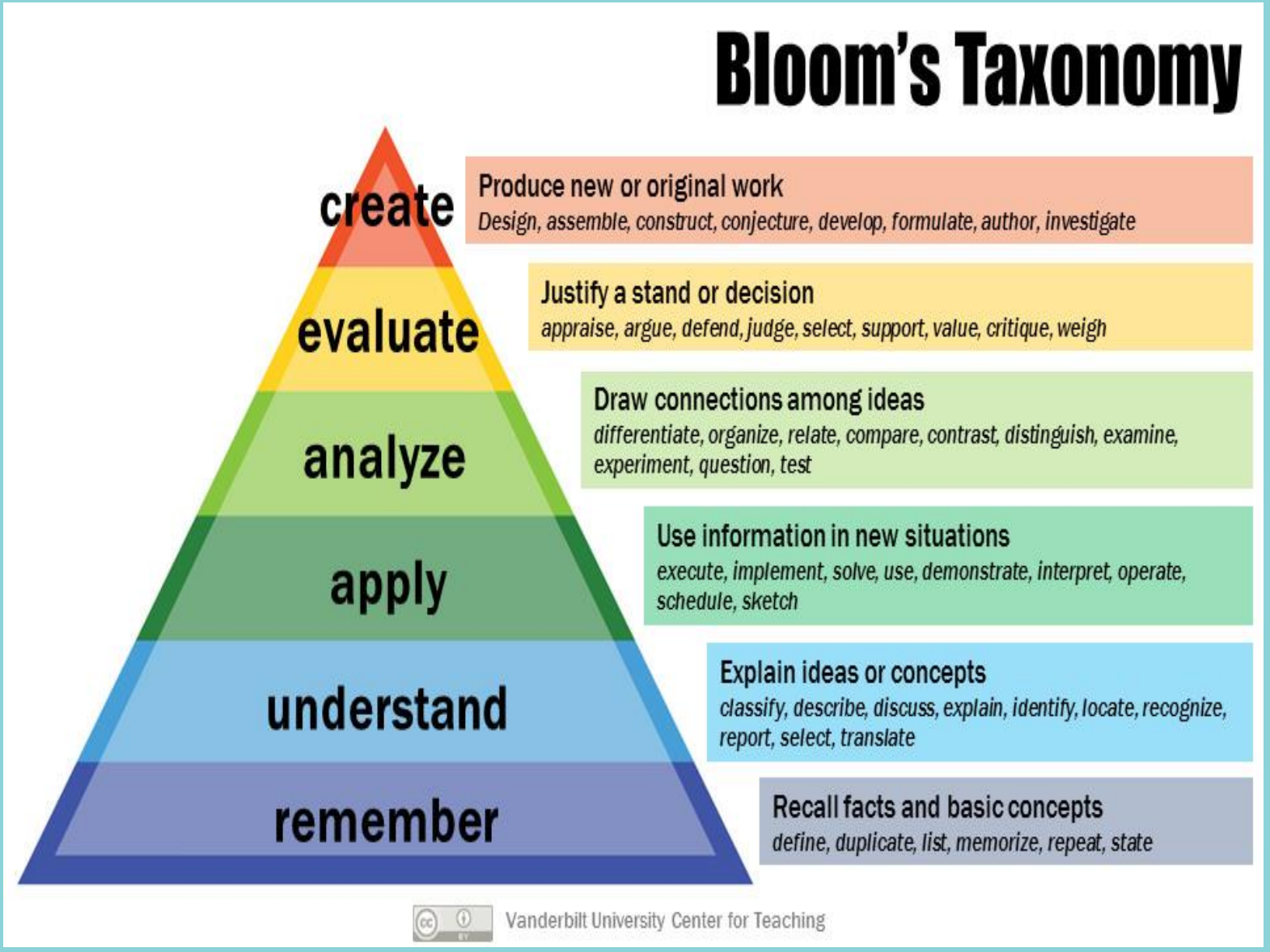
Big Idea / Goals

Your teaching

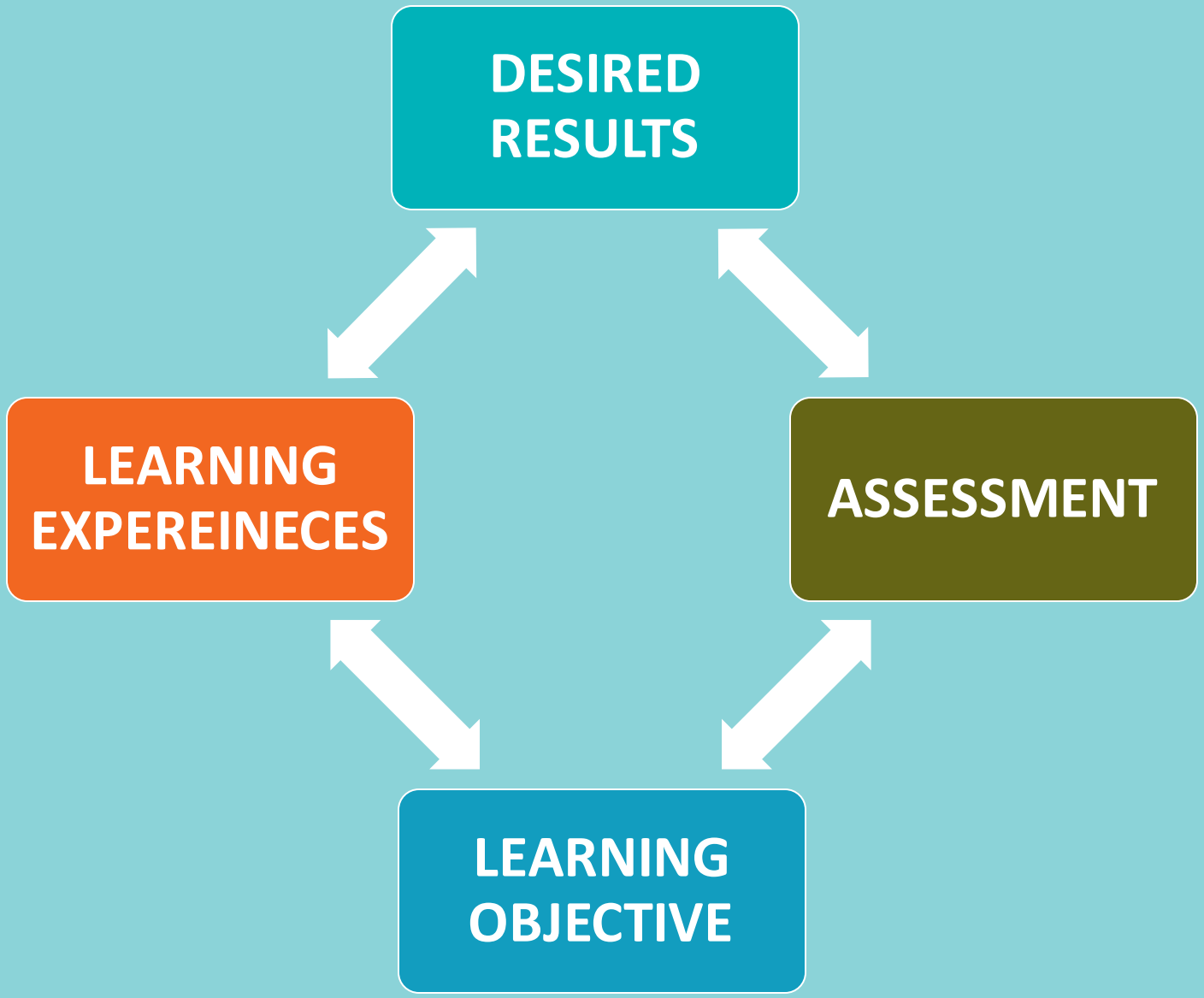


Assessment Evidence

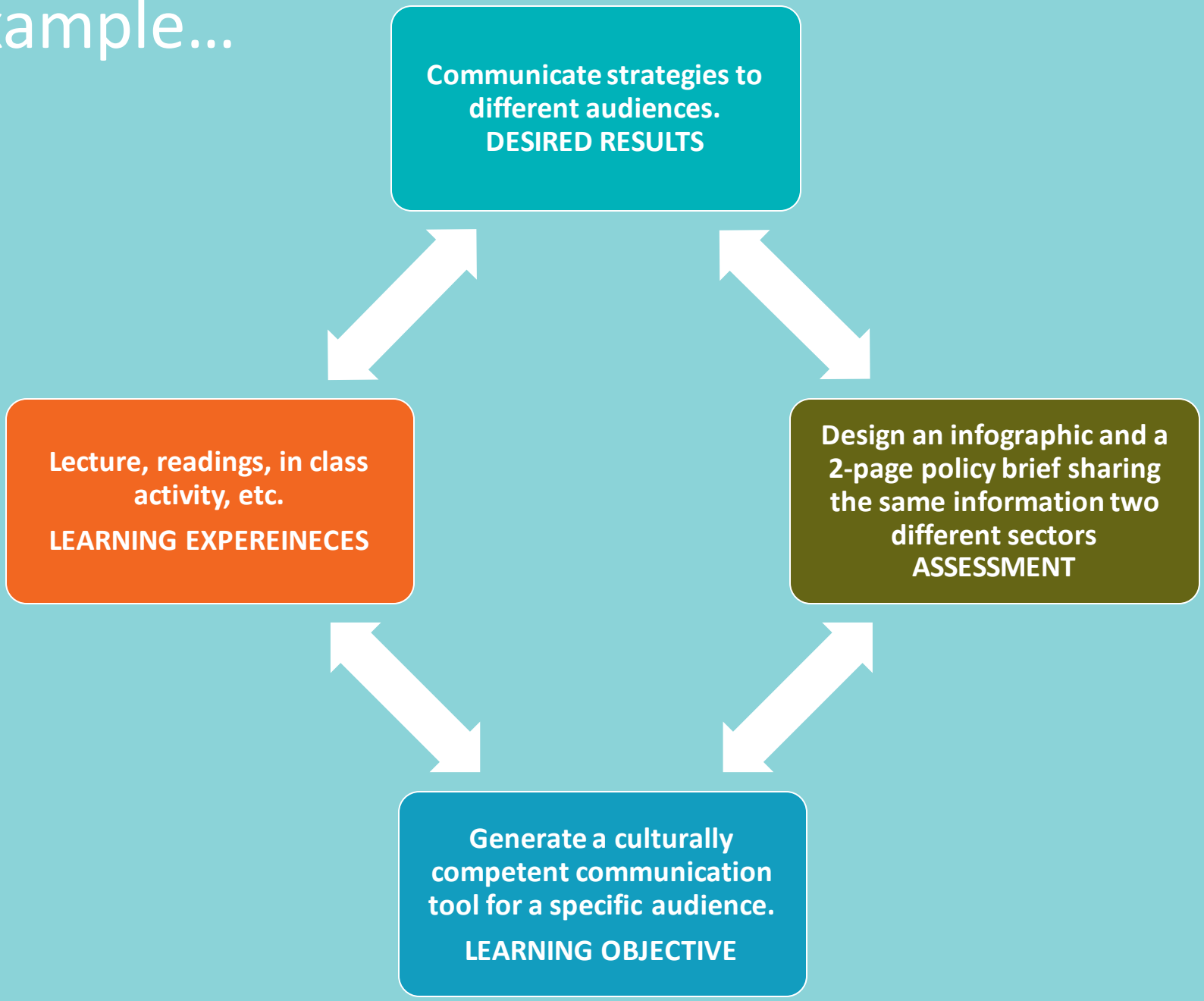
Verbs matter…



Alignment matters…



Example…


Communicate strategies to different audiences.
DESIRED RESULTS
Design an infographic and a 2-page policy brief sharing the same information two different sectors
ASSESSMENT
Generate a culturally competent communication tool for a specific audience.
LEARNING OBJECTIVE
Lecture, readings, in class activity, etc.
LEARNING EXPEREINECES

Step 3:
Plan Learning Experiences

What learning activities and content will lead to desired results?

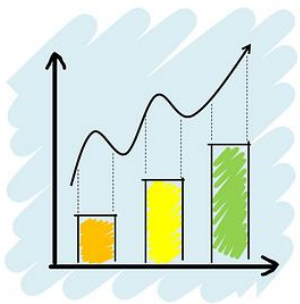
PUBLIC HEALTH CASE STUDIES

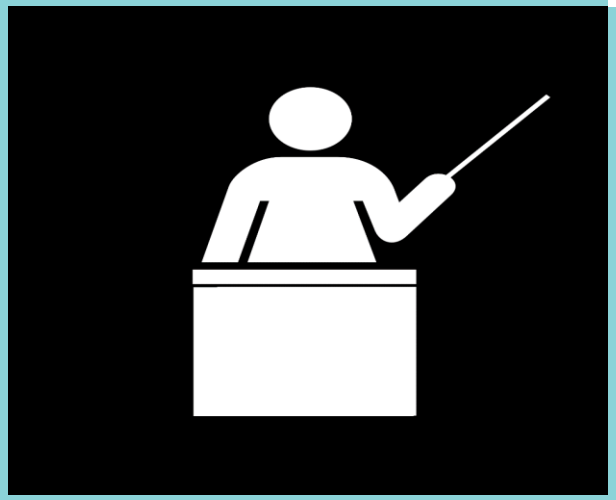
Voluntary or Regulated? The Trans Fat Campaign in New York City

This case takes students behind the scenes in the world of public health policymaking. Students follow the New York City Department of Health and Mental Hygiene, and the process it went through to craft a policy to reduce public consumption of trans fats in restaurants. In 2005, after considerable internal negotiations, the department's Bureau of Chronic Disease Prevention and Control elected to launch a public awareness campaign aimed equally at consumers, restaurants and their suppliers. But after a year, the awareness campaign had not budged the rate of trans fat use in restaurants. In 2006, the department decided to resort to regulation, despite the risks of triggering protests of a "nanny state," not to mention pushback from industry.

When BEST Intentions Go Awry: Arsenic Mitigation in Bangladesh

This case is about a public health response to the widespread arsenic contamination of groundwater in Bangladesh. It examines the lead-up to a 2008 media crisis that confronted a Columbia University clinical trial of a potential treatment for arsenic poisoning. The case raises for discussion the challenges of conducting research in rural, less developed and culturally insular communities. It also asks how to help communities while studying them—complicated by funding restrictions and a possible skewing of results.





Examples of Authentic Learning

- Interviews
- Video reports/projects
- Oral reports
- Case briefs
- Photo stories
- Peer editing/review
- ePortfolios
- Data Analysis
- Infographics
- Debates
- Ask the "expert"
- Letters to editor/government
- Floor plans
- Timelines
- Surveys
- Research data (real data sets)
- Document Analysis
- "Teacher" for a day, module or concept
- Case studies
- Podcasts/Vlogs
- Product reviews
- Article critiques
- Concept mapping
- Graphing data
- Presentations
- Design projects
- Group Projects
- Models/constructing objects
- Proposals
- Scenarios
- Inquiry based Learning
- Journaling/reflection
- Wikis and other collaborative writing
- Group problem solving
- Blogs
- Lab work
- Role playing
- Simulations
- Field work
- Field trips
- Research projects
- Problem based learning (PBL)
- Real world problems (finding solutions)
- Editorials
- Multi-media creation

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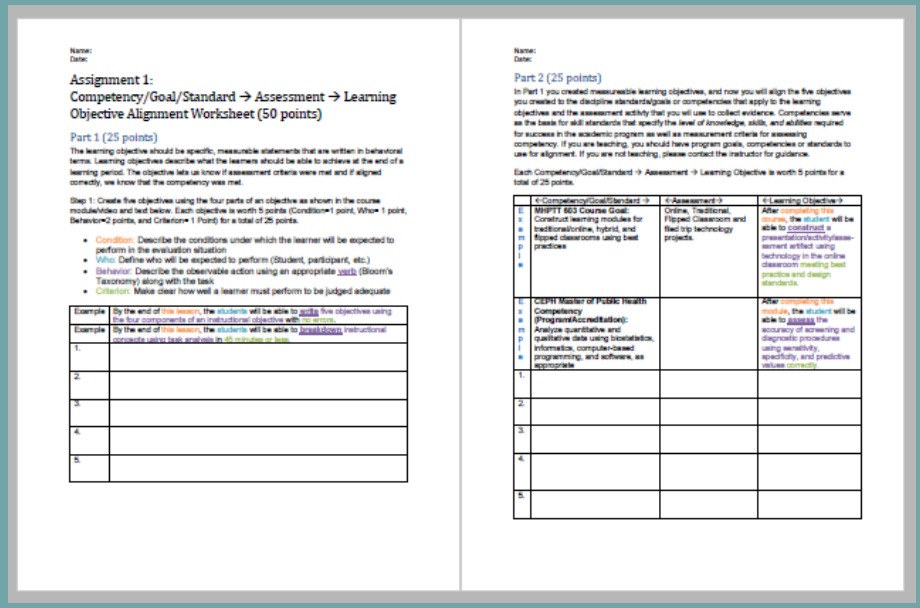
COLLEGE OF PUBLIC HEALTH

Adapted from Lombardi, M. M. (2007). Authentic learning for the 21st century: An overview. Educause learning initiative, 1(2007), 1-12.

Example 1

Be able to write objectives that align to goals and competencies

Have students write 5 objectives and align them with goal, assessment and activity.



Name:
Date:

Assignment 1:
Competency/Goal/Standard → Assessment → Learning Objective Alignment Worksheet (50 points)

Part 1 (25 points)

The learning objective should be specific, measurable statements that are written in behavioral terms. Learning objectives describe what the learners should be able to achieve at the end of a learning period. The objective lets us know if assessment criteria were met and if aligned correctly, we know that the competency was met.

Step 1: Create five objectives using the four parts of an objective as shown in the course module/video and text below. Each objective is worth 5 points (Condition=1 point, Who= 1 point, Behavior=2 points, and Criterion= 1 Point) for a total of 25 points.

- Condition: Describe the conditions under which the learner will be expected to perform in the evaluation situation
- Who: Define who will be expected to perform (Student, participant, etc.)
- Behavior: Describe the observable action using an appropriate verb (Bloom's Taxonomy) along with the task
- Criterion: Make clear how well a learner must perform to be judged adequate

Example	By the end of this lesson, the students will be able to write five objectives using the four components of an instructional objective with no errors.
Example	By the end of this lesson, the students will be able to breakdown instructional concepts using task analysis in 45 minutes or less.
1.	
2.	
3.	
4.	
5.	

Name:
Date:

Part 2 (25 points)

In Part 1 you created measureable learning objectives, and now you will align the five objectives you created to the discipline standards/goals or competencies that apply to the learning objectives and the assessment activity that you will use to collect evidence. Competencies serve as the basis for skill standards that specify the level of knowledge, skills, and abilities required for success in the academic program as well as measurement criteria for assessing competency. If you are teaching, you should have program goals, competencies or standards to use for alignment. If you are not teaching, please contact the instructor for guidance.

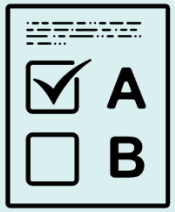
Each Competency/Goal/Standard → Assessment → Learning Objective is worth 5 points for a total of 25 points.

	←Competency/Goal/Standard →	←Assessment→	←Learning Objective→
Example	MHPTT 603 Course Goal: Construct learning modules for traditional/online, hybrid, and flipped classrooms using best practices	Online, Traditional, Flipped Classroom and filed trip technology projects.	After completing this course, the student will be able to construct a presentation/activity/assessment artifact using technology in the online classroom meeting best practice and design standards.
Example	CEPH Master of Public Health Competency (Program/Accreditation): Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming, and software, as appropriate		After completing this module, the student will be able to assess the accuracy of screening and diagnostic procedures using sensitivity, specificity, and predictive values correctly.
1.			
2.			
3.			
4.			
5.			

Create a video demonstrating how to write objectives using 4 parts and discuss the alignment process.

Example 2

Construct learning modules using technology for traditional/online, hybrid, and flipped classrooms using best practices

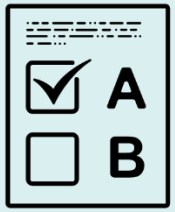


Design and build a technology tool presentation or assessment for students/participants

Video lecture (presentations and assessments using technology), technology tools discussion board, SAMR lecture

Example 3

Patient will be able to check blood glucose when leaving the medical office

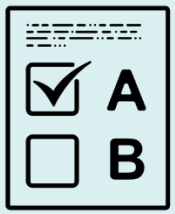


Have the patient practice using glucose monitor in the office

Create infographic with glucose monitoring steps and FAQs and go over each step in the office before practicing

Example 4

Faculty will know how to create teaching presence in online classrooms



Review course space for teaching presence indicators

Video lectures, readings, handouts, tip sheets

The End