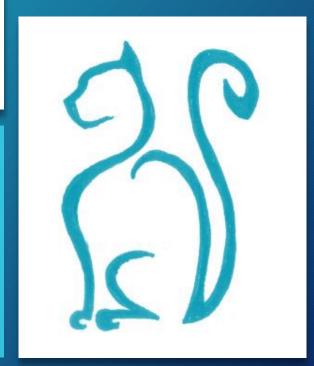
# CAT Samples!



FID in the Transition

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One of the most promising ways to improve learning is to improve teaching.

"

#### What are CATs?

The acronym CATs refers to Classroom Assessment Techniques

- CATs are strategies for ongoing assessment of student knowledge and performance in adult and higher education
- The goals of using CATs are to:
  - Guide curriculum content
  - Enhance teaching methods
  - Monitor how much and how well students are learning

Angelo & Cross (2005)

### **CAT Samples from Category 1**



Summaries of Classroom Assessment Techniques (strategies) that assess prior knowledge, comprehension, and analytic thinking

- To determine what students already know
- Help determine effective starting point for course or session

#### Description

Short, simple surveys (polls), typically multiple choice or short answer in response to "known answer" questions

#### Teaching Goal

- Establish baseline knowledge
- Improve Memory
- Learn fundamental terms or concepts

#### Effort

- Faculty: Medium
- Student: Low
- Data Analysis: Low/Medium

#### Technology

- Low tech
  - Questions on slides
  - Verbal questions
  - Hands raised, signs held
- Medium tech
  - Poll Everywhere
  - Qualtrics

## Background Knowledge Probe

- To determine an fundamental concepts students already know
- Help determine effective starting point for course or session

#### Description

Students
 create a list
 of key
 concepts and
 identify
 related
 concepts
 and/or
 questions
 about those
 concepts or
 connections

#### Teaching Goal

- Reinforce fundamental concepts
- Improve listening skills
- Learn
   conceptual
   underpinning
   s of session
   objectives

#### Effort

- Faculty: Low
- Student: Low
- Data Analysis: Low

#### Technology

- Low tech
  - Paper & pencil
- Medium tech
  - Poll Everywhere
- Qualtrics

## Focused Listing

CAT 2

Particularly useful in case-based scenarios for individuals, pairs or groups

- Determine prior knowledge that might disrupt learning
- Clarify misunderstan dings to enhance learning

#### Description

- Instructor identifies common misconceptions or pre-conceptions
- Creates anonymous polls or other inquiry activities with questions designed to promote reflection
- Consider how to respond to student misconceptions
- Explain reasoning

#### Teaching Goal

- Reinforce fundamental concepts
- Improve listening skills
- Learn
   conceptual
   underpinnings
   of session
   objectives

#### Effort

- Faculty: Low
- Student: Low
- Data Analysis: Low - Medium

#### Technology

- Low tech (Increases faculty effort)
  - Paper & pencil Concept Map
  - Smart Art
- Medium tech (reduces faculty effort)
  - Poll Everywhere (Rank, multiple choice)
  - Qualtrics

## Misconception/Preconception Check

 Assess students' skills at digesting and categorizing important information according to a given set of critical defining features

#### Description

 Requires students to categorize concepts according to the presence or absence of important defining features

#### **Teaching Goal**

- Improve analytic skills, ability to draw inferences and generate taxonomies of knowledge
- Develop study skills
- Learn concepts, facts & theories of subject

#### Effort

- Faculty: Medium (content expertise)
- Student: Low
- Data Analysis: Low(technology)

#### Technology

- Low tech
  - Paper matrix
  - PDF matrix
- Medium tech
  - Poll Everywhere (Rank Poll)
- Qualtrics (Sort poll)

## Defining Features Matrix

- Assists faculty in understanding how students reason their assertions of knowledge
- Promotes students' consideration of ethical underpinnings for decision-making

#### Description

- Instructor creates a decision-making exercise
- Students identify facts in support of or contradicting their decision
- e.g., develop differential diagnosis with reasoning for and against each possible diagnosis on the differential

#### **Teaching Goal**

- Develop analytic skills & capacity to make informed decisions
- Differentiate fact from opinion
- Make reasonable inferences from facts
- Evaluate facts

#### Effort

- Faculty: Low (content expertise)
- Student: Low
- Data Analysis: Low - Medium (technology)

#### Technology

- Low tech
- Paper & pencil
- Medium tech

question)

Recommended -Qualtrics (sorting

## Pro & Con Grid

CAT 10

Particularly useful in case-based scenarios for individuals, pairs or groups

 Enables faculty to determine how well students can evaluate content, understand how content is presented and why presentation form can affect whether and how information is utilized

#### Description

- Instructor provides raw curriculum content for students to analyze and outline (individuals, groups)
- e.g., students could identify components of decision-making process in patient situation, analyze how information was elicited and evaluated, & describe roles of various participants and how these might have influenced the process or outcomes
- e.g., students evaluate resources in support of reasoning

#### **Teaching Goal**

- Develop analytic, reading & writing skills
- Improve study skills and habits
- Learn to evaluate HOW one learns and HOW to evaluate resources
- Fosters independent thinking
- Promotes consideration of peer thinking processes and ideas

#### **Effort**

- Faculty: Low- Medium (content expertise)
- Student: High
- Data Analysis: High requires qualitative assessment

#### Technology

- Low tech
- Verbal
- Paper & pencil
- Medium tech
- Poll Everywhere
- Qualtrics (open ended)
- Document upload to LMS

## Content, Form & Function Outlines

CAT 11

Particularly helpful for self-directed learning or materials before flipped sessions

 Enables faculty to find out how concisely, completely and creatively students can organize and summarize sizeable and significant information

Promotes ability

to articulate

#### Description

- Instructor asks students to summarize in one sentence the import of content addressed in a given session -
- e.g., What do we need to know in order to do X and why?

#### **Teaching Goal**

- Enhance memory
- Improve listening and reasoning skills
- Develop ability to synthesize related concepts
- Improve ability to summarize knowledge and articulate reasoning

#### Effort

- Faculty: Low
- Student: Medium
- Data Analysis:
   Medium requires
   qualitative
   assessment

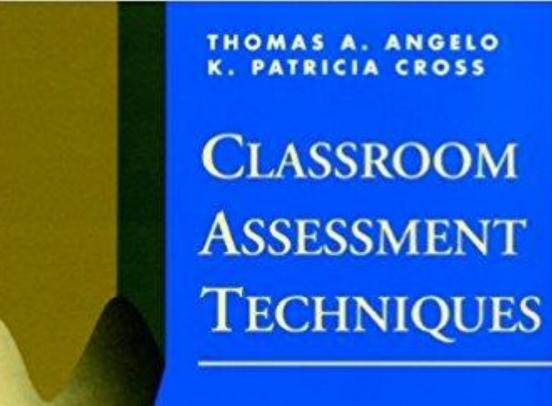
#### Technology

- Low tech
  - Verbal
  - Paper & pencil
- Medium tech
  - Poll Everywhere
  - Qualtrics (open ended)
- Document upload to LMS

## One Sentence Summary

#### Reference & Resources

- Teaching Goals Inventory
  - Self-scoring (online, PDF)
  - Online scoring (University of Iowa)
- Text
  - Thomas A. Angelo and K. Patricia Cross. Classroom Assessment Techniques: A Handbook for College Teachers, Jossey-Bass Publishers: San Francisco, CA; 2005.



A Handbook for College Teachers



#### Related Resource -

- SAMR Model
- \*By Julie Youm PhD, Instructional Technologies Group, University of California, Irvine, School of Medicine

#### Redefinition

Tech allows for the creation of new tasks, previously inconceivable

#### Modification

Tech allows for significant task redesign

**SAMR Model Videoscribe Guide\*** 

#### Augmentation

Tech acts as a direct tool substitute, with functional improvement

#### Substitution

Tech acts as a direct tool substitute, with no functional change

### For Faculty & Block Team Support

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