# Developing Clear Student Learning Outcomes

**Misty Bailey**, M.A., Curriculum and Assessment Coordinator, UTCVM

Master Teacher Program Workshop

August 14, 2018

UTCVM
INSTITUTE OF AGRICULTURE
THE UNIVERSITY OF TENNESSEE

## By the end of this session, participants will be able to:

- Identify characteristics of clear student learning outcomes.

- Compose clear, measureable outcomes that reflect most levels of Bloom's taxonomy.

- Evaluate their own course outcomes based on characteristics of well-written outcomes.

# Setting Clear Learning Outcomes…

So, why is this important?

# Importance of Clear Learning Outcomes

- Provides instructors, students with an overview of course.

- Identifies behaviors, skills students are expected to learn.

- Helps students be aware of their learning responsibility.

# Importance of Clear Learning Outcomes

- Creates roadmap for course planning.

- Provides outline & context for coordinators to develop exams & other assessments.

# 4 Characteristics of Clear Learning Outcomes

1. Reasonable
2. Measurable
3. Use verbs to describe observable behavior
4. Clear

# 3 Steps to Writing Learning Outcomes

1. Begin with the phrase:

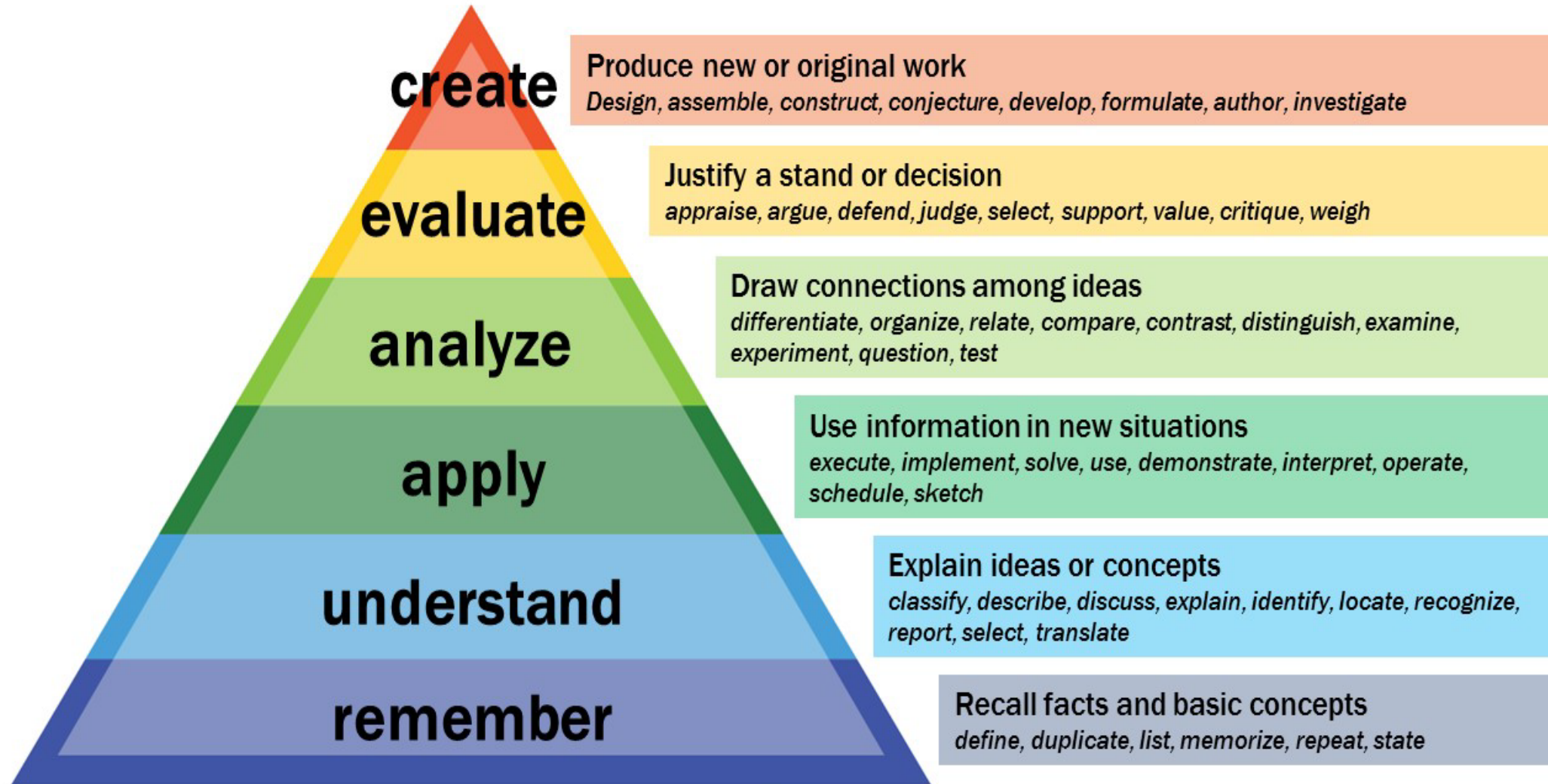"At the conclusion of this course/activity/lecture, students will be able to…"

# 3 Steps to Writing Learning Outcomes

2. Connect step 1 with an action verb that describes something observable and measurable

"At the conclusion of this course, students will be able to appraise ..."

# Bloom's Taxonomy

**create**
Produce new or original work
*Design, assemble, construct, conjecture, develop, formulate, author, investigate*

**evaluate**
Justify a stand or decision
*appraise, argue, defend, judge, select, support, value, critique, weigh*

**analyze**
Draw connections among ideas
*differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test*

**apply**
Use information in new situations
*execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch*

**understand**
Explain ideas or concepts
*classify, describe, discuss, explain, identify, locate, recognize, report, select, translate*

**remember**
Recall facts and basic concepts
*define, duplicate, list, memorize, repeat, state*

# Learning Outcomes by Category: What students do

| Remember | Understand | Apply | Analyze | Evaluate | Create |
|---|---|---|---|---|---|
| Count | Associate | Apply | Analyze | Appraise | Compose |
| Define | Compute | Calculate | Arrange | Assess | Create |
| Describe | Convert | Change | Breakdown | Compare | Combine |
| Draw | Defend | Classify | Categorize | Conclude | Connect |
| Identify | Discuss | Complete | Combine | Contrast | Design |
| Label | Distinguish | Compute | Design | Criticize | Devise |
| List | Estimate | Demonstrate | Detect | Critique | Group |
| Match | Explain | Discover | Develop | Determine | Integrate |
| Name | Extend | Divide | Diagram | Grade | Modify |
| Outline | Extrapolate | Examine | Differentiate | Interpret | Order |
| Point | Generalize | Graph | Discriminate | Judge | Organize |
| Quote | Give | Interpolate | Illustrate | Justify | Plan |
| Read | examples | Manipulate | Infer | Measure | Prescribe |
| Recall | Infer | Modify | Outline | Rank | Propose |
| Recite | Paraphrase | Operate | Point out | Rate | Rearrange |
| Recognize | Predict | Prepare | Relate | Relate | Reconstruct |
| Record | Rewrite | Produce | Select | Support | Reorganize |
| Repeat | Summarize | Show | Separate | Test | Revise |
| Reproduce | | Solve | Subdivide | | Rewrite |
| Select | | Subtract | Utilize | | Transform |
| State | | Translate | | | |
| Write | | Use | | | |

# 3 Steps to Writing Learning Outcomes

3. Conclude with specific of what student will do when demonstrating achievement

"At the conclusion of this course, students will be able to appraise risk of infection in humans by different zoonotic agents."

# Which of the following is a clear learning outcome?

a. The student will write a term paper on a topic that interests him or her.

b. The student will describe the pathophysiology of shock.

c. The student will understand the pathophysiology of shock and emergency management of small animal patients.

d. To teach basic radiation safety concepts and techniques.

# Sample Learning Objectives

*Example*

- **Good**:  Given a surgical gown pack and sterile gloves, the student will be able to put on the gown and gloves without breaking sterility of the gown and gloves.
- **Poor**: Learn sterile technique.

*Example*

- **Good**: Differentiate between vertical and horizontal mattress suture patterns.
- **Poor**: Know different suture patterns.

*Example*

- **Good**: Given a list of common anti-inflammatory drugs, compare and contrast their chemical compositions.
- **Poor**: List common anti-inflammatory drugs.

# Evaluate your learning outcomes

- Are they measurable?

- Do they describe observable behaviors (e.g., create, describe, explain, etc.)?

- Are they reasonable within the time frame of your course?

- Is there demonstration of a variation of levels within Bloom's Taxonomy?

# Questions?