Student Learning Outcomes

Why are student learning outcomes important?

Student learning outcomes can be difficult to write! It takes practice and is both an art and a science. But it is important to develop quality student learning for two reasons. At the course level, they provide the foundation for instruction, as well as course activities and assessments. Suskie (2018) defines student learning outcomes are "the skills and competencies that student learn throughout a course, through iterative, progressive learning activities" (p.70). At the program-level, student learning outcomes identify what students should know, value, or be able to do when they graduate (Banta & Palomba, 2015; Suskie, 2018).

This handout is designed to provide faculty with information on how to write student learning outcomes. In general, quality learning outcomes typically:

- Begin with a verb
- Describe a single skill, ability, or value
- Avoid words that can be subjective and difficult to measure such as "know" or "understand" (additional words to avoid are provided as part of this handout)
- Are reflective of the level of difficulty of the course and program

Let's get started!

When writing a student learning outcome, begin with the question…

1. What do you want your students to be able to do when they complete:
   - a module,
   - your course, or
   - program?

Next…

2. Think about the verb that reflects level at which you would like your students to achieve.

For example: I want my students to be able to…

- Create instructional materials
- Explain the role of probation officers in the juvenile justice system

ABCD Format

The ABCD format is one strategy for developing learning outcomes.

Audience

- Who is being assessed?
  - Example: *K-6 education graduates*

Behavior

- What will learner be able to do, think, or know at the completion of the module, course, or program?

  - Example: *Create instructional materials*

Condition

- Under what circumstances/context will the learning occur? Often referred to as the stem sentence
  - At the end of this course
  - At the completion of this program
  - After completing this module
  - Example: *At the completion of this program*

Degree

- How well or how much is the behavior performed?

The Result

Condition
$\overbrace{Upon\ completion\ of\ the\ program,}$ $\overbrace{graduates\ of\ the\ elementary\ education\ program}^{Audience}$
$\overbrace{will\ create\ instructional\ materials}_{Behavior}$ $\overbrace{that\ incorporate\ effective\ pedagogical\ practices.}^{Degree}$

# Words to Avoid When Writing Student Learning Outcomes

These verbs are considered "fuzzy" and therefore, difficult to measure.

- Appreciate
- Believe
- Capacity
- Comprehend
- Conceptualize
- Depth
- Experience
- Feel
- Hear
- Intelligence
- Know
- Knowledge
- Listen
- Memorize
- Perceive
- Realize
- Recognize
- See
- Self-Actualize
- Think
- Understand

Words to Use When Writing Student Learning Outcomes

Use words from the right side of this image and consult the word lists below.
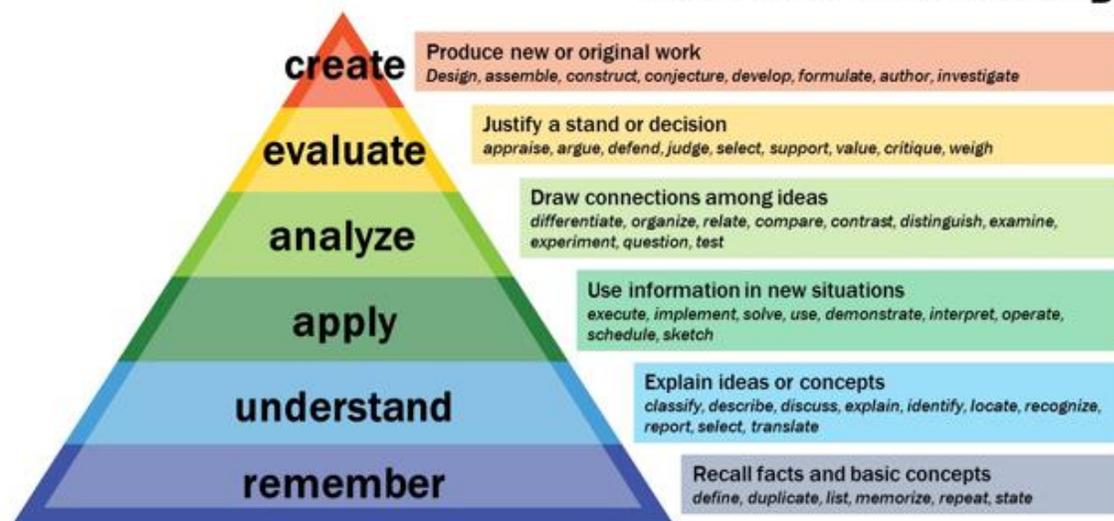
Vanderbilt University Center for Teaching

Revised Bloom's Taxonomy					
Remember	**Understand**	**Apply**	**Analyze**	**Evaluate**	**Create**
Cite	Add	Acquire	Analyze	Appraise	Abstract
Define	Approximate	Adapt	Audit	Assess	Animate
Describe	Articulate	Allocate	Blueprint	Compare	Arrange
Draw	Associate	Alphabetize	Breadboard	Conclude	Assemble
Enumerate	Characterize	Apply	Break down	Contrast	Budget
Identify	Clarify	Ascertain	Characterize	Counsel	Categorize
Index	Classify	Assign	Classify	Criticize	Code
Indicate	Compare	Attain	Compare	Critique	Combine
Label	Compute	Avoid	Confirm	Defend	Compile
List	Contrast	Back up	Contrast	Determine	Compose
Match	Convert	Calculate	Correlate	Discriminate	Construct
Meet	Defend	Capture	Detect	Estimate	Cope
Name	Describe	Change	Diagnose	Evaluate	Correspond
Outline	Detail	Classify	Diagram	Explain	Create
Point	Differentiate	Complete	Differentiate	Grade	Cultivate
Quote	Discuss	Compute	Discriminate	Hire	Debug
Read	Distinguish	Construct	Dissect	Interpret	Depict
Recall	Elaborate	Customize	Distinguish	Judge	Design
Recite	Estimate	Depreciate	Document	Justify	Develop
Recognize	Example	Derive	Ensure	Measure	Devise
Record	Explain	Determine	Examine	Predict	Dictate
Repeat	Express	Diminish	Explain	Prescribe	Enhance
Reproduce	Extend	Discover	Explore	Rank	Explain
Review	Extrapolate	Draw	Figure out	Rate	Facilitate
Select	Factor	Employ	File	Recommend	Format
State	Generalize	Examine	Group	Release	Formulate
Study	Give	Exercise	Identify	Select	Generalize
Tabulate	Infer	Explore	Illustrate	Summarize	Generate
Trace	Interact	Expose	Infer	Support	Handle
Write	Interpolate	Express	Interrupt	Test	Import
	Interpret	Factor	Inventory	Validate	Improve
	Observe	Figure	Investigate	Verify	Incorporate
	Paraphrase	Graph	Layout		Integrate
	Predict	Handle	Manage		Interface
	Review	Illustrate	Maximize		Join
	Rewrite	Interconvert	Minimize		Lecture
	Subtract	Investigate	Optimize		Model
	Summarize	Manipulate	Order		Modify
	Translate	Modify	Outline		Network
	Visualize	Operate	Point out		Organize

Revised Bloom's Taxonomy					
Remember	**Understand**	**Apply**	**Analyze**	**Evaluate**	**Create**
		Personalize	Prioritize		Outline
		Plot	Proofread		Overhaul
		Practice	Query		Plan
		Predict	Relate		Portray
		Prepare	Select		Prepare
		Price	Separate		Prescribe
		Process	Subdivide		Produce
		Produce	Train		Program
		Project	Transform		Rearrange
		Provide			Reconstruct
		Relate			Relate
		Round off			Reorganize
		Sequence			Revise
		Show			Rewrite
		Simulate			Specify
		Sketch			Summarize
		Solve			
		Subscribe			
		Tabulate			
		Transcribe			
		Translate			
		Use			

(University of Arkansas, Teaching Innovation & Pedagogical Support, 2018)
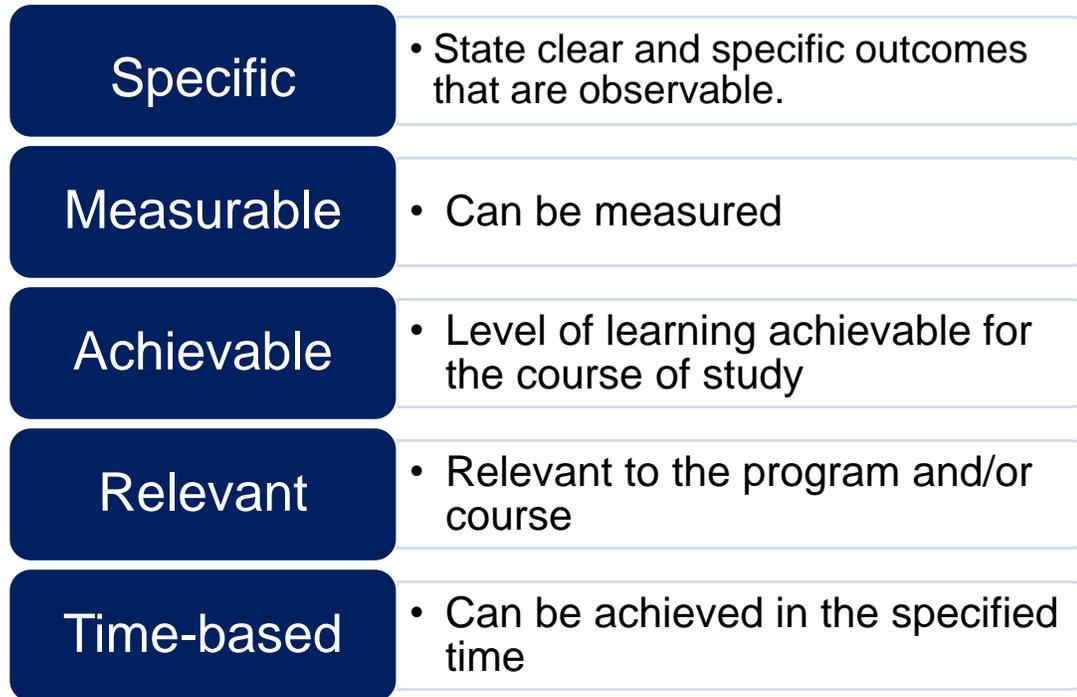
It's your turn!

List the main components of your student learning outcome:

- **Audience**: Who are the student learners?

- **Behavior**: What will the students be able to think, know, or do?

- **Condition**: Under what circumstances/context will the learning occur?

- **Degree**: How well or how much must the behavior be performed?

Now, put it all together: Write your student learning outcome below!

SMART Outcomes

After you have created a student learning outcome, review it to be sure it meets the expectations of a S-M-A-R-T outcome.

Specific	• State clear and specific outcomes that are observable.
Measurable	• Can be measured
Achievable	• Level of learning achievable for the course of study
Relevant	• Relevant to the program and/or course
Time-based	• Can be achieved in the specified time

1. Specific

Specific answers the questions, "What is to be done?" and "How will you know it is done?" and describes the results (end-product) of the work to be done. The description is written in such a way that anyone reading the outcome will most likely interpret it the same way. To ensure that an outcome is specific is to make sure that the way it is described is observable or measurable. This means that somebody can see or hear (physically observe) or otherwise measure the learner achieving the outcome. *Specific* also refers to the guideline that any learning outcome should only address one behavior, activity, or area of knowledge.

2. Measurable

Measurable answers the question, "How will you know the student has achieved the outcome?" and defines the outcome using assessable terms (*quantity*, *quality*, *frequency*, etc.). It refers to the extent to which something can be evaluated against a defined standard.

3. Achievable

Achievable answers the questions, "Can the student do it?" and "Can the measurable outcome be achieved by the student?" and "Does the student have the experience, knowledge, or capability of fulfilling the expectation?" It also answers the questions, "Can it be

done according to the conditions and degree specified by the outcome? and "Can the outcome be achieved at the student's current academic level?"

4. Relevant

Relevant answers the questions, "Should it be done?" and "Why?" and "What will be the impact?" Is the outcome aligned with goals and outcomes further up the hierarchy? Does the outcome represent a needed knowledge base or skill set? Is the outcome appropriate for the level of the lesson, module or course? For example, we would not want to include an advanced pediatric life-support objective in an introductory nursing course.

5. Time-oriented

Time-oriented answers the question, "When will it be done?" Often this is included in the preface language of an outcome: "Upon completion of this course..." or "By the end of this module...." It refers to the fact that an outcome has a check point or end point built into it. Sometimes an outcome will reference the start of another period of instruction: "**Before starting module two, the student will explain....** (The Outcome Project, n.d.)

Final Checklist for Evaluating Outcome Statements

Answer these questions about each outcome statement'	Yes	No
1. Does the outcome support: • the program outcomes?		
• CCE MCOs		
2. Does the outcome describe what the program intends for students to know (cognitive), think (affective, attitudinal), or do (behavioral, performance)?		
3. Is the outcome: • Specific?		
• Measurable?		
• Achievable?		
• Relevant?		
• Time-based?		
4. Do you have or can you create an activity to enable students to learn and demonstrate the desired outcome?		
5. Can the results from assessing this outcome be used to make decisions on how to improve the program?		

Here are some examples of student learning outcomes.

Difficult to measure	More specific but difficult to measure	Measurable
will appreciate the benefits of exercise	will value exercise as a stress reduction tool	will explain how exercise affects stress
will develop problem-solving skills and conflict resolution	will demonstrate the ability to resolve personal conflicts and assist others in resolving conflicts.	will assist classmates in resolving conflicts by helping them negotiate agreements.
will be able to have more confidence in their abilities.	will demonstrate critical thinking skills, such as problem solving as it relates to social issues	will analyze arguments about racial discrimination

References

Banta, T. W. & Palomba, C. A. (2015). *Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education.* Jossey-Bass.

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