WRITING LEARNING OUTCOMES

What are learning outcomes?
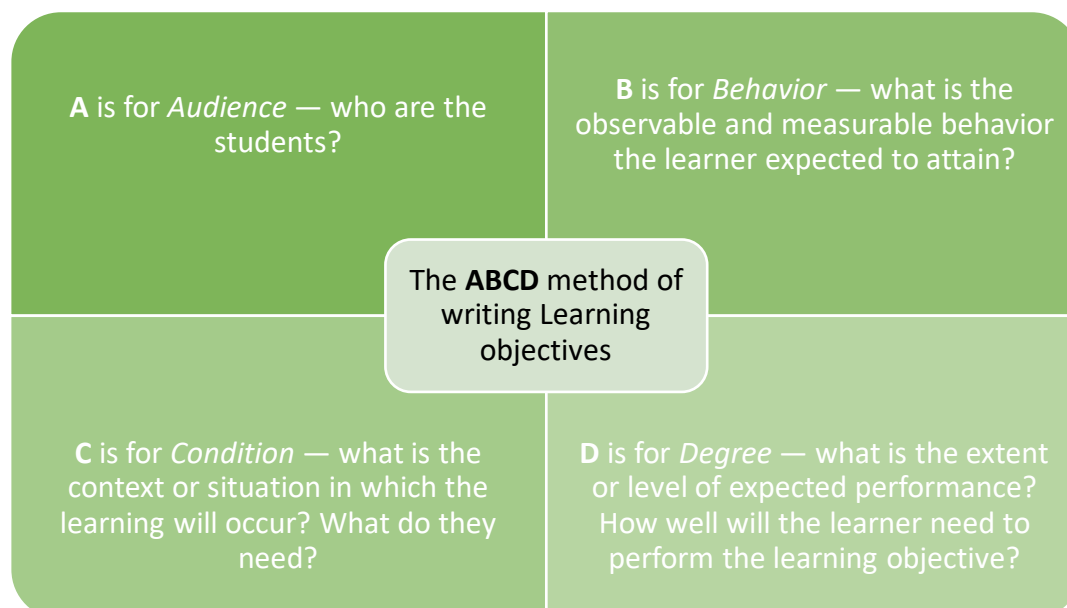
A learning outcome answers the question: '*What should students be able to do at the end of the class or course that they couldn't do before?*'

- A learning outcome aimed at the <u>knowledge and skills you are going to teach</u>.
- The focus is the product of instruction rather than what form the instruction will take.

> *Good learning outcomes are focused on what the learner will know or able to do by the end of a defined period and indicate how that knowledge or skill will be demonstrated.*

How do I write learning outcomes?

1. Focus on **student performance**, not teacher performance.

2. ABCD Method

A is for *Audience* — who are the students?	**B** is for *Behavior* — what is the observable and measurable behavior the learner expected to attain?
C is for *Condition* — what is the context or situation in which the learning will occur? What do they need?	**D** is for *Degree* — what is the extent or level of expected performance? How well will the learner need to perform the learning objective?

The **ABCD** method of writing Learning objectives

3. **Use active verbs** *(Please see Appendix A for a list of active verbs.)*

- Special attention to replacing "understand"—ask yourself, **"What should the student be able to do if the student understands the content?"**

4. Think about where you are aiming on Bloom's taxonomy. Aim for higher order thinking.

> *Make the learning outcome specific, check for action verbs and observable end products.*

Use the following template to help you write an appropriate learning outcome:

- **By the end of this unit on** <u>unit name</u> **students will be able to** <u>choose an action verb</u> **by** <u>how they will apply students' knowledge or skill/ how you will assess students' learning</u>.

When writing your outcomes, keep in mind…

Learning outcomes should be SMART(TT):

Speak to the Learner	Learning outcomes should address what the learner will know or be able to do at the completion of the course
Measurable	Learning outcomes must indicate how learning will be assessed
Applicable	Learning outcomes should emphasize ways in which the learner is likely to use the knowledge or skills gained
Realistic	All learners who complete the activity or course satisfactorily should be able to demonstrate the knowledge or skills addressed in the outcome
Time-Bound	The learning outcome should set a deadline by which the knowledge or skills should be acquired
Transparent	Should be easily understood by the learner
Transferable	Should address knowledge and skills that will be used by the learner in a wide variety of contexts

The SMART(TT) method of goal setting is adapted from Blanchard, K., & Johnson, S. (1981). The one minute manager. New York: Harper Collins.

Why spend time writing specific learning outcomes? Isn't my course description good enough?

Well-written learning outcomes help instructors

- Aid students in getting as much as possible from the course by **focusing their learning**
- Plan and revise courses by organizing the course around **specific areas of achievement**
- **Improve assessment of student performance** by aligning testing with what you want your students to actually get out of the course
- Improve organization and **optimize lecture time** by focusing on the **most important concept**s and reducing the opportunity to get off track

Well-written learning outcomes help students

- Get on the same page with the instructor and peers. Students take a course for a number of different reasons: it is required, it looked interesting, it fit my schedule, and it was the only one left. **Specific learning outcomes** make all students aware of the expectations for learning regardless of their prior experience with the subject or instructor
- **Clarify what is important in this course**
- Self-assess how they are doing and what they need to do to be successful in the course. When outcomes are aligned with assessments, students know how to study, practice, and apply concepts and spend less time guessing how to please the instructor

Some Examples of Learning Outcome

1. *Content*
   - **By the end of this course**, students will be able to **categorize** macroeconomic policies according to the economic theories from which they emerge.

o **By the end of this unit**, students will be able to **describe** the characteristics of the three main types of geologic faults (dipslip, transform, and oblique) and explain the different types of motion associated with each.

2. *Skills*

o **By the end of this course**, students will be able to **ask questions** concerning language usage with confidence and seek effective help from reference sources.

o **By the end of this course**, students will be able to **analyze** qualitative and quantitative data, and explain how evidence gathered supports or refutes an initial hypothesis.

3. *Values*

o **By the end of this course**, students will be able to **work** cooperatively in a small group environment.

o **By the end of this course**, students will be able to **identify** their own position on the political spectrum.

Learning outcomes can adress content, skill and long term attitudes or values.

Bloom's Taxonomy Action Verbs

Level		Sample of Action Verbs			Examples of Learning Outcome
Remember	recall of information	define state repeat relate	identify label list match	Name write recall recognize	By the end of this course, students will be able to identify the most frequently encountered endings for nouns, adjectives and verbs.
Understand	demonstration of comprehension	explain summarize paraphrase describe report	convert distinguish summarize classify predict	estimate express extend indicate illustrate	By the end of this course, students will be able to explain their personal responses to a literary work they have selected independently.
Apply	applying knowledge in a new context	apply change choose compute demonstrate discover	employ illustrate interpret solve construct	practice prepare schedule use predict	Upon completion of this course, students will be able to interpret the results of statistical analyses.
Analyze	supporting assertions through the use of evidence and arguments; identifying causes and patterns	analyze categorize compare contrast separate apply	classify distinguish differentiate explore explain select	figure out ensure infer investigate outline	Upon completion of this course, students will be able to compare the outcomes of different administrative practices.
Evaluate	coming to a judgment on the value of information or the validity of arguments	judge recommend critique justify appraise	interpret conclude contrast predict argue	defend discriminate estimate evaluate	Upon completion of the course, students will be able critically evaluate psychometric quality of instruments.
Create	combining or grouping knowledge to come to new conclusions	create design hypothesize invent arrange assemble	collect combine comply compose construct plan	design develop formulate generate revise reorganize	By the end of this course, students will be able to develop strategies for building teacher-parent cooperation.

Further Reading and Resources

- Learning outcome generator:

- https://learning-objectives.easygenerator.com/

- Bloom's taxonomy:

- https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/

- An introduction to writing effective learning outcomes:

  https://www.ctl.ox.ac.uk/effective-learning-outcomes

References

Anderson, L. W., & Krathwohl, D. R. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Longman.

Blanchard, K. H., & Johnson, S. (1982). *The one-minute manager.*