



Creating Learning Outcomes

Natasja Saranchuk
Educational Developer
CTL

Clarifying terminology

□ Goals:

- are general statements of teaching intentions written from the teacher's point of view to indicate the general content.

□ Objectives:

- Are specific statements of teaching intentions i.e., specific areas to be covered in a block of learning.
- **NOTE:** Because of confusion in the literature about this term sometimes referring to teaching intentions and other times to expected learning, we will only be using the term outcomes.

□ Outcomes:

- Are statements of what a learner is expected to know understand and/or be able to demonstrate after the completion of a process of learning.

About Learning Outcomes

- ❑ Learning outcomes should be:
 - ❑ appropriate to course level
 - ❑ clear and understandable to students
 - ❑ measurable – of something useful and meaningful
 - ❑ attainable
 - ❑ aligned with goals and assessments
- ❑ Example learning outcome:

“By the end of this course, students will be able to **classify** reactions as exothermic and endothermic.”

Outcomes inform....

- **instructors** of:

- the content, teaching/learning activities, and assessment.
- criteria for evaluating student performance.
- how successful a learning activity has been.

- **students:**

- as a framework to guide their studies by telling students very specifically what we intend for them to learn or do.

- **both:**

- about whether students have gained the appropriate skills, attitudes, and/or knowledge.

Outcome phrase

- ❑ By the end of this course, students will be able to (action verb) (the knowledge, skill or attitude).
- ❑ Eg. “By the end of this course, students will be able to **classify** reactions as exothermic and endothermic.”

Bloom's Taxonomy *revised



Cognitive domain		Example verbs
Higher level	Creating	compose, design, develop
	Evaluating	critique, evaluate, justify, hypothesize
Mid level	Analyzing	compare, determine, integrate
	Applying	demonstrate, carry out, implement
Lower level	Understanding	explain, interpret, classify
	Remembering	describe, list, define

Goals and accompanying outcomes

Goal	By the end of the module students will be able to...	Bloom's Taxonomy		
		Low	Mid	High
To introduce students to modes of satiric writing in the eighteenth century.	analyze the relationship between the language of satire to literary form.		X	
To become acquainted with topographic maps and their usage.	identify major landform features on topographic maps and relate them to basic geologic processes.	X	X	

Unclear vs. clear outcomes

Unclear: You will know major periods in the history of western music.

Clearer outcome: By the end of the course, you will be able to identify and summarize the important features of major periods in the history of western music.

Unclear: You will understand the process of photosynthesis.

Clearer outcome: After this module, you will be able to describe the main processes of photosynthesis.

Activity: rewrite the outcome

Rewrite the following outcome to make it clear for the students in your discipline.

- ❑ Unclear: Students will understand how to critically read research articles.

Clearer outcome example: By the end of the course, you will **critique** a research article by providing a summary, discussion and supported evaluation of the work.

Tips for writing outcomes

- Think SMART:

Specific, **M**easurable, **A**ttainable, **R**elevant, **T**ime-bound

- Avoid vague, unmeasurable verbs such as: understand, know, realize, comprehend, think, experience, become familiar with, etc.
- Group similar outcomes of same topic into one
 - (eg. 'describes functions of the heart and describes functions of the liver' into 'describes functions of major body organs')

Before and After

- ❑ **Before** you create outcomes, think about where your course fits in the program – what learning needs to occur before or after your course (i.e. prerequisites).
- ❑ **After** you create your outcomes, think about what assessments will provide you with the student work (evidence) you will examine to determine if the outcomes have been achieved.

FAQ's

- Do ALL student learning outcomes need to be assessed?
- Can a course learning outcome be the same as a program learning outcome?
- How many learning outcomes should I have for my course?
- If I teach an intro course, should all my outcomes fall in the low end of Bloom's taxonomy?

Activity: Outcomes for your course

Return to the goals you wrote earlier and choose one or two for which to write specific learning outcomes.

Check:

- ❑ Does the language describe student rather than teacher behaviors?
- ❑ Are the outcomes written at the appropriate level for this audience?
- ❑ Do the outcomes reflect the appropriate level of thinking (i.e. higher order vs. lower order)?
- ❑ Can the learning outcomes be realistically achieved within the timeframe?