

Review of Online Module

Week 3: Learning Objectives

Module 3: Learning Objectives and Their Uses

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Learning goals of the online module

1. Explain the value of developing learning goals and objectives
2. Begin to articulate broad educational goals and values
3. Contrast course-scale learning goals and topic-scale learning objectives, in terms of their scope, value, and utility.
4. Develop and communicate learning objectives clearly for a given topic
5. Justify the choice of a particular learning objective
6. Identify the cognitive level of learning objectives or assessments using Bloom's Taxonomy
7. Recognize the value of aligning assessments, instructional practices, and learning objectives
8. Propose assessments to test student achievement of a learning objective at a given cognitive level

Description of main activities of online module

Online Videos

- Learning Objectives vs. Syllabi [4:27] - Dr. Stephanie Chasteen and others from University of Colorado Boulder provide their definitions of learning objectives/goals. They go on to discuss the differences between learning objectives and points on a syllabus.
- Why Do We Need Learning Objectives [4:44] - Dr. Stephanie Chasteen and others from University of Colorado Boulder illuminate common issues professors and students encounter in the classroom, laying the foundation for why learning objectives are important.
- How can Learning Objectives be Helpful? [6:25] - Dr. Stephanie Chasteen from University of Colorado Boulder and others discuss how learning goals and objectives have improved their instruction and the success of their students.
- Introduction to Backwards Design [6:38] - Dr. Stephanie Chasteen and others from University of Colorado Boulder introduce the concept of backward design. They discuss why backward design is useful and how to effectively implement this concept in course design.
- Course Scale Goals vs. Topic Level Objectives [6:17] - Dr. Stephanie Chasteen and others from University of Colorado Boulder define learning goals vs. learning objectives and how they are related.
- How to Align Objectives and Assessments in Your Course [8:04] - Dr. Stephanie Chasteen and others from University of Colorado Boulder address the importance of aligning your learning objectives and your assessment techniques. They go on to provide examples regarding how to effectively align learning objectives and assessment techniques.
- What does it mean to understand something? [08:40] - Dr. Stephanie Chasteen and others from University of Colorado Boulder discuss how instructors can "unpack" their larger learning goals into smaller learning objectives and importance of making sure all of the objectives fit under a larger learning goal.

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- Breaking Down a Topic [05:35] - Dr. Stephanie Chasteen from University of Colorado Boulder facilitates a discussion among several graduate student teaching assistants concerning breaking down larger learning goals into focused learning objectives. [Supplemental]
- Mapping the Terrain: What should they know, and how deeply? Part 1 [9:58] - Dr. Stephanie Chasteen and others from University of Colorado Boulder introduce different types of learning that an instructor can take advantage of and how fitting your learning objectives into one of these categories can facilitate the creation of effective learning objectives and goals. They go on to discuss Bloom's Taxonomy and how it relates to these different categories of learning.
- Mapping the Terrain: What should they know, and how deeply? Part 2 [7:13] - Dr. Stephanie Chasteen and others from University of Colorado Boulder provide a more in depth discussion of Bloom's Taxonomy and the importance of considering and defining the types of learning goals and objectives the instructor would like students to achieve at the end of the course or a section of the course.
- Making Your Objectives Useful: Potential Struggles [4:28] - Dr. Stephanie Chasteen and others from University of Colorado Boulder address the importance of creating learning objectives that are clearly stated and understandable from the student's perspective. They also discuss a number of potential issues that educators can run into when trying to express their learning objectives
- Making Your Objectives Useful: Checklist [9:29] - Dr. Stephanie Chasteen and others from University of Colorado Boulder provide a checklist for creating effective learning objectives. They discuss examples of useful learning objectives vs learning objectives that are not as clear.
- Refining Your Learning Goals [06:13] – Dr. Stephanie Chasteen from University of Colorado Boulder introduces the best ways to refine your learning objectives. She then discusses this concept with a group of graduate students who give their advice on how to effectively refine learning objectives. [Supplemental]
- Institutional Considerations: Broader Context [9:38] – Dr. Stephanie Chasteen from University of Colorado Boulder talks with several faculty members from UC Boulder about creating learning objectives with their department, institution and discipline in mind. They discuss how learning objectives can be created to give students the best possible foundation for future employment.
- Final Thoughts [8:34] – Dr. Stephanie Chasteen from University of Colorado Boulder recaps the main takeaway messages from this module and provides some more helpful tips for creating useful learning objectives.

Online Discussion Questions

- What We Value – Think of a transformational educational experience. What did you learn? What made this so powerful? Based on your own post, and comparison to posts from other students, name some of the things that you value in education.
- Reverse Engineering – Find one or two example exam questions or homework problems specific to your discipline. Post the problems here, and discuss what the learning objective might have been for each problem. Do you think that this is a worthwhile objective?
- Breaking Down a Topic – In the video, Stephanie Chasteen introduced some strategies for breaking down a topic into components or steps. Choose a topic you might teach— photosynthesis, buoyancy, linear equations, plate tectonics, heat transfer, something else—and

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discuss what it means to understand the topic, including at least five different elements or steps of understanding. Watch out for your own expert blindspots!

- Mapping the Terrain - In a course you took or taught recently, what were a few things that required learning at low levels of Bloom's Taxonomy? At higher levels of Bloom's? Name some tasks from that same course that allowed student learning in the different areas of understanding – cognitive, metacognitive, affective, and procedural.
- Learning Objective Makeover – Choose one or two of the objectives provided to "make over." Write a better version of the learning objective, using the learning goals checklist from the video. This may require some interpretation and creativity on your part, as it is not clear what the instructor wants in the provided objectives.
- Broader Context – What questions did the video raise for you about the broader context of your learning objectives? What are some things you want to keep in mind about this broader context?
- Takeaways – What are one or two ideas from the module that you want to be sure to remember? Why do you think these are important? What do you think will be most challenging about writing your goals and objectives?

Online Activities (Peer-graded assessment, for week 3, module 3)

- Explain why learning objectives are useful
- Write a learning goal, plus three learning objectives, and justify your choice.

Activities for the MCLC In-person Sessions

Module 3: Learning Objectives

Learning goal for MCLC in-person sessions

Students should be able to write topic-level learning objectives, and justify their alignment with course-level goals. Students should be able to critique and evaluate goals, including suggestions for improvement.

	Student Activity/Discussion	Facilitator Notes
Warm-up	Ask students to write a one-minute paper, "What does it look like when someone understands something?"	Give students a few minutes to write down their thoughts, and then facilitate a share-out of the ideas, writing down what students say on the board. Look for themes that reflect ideas from the module, such as level of knowledge, types of knowledge, or student behaviors/actions. You may discuss the need to communicate ones' expectations for student understanding through learning objectives, or the challenge of communicating this. Use this as a springboard to talk about the module content. You may wish to have students review the handout, "Creating and Using Effective Learning Goals" as a review of many of the messages of the module. Encourage them to bring in ideas from the module forum discussions.
Discussion topic #1	Provide students with the electronic list of learning goals in various courses. This is provided electronically at http://cwsei.ubc.ca/resources/learn_goals.htm as well as within the online module. In small groups, have them read through course-level goals relevant to their discipline. <ul style="list-style-type: none"> • Which goals do they feel are appropriate, and why? • Which goals would they improve? • Why would they improve them, and how? 	If the class is in a single discipline, it may be helpful to provide only those goals/objectives relevant to that discipline. After the small group work, have students share out from their discussion. Encourage them to bring in ideas from the module forum discussions.

<p>Discussion topic #2</p>	<p>Students should pick one of the course-level learning goals that they find compelling. In the same small groups, discuss the following questions:</p> <ul style="list-style-type: none"> • What does it mean for a student to master this goal? Go through the process of "deconstructing" this goal, topic, or skill. • Now, write 1 or 2 topic-level learning objectives that would help a student master that course-level goal. You may want to use the Bloom's Level Verb list as a reference. • Use the learning objective checklist to critique and improve your goals as a group. 	<p>You may want to pause the small group discussions after they have discussed what it means for a student to master that goal, in order to have a whole-group discussion. During the activity, circulate and prompt students to think deeply about their objectives. If they are writing low-level objectives, can you help them think of a higher-level objective? Allow at least 10 minutes for share-out, and focus on the process of writing goals during that share out. Encourage them to bring in ideas from the module forum discussions.</p>
<p>Connections to current or former instructional experiences</p>	<p>Discuss as a group, how would you use learning objectives in your instruction? How, practically, would this work? How might you use learning objectives in teaching statements or faculty applications?</p>	<p>Consider bringing in ideas from video 7 on institutional constraints, and video 8 on practical tips. Questions to consider are, when would you refer to your goals? When do you write your goals? How might you work with colleagues, especially if you plan to cut content from your course? Encourage them to bring in ideas from the module forum discussions.</p>