Course Learning Outcomes

Undergraduate Studies Committee / Centre for Teaching & Learning

Student learning outcomes are concise, measurable statements that specify what a student is expected to know or be able to do upon successful completion of the course. Each learning outcome should be meaningful and identify a unique knowledge, skill, or ability to be attained. Each should begin with an observable action verb followed by a statement specifying the learning to be demonstrated.

Why Learning Outcomes?

Learning outcomes are a key component of creating integrated courses, in which instructors' goals for their students are aligned with their instructional activities as well as their assessments (Fink, 2003). Learning outcomes can help instructors to make decisions about how to structure their courses and what types of assignments to give. They can also help students to know what they can expect from the course as well as to align their study with the learning goals. Outcome-based courses have been linked to many teaching and learning benefits, including increased engagement and motivation and better performance on assessments (University of Windsor, 2012).

Questions to ask:

- What knowledge, skill, or ability should the student demonstrate?
- What specific demonstrable skill or knowledge will the student learn?
- How will the instructor and students know they have achieved the learning outcome?
- Is the outcome measurable? Could data be collected to measure student learning?
- Is the outcome attainable? Are the expectations for students realistic for the level of the course?

Cognitive Skills and Use of Active Verbs

Based on Bloom's Taxonomy of Educational Objectives, there are six levels of cognitive learning:

Cognitive Skill	Definition	Verbs to describe student learning	Sample Learning Outcome
Knowledge/ Information Gathering	Recall or remember facts without necessarily understanding them	 Define, list, recognize, describe, identify, state, select, know, observe, locate, indicate, outline, relate 	By the end of this course, students will be able to identify and describe the functions of the different levels of Canadian government.
Comprehension/ Deeper Understanding of Knowledge	Understand something that has been communicated without relating it to anything else	 Characterize, describe, explain, identify, locate, recognize, sort, review, relate, clarify, interpret, summarize, transform, compare, report, translate 	By the end of this course, students will be able to explain the inter- relationships between domestic and international political bodies and decision-making processes.
Application/Use of Knowledge	Use ideas and concepts to solve problems in particular situation	 Choose, practice, employ, solve, use, demonstrate, implement, compute, investigate, predict, produce, perform 	By the end of this course, students will be able to choose the appropriate research methodologies to study a diverse range of problems.

Analysis/ Compare and Contrast	To break information into its components; focus on interrelationships	 Analyze, categorize, compare, deconstruct, determine evidence and conclusions, appraise, debate, question, relate, distinguish, examine, survey, differentiate 	When presented with a case study of a current Canadian political debate, students will be able to analyze the key issues within the debate and compare and contrast different stakeholders' views of these issues.
Synthesis/ Original of or New Creation	Create something new by putting different parts of different ideas together as a whole	 Construct, design, formulate, organize, synthesize 	By the end of this course, students will be able to design a research study of a significant political problem, including creating a research plan, conducting research, and synthesizing the results of the research.
Evaluation/ Judging the Outcome	To judge the value of material or method based on definite criteria	 Assess, critique, evaluate, rank, rate 	When presented with a complex problem, students will be able to analyze the components of the problem and evaluate the best method and sources with which to research the problem.

It is important to note that learning outcomes can address more than cognitive skills. For example, Marcella LaFever (2016) <u>developed a model of learning outcomes</u> based on the Medicine Wheel that embraces a holistic approach to student learning, including spiritual, emotional, intellectual, and physical outcomes.

What to Avoid When Writing Learning Outcomes

- Unobservable outcomes: Some verbs that are used in writing learning outcomes are not helpful to instructors or students because they cannot be observed or measured. For example, it would be difficult for an instructor to know whether a student has achieved a learning outcome that states that students will "understand," "perceive," or "value" a set of information (University of Windsor, 2012).
- Vague outcomes: Some outcomes are so vague that they are difficult to assess. For example, stating that students will have a deeper appreciation a historical time period or a clearer understanding of the scientific research process, does not provide very specific guidance on what, precisely, students will know and how, in the context of the course, they will demonstrate that knowledge.

Support with Writing Learning Outcomes

The Centre for Teaching & Learning can offer individual support to instructors as they develop learning outcomes. You can book a consultation by emailing <u>teaching@trentu.ca</u>. You may also find helpful the CTL's issue of *Teaching Notes*, <u>"Learning from Learning</u> <u>Outcomes,"</u> which provides many supports for understanding and writing learning outcomes.