Writing Course Learning Outcomes

A note on word choice:

In higher education, we use many terms for learning outcomes including learning goals, learning objectives, qualification frameworks, and more. Although there are similarities among these terms, there are also fine distinctions among them. Our campus uses the term learning outcomes to describe what students will know or be able to do by the end of a course.

Why Learning Outcomes?

Learning outcomes help faculty and students come to a common understanding about the purpose of a course. By providing clear and comprehensive learning outcomes, faculty begin to provide a clear pathway for student success. In addition, clear learning outcomes are the cornerstones of course design and help students focus on what is important. Finally, learning outcomes can be considered an inclusive teaching practice as they can help clarify expectations for all students. Some students enter college with the social capital to navigate the system—others do not.

Course Learning Outcomes state what students should know or be able to do at the end of the course. In addition to course level learning outcomes, you may want to have unit or class session learning outcomes. Today, we will focus on course level learning outcomes.

Steps to create a learning outcome:

- 1. Use student-focused language (e.g., "By the end of the course, you will be able to...")
- 2. Begin each learning outcome with an **active verb** that indicates the expected level and type of learning. You may want to consult Bloom's Revised Taxonomy or Fink's Taxonomy of Significant Learning on the back of this page.
- 3. Clearly state what you want students to **know** or be able to **do** by the end of the course.

Ensure that:

- 4. Each learning outcome describes an action by students that is observable.
- 5. Your learning outcomes are **measurable**.

TEMPLATE:

By the end of this course, you will be able to: ____

action verb

knowledge or skill you expect students to acquire

EXAMPLE:

Explain the importance of soil microbes for globally important issues such as climate change, nutrient cycling, and biodiversity.



In 1956, Benjamin Bloom and colleagues differentiated six levels of learning in the "cognitive" domain and proposed a list of skills that would indicate understanding at each level. In 2001, Anderson, Krathwohl, and colleagues revised the taxonomy. The lowest levels (which are most commonly tested in exams) are based on knowledge of factual information. Understanding at higher levels is indicated by more complex skills in evaluation, synthesis, or the creation of new information. Below are some verbs that represent learning at each level. For additional action verbs, see <u>celt.iastate.edu/teaching/effective-teaching-practices/revised-bloomstaxonomy</u>

Remember	Understand	Apply	Analyze	Evaluate	Create
Describe	Explain	Complete	Compare/contrast	Justify	Plan
Name	Compare	Use	Examine	Assess	Invent
Find	Discuss	Examine	Explain	Prioritize	Compose
List	Predict	Illustrate	Identify	Recommend	Design
Relate	Outline	Clarify	Categorize	Rate	Construct
Write	Restate	Solve	Investigate	Decide/choose	Imagine

CARING

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Developing new:

Feelings

Interests

Values

Fink's Taxonomy of Significant Learning

Foundational Knowledge

Understand and remember information; provides basic understanding that is needed for other types of learning

Application

Apply knowledge to action and critical, creative, and practical skills; allows other types of learning to be useful

Integration

See and understand connections between ideas, experiences, and realms of life

Human Dimension

Learn about self and others; understand the human significance of content

Caring

Change in the level of caring about something; energy and interest needed to learn more

*For sample action verbs, see

ccoe.rbhs.rutgers.edu/forms/pdf/EffectiveUseofLearningObjectives.pdf

Adapted from:

Bloom, B.S. (Ed.) 1956. Taxonomy of Educational Objectives: The classification of educational goals. Handbook 1, Cognitive Domain. New York. (Overview online at https://www.uvic.ca/services/counselling/assets/docs/Blooms%20taxonomy.pdf)

Anderson, L.W. (Ed.), Krathwohl, D.R. (Ed.), Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Raths, J., & Wittrock, M.C. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's Taxonomy of Educational Objectives (Complete edition). New York: Longman. (Available online at https://www.depauw.edu/files/resources/krathwohl.pdf)

Fink, L. D. (2013). Creating significant learning experiences: An integrated approach to designing college courses. San Francisco, CA: Jossey-Bass.

FOUNDATIONAL

Understanding and

Ideas

Information

APPLICATION

Skills

Thinking

Critical, creative, & practical thinking

Managing Projects

KNOWLEDGE

remembering:

INTEGRATION

Ideas

People

Realms of life

Connecting:

ARNING HOW TO LEARN

student

subject

learners

HUMAN DIMENSION

Oneself

Others

Learning about:

Becoming a better

Inquiring about a

Self-directing

Writing Learning Outcomes, continued

I. How can we improve the following learning outcomes?

- a. You will begin to understand the purpose of the undergraduate educational experience
- b. Design a skyscraper
- c. Think critically about US politics

II. Examples of strong learning outcomes

By the end of this course you will be able to:

- Analyze and predict fracture in terms of stress and energy.
- Discuss the history, culture, and purpose of UW-Madison and how those shared reference points may influence your Wisconsin Experience.
- Connect changing relationships among humans and animals to broader processes of economic and cultural development.
- Describe what you see and how you see.
- Implement the close-reading skills necessary to analyze both historical and contemporary figurations of ethno-religious identity and difference.
- Discuss economic, social and legal applications of additive manufacturing.
- Explain the importance of soil microbes for globally important issues such as climate change, nutrient cycling, and biodiversity.
- Design and present a scientific poster.
- Reflect on and discuss how you contribute to campus climate.
- Compare and contrast student development theories, both verbally and in writing.

Campus Resources for writing learning outcomes: https://assessment.provost.wisc.edu/

Wrap-Up Questions:

I. What have you learned today about course design?

II. What *manageable* changes, if any, would you like to make now to your approach to course design?

III. What changes, if any, would you like to make at a later date?