**What is a learning outcome?**

A specific type of goal that summarizes the significant knowledge or skill that learners can reasonably be expected to take away from an opportunity, based on the nature of the learning activities. Learning outcomes should be learner-centered, action-oriented, and observable.

**Action Verbs and Levels of Engagement**

Use the figure below to identify the appropriate verb(s) that match the level of engagement you have identified for your SAIL opportunity.

**Sample Learning Outcomes**

Learners will be able to **identify** a professional in the field by **researching** careers of **genuine interest**.

Learner-centered: learners as the subject Action-oriented and observable: action verb(s)

Learners will be able to **develop** strategies for **effectively overcoming anxiety with leading conversations**.
Why are learning outcomes important?

For educators – Going through the process of carefully crafting and articulating the intended learning outcomes informs the shape and focus of the learning activities, and serves as a guide for determining whether learners have achieved what was intended.

For learners - Outcome statements set expectations and cue attention to what is most important to learn. This helps learners learn more effectively.

Consider the famous perceptual illusion in the image below. Unless we focus the observer’s attention on either the young girl or the older woman, we can’t predict which one they will see. In the same way, we can’t predict what learners will “see” (or take away) during activities. Therefore, it is important to craft activities with the intended outcome in mind, and then explicitly bring the learner’s attention to what that intended outcome is.

Which do you see—the young girl or the older woman?

For help with this image, go to the next page.
Writing Effective Learning Outcomes

There are three main criteria for effective learning outcomes: 1) they are learner-centered and observable, 2) the activity’s level of learning matches the learning outcome, and 3) the level of granularity is appropriate.

1. What is a learner-centered, observable outcome?

A learning outcome statement is a clear and specific statement of what a learner should know or be able to do as a result of the activities. Even if formal assessment is not a part of the opportunity, it is important to specify what the learner should know or be able to do, because it lets the learner know what is expected, and it helps the educator determine the appropriate learning activities.

Additional points:

- A learning outcome is not a description of what the educator will do (I will explain, I will show, I will demonstrate, I will cover, etc.). Rather, it is a learner-centered statement of what the learner should be able to do (the learner will explain, the learner will solve, the learner will identify, etc.) as a result of engaging in the activity.

- A learning outcome begins with an action verb that describes how the learner will demonstrate what they know or can do. The action must be observable so that the educator can evaluate how well the outcome was achieved (even if the learner won’t be evaluated). Refer to the circular image on page 1 for examples of observable action verbs.

- Verbs like understand, appreciate, and demonstrate should be avoided in learning outcome statements. While these verbs do describe what the learner should take away, they are not specific enough. The learning outcome statement should say specifically what the learner will do to demonstrate what they understand (explain, write, create, etc.) because they do not specify how the learner will demonstrate what they know or are able to do. If the outcome is understanding, think about how the learner can demonstrate their understanding. Or, if the
outcome is to be able to demonstrate something, think about how the learner can demonstrate the knowledge or skill.

Examples:

- After completing this opportunity, learners should be able to describe strategies for overcoming anxiety associated with leading conversations.
- After completing this opportunity, learners should be able to properly perform hip stretches.
- After completing this opportunity, learners should be able to discuss the relationship between the proliferation of technology and economics.
- After completing this opportunity, learners should be able to solve simple linear algebra equations.
- After completing this opportunity, learners should be able to develop a solution to a traffic problem, through application of relevant knowledge and concepts.
- After completing this opportunity, learners should be able to effectively communicate with peers in a one-on-one setting.

Check your understanding: Which of these statements describe outcomes that could be observed and evaluated?

a. Drive to a desired destination, operating the vehicle safely and legally.
b. Understand strategies for responding to complex driving situations.
c. Explain the best strategies for responding to specific complex driving situations.
d. Describe how to turn on the left turn signal.
e. Demonstrate an understanding of the instrument panel.
f. Apply the brake at the proper time and with the appropriate amount of pressure.
g. Parallel park in a controlled environment.
h. Appreciate the parallel parking process.
Statements a, c, d, f, and g are examples of outcomes that could be observed and evaluated.

2. How do I match the activity’s level of learning and the learning outcome?

As Table 1 illustrates, level of engagement and learning activities are closely linked together. The level of engagement largely determines the level of learning (superficial to deep) that can potentially result.

<table>
<thead>
<tr>
<th>Level of Engagement</th>
<th>Learning Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Passive</td>
<td>Gain exposure to knowledge and skills through reading, listening, and observing, for example</td>
</tr>
<tr>
<td>2-Active</td>
<td>Apply thinking, communication, and other skills through discussion, problem solving, experimentation, investigation, and reasoning, for example</td>
</tr>
<tr>
<td>3-Generative</td>
<td>Apply creative or performance skills such as leading, generating original solutions to complex problems, creating original products, facilitating, coaching, teaching, performing in a sport or dramatic production</td>
</tr>
</tbody>
</table>

If you already have an opportunity developed, then you can match the outcome to the existing activity. If you are creating a new opportunity, begin with your desired outcome, and match the learning activities to it. For the levels of engagement above, the learning outcomes and activities might look like those in Table 2.

<table>
<thead>
<tr>
<th>Level of Engagement</th>
<th>Learning Activities</th>
<th>Outcomes (What learners can be expected to do as a result of engaging in the activity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Activity</td>
<td>Outcome Verb</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>1-Passive</td>
<td>Listen to a one-hour lecture on how to overcome anxiety when leading conversations.</td>
<td>Describe strategies for overcoming anxiety associated with leading conversations.</td>
</tr>
<tr>
<td>2-Active</td>
<td>Practice and receive feedback on performing hip stretches demonstrated by the instructor.</td>
<td>Properly perform hip stretches.</td>
</tr>
<tr>
<td>2-Active</td>
<td>Read and discuss in class corresponding patterns and trends in technology and economics.</td>
<td>Discuss the relationship between the proliferation of technology and economics.</td>
</tr>
<tr>
<td>2-Active</td>
<td>View problem-solving demonstrations, read explanations in the textbook, and practice solving sample problems.</td>
<td>Solve simple linear algebra equations.</td>
</tr>
<tr>
<td>3-Generative</td>
<td>Complete a semester-long project including research into traffic issues, associated problems, and possible solutions based on practices in other cities.</td>
<td>Create a solution to a specific traffic problem presented by the City of Boston.</td>
</tr>
<tr>
<td>3-Generative</td>
<td>Serve as a mentor to help first-year learners be successful at Northeastern.</td>
<td>Effectively communicate with peers in a one-on-one setting.</td>
</tr>
</tbody>
</table>

Check your understanding: Identify the level of engagement and an appropriate outcome verb for each of the following learning activities.

a. Practicing parallel parking in a closed section of a parking lot.

b. Participating in small group discussions in class to determine the best way to handle complex driving situations that are presented in scenarios, and presenting recommended actions, along with reasoning and rationale for responses, to the class.

c. Listening to the driver’s ed. teacher explain how to find and use vehicle controls (accelerator, brake pedal, gear shift, signal, etc.) and the instrument panel (speedometer, odometer, tachometer, temperature gauge, warning lights)

d. Driving a vehicle from home to a store on the other side of town.
Check you understanding: Recommended Responses

a. Practicing parallel parking in a closed section of a parking lot.
   o Level 2, Practice
b. Participating in small group discussions in class to determine the best way to handle complex driving situations that are presented in scenarios, and presenting recommended actions, along with reasoning and rationale for responses, to the class.
   o Level 2, Analyze
c. Listening to the driver’s ed. teacher explain how to find and use vehicle controls (accelerator, brake pedal, gear shift, signal, etc.) and the instrument panel (speedometer, odometer, tachometer, temperature gauge, warning lights)
   o Level 1, Identify
d. Driving a vehicle from home to a store on the other side of town.
   o Level 3, Apply

3. What is the appropriate level of granularity?

While you may be able to articulate a number of granular outcomes, for SAIL purposes, learning outcome statements should focus on the “big picture” outcomes, or the most significant big ideas and major skills that are the essence of the opportunity.

Example of a big picture outcome:

- After completing this opportunity, learners should be able to create a computer program that will create a health score based on user inputs.

Examples of granular outcomes that make up the big picture outcome above:

- After completing this opportunity, learners should be able to:
  o Identify the product requirements.
  o Program in the specific programming language.
  o Perform user testing.

Summary

As described in this document, learning outcomes should be:

- observable and measurable
- aligned with the level of engagement (1, 2, or 3)
- at the “big picture” level

For support with writing learning outcomes for your SAIL opportunities, please contact us at: sail@northeastern.edu
References
