The Use of Bloom's Taxonomy to Write Effective Learning Outcomes

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Introduction

Before starting your course, topic, or lesson, it is important to ensure that your students have a clear idea about the learning outcomes.

So, ask yourself the following questions:

- What should my students be able to do at the end of the course, topic, or lesson?

- How can I tell **if and when** my students have achieved the desired learning outcomes?

Learning Goals, Objectives, and Outcomes

Learning goals

- Broad statements written from an instructor's perspective to describe the general content of the learning experience

- Focused on what the instructor wants to do

- Don't have to be measurable or observable

- Example: The course will introduce students to the main segmentation methods that are used in medical imaging.

Learning Goals, Objectives, and Outcomes

Learning objectives

- Statements to inform your students what you are planning to teach in the learning experience

- More specific than the learning goals

- Instructor-centered rather than student-centered

- Don't have to be measurable or observable

- Example: The course will cover the impacts and effects of new media on identity formation

Learning Goals, Objectives, and Outcomes

Learning outcomes

- Inform the students what is expected from them at the end of the learning experience

- Student-centered rather than instructor-centered

- Should be measurable, concise, meaningful, and outcome-based

- Example: Student will be able to describe the potential impact of specific ethical conflicts on research findings

Learning Outcomes "Rules"

Don't define too many learning outcomes. Five to eight are sufficient.

Make sure that the learning outcomes match the content.

The learning outcome must be formulated in such a way that it is **clear how is to achieve it** and **which criteria apply to ensure that it is fulfilled**.
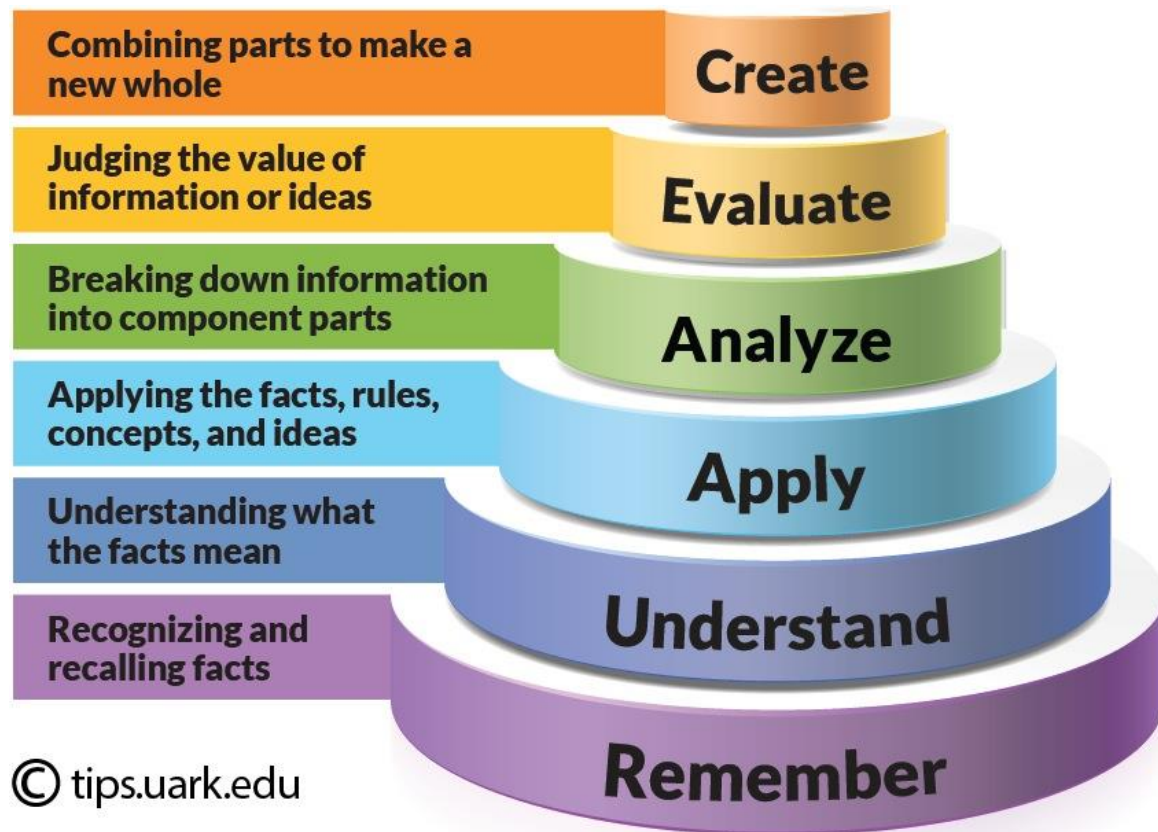
Use so-called **action verbs** and avoid vague verbs in your formulation.

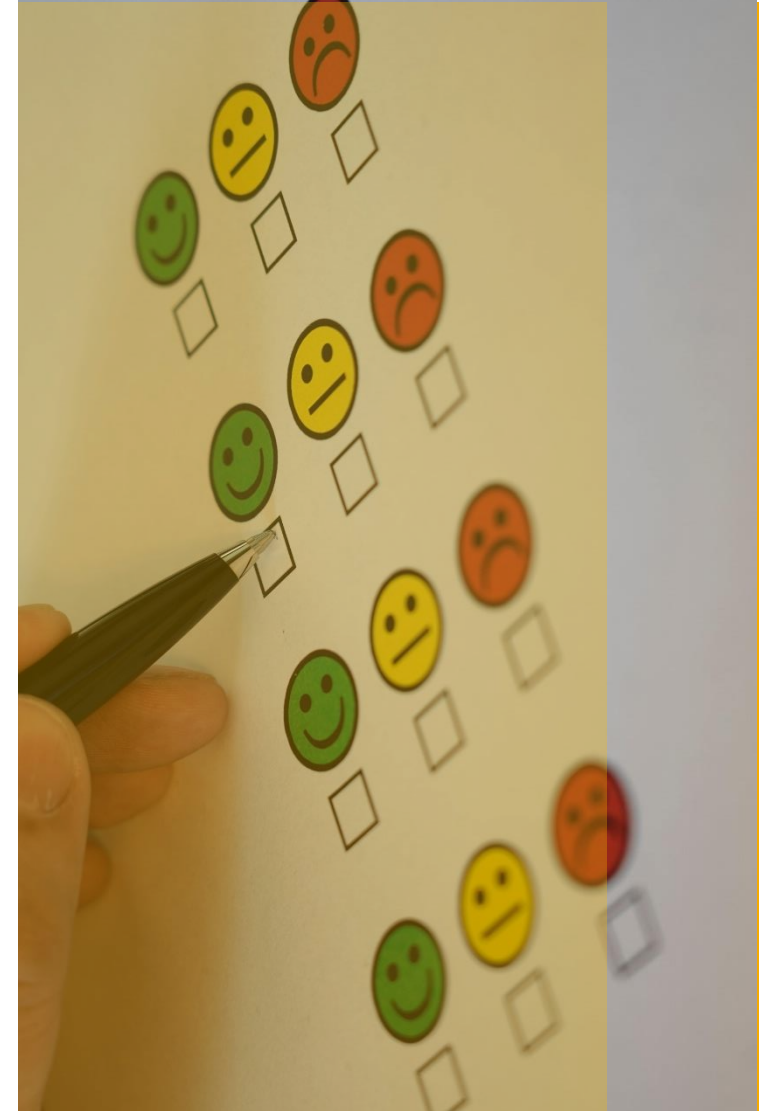# Using Bloom's Taxonomy to Write Effective Learning Objectives

Bloom' taxonomy classifies the learning into six levels.

Combining parts to make a new whole — **Create**

Judging the value of information or ideas — **Evaluate**

Breaking down information into component parts — **Analyze**

Applying the facts, rules, concepts, and ideas — **Apply**

Understanding what the facts mean — **Understand**

Recognizing and recalling facts — **Remember**

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Bloom's Taxonomy to Write Effective Learning Objectives

Boolm's taxonomy explains the process of learning:

- Before understanding a given concept, you need to remember it

- Before applying the concept, you need to understand it

- Before analyzing the concept, you need to apply it

- Before evaluating the concept, you need to analyze it

- Before creating knowledge, you evaluate the existing literature

Using Bloom's Taxonomy to Write Effective Learning Objectives

Please refer to the following website to choose the active verbs associated with the six learning levels included in Bloom's taxonomy:

https://tips.uark.edu/blooms-taxonomy-verb-chart/

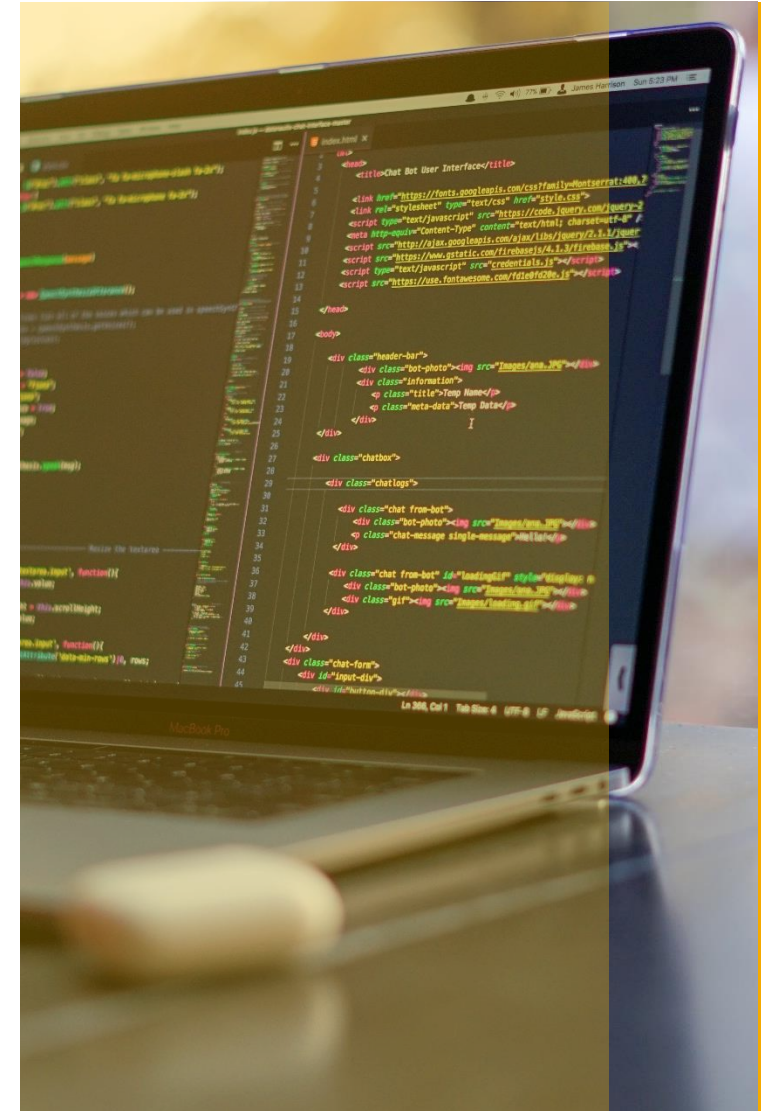| Remember	Understand	Apply	Analyze	Evaluate	Create
Cite	Add	Acquire	Analyze	Appraise	Abstract
Define	Approximate	Adapt	Audit	Assess	Animate
Describe	Articulate	Allocate	Blueprint	Compare	Arrange

Examples – Remember

By the end of this lesson, students will be able to **define** acceleration.

By the end of this lesson, students will be able to **outline** various stages of design thinking.

By the end of this lesson, students will be able to **list** various kinds of loops in javascript.

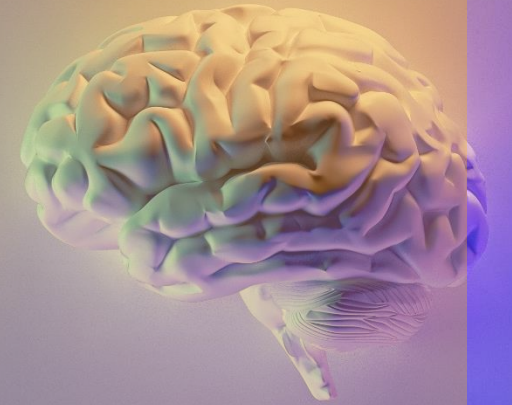https://www.educationise.com/post/30-bloom-s-taxonomy-examples-of-learning-objectives-for-teachers

Examples – Understand

By the end of this lesson, students will be able to **distinguish** between mass and weight.

By the end of this lesson, students will be able to **explain** how sensory receptors in our brain detect stimuli.

By the end of this lesson, students will be able to **recognize** different types of number sequences.

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Examples – Apply

By the end of this lesson, students will be able to **compute** their annual pocket money using the ___ mathematical formula.

By the end of this lesson, students will be able to **use** the ___ accounting software for the annual family budget.

By the end of this lesson, students will be able to **demonstrate** how to work in a diverse culture.

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Examples – Analyze

By the end of this lesson, students will be able to **illustrate** how DNA code translates into RNA code.

By the end of this lesson, students will be able to **analyze** information in marketing research.

By the end of this lesson, students will be able to **analyze** how leaves change colors during the fall season.

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Examples – Evaluate

By the end of this lesson, students will be able to **assess** the environmental impact of coal mining.

By the end of this lesson, students will be able to **measure** the effectiveness of project-based learning.

By the end of this lesson, students will be able to **defend** their proposed hypotheses.

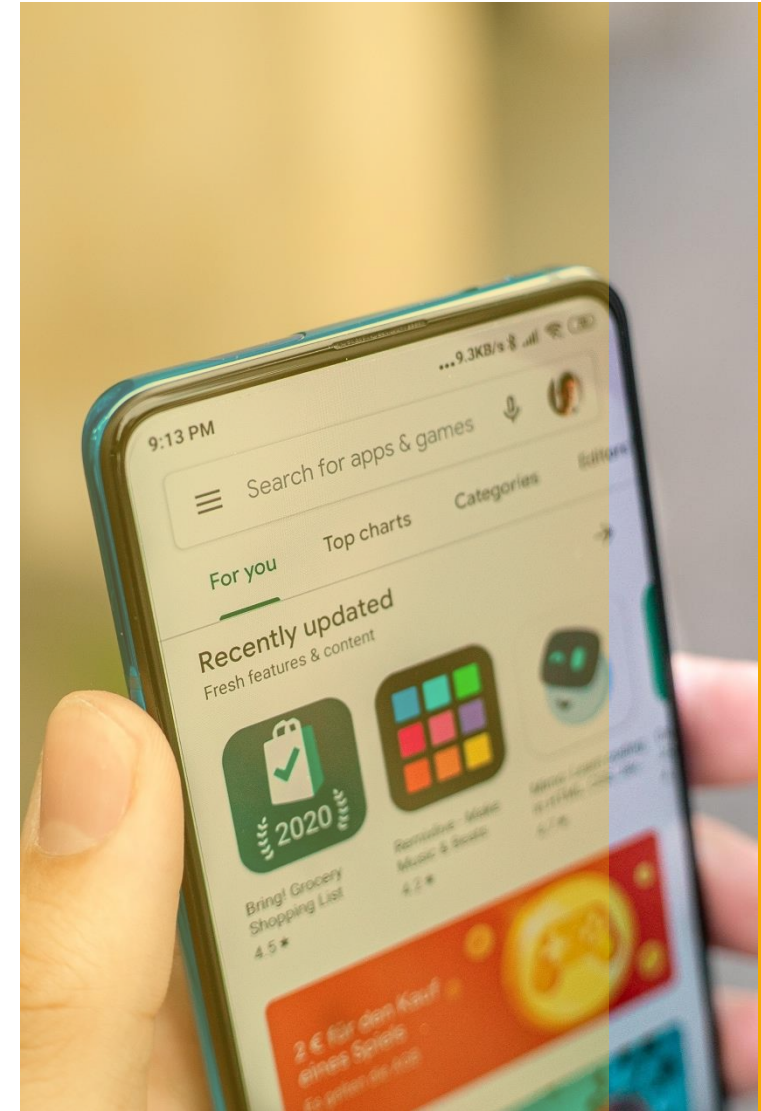https://www.educationise.com/post/30-bloom-s-taxonomy-examples-of-learning-objectives-for-teachers

Examples – Create

By the end of this lesson, students will be able to **develop** an application for the Google play store.

By the end of this lesson, students will be able to **compose** the scientific name of an organism.

By the end of this lesson, students will be able to **make** their own battery charger.

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THANK YOU

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