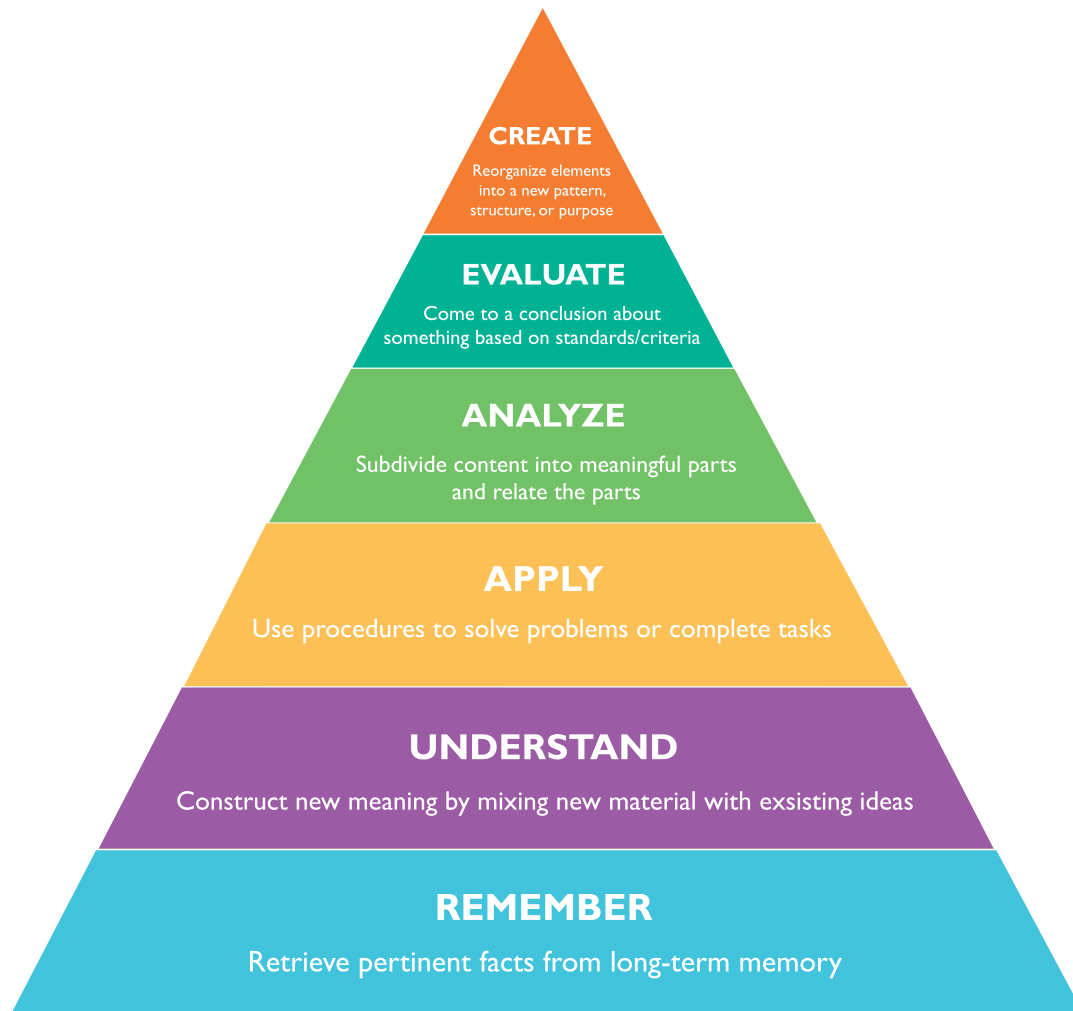


Constructing Learning Outcomes



We encourage you to use a framework when writing learning outcomes. Bloom and colleagues (1956) created three learning taxonomies (cognitive, affective, and psychomotor) as a way to understand how learning happens. For example, cognitive complexity can be understood as six levels or processes which lead to greater cognitive complexity. The six processes were reframed in 2001 (Anderson, 2001), but the concept of ordering cognitive complexity remains the foundation of the framework.

Bloom's taxonomy can be particularly useful for developing critical thinking on a topic. The concept of a pyramid is intended to show how cognitive processes build on prior knowledge. Higher order functioning can only occur if there is a foundation. It is recommended that course learning outcomes include more than one of Bloom's orders, depending on the nature of the course.

References

Bloom, B. S. (1956). *Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain*. New York: David McKay Co Inc.

Anderson, L.W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Longman.

How does taking your course contribute to students' learning?

Constructing learning outcomes articulates for students how your course contributes to their development. It's explicitly stating what successful students can expect to gain as a result of taking your course.

Ask yourself, "At the end of my course, what do I want students to know, do, and value?"

know...content knowledge

do...skills

value...ways of thinking like a professional in your discipline

Answer your question with "At the end of this course, students will [be able to]..."

Questions? Contact the OTL.



Office for
Teaching & Learning

otl.wayne.edu

ANALYZE

Breakdown	Find
Calculate	Infer
Categorize	Inspect
Change	Inventory
Characterize	Limit
Combine	Model
Compare	Outline
Correlate	Prioritize
Criticize	Question
Debate	Research
Deduce	Separate
Diagram	Solve
Differentiate	Subdivide
Examine	Survey
Experiment	Test
Figure	

EVALUATE

Appraise	Justify
Argue	Measure
Assess	Predict
Attach	Prioritize
Choose	Prove
Conclude	Qualify
Contrast	Rank
Critique	Rate
Decide	Recommend
Defend	Reframe
Discriminate	Revise
Estimate	Score
Evaluate	Summarize
Explain	Support
Interpret	Value
Judge	

CREATE

Adapt	Invent
Assemble	Manage
Categorize	Organize
Collect	Perform
Comply	Plan
Compose	Prepare
Construct	Produce
Create	Propose
Design	Rearrange
Develop	Reconstruct
Devise	Reinforce
Formulate	Setup
Generate	Structure
Incorporate	Synthesize
Integrate	Verify

REMEMBER

Arrange	Order
Copy	Outline
Count	Quote
Define	Read
Draw	Recall
Duplicate	Recite
Enumerate	Recognize
Find	Record
Identify	Repeat
Label	Reproduce
List	State
Locate	Tell
Match	Underline
Memorize	View
Name	Write

UNDERSTAND

Cite	Organize
Classify	Paraphrase
Conclude	Relate
Convert	Reorganize
Demonstrate	Report
Describe	Restate
Discuss	Review
Distinguish	Rewrite
Express	Select
Extend	Sequence
Generalize	Summarize
Give example(s)	Trace
Illustrate	Transform
Indicate	Translate

APPLY

Calculate	Interview
Change	Manipulate
Chart	Modify
Complete	Operate
Compute	Practice
Determine	Predict
Develop	Produce
Diagnose	Role-play
Discover	Schedule
Dramatize	Select
Employ	Show
Establish	Sketch
Estimate	Transfer
Illustrate	Use
Instruct	