JOHNS HOPKINS
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WRITING EFFECTIVE
LEARNING OBJECTIVES / EDUCATIONAL OBJECTIVES

Definition:

A learning objective is student centric, it states what the student will learn and be able to accomplish by the end of instruction. It describes a specific behavior which will lead to the desired goal. It is specific and measurable. It has three major components:

1. ***What*** the student will be able to do.
2. ***Conditions*** needed for the student to accomplish the task.
3. ***Criteria*** for evaluating the student performance.

How to write learning objectives:

Learning objectives emphasize:

1. students' performance
2. end product
3. what students learned

Learning objectives do not emphasize:

1. teacher performance
2. subject matter
3. how knowledge was acquired

Learning objectives should have the following S.M.A.R.T. attributes.

Specific – Statement of learning are concise and well defined in describing what students will be able to do.

Measurable – Use action / measurable verbs that can be observed through any assessment such as test, homework, or project etc. to describe what the student will be able to do. (see list attached to this document).

Attainable – Ensure that students will have the pre-requisite knowledge by the end of the course in able to achieve the stated learning objectives.

Relevant – The stated skills or knowledge are appropriate for the program and the course as described in the curriculum.

Time-bound – State when students should be able to demonstrate the knowledge or skill (mid or end of course or end of program, etc.).

BLOOM's Taxonomy

Follow Bloom's Taxonomy cognitive process to state your learning objectives. Ensure that the stated objectives describe a progressive **cognitive process** that represents a continuum of increasing cognitive complexity.

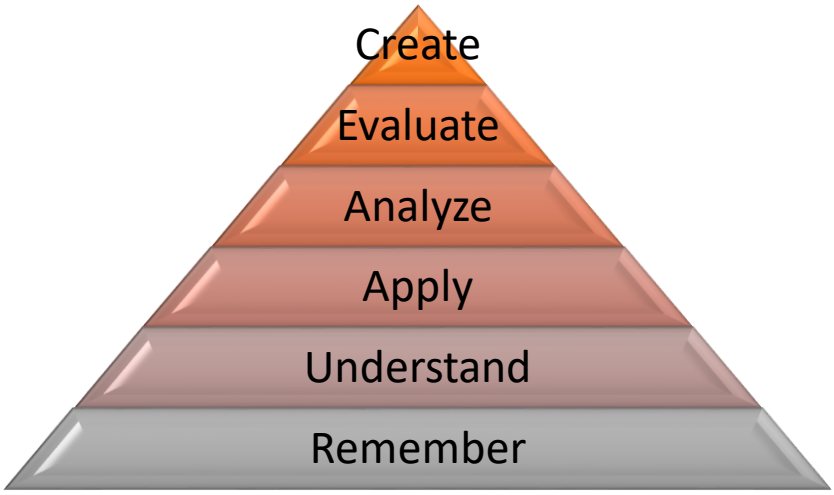

Figure 1. Cognitive Process

On a continuum of learning, students start by:

Remembering – recalling previous knowledge.

Understanding – understanding new information and presenting it in their own words.

Applying – applying what they learned into authentic settings.

Analyzing – distinguishing between facts and inferences and recognizing logical fallacies in reasoning.

Evaluating – making judgment about ideas, materials or values.

Creating – putting the parts learned together to create a whole, with a focus on creating meaning or structure.

Putting it Together

Program and Course Level Objectives

1. Create Program Learning objectives that will be addressed multiple times in your core course offering.
2. Identify which objectives are addressed in what course.

3. Identify assessments, direct, indirect, formative, summative to assess whether the students have attained the desired learning.
4. Assess all objectives multiple times to map a continuum of improvement.
5. Create a Program Matrix to ensure that all stated objectives were addressed multiple times in core curriculum offerings of the program. (See module on Creating a Program Matrix)

Assignments/Measures

1. At the assignment level, the Course Learning Objectives stated for the course are too broad and they need to be reworded into basic measurable outcomes as defined or stated in the assignment.
2. They must map directly to a specific Course Learning Objective.
3. If applicable, rubrics should guide the evaluation of each assessment and results should be gathered to measure learning. (See module on Creating Effective Rubrics)

Examples

Examples are division specific and are linked on the Provost's Assessment Website

https://provost.jhu.edu/education/student-learning-assessment/

APPENDIX A
ACTION VERBS APPROPRIATE FOR EACH LEVEL OF BLOOM'S /ANDERS ON & KRATHWOHL'S TAXONOMY
(Cognitive Domain)

Remember **Recall facts and basic concepts**	**Understand** **Explain ideas and concepts**	**Apply** **Use information in new situations**	**Analyze** **Draw connections among ideas**	**Evaluate** **Justify a stand or decision**	**Create** **Produce new or original work**
Define	Choose		Analyze	Appraise	Arrange
Identify	Cite	Apply	Appraise	Assess	Assemble
List	Demonstrate	Demonstrate	Calculate	Choose	Collect
Name	Describe	Dramatize	Categorize	Compare	Compose
Recall	Determine	Employ	Compare	Critique	Construct
Recognize	Differentiate	Generalize	Conclude	Estimate	Create
Record	Discriminate	Illustrate	Contrast	Evaluate	Design
Relate	Discuss	Initiate	Correlate	Judge	Develop
Repeat	Explain	Interpret	Criticize	Measure	Devise
Underline	Express	Operate	Deduce	Rate	Formulate
	Give	Operationalize	Debate	Revise	Manage
	Identify	Practice	Detect	Score	Modify
	Interpret	Relate	Determine	Select	Organize
	Locate	Schedule	Develop	Test	Plan
	Pick	Shop	Diagram	Validate	Prepare
	Practice	Use	Diagnose	Value	Produce
	Report	Utilize	Differentiate		Propose
	Respond		Distinguish		Predict
	Restate		Draw conclusion		Reconstruct
	Review		Estimate		Set-up
	Recognize		Evaluate		Synthesize
	Select		Examine		Systematize
	Simulate		Experiment		
	Tell		Identify		
	Translate		Infer		
			Inspect		
			Inventory		
			Predict		
			Question		
			Relate		
			Solve		
			Test		

References

Anderson, L.W., & Krathwohl (Eds.). (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Longman.

Bloom, B.S. and Krathwohl, D. R. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals, by a committee of college and university examiners. Handbook I: Cognitive Domain*. NY, NY: Longmans, Green.