IECC Outcome Development Guide

Learning outcomes examine the knowledge, attitudes, and skills that students develop through curricular/co-curricular interactions; measurable, transferable skill development. They are statements indicating what a participant (usually students) will **know, think, or be able to do** as a result of a class, event, activity, service, program, etc.

Types of Learning Outcomes:
- **Course Outcome** – is a learning outcome that occurs from successfully completing a specific course. (Curricular)
- **Discipline/Program Outcome** – is a learning outcome that occurs from successfully navigating academic programs and disciplines and is achieved by degree completion. (Curricular)
- **Program/Service Outcome** – is a learning outcome that also examines what a program or process does, achieves, or accomplishes through activities and services for its improvement and/or in support of institutional or group goals; generally numbers, needs, or satisfaction driven. (Co-Curricular)
- **General Education Outcome** – is a learning outcome that is embedded across courses, programs, and services, achievable over multiple experiences instead of the singular, and is based on the foundation of values, attitudes, and skills necessary to become responsible and concerned citizens and lifelong learners possessing the ability to think critically, communicate effectively, and solve problems in a diverse global society. (Institutional)

ABCD Structure of a Learning Outcome:
- **Audience/Who**
  - Who does the outcome pertain to? (Student-centered)
- **Behavior/What**
  - What do you expect the audience to know/be able to do? *(Include an action verb to describe the learning from either the cognitive, affective, or psychomotor domains.)*
- **Condition/How**
  - Under what conditions or circumstances will the learning occur?
- **Degree/How much**
  - How much will be accomplished, how well will the behavior need to be performed, and to what level?

Outcome Writing – The 3 Ms: Check your outcome against these criteria:
1. <u>Meaningful</u>: How does the outcome support the departmental mission or goal?
2. <u>Manageable</u>: What is needed to foster the achievement of the outcome? Is the outcome realistic?
3. <u>Measurable</u>: How will you know if the outcome is achieved? What is the assessment method?

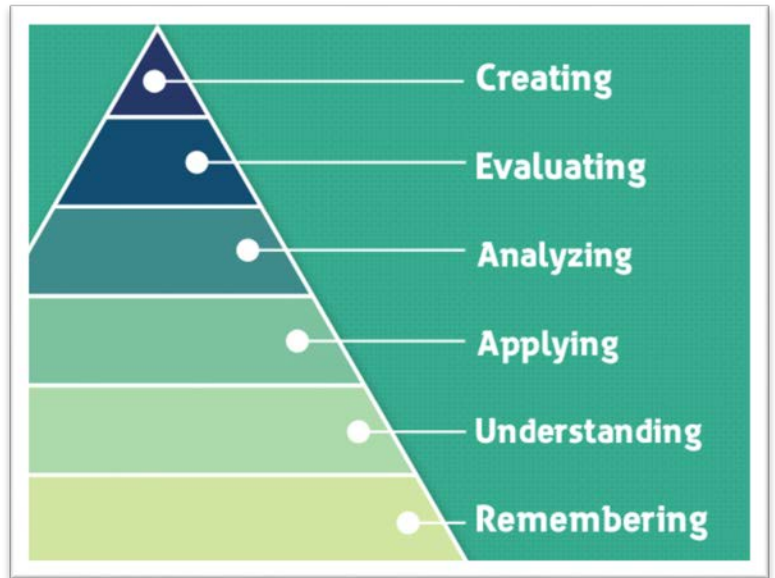### Initial Problems Encountered When Writing Learning Outcomes:
- Describe program outcomes, rather than learning outcomes
- People do not use *action verbs* and instead use vague terms like: appreciate, become aware of/familiar with, know, learn, value, use, understand…
- Too vast/complex, too wordy
- Multiple outcomes in one learning outcome statement (the word "and" is usually a clue!)
- Not specific enough (e.g., effective communication skills)

See Learning Domain Appendices

Cognitive Domain

The Cognitive domain deals with how we acquire, process, and use knowledge. It is the "thinking" domain. This includes things like recalling or recognizing facts, understanding concepts, using concepts in new circumstances, and more. The levels of the Cognitive domain are often represented as different levels of a pyramid, with "Remembering," the simplest level, making up the bottom of the pyramid and "Creating," the most complex level, making up the top.

Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Definitions:					
Remembering previously learned material	Grasping the meaning of material (lowest level of understanding).	Using knowledge in new and concrete situations (higher levels of understanding)	Understanding both the content and structure of material	Judging the value of material for a given purpose.	Synthesizing and creating new structures from existing knowledge and skills.
Sample Verbs:					
• Define • Identify • Label • List • Name • Recall • Record • State	• Describe • Discuss • Explain • Give an example of • Locate • Paraphrase • Translate	• Apply • Carry out • Demonstrate • Illustrate • Prepare • Solve • Use	• Analyze • Categorize • Compare • Contrast • Differentiate • Discriminate • Outline	• Assess • Conclude • Evaluate • Interpret • Justify • Select • Support	• Combine • Construct • Design • Develop • Generate • Plan • Propose

Lower Order Thinking Skills   Higher Order Thinking Skills

Affective Domain

The Affective domain deals with our attitudes, values, and emotions. It is the "valuing" domain. The Affective domain is divided into five different levels, ranging from the most simple–basically the willingness to pay attention–to the most complex–when a person's behaviors are consistently controlled by their value system. They represent not so much different kinds of attitudes but rather different degrees. The levels of the Affective domain are often represented as different levels of a pyramid, with receiving, the simplest level, making up the bottom of the pyramid and internalizing values, the most complex level, making up the top.
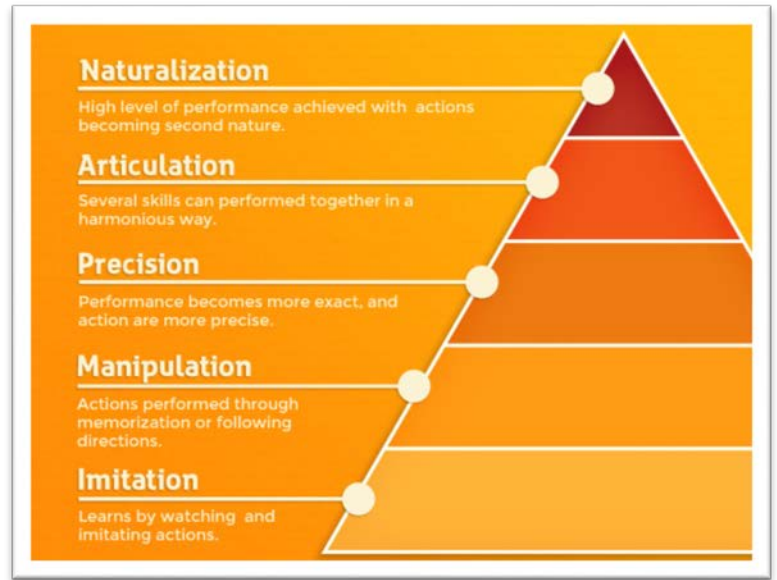
Internalizing Values
Value system is internalized and controls behavior.

Organization
Prioritizes values and resolves conflicts between them.

Valuing
Places value on a behavior, idea, person, situation, etc.

Responding
Learner actively responds and participates.

Receiving
Learner is willing to pay attention and listen with respect.

Receiving	Responding	Valuing	Organization	Internalizing
		Definitions:		
Learner is willing to pay attention and listen with respect	Learner actively responds and participates.	Places value on a behavior, idea, person, situation, etc.	Prioritizes and resolves conflicts between them.	Value system is internalized and controls behavior.
		Sample Verbs:		
• Accept • Acknowledge • Attend • Be aware • Listen • Notice • Pay attention • Tolerate	• Agree to • Answer freely • Assist • Care for • Communicate • Comply • Conform • Consent • Contribute • Cooperate • Follow • Obey • Participate • Read voluntarily • Respond • Visit • Volunteer	• Adopt • Assume responsibility • Behave according • Choose • Commit • Desire • Display • Exhibit loyalty • Express • Initiate • Prefer • Seek • Show continual desire to • Use resources to	• Adapt • Adjust • Arrange • Balance • Classify • Conceptualize • Formulate • Group • Organize • Rank • Theorize	• Act Upon • Advocate • Defend • Exemplify • Influence • Justify behavior • Maintain • Serve • Support

Psychomotor Domain

The Psychomotor domain deals with manual or physical skills. It is the "doing" domain. The five levels are in order from most basic to most advanced. The levels of the Psychomotor domain are often represented as different levels of a pyramid, with imitation, the simplest level, making up the bottom of the pyramid and naturalization, the most complex level, making up the top.

Imitation	Manipulation	Precision	Articulation	Naturalization
Definitions:				
Learns by watching and imitating actions.	Actions performed through memorization or following directions.	Performance becomes more exact, and actions are more precise.	Several skills can be performed together in a harmonious way.	High level of performance achieved with actions becoming second nature.
Sample Verbs:				
• Attempt • Copy • Duplicate • Follow • Imitate • Mimic • Repeat • Replicate • Reproduce • Trace	• Act • Build • Complete • Execute • Follow • Perform • Play • Produce	• Achieve automatically • Calibrate • Demonstrate • Excel expertly • Master • Perfect • Perform masterfully	• Adapt • Alter • Combine • Construct • Create • Customize • Formulate • Modify • Originate	• Create • Design • Develop • Invent • Manage