

# Learning Taxonomy Levels for Developing Competencies & Learning Outcomes (for the Cognitive and Affective Domains) Reference Guide

October 2018

<b>Cognitive Domain (evidence of change in knowledge, e.g. facilities for facts and figures, conceptual frameworks, and/or metacognition)</b>						
Bloom's Taxonomy Levels (revised using Anderson & Krathwohl)	<b>Level 1: Remember</b>	<b>Level 2: Understand</b>	<b>Level 3: Apply</b>	<b>Level 4: Analyze</b>	<b>Level 5: Evaluate</b>	<b>Level 6: Create</b>
Description of Levels	Recall information	Explain ideas or concepts	Use information	Break into parts to explore and understand relationships	Justify decisions	Generate new ideas and synthesize learning
Action Verbs*	Define, describe, identify, label, list, match, memorize, name, recall, recite, recognize, record, relate, repeat, select, state, write	Arrange, associate, clarify, classify, compile, conclude, determine consequences, discuss, draw conclusions, explain, express, generalize, give examples, infer, interpret, predict, respond to, restate, summarize, transcribe	Apply, calculate, classify, chart, compute, deliver, demonstrate, dramatize, employ, generalize, illustrate, implement, locate, manipulate, order, operate, perform, practice, predict, prepare, present, produce, report, sketch, tabulate, translate, use	Analyze, appraise, arrange, categorize, compare, contrast, correlate, determine, differentiate, distinguish, examine, experiment, inspect, inventorize, outline, solve, test	Appraise, assess, choose, compare, confirm, criticize, critique, decide, diagnose, evaluate, judge, justify, measure, prioritize, prove, rank, rate, recommend, research, revise, weigh, validate, verify	Adapt, arrange, assemble, build, combine, compose, construct, create, derive, develop, design, draft, establish, formulate, generate, integrate, manage, organize, plan, prepare, propose, reorder, structure, shape, synthesize, transform
Instructional Strategies	Lectures, audio/visuals, examples, analogies, discussions, multi-media activities	Didactic questions, discussion, review, automated audience response systems, multi-media activities, computer-based tutorials, asynchronous online forums	Case studies, exercises, drills & practice demonstrations, projects, sketches, role plays, simulations, cooperative learning activities, field observations, audio/visuals, multi-media activities, computer-based tutorials, asynchronous online forums, virtual field trips and related observations	Exercises, case studies, critical incidents, essays, interviews, journal critiques, panel discussions, mapping, audio/visuals, multi-media activities, computer-based tutorials, root cause analysis, needs and assets assessments, asynchronous online forums	Argument labs, debates, auditions, case studies, projects, simulations, panel discussions, comparison activities, audio/visuals, multi-media activities, computer-based tutorials, asynchronous online forums	Formation of a hypotheses, case studies, problem solving activities, development plans, delivery of testimony, simulations, audio/visuals, multi-media activities, computer-based tutorials, asynchronous online forums
Evaluation Methods	Pre-/post-tests, standardized assessments, critiques, reports, presentations, essays, case studies, simulation performance, actual performance, interviews, portfolios, debates, blogs, theses, self-reports, reflection papers, self-evaluations, peer evaluations					

\* the listed verbs represent a few of the more prominent examples from a very wide range of possible action verbs and there will be cases where the verb could fall into more than one category

# Learning Taxonomy Levels for Developing Competencies & Learning Outcomes (for the Cognitive and Affective Domains) Reference Guide

October 2018

<b>Affective Domain (evidence of change in attitudes, e.g. motivational dispositions, perceptions, values, and/or opinions)</b>					
Bloom's Taxonomy Levels (revised) Anderson & Krathwohl	<b>Level 1: Receive</b>	<b>Level 2: Respond</b>	<b>Level 3: Value</b>	<b>Level 4: Organize</b>	<b>Level 5: Characterize by Value</b>
Description of Levels	Be open to experience and willing to hear	React and actively participate	Attach value and express personal opinions	Bring together and resolve internal conflicts	Adopt belief systems and philosophies
Action Verbs*	Acknowledge, ask, attend, be open to, concentrate, do, discuss, follow, read, take part	Agree, ask, cite, clarify, communicate, cooperate, contribute, cite, describe, discuss, identify, react, report, respond, select	Accept, adopt, approve, argue, contribute, encourage, evaluate, initiate, justify, maintain, monitor, support, confront, criticize, debate, persuade, propose, refute	Adapt, adhere, alter, arrange, categorize, classify, compare, design, explain, formulate, modify, organize rate, revise, synthesize, test	Act, advocate, characterize, conform, devote, defend, disclose, discriminate, display, exemplify, incorporate, justify, maintain, promote, uphold, use
Instructional Strategies	Lectures, symposia, discussions, computer-based tutorials, asynchronous online forums	Lectures, panel discussions, small group activities, didactic questions, scenarios, role playing	Lectures, panel discussions, small group activities, didactic questions, scenarios, role playing	Lectures, panel discussions, small group activities, didactic questions, scenarios, role playing	Lectures, panel discussions, small group activities, didactic questions, scenarios, role playing
Evaluation Methods	Reflective papers, persuasive papers, journal writing, focus groups, self-report, portfolios, debates, minute papers, pre/post self-assessment, pre-/post-tests,				

\* the listed verbs represent a few of the more prominent examples from a very wide range of possible action verbs and there will be cases where the verb could fall into more than one category

Materials adapted from:

Anderson, L. W. and David R. Krathwohl, D. R., et al (2001) A taxonomy for learning, teaching, and assessing: A revision of bloom's taxonomy of educational objectives. Allyn & Bacon. Boston, MA (Pearson Education Group)

Caffarella, R.(2002). Planning programs for adult learners: A practical guide for educators, trainers, and staff developers. San Francisco,CA: Jossey-Bass Publishing.

Suskie, L. (2009). Assessing student learning: A common sense guide (2nd ed). San Francisco, CA: Jossey-Bass Publishing