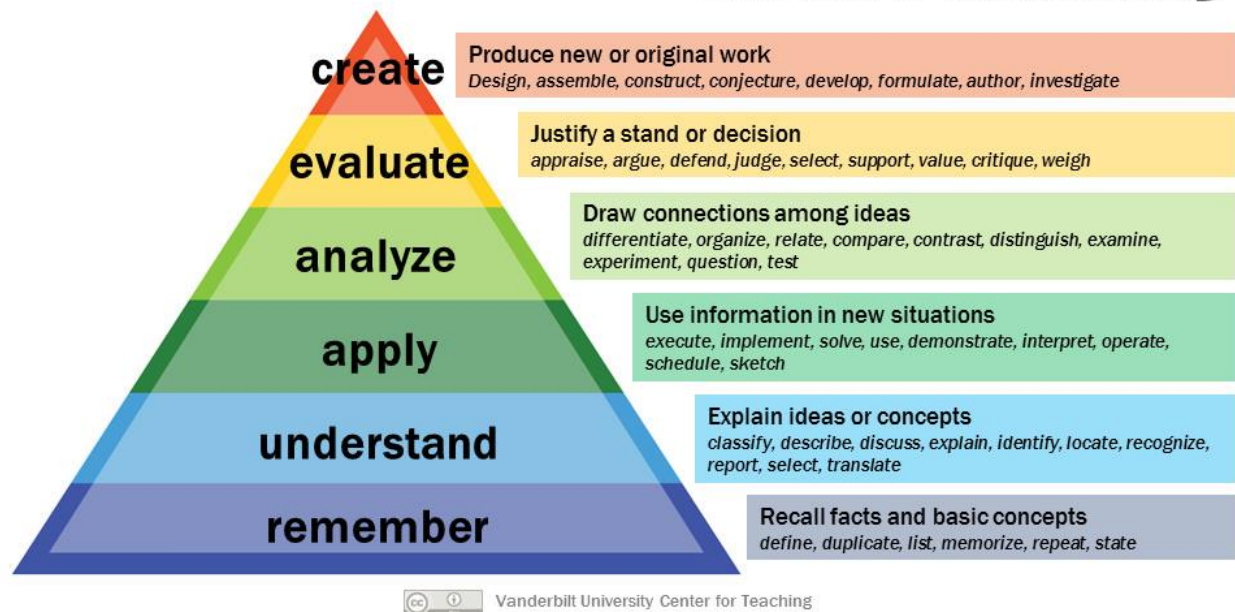# Writing Observable and Measurable Student Learning Outcomes

The original 1956 *Bloom's Taxonomy* was revised by Anderson and Krathwhohl (2001) to be used as a guide when writing Student Learning Outcomes (SLOs). Effective SLOs include active verbs based on a hierarchy of cognitive learning from recalling basic facts to producing original work. Faculty select a single verb from the highest level that reflects the desired learning and student deliverable. "Active" learning begins with the Application level.

Bloom's Taxonomy

create — Produce new or original work
Design, assemble, construct, conjecture, develop, formulate, author, investigate

evaluate — Justify a stand or decision
appraise, argue, defend, judge, select, support, value, critique, weigh

analyze — Draw connections among ideas
differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test

apply — Use information in new situations
execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch

understand — Explain ideas or concepts
classify, describe, discuss, explain, identify, locate, recognize, report, select, translate

remember — Recall facts and basic concepts
define, duplicate, list, memorize, repeat, state

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Verbs to consider when writing your SLO: ***apply, appraise, argue, arrange, assemble, assess, calculate, categorize, compare, compose, conclude, contrast, create, define, demonstrate, describe, differentiate, discuss, distinguish, evaluate, examine, explain, express, formulate, identify, integrate, interpret, memorize, modify, practice, predict, propose, recall, recognize, relate, report, review, summarize, translate, utilize, write.***

Notice that these verbs were **NOT** on the list: appreciate, know, learn, understand.

Examples of Student Learning Outcomes Using Bloom's Action Verbs

Students will be able to….
…***identify*** the most appropriate resource applicable to their project.

…***articulate*** the importance of ethics in a professional setting.

…***analyze*** clinical lab data to articulate a solution.

…***evaluate*** educational research critically.

…***apply*** anger management techniques to assist classmates in resolving conflicts.

…***utilize*** technology to create a professional resume.