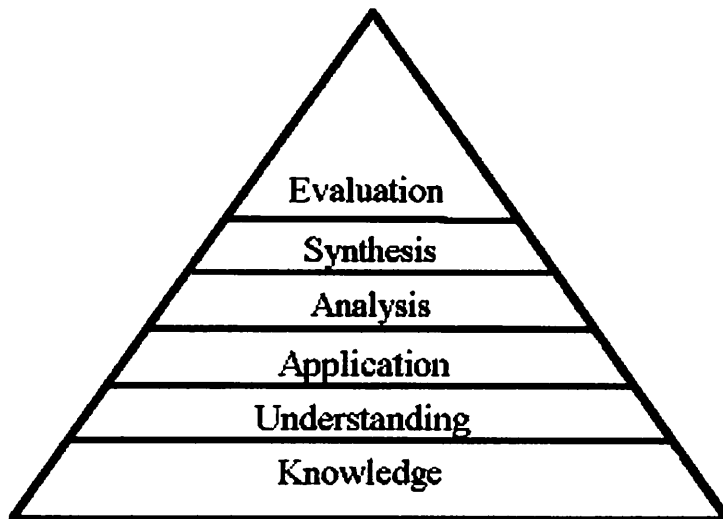# BLOOM'S TAXONOMY

In 1956, Benjamin Bloom headed a group of educational psychologists who developed a classification of levels of intellectual behavior important in learning. Bloom found that over 95 % of the test questions students encounter require them to think only at the lowest possible level...the recall of information.

Bloom identified six levels within the cognitive domain, from the simple recall or recognition of facts, as the lowest level, through increasingly more complex and abstract mental levels, to the highest order which is classified as evaluation. Verb examples that represent intellectual activity on each level are listed here.

Evaluation
Synthesis
Analysis
Application
Understanding
Knowledge

1. *Knowledge*: arrange, define, duplicate, label, list, memorize, name, order, recognize, relate, recall, repeat, reproduce state.
2. *Comprehension*: classify, describe, discuss, explain, express, identify, indicate, locate, recognize, report, restate, review, select, translate,
3. *Application*: apply, choose, demonstrate, dramatize, employ, illustrate, interpret, operate, practice, schedule, sketch, solve, use, write.
4. *Analysis*: analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.
5. *Synthesis*: arrange, assemble, collect, compose, construct, create, design, develop, formulate, manage, organize, plan, prepare, propose, set up, write.
6. *Evaluation*: appraise, argue, assess, attach, choose compare, defend estimate, judge, predict, rate, core, select, support, value, evaluate.

(http://www.officeport.com/edu/blooms.htm, May 2002)

Bloom's Taxonomy

Competence	Skills Demonstrated	Question Cues:
Knowledge	• observation and recall of information • knowledge of dates, events, places • knowledge of major ideas • mastery of subject matter	list, define, tell, describe, identify, show, label, collect, examine, tabulate, quote, name, who, when, where, etc.
Comprehension	• understanding information • grasp meaning • translate knowledge into new context • interpret facts, compare, contrast • order, group, infer causes • predict consequences	summarize, describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss, extend
Application	• use information • use methods, concepts, theories in new situations • solve problems using required skills or knowledge	apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover
Analysis	• seeing patterns • organizations of parts • recognition of hidden meanings • identification of components	analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer
Synthesis	• use old ideas to create new ones • generalize from given facts • relate knowledge from several areas • predict, draw conclusions	combine, integrate, modify, rearrange, substitute, plan, create, design, invent, what if?, compose, formulate, prepare, generalize, rewrite
Evaluation	• compare and discriminate between ideas • assess value of theories, presentations • make choices based on reasoned argument • verify value of evidence • recognize subjectivity	assess, decide, rank, grade, test, measure, recommend, convince, select, judge, explain, discriminate, support, conclude, compare, summarize

(http://www.calstatela.edu/centers/cetl/Bloomtable.htm, November, 2000)

Possible Action Verbs for Course Outcomes

Domain: _Cognitive_

1. Knowledge

define	write	underline
state	recall	select
list	recognize	reproduce
name	label	measure

2. Comprehension

identify	illustrate	explain
justify	represent	judge
select	name	contrast
indicate	formulate	classify

3. Application

predict	choose	construct
select	find	compute
assess	show	uses
explain	demonstrate	perform

4. Analysis

analyze	select	justify
identify	separate	resolve
conclude	compare	break down
differentiate	contrast	criticize

5. Synthesis

combine	argue	select
restate	discuss	relate
summarize	organize	generalize
précis	derive	conclude

6. Evaluation

judge	support	identify
evaluate	defend	avoid
determine	attack	select
recognize	criticize	choose

Domain: Affective

1. Receiving

listen	accept	be aware
attend	receive	favor
prefer	perceive	select
differentiate	separate	set apart
accumulate	combine	distinguish

2. Responding

state	select	record
answer	list	develop
complete	write	derive
comply	follow	volunteer
discuss	practice	play
applaud	acclaim	augment

3. Value

accept	increase	indicate
recognize	develop	decide
participate	attain	influence
assist	subsidize	help
support	deny	protest
debate	argue	

4. Organization

organize	find	associate
judge	determine	form
relate	correlate	select
discuss	theorize	abstract
compare	balance	define
formulate		

5. Characterization

revise	accept	demonstrate
change	judge	identify
face	develop	decide
complete	require	avoid
manage	resolve	resist