



Office for Professional Development
Indiana University-Purdue University Indianapolis

Bloom's Taxonomy "Revised"

Key Words, Model Questions, & Instructional Strategies

Bloom's Taxonomy (1956) has stood the test of time. Recently Anderson & Krathwohl (2001) have proposed some minor changes to include the renaming and reordering of the taxonomy. This reference reflects those recommended changes.

I. REMEMBER (KNOWLEDGE)

(shallow processing: drawing out factual answers, testing recall and recognition)

Verbs for Objectives	Model Questions	Instructional Strategies
choose	Who?	Highlighting
describe	Where?	Rehearsal
define	Which One?	Memorizing
identify	What?	Mnemonics
label	How?	
list	What is the best one?	
locate	Why?	
match	How much?	
memorize	When?	
name	What does It mean?	
omit		
recite		
recognize		
select		
state		

II. UNDERSTAND (COMPREHENSION)

(translating, interpreting and extrapolating)

Verbs for Objectives	Model Questions	Instructional Strategies
classify	State in your own words.	Key examples
defend	Which are facts?	Emphasize connections
demonstrate	What does this mean?	Elaborate concepts
distinguish	Is this the same as . . . ?	Summarize
explain	Give an example.	Paraphrase
express	Select the best definition.	STUDENTS explain
extend	Condense this paragraph.	STUDENTS state the rule
give example	What would happen if . . . ?	"Why does this example . . . ?"
illustrate	State in one word . . .	create visual representations
indicate	Explain what is happening.	(concept maps, outlines, flow
interrelate	What part doesn't fit?	charts organizers, analogies,
interpret	Explain what is meant.	pro/con grids) <u>PRO CON</u>
infer	What expectations are there?	<i>NOTE: The faculty member can</i>
judge	Read the graph (table).	<i>show them, but <u>they</u> have to do it.</i>
match	What are they saying?	Metaphors, rubrics, heuristics
paraphrase	This represents. . .	
represent	What seems to be . . . ?	
restate	Is it valid that . . . ?	
rewrite	What seems likely?	
select	Show in a graph, table.	
show	Which statements support . . . ?	
summarize	What restrictions would you add?	
tell		
translate		

III. APPLY

(Knowing when to apply; why to apply; and recognizing patterns of transfer to situations that are new, unfamiliar or have a new slant for students)

Verbs for Objectives

apply
choose
dramatize
explain
generalize
judge
organize
paint
prepare
produce
select
show
sketch
solve
use

Model Questions

Predict what would happen if
Choose the best statements that apply
Judge the effects
What would result
Tell what would happen
Tell how, when, where, why
Tell how much change there would be
Identify the results of

Instructional Strategies

Modeling
Cognitive apprenticeships
“Mindful” practice – NOT just a “routine” practice
Part and whole sequencing
Authentic situations
“Coached” practice
Case studies
Simulations
Algorithms

IV. ANALYZE (breaking down into parts, forms)

Verbs for Objectives

analyze
categorize
classify
compare
differentiate
distinguish
identify
infer
point out
select
subdivide
survey

Model Questions

What is the function of . . . ?
What's fact? Opinion?
What assumptions. . . ?
What statement is relevant?
What motive is there?
Related to, extraneous to, not applicable.
What conclusions?
What does the author believe?
What does the author assume?
Make a distinction.
State the point of view of . . .
What is the premise?
State the point of view of . . .
What ideas apply?
What ideas justify the conclusion?
What's the relationship between?
The least essential statements are
What's the main idea? Theme?
What inconsistencies, fallacies?
What literary form is used?
What persuasive technique?
Implicit in the statement is . . .

Instructional Strategies

Models of thinking
Challenging assumptions
Retrospective analysis
Reflection through journaling
Debates
Discussions and other collaborating learning activities
Decision-making situations

V. EVALUATE (according to some set of criteria, and state why)

Verbs for Objectives

appraise
judge
criticize
defend
compare

Model Questions

What fallacies, consistencies, inconsistencies appear?
Which is more important, moral, better, logical, valid, appropriate?
Find the errors.

Instructional Strategies

Challenging assumptions
Journaling
Debates
Discussions and other collaborating learning activities
Decision-making situations

VI. CREATE (SYNTHESIS)

(combining elements into a pattern not clearly there before)

Verbs for Objectives

choose
combine
compose
construct
create
design
develop
do
formulate
hypothesize
invent
make
make up
originate
organize
plan
produce
role play
tell

Model Questions

How would you test. . . ?
Propose an alternative.
Solve the following.
How else would you . . . ?
State a rule.

Instructional Strategies

Modeling
Challenging assumptions
Reflection through journaling
Debates
Discussions and other collaborating learning activities
Design
Decision-making situations

Web References:

- <http://www.coun.uvic.ca/learn/program/hndouts/bloom.html>
- <http://www.fwl.org/edtech/blooms.html>
- <http://apu.edu/~bmccarty/curricula/mse592/intro/tsld006.htm>
- <http://152.30.11.86/deer/Houghton/learner/think/bloomsTaxonomy.html>
- <http://amath.colorado.edu/appm/courses/7400/1996Spr/bloom.html>
- <http://www.stedwards.edu/cte/bloomtax.htm>
- <http://quarles.unbc.edu/lsc/bloom.html>
- <http://www.wested.org/tie/dlrn/blooms.html>
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References:

Anderson, L. W. & Krathwohl, D. R. (2001). *A Taxonomy for learning, teaching, and assessing*.
Bloom, B. S. (Ed.). (1956). *Taxonomy of educational objectives: The classification of educational goals, by a committee of college and university examiners*. New York: Longmans.
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