



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

choose
describe
define
identify
label
list
locate
match
memorize
name
omit
recite
recognize
select
state

Model Questions

Who?
Where?
Which One?
What?
How?
What is the best one?
Why?
How much?
When?
What does It mean?

Instructional Strategies

Highlighting
Rehearsal
Memorizing
Mnemonics

II. UNDERSTAND (COMPREHENSION)

(translating, interpreting and extrapolating)

Verbs for Objectives

classify
defend
demonstrate
distinguish
explain
express
extend
give example
illustrate
indicate
interrelate
interpret
infer
judge
match
paraphrase
represent
restate
rewrite
select
show
summarize
tell
translate

Model Questions

State in your own words.
Which are facts?
What does this mean?
Is this the same as . . . ?
Give an example.
Select the best definition.
Condense this paragraph.
What would happen if . . . ?
State in one word . . .
Explain what is happening.
What part doesn't fit?
Explain what is meant.
What expectations are there?
Read the graph (table).
What are they saying?
This represents. . .
What seems to be . . . ?
Is it valid that . . . ?
What seems likely?
Show in a graph, table.
Which statements support . . . ?
What restrictions would you add?

Instructional Strategies

Key examples
Emphasize connections
Elaborate concepts
Summarize
Paraphrase
STUDENTS explain
STUDENTS state the rule
"Why does this example. . . ?"
create visual representations
(concept maps, outlines, flow
charts organizers, analogies,
pro/con grids) PRO | CON
*NOTE: The faculty member can
show them, but they have to do it.*
Metaphors, rubrics, heuristics

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 | Model Questions | Instructional Strategies |
|----------------------|--------------------------------------|-----------------------------------|
| appraise | What fallacies, consistencies, | Challenging assumptions |
| judge | inconsistencies appear? | Journaling |
| criticize | Which is more important, moral, | Debates |
| defend | better, logical, valid, appropriate? | Discussions and other |
| compare | Find the errors. | collaborating learning activities |
| | | Decision-making situations |

VI. CREATE (SYNTHESIS)

(combining elements into a pattern not clearly there before)

| Verbs for Objectives | Model Questions | Instructional Strategies |
|----------------------|----------------------------|-----------------------------------|
| choose | How would you test. . . ? | Modeling |
| combine | Propose an alternative. | Challenging assumptions |
| compose | Solve the following. | Reflection through journaling |
| construct | How else would you . . . ? | Debates |
| create | State a rule. | Discussions and other |
| design | | collaborating learning activities |
| develop | | Design |
| do | | Decision-making situations |
| formulate | | |
| hypothesize | | |
| invent | | |
| make | | |
| make up | | |
| originate | | |
| organize | | |
| plan | | |
| produce | | |
| role play | | |
| tell | | |

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/dlrm/blooms.html>
- <http://www.bena.com/ewinters/bloom.html>
- <http://weber.u.washington.edu/~krumme/guides/bloom.html>

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.
John Maynard, University of Texas, Austin
Marilla Svinicki, University of Texas, Austin

Compiled by the IUPUI Center for Teaching and Learning, Revised December 2002

Class: *This is the grade level or the class*

| | | |
|--|--|--|
| Previous Unit: | Current Unit: | Next Unit: |
| Industry Standards: | CCRS: <i>Common Core Reading and/or Writing Standard</i> | CCMS: <i>Common Core Math Standard</i> |
| Essential Questions: <i>These are open-ended, thought provoking, higher-order questions that point toward important, transferable ideas within and possibly across disciplines.</i> | Anchor Text(s): <ul style="list-style-type: none">• <i>What the students read to accomplish this standard</i>• <i>There could be several reading sources</i> | Essential Vocabulary: <i>Vocabulary that students need to know for success in this unit and future instruction. This vocabulary will be purposefully taught and might become part of the assessment.</i> |
| Measurable Unit Objectives: <i>After defining your standards, develop Specific Measurable Attainable Relevant Targeted outcomes for desired academic results and appropriate to the learners</i> | Learning Targets/ I Can Statements: <i>"I can" statements are learning targets for the students, they:</i> <ol style="list-style-type: none">1. <i>Link the objectives to the unit within a daily lesson</i>2. <i>Designed to partner with students and help students "know" the learning expectations</i>3. <i>Written in student friendly language</i> | Instructional Technology: <i>What technology tools will you use to help the students hit the learning targets?</i> |
| Instructional Strategies: <i>What will you do in the classroom to help the students hit the learning targets?</i> | Assessments: <i>An assessment can easily be created from the learning targets and essential vocabulary. Assessments can be performance-based or paper-pencil.</i> | |

Class:

Previous Unit:

Current Unit:

Next Unit:

Industry Standards:

CCRS:

CCMS:

Essential Questions:

Anchor Text(s):

Measurable Unit Objectives:

Learning Targets/ I Can Statements:

Essential Vocabulary:

Instructional Strategies:

Assessments:

Instructional Technology: