Higher Order Thinking Skills

**Evaluation** 

Lower Order Thinking Skills

Thinking Skins				Synthesis	
	Comprehension	<b>Application</b> Ability to use learned	Analysis Ability to separate material into component	Ability to put together the separate idea to form new whole,	Ability to Judge the worth of material against stated criteria
Knowledge	Ability to grasp	material in new	parts and show relationships between	establish	Appraise
Ability to recall	meaning, explain,	situations	parts	Arrange	Argue
previously learned	and restate ideas	Apply	Analyze	Assemble	Assess
material	Classify	Change	Appraise	Categorize	Choose
Arrange	Compare	Choose	Breakdown	Collect	Compare
Define	Convert	Complete	Calculate	Combine	Conclude
Describe	Defend	Construct	Categorize	Comply	Contrast
Duplicate	Describe	Demonstrate	Compare	Compose	Defend
Identify	Discuss	Discover	Contrast	Construct	Describe
Label	Distinguish	Dramatize	Criticize	Create	Discriminate
List	Estimate	Employ	Debate	Design	Estimate
Match	Explain	Illustrate	Diagram	Develop	Evaluate
Memorize	Express	Interpret	Differentiate	Devise	Explain
Name	Extend	Manipulate	Discriminate	Explain	Interpret
Order	Generalized	Modify	Distinguish	Formulate	Judge
Outline	Give Example(s)	Operate	Examine	Generate	Justify
Recognize	Identify	Practice	Experiment	manage	Measure
Relate	Indicate	Predict	Identify	Organize	Predict
Recall	Infer	Prepare	Illustrate	Plan	Rate

Record	Locate	Produce	Infer	Prepare	Revise
Repeat	Paraphrase	Relate	Inspect	Rearrange	Score
Reproduce	Predict	Schedule	Inventory	Reconstruct	Select
Select	Recognize	Show	Model	Relate	Support
State	Restate	Sketch	Outline	Reorganize	value
Tell	Rewrite	Solve	Point out	Revise	
Underline	Review	Use	Question	Rewrite	
	Select	Write	Relate	Set up	
	Summarize		Select	Summarize	
	Tell		Separate	Synthesize	
	Translate			Tell	
				Write	

Some of this material was adopted from:

Anderson, L.W., & Krathwohl (Eds.). (2001). A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. New York: Longman.

Bloom, B.S. and Krathwohl, D. R. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals, by a committee of college and university examiners. Handbook I: Cognitive Domain.* NY, NY: Longmans, Green

Churches, A. (2007). Bloom's Digital Taxonomy. Retrieved from http://www.techlearning.com/techlearning/archives/2008/04/AndrewChurches.pdf

University of West Florida's Center for University Teaching, Learning, and Assessment. Action Words for Bloom's Taxonomy. Retrieved from <a href="http://uwf.edu/cutla/SLO/ActionWords.pdf">http://uwf.edu/cutla/SLO/ActionWords.pdf</a>



Creating

Lower Order Thinking Skills

Thinking Skills				Evaluating	Putting the elements
	Understanding	<b>Applying</b> Carrying out or using a procedure through	Analyzing Breaking concept into part, determining how the parts relate to one	Making judgments based on criteria and standards through checking and critiquing	together to form a coherent or functional whole
Remembering	Constructing meaning	executing or	another or to an overall	Appraise	Adapt
Retrieving, recalling or	form different types of	implementing.	structure or purpose.	Argue	Anticipate
recognizing knowledge	function be they written	Act	Advertise	Assess	Arrange
from memory.	or graphic	Administer	Analyze	Choose	Assemble
Arrange	Ask	Articulate	Appraise	Compare	Categorize
Define	Associate	Apply	Breakdown	Conclude	Collaborate
Describe	Cite	Calculate	Calculate	Contrast	Collect
Duplicate	Classify	Chart	Categorize	Consider	Combine
Identify	Compare	Collect	Classify	Convince	Comply
Locate	Convert	Compute	Compare	Critique	Compose
Label	Defend	Change	Conclude	Debate	Construct
List	Describe	Choose	Connect	Decide	Create
Match	Discuss	Complete	Contrast	Defend	Design
Memorize	Distinguish	Construct	Correlate	Describe	Develop
Name	Demonstrate	Demonstrate	Criticize	Discriminate	Devise
Order	Discover	Discover	Debate	Distinguish	Explain
Outline	Differentiate	Dramatize	Deduce	Editorialize	Express
Quote	Estimate	Develop	Devise	Estimate	Facilitate
Recognize	Explain	Establish	Diagram	Evaluate	Formulate
Relate	Express	Examine	Differentiate	Explain	Generate
Recall	Extend	Explain	Discriminate	Find errors	Imagine

Record	Give Example(s)	Employ	Distinguish	Grade	Infer
Repeat	Group	Illustrate	Dissect	Interpret	Intervene
Reproduce	Identify	Interpret	Divide	Judge	Justify
Select	Indicate	Judge	Estimate	Justify	Make
State	Infer	List	Evaluate	Measure	Manage
Tell	Illustrate	Manipulate	Examine	Order	Negotiate
Underline	Judge	Modify	Experiment	Persuade	Organize
Visualize	Paraphrase	Operate	Explain	Predict	Originate
	Predict	Practice	Focus	Rank	Plan
	Recognize	Predict	Identify	Rate	Prepare
	Restate	Prepare	Illustrate	Recommend	Propose
	Rewrite	Produce	Infer	Reframe	Rearrange
	Review	Relate	Inspect	Revise	Reconstruct
	Select	Record	Inventory	Score	Relate
	Summarize	Simulate	Model	Select	Reorganize
	Show	Schedule	Order	Support	Revise
	Tell	Show	Organize	value	Rewrite
	Translate	Sketch	Outline	Rewrite	Schematize
	Trace	Solve	Plan	Set up	Set up
	Transform	Teach	Point out	Summarize	Simulate
		Transfer	Prioritize	Synthesize	Solve
		Utilize	Question	Tell	Speculate
		Use	Relate	Value	Structure
		Write	Select	Weight	Support
			Separate	Write	Summarize
			Subdivide		Synthesize
			Survey		Test
			Test		Tell
					Validate