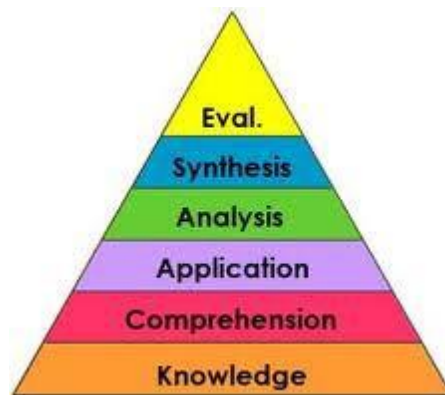


## Bloom's Taxonomy and Online Resources

A well designed course is built on a foundation of actionable learning objectives. There are numerous lists of action learning verbs. Many of those are based on Bloom's Taxonomy, which is a classification of actionable objectives for learning opportunities.

Bloom's Taxonomy was published in 1956 under the leadership of educational psychologist Dr. Benjamin Bloom, who recognized most classroom activities never pushed beyond rote learning. He proposed six categories of thinking with related action verbs. The six categories from lower to higher order thinking were:



Source: File: [http://commons.wikimedia.org/wiki/File:Bloom\\_taxonomy.jpg](http://commons.wikimedia.org/wiki/File:Bloom_taxonomy.jpg)

Forty years later Lorin Anderson, one of Bloom's former students, revised his learning taxonomy. In addition to creating new "active" names for the six categories of thinking, he made creating the highest order of learning mastery:



Source: File: [https://lynnscarqillk12.wikispaces.com/file/view/blooms\\_taxonomy\\_dia.gif/293026294/399x364/blooms\\_taxonomy\\_dia.gif](https://lynnscarqillk12.wikispaces.com/file/view/blooms_taxonomy_dia.gif/293026294/399x364/blooms_taxonomy_dia.gif)

### Interactive 3D model of Bloom's taxonomy

Iowa State University's Center for Excellence in Learning and Teaching shares an online interactive 3D model of Bloom's Revised Taxonomy. Their resource provides a good introduction to the learning categories and possible associated action verbs. To access this resource, visit <http://www.celt.iastate.edu/teaching/RevisedBlooms1.html>. You may find this tool especially useful in visualizing the relationship of categories to one another and their place in the range of factual to metacognitive mastery of content. In addition, it is a good resource for launching a learning activity brainstorming session in the course planning stages.

It is important to note when developing learning activities it is not necessary to always start students with lower order thinking skills and progressively move to the higher order skills. For example, having students create a video might give them opportunity to touch on the other thinking categories and promote deeper level of content mastery.

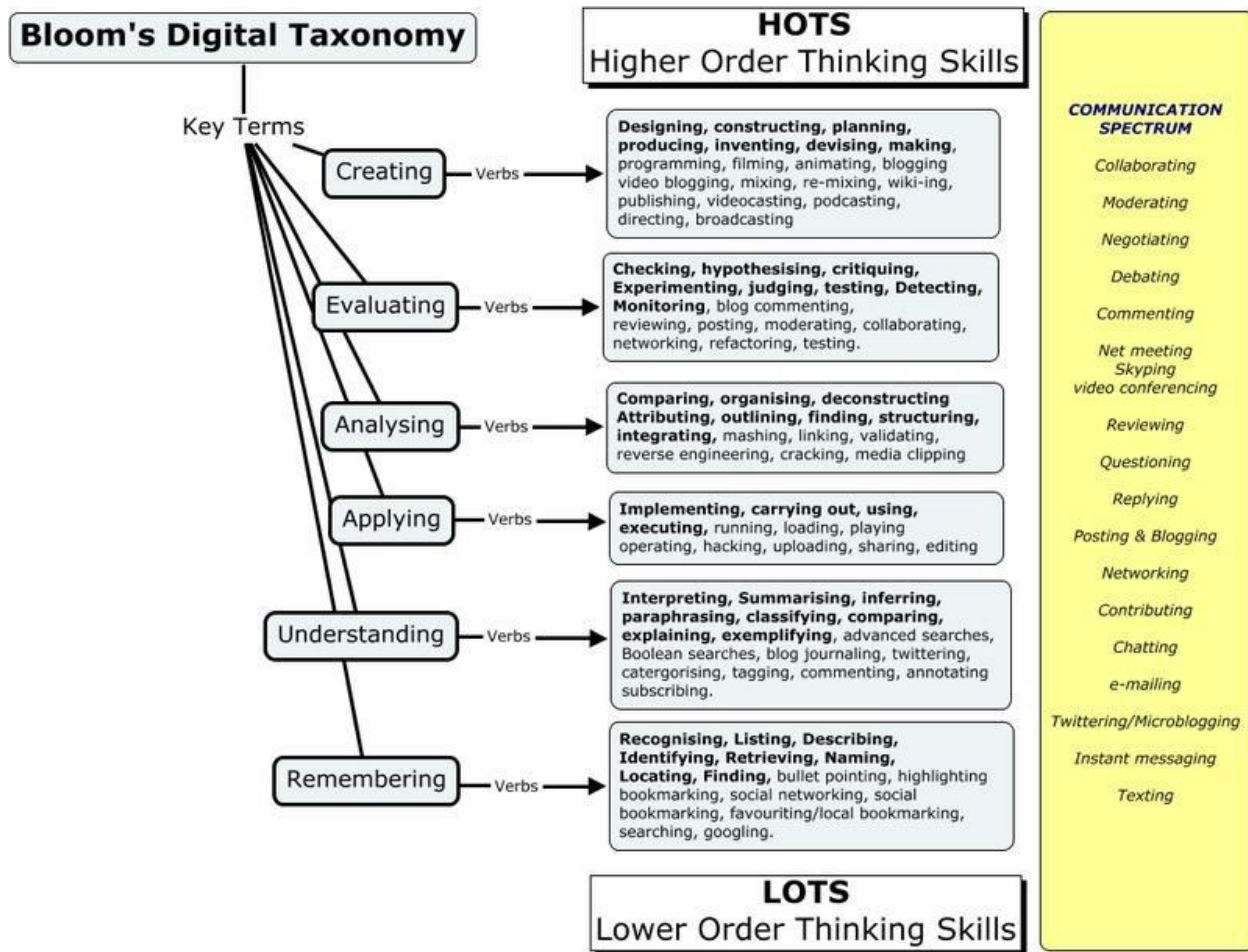
### Learning Objective Action Verbs related to Bloom's Taxonomy

Definitions	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
<b>Bloom's Definition</b>	Remember previously learned information	Demonstrate an understanding of the facts	Apply knowledge to actual situations	Break down objects or ideas into simpler parts and find evidence to support generalizations	Compile component ideas into a new whole or propose alternative solutions.	Make and defend judgments based on internal evidence or external criteria.
<b>Verbs</b>	Arrange Define Describe Duplicate Identify Label List Match Memorize Name Order Outline Recognize Relate Recall Repeat Reproduce Select State	Classify Convert Defend Describe Discuss Distinguish Estimate Explain Express Extend Generalized Give example(s) Identify Indicate Infer Locate Paraphrase Predict Recognize Rewrite	Apply Change Choose Compute Demonstrate Discover Dramatize Employ Illustrate Interpret Manipulate Modify Operate Practice Predict Prepare Produce Relate Schedule Show	Analyze Appraise Breakdown Calculate Categorize Compare Contrast Criticize Diagram Differentiate Discriminate Distinguish Examine Experiment Identify Illustrate Infer Model Outline Point out	Arrange Assemble Categorize Collect Combine Comply Compose Construct Create Design Develop Devise Explain Formulate Generate Plan Prepare Rearrange Reconstruct Relate	Appraise Argue Assess Attach Choose Compare Conclude Contrast Defend Describe Discriminate Estimate Evaluate Explain Judge Justify Interpret Relate Predict Rate

Blooms Taxonomy Action Verbs [Resource PDF] (2012, January 19) Retrieved June 24, 2013, from <http://www.clemson.edu/assessment/assessmentpractices/referencematerials/documents/Blooms%20Taxonomy%20Action%20Verbs.pdf>

## Bloom's Digital Taxonomy

A contemporary update to the revised taxonomy is Bloom's Digital Taxonomy, which includes action verbs referencing digital technology. This version of the revised Bloom's Taxonomy is helpful in creating learning opportunities promoting the development of 21<sup>st</sup> Century skills, like digital content creation, curation, and online collaboration.



Blooms Digital Taxonomy Summary Map [Image] (2013) Retrieved June 24, 2013, from <http://edorigami.wikispaces.com/Bloom%27s+Digital+Taxonomy>