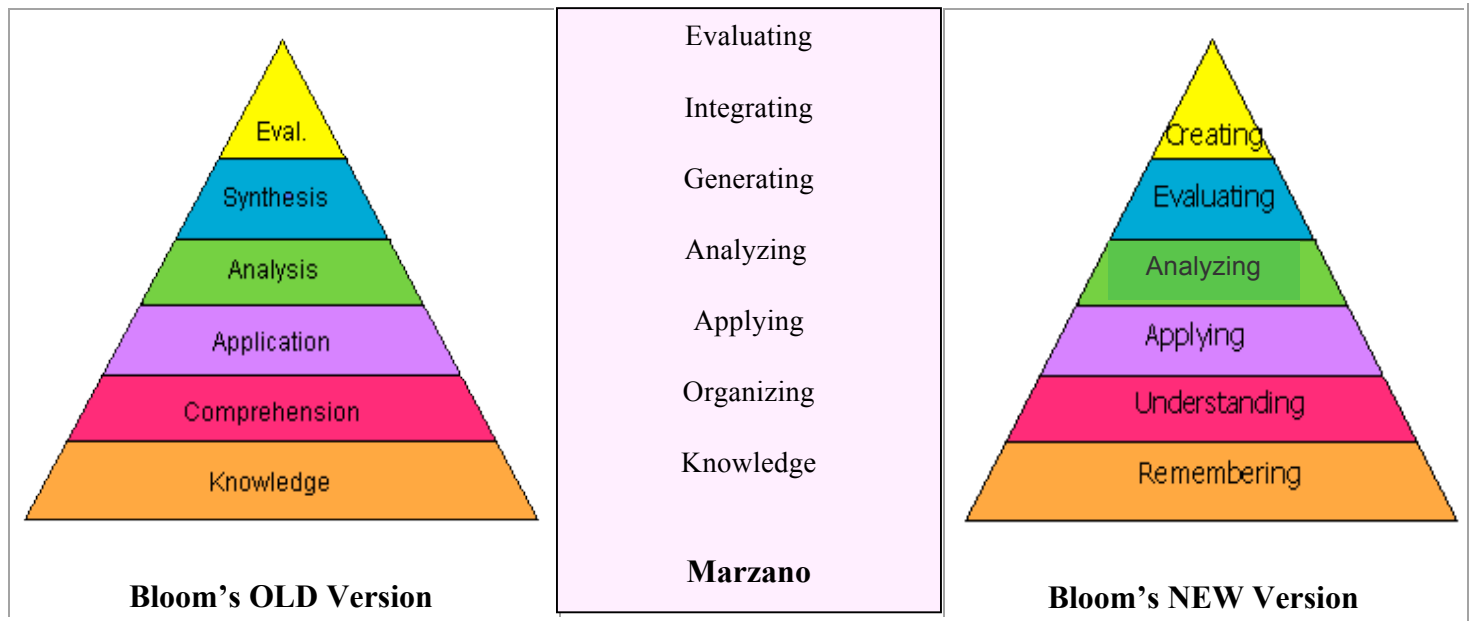


## Levels of Thinking and Reasoning



In 1956, Benjamin Bloom headed a group of educational psychologists who developed a classification of levels of intellectual behavior important in learning. During the 1990's a new group of cognitive psychologist, lead by Lorin Anderson (a former student of Bloom's), updated the taxonomy reflecting relevance to 21st century work. Note the change from nouns to verbs to describe the different levels of the taxonomy.

Terminology	Definition	Synonyms	Example Question
<b>Remembering</b>  Can the student recall or remember the information?	Retrieving, recognizing, and recalling relevant knowledge from long-term memory	define, duplicate, list, memorize, recall, repeat, reproduce state	Describe where Goldilocks lived.
<b>Understanding</b>  Can the student explain ideas or concepts?	Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining	classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase	Summarize what the Goldilocks story was about.
<b>Applying</b>  Can the student use the information in a new way?	Carrying out or using a procedure through executing or implementing	choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write	Construct a theory as to why Goldilocks went into the house.
<b>Analyzing</b>  Can the student distinguish between the different parts?	Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing	appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test	Differentiate between how Goldilocks reacted and how you would react in each story event.
<b>Evaluating</b>  Can the student justify a stand or decision?	Making judgments based on criteria and standards through checking and critiquing	appraise, argue, defend, judge, select, support, value, evaluate	Assess whether or not you think this really happened to Goldilocks.
<b>Creating</b>  Can the student create a new product or point of view?	Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing	assemble, construct, create, design, develop, formulate, write	Compose a song, skit, poem, or rap to convey the Goldilocks story in a new form.