Levels of Thinking and Reasoning

In 1956, a group of educators and educational psychologists led by Benjamin Bloom published a taxonomy of educational objectives. The taxonomy reached wide acceptance. Robert J. Marzano is an educational researcher, speaker, and trainer focusing on school improvement and teacher observation and assessment. In 2000, Marzano published seven “thinking skills” as a new taxonomy. Meanwhile, former Bloom student Lorin Anderson and former Bloom research partner David Krathwohl led a new group in 1995-2000 to develop changes to Bloom’s original taxonomy. In 2001, they published an updated taxonomy to reflect developments in the intervening years and some of Bloom’s own desires for revision.

<table>
<thead>
<tr>
<th>Terminology</th>
<th>Definition</th>
<th>Synonyms</th>
<th>Example Question</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Remembering</strong></td>
<td>Can the student recall or remember the information?</td>
<td>Retrieving, recognizing, and recalling relevant knowledge from long-term memory</td>
<td>Describe where Harry Potter lived.</td>
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<td><strong>Understanding</strong></td>
<td>Can the student explain ideas or concepts?</td>
<td>Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining</td>
<td>Summarize the Deathly Hallows story.</td>
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<td><strong>Applying</strong></td>
<td>Can the student use the information in a new way?</td>
<td>Carrying out or using a procedure through executing or implementing</td>
<td>Construct a theory as to why Hermione’s <strong>patronus</strong> is an otter.</td>
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<td><strong>Analyzing</strong></td>
<td>Can the student distinguish between the different parts?</td>
<td>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</td>
<td>Differentiate between how Cedric Diggory reacted in the maze and how you would react.</td>
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<td><strong>Evaluating</strong></td>
<td>Can the student justify a stand or decision?</td>
<td>Making judgments based on criteria and standards through checking and critiquing</td>
<td>Assess whether or not Luna Lovegood is an essential character in the Harry Potter series.</td>
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<td><strong>Creating</strong></td>
<td>Can the student create a new product or point of view?</td>
<td>Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing</td>
<td>Compose a song, skit, poem, or rap to convey the Deathly Hallows story in a new form.</td>
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Adapted from: [www.nhcs.net/instruction/citw%20year%20III%20links/Blooms%20handout.doc](http://www.nhcs.net/instruction/citw%20year%20III%20links/Blooms%20handout.doc)
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