

Approaching Writing and Critical Thinking Using Bloom's Taxonomy

Critical thinking is a key step in analysis of concepts when writing. A great way to go about critical thinking is through critical questioning. Bloom's Taxonomy, an objective writing theory used by teachers to guide and create their lesson objectives, is a great resource to fall back on when trying to come up with questions to ask yourself and guide your writing. But what is Bloom's Taxonomy and how can you make it useful to you?

Bloom's Taxonomy – What is it?

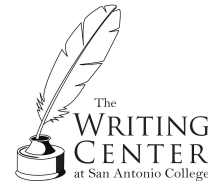
Bloom's Taxonomy works as a tier of knowledge categories. Teachers and professors use this theory to guide their lesson planning and create objectives, or goals, for students to reach in in lesson and unit, with a focus on making sure they they're lead from the basic Remembering stage to the Creating stage, in which they're able to manipulate the knowledge they've gained and make it their own.

Bloom's Taxonomy was created in 1956 by a group of educators, led by Dr. Benjamin Bloom. In 2001, the titles of the tiers were changed to verbs to reflect the active nature of obtaining and applying knowledge.

The lower tiers of the pyramid, Remembering, Understanding, and Applying are lower-order thinking skills. They consist of skills such as recalling what you know, describing or recognizing ideas, and being able to use your knowledge in various situations.

The higher sections of the pyramid, Analyzing, Evaluating, and Creating, are the higher-order thinking skills. These are what you want to aim for, as it in in these sections that students gain a deep understanding of and connection with the material they're learning.

Though it is generally a teacher's tool, that does not mean that Bloom's Taxonomy



cannot benefit you, as a student. It can be an invaluable tool to students, especially as a writing strategy, as it helps students to get to the heart of what they're learning and to think critically about concepts they are meant to analyze in academic writing. But that begs the questions: How *can* I use it to my benefit?

Bloom's Taxonomy – How can I use it?

Just as teachers have to be purposeful in their use of Bloom's Taxonomy, so must students if they want to get the most out of it. Teachers use the verbs located in the categories to guide their objective writing in a way that will help students ascend from the lower-order thinking skills to higher-order ones. One of the best ways students can use the tool is to manipulate these same verbs to create questions they can ask themselves that will assist them in strengthening their understanding of content and moving up to being able to analyze and manipulate that same content in their essays and other writing.

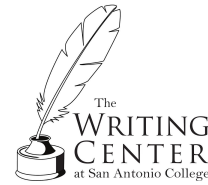
You want the questions that you ask to perform a forward projection.

The big goal is Remembering → Creating, but, sometimes, you need to start smaller and move forward by taking baby steps.

1. Remembering →
- Understanding
2. Understanding →
- Applying
3. Applying →
- Analyzing
4. Analyzing →
- Evaluating
5. Evaluating →
- Creating

Below are some of the verbs teachers use in Bloom's Taxonomy and some question stems that you can use based on them. Play with the verbs and questions in order to find a way that allows you to follow the forward momentum mentioned above.

Consider what questions and verbs make the most sense with the subject you're working with and the concept you're attempting to grasp. Then, think about how you can apply those to start using higher-order thinking skills.



Bloom's Taxonomy Category Verbs Teachers Use Questions Stems You Can Use

Remembering

Tell

Define

e

Locate

e

State

What happened after...?

What does ___ mean?

Describe what happened

at... What is...?

Find Relate Name Write

Find the meaning of... Can you name the...? Which is true or false...? Can you explain why...? *Understanding* Identify

Recognize Discuss

Outline

Explain Interpret Compare Distinguish Determine

Who was affected by...? Where can we see...? Who do you think...? What do you think could have happened next? Can you write in your own words...? Can you briefly tell why...? Can you provide examples of...? What differences exist between...? What is the main idea of...?

Applying Solve

Demonstrate

Show Construct Illustrate Examine

Use

Can you find a solution to...? Can you develop a set of instructions for...? How does this appear...? What factors would you change if...? In what ways does...? How else would this information be useful? Can you apply the method use to some experience of your own? *Analyzing* Test

Contrast

Analyze Compare

Investigate Categorize Examine Identify

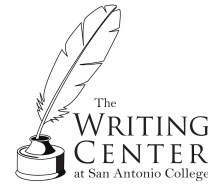
Interpret

What would happen if you were to change...? What is the difference between these two events or ideas? What is the significance of...? How do these ideas relate to one another? Why did ___ occur?

For what reason does/did...? Can you explain what must have happened to cause...?

Why did this person act in this way? *Evaluating* Argue

Defend Judge Imagine



Support Devise

In what ways was ___ wrong...? Did ___ make the right decision? Is there a better solution to...? How many ways can you...? Was it necessary for...? Can you plan your own way to deal with...? What could ___ have done better?

Critique Weigh Propose

What is most important in...? Can you develop a proposal which would...? *Creating Design*

Construct Assemble

Formulate Recommend Assess Rate Voice Compose

Debate

Can you create new and unusual uses for...? What would happen if you were to...? How can you put these different things together? Can you come up with a method to...? What would best work in order to...? How would you feel if...? How effective is...? In your opinion, what/why/how...? How can you take this and make something new? Do you think ___ is good or bad? Can you defend that? Adapted from materials found at Homemade

PowerPoint Games. <http://wwild.coe.uga.edu/pptgames/teacher.htm>

http://wwild.coe.uga.edu/pptgames/resources/bloom_questions.pdf

There are many other verbs and questions to consider, but these are good places to start. However, not all questions are useful in all areas. You must be sure to choose questions to ask yourself that best apply to the subject, concepts, materials, etc. that you are evaluating. Try coming up with questions that you find help you to achieve a deeper understanding of what you're writing about.

Bloom's Taxonomy – Verbs and Factors for Question Making by Subject

When thinking about those higher-order thinking tiers - Analyzing, Evaluating, and Creating – and the questions you can develop for your studying/planning, it is especially helpful to consider some verbs and other factors as they apply to certain subjects.

Subject Verbs Factors to Consider for Questioning

English Investigate, examine, interpret,

explore, analyze, argue, defend, assess, voice, debate, compose, discuss

Characters (personalities, motivations, struggles, etc.), theme, settings (time period and location) in the work and in reality, aesthetics, events, and societal and cultural significance *History* Investigate, determine, weigh,

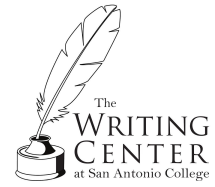
compare, contrast, identify, explore, discuss, examine

Setting (time period and location), participants (racial groups, women, those with disabilities, etc.), culture, and historical significance and influence *Science* Test, identify, formulate, hypothesize, construct, propose, imagine, compare, contrast, explore, create, design



ALAMO COLLEGES DISTRICT
San Antonio College

Academic Success



Historical significance and influence, who/what is affected and how, what changes occur, curiosity, and necessity