HIGHER ORDER THINKING



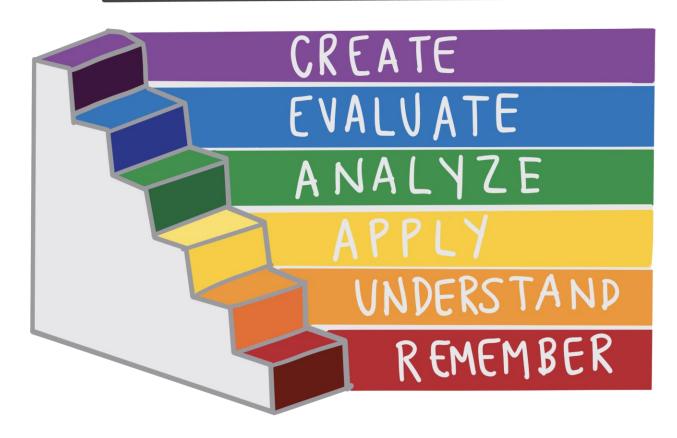
Blooms Taxonomy

HIGHER ORDER THINKING & EFFECTIVE STUDY

Bloom's Taxonomy is a framework that starts with remembering and recalling levels of thinking as important bases for pushing our brains to other higher order levels of thinking—helping us move deeper into application, analysis, synthesis, evaluation, and creation—the levels of thinking that your professors have in mind when designing exams and paper assignments.

Because it is in these higher levels of thinking that our brains truly and deeply learn information, it's important that you integrate higher order thinking into your study habits and emphasize it to your students during coaching meetings.





BLOOM'S TAXONOMY

LEVEL 1: REMEMBER

This level helps us recall foundational or factual information: names, dates, formulas, definitions, components, or methods.

Study methods	Types of questions to ask yourself
Make and use flashcards for key terms.	How would you define?
Make a list or timeline of the main events.	List the in order.
List the main characteristics of something.	Who were?



LEVEL 2: UNDERSTAND

Understanding means that we can explain main ideas and concepts and make meaning by interpreting, classifying, summarizing, inferring, comparing, and explaining.

Study methods	Types of questions to ask yourself
Discuss content with or explain to a partner.	How would you differentiate between and?
Explain the main idea of the section.	What is the main idea of?
Write a summary of the chapter in your own words.	Why did?

THE WINGODAN

LEVEL 3: APPLY

Application allows us to recognize or use concepts in real-world situations and to address when, where, or how to employ methods and ideas.

Study methods	Types of questions to ask yourself
Seek concrete examples of abstract ideas.	Why does work?
Work practice problems and exercises.	How would you change?
Write an instructional manual or study guide on the chapter that others could use.	How would you develop a set of instructions about?

THE WINGSPAN

LEVEL 4: ANALYZE

Analysis means breaking a topic or idea into components or examining a subject from different perspectives. It helps us see how the "whole" is created from the "parts."

It's easy to miss the big picture by getting stuck at a lower level of thinking and simply remembering individual facts without seeing how they are connected. Analysis helps reveal the connections between facts.

Study methods	Types of questions to ask yourself
Generate a list of contributing factors.	How does this element contribute to the whole?
Determine the importance of different elements or sections	What is the significance of this section?
Think about it from a different perspective	How would group see this?



LEVEL 5: EVALUATE

Evaluating means making judgments about something based on criteria and standards. This requires checking and critiquing an argument or concept to form an opinion about its value.

Often there is not a clear or correct answer to this type of question. Rather, it's about making a judgment and supporting it with reasons and evidence.

Study methods	Types of questions to ask yourself
Decide if you like, dislike, agree, or disagree with an author or a decision.	What is your opinion about? What evidence and reasons support your opinion?
Consider what you would do if asked to make a choice.	How would you improve this?
Determine which approach or argument is most effective.	Which argument or approach is stronger? Why?

THE WINGSPAN

LEVEL 6: CREATE

Creating involves putting elements together to form a coherent or functional whole. Creating includes reorganizing elements into a new pattern or structure through planning. This is the highest and most advanced level of Bloom's Taxonomy.

Study methods	Types of questions to ask yourself
Build a model and use it to teach the information to others.	How can you create a model and use it to teach this information to others?
Design an experiment.	What experiment can you make to demonstrate or test this information?
Write a short story about the concept.	How can this information be told in the form of a story or poem?



CONCLUSION

While higher order thinking is an excellent way to approach learning new information and studying, one should pair it with other effective study strategies.

Other resources:

- •<u>Study Smarter, Not Harder</u>
- •Simple Study Template
- •Using Concept Maps
- •Group Study
- Evidence-Based Study Strategies Video
- •<u>Memory Tips Video</u>



REFERENCES

Anderson, L. W., Krathwohl, D.R., Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Wittrock, M.C (2001). A taxonomy of learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. New York, NY: Longman.

- "Bloom's Taxonomy." University of Waterloo. Retrieved from https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/planning-courses-and-assignments/course-design/blooms-taxonomy
- "Bloom's Taxonomy." Retrieved from <u>http://www.bloomstaxonomy.org/Blooms%20Taxonomy%20questions.pdf</u>
- Overbaugh, R., and Schultz, L. (n.d.). "Image of two versions of Bloom's Taxonomy." Norfolk, VA: Old Dominion University. Retrieved from <u>https://www.odu.edu/content/dam/odu/col-dept/teaching-learning/docs/blooms-taxonomy-handout.pdf</u>
- The Learning Center, University of North Carolina at Chapel Hill