

Teaching and Learning

The Spectrum of Effective Questioning

This graphic provides examples of questions and activities aligned with the six levels of Bloom's Cognitive Domain of Learning. Bloom's Taxonomy "differentiates between cognitive skill levels and calls attention to learning objectives that require higher levels of cognitive skills" (Adams, 2015).

Level

Question Stems

Classroom Activities

Synthesis

Plan and create new products using varied resources; combine elements in new ways or propose solutions to problems.

- What could be an alternate solution to ...?
- How might you accomplish ...?
- How would you adapt ...?
- How would you build ...?
- How would you pitch this to ...?
- How can these resources be combined to create ...?

- Creating a project plan
- Building a prototype
- Designing or re-designing a product
- Pitching an idea
- Proposing a solution
- Combining ideas into new products

Evaluation

Predict or justify choices, make judgments, and defend the validity or quality of something.

- Why do you agree/disagree with ...?
- In what ways is ... flawed?
- How could ... be improved?
- What justifies ...?
- What is your assessment of ...?
- How could you convince ...?
- Assessing a process
- Evaluating a product
- Testing a hypothesis
- Debating a topic
- Offering peer feedback
- Persuading an audience

Analysis

Examine info and break it into categories; make inferences and use evidence to support or compare ideas.

- How would you classify ...?
- What distinguishes ... from ... ?
- What's the underlying theme of ...?
- What are the causes/effects of ...?
- What comparisons can you make between ...?
- Classifying concepts
- Inferring themes
- Examining cause & effect
- Interpreting data
- Comparing and contrasting ideas or methods

Application

Use information or carry out a procedure in a given situation.

- What's the appropriate way to ...?
- What steps are involved in ...?
- How would you plan ...?
- How could you calculate ...?
- Practicing a skill or technique
- Following a process
- Carrying out a procedure
- Role playing a scenario
- Illustrating a diagram

Comprehension

Determine the meaning of various messages and concepts.



- What's your interpretation of ...?
- What information supports the claim that ...?
- What's the main idea of ...?
- How would you solve ...?
- Paraphrasing content
- Finding evidence
- Outlining a process
- Interpreting ideas
- Summarizing content

Knowledge

Remember or retrieve previously learned facts, terms, and basic concepts.



- What's the definition of ...?
- What equipment is needed to...?
- What are the main elements of ...?
- When did ... happen?
- Who's responsible for ...?
- Defining terms
- Identifying components
- Listing/outlining details
- Labeling diagrams
- Sequencing events

Reference

Adams, N. E. (2015). Bloom's taxonomy of cognitive learning objectives. Journal of the Medical Library Association, 103(3), 152-153.



