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Description automatically generatedA black background with a black square

Description automatically generated with medium confidence**Guiding Questions for Project-Based Learning**

**What to do:** Review the information on this page about Bloom’s Taxonomy. Use the question stems on the next page to develop guiding questions to use during project-based learning.

**Why it matters:** Guiding questions that prompt students to think at increasingly higher levels develops their thinking skills.

**Discussion Guide**

Bloom’s Taxonomy is a widely used framework for distinguishing between different kinds of thinking or cognition. Originally developed in 1956, it was revised in 2001 and is still used by teachers at all grade levels. The framework is useful for planning activities and questions that help students apply various types of thinking. The taxonomy (or classification system) identifies six levels of cognitive processes (thinking), with each level building on the previous levels. The six levels are Remember, Understand, Apply, Analyze, Evaluate, and Create. See the table below for a definition of each level and “action words” that describe what students do when they use that level of thinking.

# The Six Levels of Thinking in Bloom’s Taxonomy

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Remember** | **Understand** | **Apply** | **Analyze** | **Evaluate** | **Create** |
| **Recall facts and basic concepts:**  Define  Duplicate  List  Memorize  Repeat  State | **Explain ideas or concepts:**  Classify  Describe  Discuss  Explain  Locate  Report  Select  Translate | **Use information in new situations:** Execute  Implement  Solve  Demonstrate  Interpret | **Draw connections among ideas:** Differentiate  Organize  Relate  Compare  Contrast  Distinguish  Examine  Experiment  Question  Test | **Justify a stand or decision:**  Appraise  Argue  Defend  Judge  Select  Support  Value  Critique  Weigh | **Produce new or original work:** Design  Assemble  Construct  Conjecture  Develop  Formulate  Author  Investigate |

**Source:** Armstrong, P. (2010). *Bloom’s Taxonomy.* Vanderbilt University Center for Teaching. <https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy>

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Remember** | | **Understand** | **Apply** | **Analyze** | **Evaluate** | **Create** |
| **Guiding Questions** | What happened after...?  How many...?  Who was it that...?  Can you name the...?  Describe what happened at...?  Who spoke to...?  Can you tell why...?  What’s the meaning of...?  What is...?  Which is true or false...? | Can you write in your own words...?  Can you write a brief outline of...?  What could have happened next?  Who do you think...?  What was the main idea of...?  Who was the key character in...?  Can you distinguish between...?  What differences exist between...?  Can you give an example of what you mean by...?  Can you provide a definition for...? | Do you know another instance where...?  Could this have happened in...?  Can you group by characteristics such as...?  What factors would you change if...?  Can you apply the method used to some experience of your own?  What questions would you ask of...?  From the information given, can you develop instructions for...?  Would this information be useful if ...? | If...happened, what might the ending have been?  How was this similar to...?  What was the underlying theme of...?  What do you see as other possible outcomes?  Why did...changes occur?  Can you compare your...with that presented in...?  Can you explain what must have happened when...?  How is...similar to ...?  What are some of the problems of...? | Is there a better solution to...?  Judge the value of....  Can you defend your position on...?  Do you think...is a good or a bad thing?  How would you have handled...?  What changes to...would you recommend?  Do you believe…?  Are you a...person?  How would you feel if...?  How effective are...?  What do you think about...? | Can you design a...to...?  Why not compose a song about...?  Can you see a possible solution to...?  If you had access to all resources, how would you deal with...?  Why don’t you devise your own way to deal with...?  What would happen if...?  How many ways can you...?  Can you create new and unusual uses for...?  Can you develop a proposal that would...? |



This resource was developed in 2024 by the Nita M. Lowey 21st Century Community Learning Centers (21stCCLC) National Technical Assistance Center (NTAC), funded under a grant from the U.S. Department of Education (Department) and administered by Synergy Enterprises, Inc. under Cooperative Agreement No. 287E230009 with the Department’s Office of Elementary and Secondary Education. Opinions expressed herein do not necessarily reflect the position or policy of the Department, nor does mention of trade names, commercial products, or organizations imply endorsement by the Department or the federal government. This resource is in the public domain and is available at [21stcclcntac.org](http://www.21stcclcntac.org). Authorization to reproduce it in whole or in part is granted.