Social Studies Depth-of-Knowledge Definitions

Four levels of depth of knowledge were used for this analysis. Because the highest (fourth) level is rare or even absent in most standardized assessments, reviewers usually made distinctions among DOK levels 1, 2 and 3. The social studies levels were developed by Ann Prewitt and Fred Czarra.

Level 1 Recall of Information

Level 1 asks students to recall facts, terms, concepts, trends, generalizations and theories or to recognize or identify specific information contained in graphics. This level generally requires students to identify, list, or define. The items at this level usually ask the student to recall who, what, when and where. Items that require students to “describe” and “explain” could be classified at Level 1 or 2 depending on what is to be described and explained. A Level 1 “describe or explain” would recall, recite or reproduce information. Items that require students to recognize or identify specific information contained in maps, charts, tables, graphs or drawings are generally level 1.

Level 2 Basic Reasoning

Level 2 includes the engagement of some mental processing beyond recalling or reproducing a response. This level generally requires students to contrast or compare people, places, events and concepts; convert information from one form to another; classify or sort items into meaningful categories; describe or explain issues and problems, patterns, cause and effect, significance or impact, relationships, points of view or processes. A Level 2 “describe or explain” would require students to go beyond a description or explanation of recalled information to describe or explain a result or “how” or “why.”

Level 3 Application

Level 3 requires reasoning, using evidence, and a higher level of thinking than the previous two levels. Students would go beyond knowing “how and why” to justifying the “how and why” through application and evidence. The cognitive demands at Level 3 are more complex and more abstract than Levels 1 or 2. Items at Level 3 include drawing conclusions; citing evidence; using concepts to explain “how and why;” using concepts to solve problems; analyzing similarities and differences in issues and problems; proposing and evaluating solutions to problems; recognizing and explaining misconceptions or making connections across time and place to explain a concept or big idea.
Level 4 Extended Reasoning

Level 4 requires even more complex reasoning and the addition of planning, investigating, or developing that will most likely require an extended period of time. The extended time period is not a distinguishing factor if the required work is only repetitive and does not require applying significant conceptual understanding and higher-order thinking. At this level the cognitive demands should be high and the work should be very complex. Students should be required to connect and relate ideas and concepts within the content area or among content areas in order to be at this highest level. The distinguishing factor for Level 4 would be evidence through a task or product that the cognitive demands have been met. A Level 4 performance will require students to analyze and synthesize information from multiple sources, examine and explain alternative perspectives across a variety of sources and/or describe and illustrate how common themes and concepts are found across time and place. In some Level 4 performance students will make predictions with evidence as support, develop a logical argument, or plan and develop solutions to problems.

Many on-demand assessment instruments will not include assessment activities that could be classified as Level 4. However, standards, goals, and objectives can be stated so as to expect students to perform thinking at this level. On-demand assessments that do include tasks, products, or extended responses would be classified as Level 4 when the task or response requires evidence that the cognitive requirements have been met.
**Social Studies Examples Applied to Objectives and Assessment Items**

**Objectives**

Use the social studies DOK levels on the previous pages to determine the DOK levels for the following seven sample objectives. When you are finished, turn the page to see whether you agree with the way we coded these objectives! Then try using the DOK levels on the 13 sample mathematics items in Part ii.

**Objective 1**

Students will analyze how changes in technology, costs, and demand interact in competitive markets to change the price of goods.

**Objective 2**

Students will identify new technologies in the United States in the early 1900’s.

**Objective 3**

Students will research and analyze mapped patterns in order to develop strategies that can be applied to the solution of problems.

**Objective 4**

Students will compare different historians’ descriptions of the same event in history.

**Objective 5**

Students will describe the physical features of the regions of the world.

**Objective 6**

Students will apply the protections guaranteed in the Bill of Rights to an analysis of everyday situations.

**Objective 7**

Students will demonstrate understanding of the Earth’s physical environment as a set of interconnected systems by analyzing the ways that humans have perceived, reacted to, and changed environments at the local/or global level and developing a plan to implement a change.
DOK Levels of the Sample Social Studies Objectives

Objective 1. This objective is an example of a Level 3. The expectation in this objective is that students will know the changes, will see the cause and effect of those changes, and then will analyze why these changes have occurred. There is the process of application of understanding of the concepts of supply and demand to a specific time and place through the specific technology, the costs, and demand in the market place.

Objective 2. This objective is an example of Level 1. The highest demand for students to successfully meet this expectation requires them to use recall of information to identify new technologies during a specific time period.

Objective 3. This objective is Level 4. Students are required to analyze and synthesize information from multiple sources in order to translate this information into strategies. These strategies must then become part of a plan that would be applied to a specific problem.

Objective 4. This objective is an example of Level 2. Students would be required to determine the differences and/or similarities in the descriptions of the same event by two or more historians. This engages the students in a process of basic reasoning that goes beyond simple recall.

Objective 5. This objective is also an example of Level 1 with the expectation requiring a recall of a description.

Objective 6. This objective is an example of Level 3. Students are required to use a combination of recalled information about the protections in the Bill of Rights and the impact of the Bill of Rights in order to apply to a given situation.

Objective 7. This objective is a Level 4. Students are required to research the necessary data to analyze a specific situation in order to develop a plan to implement change.
Sample Social Studies Assessment Items

Now try coding some sample assessment items using the Social Studies DOK Levels. After you are finished coding these, read our “Answers” on the following page.

Item 1. Which of the following describes a tropical rainforest?

a. a landscape of tall grass and shrubs
b. a dry, cold climate most of the year
c. a forest of pine trees and other evergreens
d. broadleaf trees form a dense canopy

Item 2. Which decade in the 1800’s had the highest number of immigrants to the United States?

a. 1850 to 1860
b. 1870 to 1880
c. 1880 to 1890
d. 1890 to 1900

Item 3. Students are given the scenario of acid rain potentially causing problems in a specific farming community. Students are to define and describe the problems with supporting data. There should be a proposal of alternative solutions to the problem, a selection of one solution, and an explanation of why it would be the best alternative. The selected solution must include a plan for implementation.

Item 4. A newspaper prints a story that criticizes the current administration’s Policies. The Bill of Rights allows a government official to respond to this headline by

a. arresting the publisher of the newspaper
b. closing down the newspaper
c. demanding that the newspaper print a new headline
d. writing a letter of protest to the editor

Item 5. The Great Awakening of the 1730’s was important because it led to people in the American colonies to

a. increase toleration for Roman Catholics
b. examine the different positions of men and women in society
c. reaffirm that God gave kings their right to rule
d. question the authority of church and government leaders
Item 6. Who was responsible for important contributions in the automobile industry?

   a. Thomas Edison  
   b. Eli Whitney  
   c. Henry Ford  
   d. George Washington Carver

Item 7. In the 19th Century, passengers who did not want to go overland by Stagecoach could have traveled from the East Coast to the West Coast of the United States by ship. Which route would they Probably have followed?

   a. north in the Atlantic and then east in the Arctic Ocean  
   b. south in the Atlantic and then south in the Indian Ocean  
   c. south around Africa and north through the Indian Ocean  
   d. south around South America and north in the Pacific Ocean

Item 8. What was the main reason that many leaders in Great Britain leaned toward supporting the Confederacy in the Civil War?

   a. Plantation owners in Britain held slaves  
   b. Most British immigrants to the United States lived in the South  
   c. Britain relied on Southern cotton for its factories  
   d. British politicians wanted to make the United States weaker so they could conquer it.

Item 9. Which of the following would have caused the price of energy to go up Instead of down?

   1. increase in disposable income  
   2. decrease in extraction costs  
   3. development of cheap substitutes  
   4. depletion of natural resources

Item 10. Students are to take a position on the question of whether or not American colonists should remain loyal to the British crown in 1775. Students are to address alternative perspectives on the issue, take a position, and develop a logical argument supporting the position.
Social Studies March 2006

DOK Levels for the Social Studies Sample Assessment Items

Item 1. This item illustrates a Level 1 describe because the description is a recall of information.

Item 2. This item illustrates a Level 1 describe because the description is a recall of information.

Item 3. The students would investigate, plan, and develop solutions to a problem. This task goes beyond using concepts to solve problems and citing evidence by requiring evidence of the process and the inclusion of an implementation plan. An activity that required students to apply problem-solving criteria to possible solution in order to select the best solution would be Level 3. The addition of both the investigation to gather data that will be used as evidence of the problem and implementation plan makes this task a Level 4.

Item 4. Level 3. This item from released samples from the Delaware Department of Education requires students to apply the concepts of the Bill of Rights to a given situation represented by the newspaper headline to determine the correct answer.

Item 5. This item from NAEP is an example of Level 2. Students are required to think about an event and its importance or impact on people in the American colonies.

Item 6. This item is an example of Level 1. Students are required to recall a specific fact by naming the person responsible for new technologies in the automobile industry.

Item 7. This item from a set of released items from the Missouri Department of Education is another example of Level 2. The students are required to recall a map of the western hemisphere and to see the relationship of east to west travel to that map.

Item 8. This item from NAEP is a Level 1. Students are to recall the “main reason” for an event in US history.

Item 9. This item is an example of Level 3. Students are required to apply concepts of scarcity, supply and demand, and productive resources to a specific situation given in the data on the line graph in order to determine the correct answer.

Item 10. This task is an example of Level 4. The students would investigate the time period from different perspectives on the issue of loyalty to the crown. Once a position is decided the process would require connecting concepts in geography and economics to the historical events in order to formulate a logical argument in support of that position. An activity that only required the presentation of the different positions and the reasons for those positions would be at Level 2 since the students would be comparing and explaining.