

## IMPACT OF COMPUTER TECHNOLOGY

### Performance Standards 18B.J

Show how advancements in computer technology have both hurt and helped individuals accordingly:

- *Knowledge:* describe the key ideas and concepts that are associated with the positive and/or negative effects of computer technology.
- *Reasoning:* analyze the impact of the technology in a logical and reasoned manner.
- *Communication:* write an essay that is well organized, well focused and well detailed; express all ideas in a way that provides evidence of knowledge and reasoning processes.

### Procedures

1. ***In order to understand the roles and interactions of individuals and groups in society (18B)***, provide students with sufficient learning opportunities to develop the following skill:
  - Assess the effect of technology on the status and role of individuals.  
Although most computer technologies seem to be positive, there are some negative issues that can be cited. Students should be aware of both the positive and negative effects of computer technology. Positive effects might include increased productivity, creativity or reducing paperwork. Negative effects might include security issues, downtime due to equipment failures or retraining employees. This assessment addresses Illinois Workplace Skill K3 (Demonstrating Technological Literacy/Recognize impact of technological changes on tasks and people).
2. Have students review and discuss the following assessment task and how the rubric will be used to evaluate their work.
3. Facilitated by the teacher, students should brainstorm a few examples of computer technology. For example, the history of computers goes back as far as the invention of the telegraph, which used a binary system for communicating. Today the operation of computers is based on the binary system.
4. After selecting a teacher-approved topic, students should individually conduct research on the impacts of their topic.
5. Write a summary (five paragraphs) of how a particular computer technology both positively and negatively impacted individuals.
6. Evaluate each student's work using the Social Science Rubric as follows, and add the scores to determine the performance level:
  - *Knowledge:* The description and definition of key concepts and facts associated with positive and/or negative impacts of computer technology are complete and accurate.
  - *Reasoning:* The analysis of the impact of the technology was logical and well reasoned.
  - *Communication:* The writing was well focused, well organized and well detailed; the knowledge and reasoning were completely and effectively communicated.

### Examples of Student Work

- [Meets](#)
- [Exceeds](#)

### Time Requirements

- Two, 45-minute periods
- One period for brainstorming and starting research, the other to complete the research
- The summary should be composed outside of class time

### Resources

- Primary and secondary resources that define and give examples of computer technology and its influence on individuals
- Notebook paper
- Pen or pencil
- Social Science Rubric

## SOCIAL SCIENCE RUBRIC

NAME \_\_\_\_\_ DATE \_\_\_\_\_

- |   |  |
|---|--|
| <input type="checkbox"/> Exceeds standard (total points 11 - 12)<br><input type="checkbox"/> Meets standard (total points 8 - 10) | <input type="checkbox"/> Approaches standard (total points 5 - 7)<br><input type="checkbox"/> Begins standard or absent (total points 1 - 4) |
|---|--|

	<b>Knowledge</b> of evidence from the social sciences: facts/supporting details; themes/issues; and concepts/ideas	<b>Reasoning:</b> Analysis, evaluation and synthesis of evidence	<b>Communication:</b> Demonstrates knowledge and reasoning through oral, written, visual, dramatic or mixed media presentation
<b>4</b>	<ul style="list-style-type: none"> <li>• Key concepts/themes/issues/ideas are thoroughly identified, defined and described.</li> <li>• Significant facts/supporting details are included and accurately described.</li> <li>• Has little or no factual inaccuracies.</li> </ul>	<ul style="list-style-type: none"> <li>• Identifies and logically organizes almost all relevant evidence.</li> <li>• Uses appropriate and comprehensive critical thinking skills and habits of mind to analyze, evaluate and synthesize evidence.</li> <li>• Reaches informed conclusions based on the evidence.</li> </ul>	<ul style="list-style-type: none"> <li>• Almost all ideas in the presentation are expressed in a way that provides evidence of the student's knowledge and reasoning processes.</li> <li>• The presentation is well focused with a well-defined thesis.</li> <li>• Presentation shows substantial evidence of organization.</li> <li>• Presentation shows attention to the details of specific performance conventions.</li> </ul>
<b>3</b>	<ul style="list-style-type: none"> <li>• Key concepts/themes/issues/ideas are identified, defined and described.</li> <li>• Facts/supporting details are included.</li> <li>• May have a major factual inaccuracy, but most information is correct.</li> </ul>	<ul style="list-style-type: none"> <li>• Identifies and organizes most of the relevant evidence.</li> <li>• Uses partial critical thinking skills and habits of mind to analyze, evaluate and synthesize evidence.</li> <li>• Reaches informed conclusions based on the evidence.</li> </ul>	<ul style="list-style-type: none"> <li>• Most ideas in the presentation are expressed in a way that provides evidence of the student's knowledge and reasoning processes.</li> <li>• The presentation demonstrates a focus and thesis with several narrative gaps.</li> <li>• Presentation demonstrates adequate evidence of organization.</li> <li>• Presentation has mistakes in attention to the details of specific performance conventions.</li> </ul>
<b>2</b>	<ul style="list-style-type: none"> <li>• Some key concepts/themes/issues/ideas are identified, defined and described.</li> <li>• Some facts/supporting details are included.</li> <li>• Has some correct and some incorrect information.</li> </ul>	<ul style="list-style-type: none"> <li>• Identifies some relevant evidence and omits most of the other evidence.</li> <li>• Uses unclear, inappropriate or incomplete critical thinking skills and habits of mind to analyze, evaluate and synthesize evidence.</li> <li>• Reaches incomplete or inaccurate conclusions based on the evidence.</li> </ul>	<ul style="list-style-type: none"> <li>• Some ideas in the presentation are expressed in a way that provides evidence of the student's knowledge and reasoning processes.</li> <li>• The presentation demonstrates an inadequate focus and thesis.</li> <li>• Presentation demonstrates inadequate evidence of organization.</li> <li>• Presentation has insufficient attention to the details of specific performance conventions.</li> </ul>
<b>1</b>	<ul style="list-style-type: none"> <li>• Few or no key concepts/themes/issues/ideas are identified, defined and described.</li> <li>• Few or no facts/supporting details are included.</li> <li>• Information is largely inaccurate, absent or irrelevant.</li> </ul>	<ul style="list-style-type: none"> <li>• Important evidence relevant to the problem is not identified.</li> <li>• Critical thinking skills and habits of mind are absent.</li> <li>• Conclusions are lacking, absent or unclear.</li> </ul>	<ul style="list-style-type: none"> <li>• Expression of almost all ideas in the presentation is unclear.</li> <li>• The presentation demonstrates little focus and lacks a thesis.</li> <li>• Presentation demonstrates little or no evidence of organization.</li> <li>• Presentation has multiple mistakes in attention to the details of specific performance conventions.</li> </ul>
<b>Score</b>			