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Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
1999 Volume VII: Electronics in the 20th Century: Nature, Technology, People, Companies, and the Marketplace

The Cultural Impact of Computer Technology

Guide for Curriculum Unit 99.07.07
by Sheldon A. Ayers

This curriculum unit delves into the effect computer technology is having on contemporary American culture. The unit examines this subject from both a historical viewpoint and a sociological perspective. The content in this unit will challenge students to:

- a. understand the connection of the past to conditions today
- b. examine the relationship between innovation and the American living standard
- c. explore how the "information marketplace" has sparked changes
- d. assess how the job market has evolved and will continue to evolve
- e. speculate regarding future trends and inventions in the twenty first century

Throughout human history technological innovation has been the catalyst for changes in the way people live, work and relate to one another. But just how does technological advancement, such as the computer, spur social change? What are some of the changes taking place due to the proliferation of computer technology? As we approach a new millennium these are relevant questions worth exploring.

The unit is organized into three broad categories. The first section, Industrial Revolution (1750-1850), gives students some historical context of just how revolutionary technological advancements can be. During the Industrial Revolution, the development of factories, the introduction of mass production methods, etc. ushered in dynamic changes which rippled throughout English society and ultimately throughout the world.

The Information Age is the second section of this unit. This section borrows ideas from a provocative book written by Michael Dertouzos, head of the Laboratory for Computer Science at the Massachusetts Institute of Technology, entitled *What Will Be*. Because the information marketplace is still relatively new, many questions about the technology and its implications are raised in this section.

The unit concludes with a section on the future of information technology entitled, The Future. Scientist and engineers are feverishly working on systems that will allow more fluid communication between machines and people. Many computer experts believe that the ability to speak directly to our computers will be the interface we will end up with. It is clear that developing a system that enables computers to understand speech will dramatically expand technologies role in our daily lives. The application for a language recognition system would be astronomical.

(Recommended for Sociology, Current Events, and World History, grades 9-12.)

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