Curriculum Enhancement Center (CEC)

COMPUTER SCIENCE

RESOURCE MANUAL

2013 - 2014
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Computers

Miniature Miracle: the computer chip
*National Geographic Society, 1985*
VC 621.381 M664 (60 min.)

Computers and Civilization

Frontline: high stakes in cyberspace
*PBS Video, 1995*
VC 303.4834 F928 (57 min.)

**Abstract:** This program tracks the new land rush to stake claims in cyberspace by asking questions about the optimistic predictions for a cyber-revolution.

Computer-assisted Instruction

Academic DESKlab
*IBM, 1991*
VC 371.33 AC12 (20 min.)

**Abstract:** This program discusses using computer assisted instruction in basic skills education and remediation.

Digital media: new learners of the 21st century
*PBS Home Video, 2011, 2010*
DVD 371.334 D569M (60 min.)

**Summary:** Examines how mobile devices and digital media practices can empower young people to direct their own learning. Documents five success stories, and demonstrates how digital media, games, smart phones, and the Internet are fundamentally transforming the way young people communicate, collaborate, participate, and learn in the 21st century.

Teachable moment, the: using computers in the writing classroom
*University of Iowa, 1990*
VC 371.334 T22

**Abstract:** This program addresses basic issues of using computers in the writing classroom.
Computer Occupations

Computer Occupations  
*Delphi Productions, 1997*  
VC 004.023 C739 (47 min.)

**Summary:** Presents background information on a variety of careers available in the computer professions, exploring such information as educational requirements, salary potential, and job outlook for the professions in years to come.

History of Computing

*Interface videorecording: The Future of Technology*  
*Jones Education Media, 1997*  
VC 302.23 In8 (23 minutes)

**Summary:** Shows a vision for next century, transforming the technology that changes the way we communicate.

*Machine That Changed the World, The*  
*Films for the Humanities, 1992*  
VC 004 M184 Pt.1 – 4 (58 minutes each - closed captioned for the hearing impaired)

**Contents:** Pt. 1. Giant Brains; Pt. 2. Inventing the Future; Pt. 3. The paperback computer; Pt. 4. The Thinking Machine; Pt. 5 The World at your Fingertips

**Summary:** This series traces the history of computers, from ENIAC to the Apple. It discusses the people and companies involved in the development of computers, and the social repercussions of the computer revolution.

*Nerds 2.0.1 A Brief History of the Internet*  
*PBS Public Broadcasting, 1998*  
VC 338.761 N355 V.1 - 3 (180 min.)

**Contents:** Vol 1. Networking the Nerds; Vol 2. Serving the Suits; Vol 3. Wiring the World

**Summary:** A three part series examining the ins and outs of one of the most volatile industries: the Internet. The first episode examines how the seeds of the Internet were planted by Sputnik. The second episode examines the advent of the PC and the need to
connect them all to a network. The third episode visits Excite, a typical Silicon Valley entrepreneurial adventure, as well as describing how the Internet became a comfortable environment to do business, chat, and go shopping.

**Triumph of the Nerds: an irreverent history of the PC industry**  
*Ambrose Video, 1996*  
VC 338.761 T739 Pt. 1 – 3 (55 minutes each)

**Contents:** Pt. 1. Impressing their Friend; Pt. 2. Riding the Bear; Pt. 3. Great Artists Steal

**Abstract:** Part 1 covers the pioneering years of the PC revolution during the mid-1970's in Silicon Valley. Part 2 explains how the PC industry came of age in the 1980's. Part 3 looks at changes in the PC industry during the 1990's and their impact on the future.

**Wired World, The**  
*National Geographic Television, 1997*  
VC 302.2 W743 (25 minutes)

**Summary:** Presents a history of communication from cave drawings to computers. Includes a teacher's guide with objectives.

**Women in Computer Science**  
*Computing Research Association, 1995*  
VC 004.082 W842c (55 minutes)

**Summary:** Mildred Dresselhaus begins her lecture with anecdotes about the life and work of Grace Hopper and then talks about how women have advanced in industry and in science and engineering. She also speaks about her personal perspectives as a woman working in science.

**Women in the History of Computer Science**  
*Computing Research Association, 1997*  
VC 004.082 W842h (90 minutes)

**Summary:** A panel of women pioneers of the 1940s and 1950s discuss their experiences, from programming the world's first computing machines to developing biomedical and graphical applications for computers.
The Internet

An Introduction to Internet
*Free Range Media, 1994*
VC 384.3 IN8I (30 min.)

**Summary:** Designed with the novice PC user in mind, this tutorial is both fun and interesting with interviews and demonstrations from actual Internet users. You will be shown the basic protocols of E-Mail, File Transfer Protocol and Telnet as well as the latest Internet tools such as Gopher, World Wide Web, Archie, Veronica and WAIS.

Computer security
*Films for the Humanities & Sciences, 2001*
VC 364.168 C739CS (30 min)

**Summary:** Describes the various components of computer security, including identification, access control, and confidentiality. Discusses the problem of attacks on data and describes various hardware and software solutions. Stresses the need for risk assessment in both small and large firms and demonstrates the ease with which an outsider can gain access to a company's data.

Cybercrime: invisible threat
*Films for the Humanities & Sciences, 2002*
VC 364.168 C992C (53 min.)

**Summary:** Examines the Internet's exponential growth and evaluates risks posed by groups and individuals bent on crime or terrorism. Experts from the FBI, the Pentagon, and private companies, and even a self-confessed hacker comment on the danger of online fraud and denial of service attacks as well as on anti-hacking and biometric identification as ways of protecting the World Wide Web—and perhaps the world itself.

Forbidden places: unauthorized access
*Films for the Humanities & Sciences, 1997*
VC 364.168 F747P

**Summary:** Examines the world of technological crime, from computer hacking to telecommunications fraud involving vast sums, providing insight into the depth of the problem and what is being done to prevent it. Interviews with former FBI and CIA agents and members of the "hackers" community present the problem from both sides of the law.
Hackers
Films for the Humanities and Sciences, 2002
VC 364.168 H115HC (48 min.)

Summary: This program examines the role of hackers and reveals how their exploits highlight the profound insecurities of the Internet and the software that drives it.

Internet: a practical approach
PBS Adult Learning Satellite Service, 1994
VC 384.3 IN8 (178 min.)

Summary: This program will help students learn what is on the Internet, how to use electronic mail, and other retrieval methods.

The Internet: behind the web
A&E Home Video, 2000
VC 004.67 IN8B (50 min.)

Summary: A look at the history and development of the internet.

Internet Curriculum Integration
Classroom Connect, 1996
VC 371.3 In8 (28 min. ea.)

Contents: Pt. 1. Curriculum integration 101; Pt. 2. Creating Internet lesson plans; Pt. 3. Creating Internet projects

Summary: These programs give step-by-step instructions to successfully integrate the Internet into your classroom.

Learning online: using the Internet for education
National TeleLearning Network, 1997
VC 025.0637 L479 (90 min.)

Abstract: In this program, a panel of educators discusses using the Internet as a classroom teaching tool.

Technology & Legal Issues: Part 1, Ownership & copyright on the Web
Computer Channel, 1997
VC 346.7304 T226 Pt. 1 (55 min.)
Contents: Copyright law: copyright myths, types of infringement, case study (RTC vs. Netcom) -- Avoiding copyright problems: Web page development (detailed agreements, copyright notice, hypertext links), NII white paper, international copyright treaty -- Trademark law: types of trademark infringement, protectable marks & consumer confusion, domain name disputes -- Avoiding trademark problems -- Jurisdiction -- CDA Communications Decency Act.

The Internet: behind the web
A&E Home Video, 2000
VC 004.67 IN8B (50 min.)

Summary: A look at the history and development of the internet.

Manuals

Microsoft Office 2007: Introductory Concepts and Techniques (Shelly)
Thomson Course Technology, 2008
MAN 005.369 Sh44m