

Technology Education

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Architecture and Construction

TE 14.0500 W212

Architecture Everywhere: Investigating the Built Environment of Your Community

Joseph A. Weber

BOOK ---- Through projects and activities, this guide supplies educators with a program to teach architecture as a unit or as a topic with interdisciplinary connections to social studies, language arts, visual arts, media production, journalism, and more. Explorations of how modern homes and communities have been shaped by such forces as sense of place, historical and cultural connections to buildings, and ethnic traditions lead students to understand the modern man-made world. Grades 5 - 12. Tucson, AZ, Zephyr Press, 2000.

TE CD ROM 2

The Great Buildings Collection

Kevin Matthews

CD ROM ---- Take a virtual tour of more than 750 important structures from around the world and throughout history. This CD ROM based multimedia designer's library of architecture includes photographic images, drawings, videos, textural commentary, and interactive three-dimensional models of the structures represented. Includes a printed user's guide. Eugene, OR, Artifice, Inc, 1999.

TE CD ROM 5

Architecture: Residential Drafting and Design

Clois E Kicklighter

CD ROM ---- Instructor's Resource CD with G-W Test Creation Software. This CD provides comprehensive instruction for preparing architectural working drawings using traditional and computer based methods. Organized logically around the design-building process in an exciting format. Content is up-to-date with coverage of state-of-the-art technology. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2004.

TE CD ROM 6

Architecture: Residential Drafting and Design

Clois E Kicklighter

CD ROM ---- Instructor's PowerPoint Presentations. This CD provides comprehensive instruction for preparing architectural working drawings using traditional and computer based methods. Organized logically around the design-building process in an exciting format. Content is up-to-date with coverage of state-of-the-art technology. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2004.

TE CD ROM 7

Modern Carpentry, Building Construction

Willis H Wagner, Howard Bud Smith

CD ROM ---- G-W Test Creation Software. This software enables an instructor to quickly create tests using a furnished test bank, or by adding their own questions. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2004.

TE DT K31

Architecture Residential Drafting and Design

Clois E Kicklighter

BOOK ---- This book provides the basic information for planning various types of dwellings. It presents basic instruction in preparing architectural working drawings using traditional and includes excellent coverage of computer aided drafting and design (CADD). Tinley Park, IL, The Goodheart-Willcox Co Inc, 2004.

TE DT K31.1

Architecture Residential Drafting and Design

Clois E Kicklighter

BOOK ---- Instructor's Resource Binder. Featuring: 1) List of Architecture and Construction Associations, Institutes, and Publications; 2) Internet Resources; 3) Pedagogical Charts; 4) Personal Portfolio Activity; 5) Teaching Aids Consisting of: objectives, display suggestions, instructional materials, teaching strategies; 6) Chapter Pretests and Posttests; 7) Answers and Solutions for: text review questions, workbook questions, workbook problems, chapter pretests and posttests; 8) Color Transparencies. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2004.

TE DT K31A

Architecture Residential Drafting and Design

Clois E Kicklighter

BOOK ---- Workbook. This workbook is designed for use with the Architecture - Residential Drafting and Design textbook. The workbook includes several types of questions, problems, and activities. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2004.

TE DVD ROM 10

Deconstruction: The Science of Building a House-Foundation to Roof

Discovery Channel University

DVD ROM ---- This video highlights scientific aspects of concrete, steel, wood, and nails; and the forces that impact them. Experiments done on the building site and at materials testing labs investigate the strengths of concrete, rebar, and engineered lumber; the chemical properties of Portland cement and galvanized nails; and the effects of dead load and live load, torque and shear induced by wind and earthquakes, and Bernoulli's Principle as it relates to the effects of tornadoes on roofs. Microscope and infrared imaging plus animations give extra angles of insight. So do field trips to a concrete batch plant, a tree farm to study silviculture, and a saw mill to see how computerized cutting and sorting are done. 50 minutes. Lawrenceville, NJ, Shopware, 2004.

TE DVD ROM 11

Deconstruction: The Science of Building a House-Plumbing to Paint

Discovery Channel University

DVD ROM ---- A home is more than a house; technologically speaking, it's an engineered habitat. This video explains how electrical, plumbing, and HVAC systems work with selected parts of the building envelope building wrap, windows, fiberglass insulation, gypsum wallboard, and paint to keep the weather out and comfort in. Animated diagrams, microscopic and thermal imaging, on-site demonstrations, and off-site tests are used to show how things like circuit breakers and P-traps work; to define U-factor, R-value, permeance, and other technical terms and concepts; to demonstrate color-matching and paint-making; and to isolate envelope failures leading to moisture infiltration and mold. A visit to a USG wallboard plant is also included. 50 minutes. Lawrenceville, NJ, Shopware, 2004.

TE DVD ROM 13

**The Future of Home Construction:
New Techniques, New Technologies**

Meridian Education Corporation

VIDEO ---- This program travels to the National Association of Home Builders' Research Center to study four townhouses constructed using some of today's most innovative building materials and energy-saving technologies. Filmed at each stage of construction, these houses showcase foundations made of precast, pre-insulated, high-strength reinforced concrete or insulating concrete forms; walls made of ICFs, Hebel blocks, or steel framing; exterior finishes that incorporate thermally elastic stucco; and standing seam steel roofs. Photovoltaic roofing panels, a natural gas heat pump that uses a non-CFC refrigerant, an electronic home energy management system, gas fireplaces, doors made from sawmill residue and wood scraps, a geothermal heat pump, a pellet... Monmouth Jct., NJ, Meridian Education Corporation, 2001.

TE DVD ROM 40

**Quake Proof: Building the Perfect
Bridge**

Films for the Humanities & Sciences

DVD ROM ---- A behind-the-scenes look at modern anti-earthquake preparation, this program documents the replacement of a major section of the San Francisco-Oakland Bay Bridge. Anticipating the 2007 demolition of the bridge's eastern cantilever span, the video shows viewers how the new design and construction will presumably withstand a high-magnitude earthquake. Footage of the construction process accompanies detailed scenes of seismologists and engineers at work; testing bridge columns with a giant shake table, predicting the area's next quake, and demonstrating the phenomenon known as liquefaction. The result is a first-rate architectural case study. 52 minutes. Princeton, NJ, Films Media Group, 2005.

TE EXPL F13

Concrete Principles

Thomas P Fahl

BOOK ---- This completely new, full-color text provides a comprehensive overview of the tools, materials, and practices commonly used in the concrete industry. The content areas covered correlate with established training programs. The information presented in the text is designed to serve as a teaching tool or as a reference for upgrading knowledge and skills. Homewood, IL, American Technical Publishers Inc, 2001.

TE EXPL F13A

Concrete Principles

ATP Staff

BOOK ---- Workbook. This workbook is designed to reinforce information presented in the Concrete Principles textbook. Each chapter in the workbook covers information in the corresponding textbook chapter. Activities reinforce comprehension of related concepts and mathematical principles. Homewood, IL, American Technical Publishers Inc, 2001.

TE EXPL K52

Carpentry, Fourth Edition

Leonard Koel

BOOK ---- Carpentry has been thoroughly updated and expanded to reflect the latest trends and accepted practices of the carpentry trade. This full-color text provides comprehensive coverage of tools, equipment, materials, and trade practices. New and expanded content areas reflect industry trends and user suggestions. Homewood, IL, American Technical Publishers Inc, 2004.

TE EXPL P65

Carpentry, Fourth Edition

Thomas E Proctor

BOOK ---- Workbook. Carpentry has been thoroughly updated and expanded to reflect the latest trends and accepted practices of the carpentry trade. This workbook is comprised of 70 unit tests and 16 section tests designed to aid student comprehension. Multiple choice, true-false, identification, completion, short answer, and math questions are used throughout the workbook. Homewood, IL, American Technical Publishers Inc, 2004.

TE KIT 2

Concrete Principles Resource Guide

American Technical Publishers Staff

KIT ---- The Concrete Principle Resource Guide is a valuable instructional tool designed for training in group settings. The Resource Guide provides an out-of-the-box approach designed for maximum flexibility. It is divided into sections for easy use in a classroom or seminar setting. The Resource Guide includes a CD ROM with Electronic Slides of all the illustrations from the textbook and web links to valuable instructional resources on the Internet. This is a complete instructional package for teaching concrete principles. Homewood, IL, American Technical Publishers, Inc, 2003.

TE VIDEO 12

**The Future of Home Construction:
New Techniques, New Technologies**

Meridian Education Corporation

VIDEO ---- This program travels to the National Association of Home Builders' Research Center to study four townhouses constructed using some of today's most innovative building materials and energy-saving technologies. Filmed at each stage of construction, these houses showcase foundations made of precast, pre-insulated, high-strength reinforced concrete or insulating concrete forms; walls made of ICFs, Hebel blocks, or steel framing; exterior finishes that incorporate thermally elastic stucco; and standing seam steel roofs. Photovoltaic roofing panels, a natural gas heat pump that uses a non-CFC refrigerant, an electronic home energy management system, gas fireplaces, doors made from sawmill residue and wood scraps, a geothermal heat pump, a pellet... Monmouth Jct., NJ, Meridian Education Corporation, 2001.

TE VIDEO 42

Super Bridge

Thomas Friedman, Neil Goodwin

VIDEO ---- Super Bridge covers every phase of the construction of the Clark Bridge that spans the Mississippi at Alton, Illinois. Featuring modern cable-stayed design, the bridge was built over four years in often adverse conditions. See how its builders overcame the project's unique challenges. Level: Middle School-High School. 120 minutes. South Burlington, VT, WGBH Educational Foundation, 1997.

TE VIDEO 52

Building Trades Video Series: Foundations

James E Duffy

VIDEO ---- This video provides dynamic visual instructions to improve understanding of important construction methods. This video is paced with practical examples that emphasize the use of the latest materials, tools, and techniques. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2002.

TE VIDEO 53

Building Trades Video Series: Wall and Ceiling Framing

James E Duffy

VIDEO ---- This video provides dynamic visual instructions to improve understanding of important construction methods. This video is paced with practical examples that emphasize the use of the latest materials, tools, and techniques. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2002.

TE VIDEO 54

Building Trades Video Series: Roof Framing

James E Duffy

VIDEO ---- This video provides dynamic visual instructions to improve understanding of important construction methods. This video is paced with practical examples that emphasize the use of the latest materials, tools, and techniques. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2002.

TE VIDEO 55

Building Trades Video Series: Floor Framing

James E Duffy

VIDEO ---- This video provides dynamic visual instructions to improve understanding of important construction methods. This video is paced with practical examples that emphasize the use of the latest materials, tools, and techniques. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2002.

TE VIDEO 58

Why Buildings Stand Up: Loads On Buildings

Mario Salvadori

VIDEO ---- Program 1. Demonstrations of static and dynamic loads, and the effects of winds and earthquakes on buildings. 29 minutes. Allegan, MI, VMS, Inc, Copyrighted date not available.

TE VIDEO 59

Why Buildings Stand Up: Equilibrium and Materials

Mario Salvadori

VIDEO ---- Program 2. Tension, compression, bending; beams, columns, cables arches, steel, concrete, and wood. 28 minutes. Allegan, MI, VMS, Inc, Copyrighted date not available.

TE VIDEO 60

Why Buildings Stand Up: Bridges

Mario Salvadori

VIDEO ---- Program 3. An exploration of framed structures, arches, and truss and suspension bridges. 26 minutes. Allegan, MI, VMS, Inc, Copyrighted date not available.

TE VIDEO 61

Why Buildings Stand Up: Paper Structures

Mario Salvadori

VIDEO ---- Program 4. Using paper to create folded plates, beams, arches, and domes. 22 minutes. Allegan, MI, VMS, Inc, Copyrighted date not available.

TE VIDEO 62

Why Buildings Stand Up: Monuments on Architecture & Engineering

Mario Salvadori

VIDEO ---- Program 6. A survey of architectural and engineering monuments from 8000 BC to the present. 28 minutes. Allegan, MI, VMS, Inc, Copyrighted date not available.

TE VIDEO 63

Why Buildings Stand Up: Swing Bridges

Mario Salvadori

VIDEO ---- Program 7. Bridges with an emphasis on swing bridges. 15 minutes. Allegan, MI, VMS, Inc, Copyrighted date not available.

TE VIDEO 64

Why Buildings Stand Up: Skyscrapers

Mario Salvadori

VIDEO ---- Program 8. Illustrates high-rise buildings in New York City. 13 minutes. Allegan, MI, VMS, Inc, Copyrighted date not available.

Arts, A/V Technology and Communications

TE DVD ROM 2

Digital Photography: The Camera

Media West Home Video

DVD ROM ---- Learn the fundamentals of digital photography. Fundamentals of digital camera imaging. Includes choosing a camera, use, and more. Includes teachers guide, assignments, quizzes, terms, and glossary. 85 minutes. Lake Grove, OR, Media West Home Video, 2003.

TE DVD ROM 3

Digital Photography: Crafting Images

Media West Home Video

DVD ROM ---- Learn the fundamentals of digital photography. Teaches the fundamentals of making, not taking, digital images. 97 minutes. Lake Grove, OR, Media West Home Video, 2003.

TE EXPL S29

Exploring Communication

Richard D Seymour, John M Ritz,

Florence A Cloghessy

BOOK ---- This book will introduce you to the communication process. This text is divided into five sections. Each section ends with a section review and activities. You will examine the technical devices that aid human communication. This book focuses on two areas, printed communication and electronic communication. This book will help you gain a broad background in the study of communication. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2000.

TE EXPL S29A

Exploring Communication

Richard D Seymour

BOOK ---- Instructor's Manual. This manual is intended for use with Exploring Communication Textbook. The text and accompanying manuals provide a complete instructional package for the middle school technology education program. The three educational materials outline content, suggested activities, student handouts, worksheets, and evaluation materials. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2000.

TE EXPL S29B

Exploring Communication

Nancy Henke-Konopasek, Florence A Cloghessy

BOOK ---- Student Activity Manual. This manual is designed to be used with Exploring Communication textbook. The study questions and hands-on activities will enhance your study of the communications field and the career opportunities within the communications industry. Tinley Park, IL, The Goodheart Willcox Co Inc, 2000.

Career Exploration

TE DVD ROM 50

Women in Engineering: The Best Kept Secret to Changing the World

Engineering Education Service Center

DVD ROM ---- Engineering is humanitarian, caring and possibly the most effective, hands-on approach to make the world a better place. This program features women engineers from companies all over the United States, and offers middle and high school girls encouragement to pursue engineering. Ages 12+. 25 minutes. Springfield, OR, Engineering Education Service Center, 2007.

Classroom Activities

TE CLASS K17

Technology Projects for the Classroom

Allan Kaufman, Jim Flowers

BOOK ---- Twenty low-cost projects for middle school and High School science and technology students. Required materials are readily available and largely free or low cost. Each project features background information, safety guidelines, detailed procedure with many illustrations, and study questions. Projects include a small-scale hot-air balloon, a fiber-optic communicator, a hydraulic robot arm, an electronic sound amplifier, and a small solar-powered race boat. Includes Teacher's Guide. 134 pages. Ann Arbor, MI, Prakkren Publications, Inc., 1996.

TE CLASS K17.1

More Technology Projects For the Classroom

Allan Kaufman, Jim Flowers

BOOK ---- Nineteen fun and fascinating low-cost projects that educate and motivate students. Background information provides solid math and science content. Projects include design and testing of model car frames and model gliders; experimentation with plastics, plaster, and concrete; construction and use of a simple sextant and gyroscopes. Includes Teacher's Guide. 160 pages. Ann Arbor, MI, Tech Directions Books, Prakkren Publications Inc., 2000.

TE CLASS K17.12

Exploring Solar Energy: Principles & Projects

Allan Kaufman

BOOK ---- This easy-to-understand book covers the major aspects of solar energy use and discusses passive solar energy, active solar energy, and solar electricity. Project section includes step-by-step hands-on activities that let students apply solar energy principles. 98 pages. Ann Arbor, MI, Prakkren Publishing, Inc., 1992.

TE CLASS K17.13

Exploring Solar Energy II: Activities in Solar Electricity

Allan Kaufman

BOOK ---- This easy-to-understand book covers: Photovoltaics; Theory of sunlight into electricity; Material and processes; Solar cells for the experimenter. Projects include a solar sun racer, solar-powered rover robot, solar music box, solar rechargeable flashlight and solar-powered FM Transmitter. 102 pages. Ann Arbor, MI, Prakkren Publications, Inc., 1995.

TE CLASS R57

Handbook Two for Aerospace Education: A Guide to Projects and Applications

John Paul Rossie, Editor

BOOK ---- This handbook provides a wealth of aerospace-related course materials and projects for both group and individual study. It also gives information on organizations that offer teachers resources and support. 102 pages. Ann Arbor, MI, Prakkren Publications, Inc., 1991.

TE CLASS S14

The Art of Construction

Mario Salvadori

BOOK ---- Projects and principles for beginning engineers and architects! The easy-to-read chapters will teach students the basics of structures: Shape and Strength, What Do We Build Structures With?, and The Part of the Building You Don't See. Then, students' newly acquired knowledge is applied as they do enlightening activities that use common items such as craft sticks and string. Level: Middle/High School. Chicago, IL, Chicago Review Press, 1990.

TE VIDEO 41

Sculpting Characters With Clay

Mark Sawicki A Biztoon Production

VIDEO ---- A Beginners Guide To Animation. This program describes the properties of polymer clay, the tools used to sculpt, bake and paint the material and illustrates the basic forms that you can make out of clay that provide the basis for any sculpture. 48 minutes. Venice, CA, First Light Video Publishing, 2001.

Design Technology

TE 13.1397 T33

Girls Think of Everything: Stories of Ingenious Inventions by Women

Catherine Thimmeah

BOOK ---- Celebrates the clever and creative inventions of women from candles, helmets, and baby carriers to cancer-fighting drugs and details their determination to make their dreams come true. For middle school. New York, NY, Houghton Mifflin Company Boston, 2000.

TE DVD ROM 6

Design-Product Design: A Hand-Made Stereo for a Hand-Made Car

Films for the Humanities & Sciences

DVD ROM ---- The sound system that goes into a hand-assembled Aston-Martin sports car must be special indeed. In this program, designers at Linn, a precision-engineering company specializing in state-of-the-art sound reproduction, draft and build a compact stereo for this elite automobile. Project leaders demonstrate the use of 3-D CAD in the drafting process. The outsourcing of a component provides a good example of how to work with subcontractors. 15 minutes. Princeton, NJ, Films for the Humanities & Sciences, 2002.

TE DVD ROM 7

Design-Systems and Control: Design in the Abstract

Films for the Humanities & Sciences
DVD ROM ---- Hydrovision specializes in the design and manufacture of remotely operated vehicles, or ROV, for use underwater. The company has decided that it is time to come up with a new and improved version of their long-standing, highly successful model. This program looks specifically at how electronics and software engineers at Hydrovision use block diagrams to organize the onboard component systems of the ROV. The designers also get a chance to test and debug the prototype. 15 minutes. Princeton, NJ, Films for the Humanities & Sciences, 2002.

TE DVD ROM 8

Design-Graphic Design: What's in a Logo?

Films for the Humanities & Sciences
DVD ROM ---- Graphic designers with the consulting firm Navy Blue must produce a new corporate identity for Digital Animations Group, a Scottish company on the cutting edge of 3-D technology. Their task is to create a logo that captures the company's spirit and works across different formats, such as on paper, signs, windows, and Web pages. This program follows the entire process, from sitting down with the client to determine the mission, to brainstorming and pitching proposals, to unveiling the finished product. 15 minutes. Princeton, NJ, Films for the Humanities & Sciences, 2002.

TE DVD ROM 9

Design-Electronics: Polaroid's Passport Photo Business in a Box

Films for the Humanities & Sciences
DVD ROM ---- The task: design and build an all-in-one camera with an integrated printer that produces instant digital pictures. This program follows a team of industrial and electronics designers at Polaroid's U.K. headquarters as they take on this challenge. The whole process unfolds neatly as the idea jumps from paper to 3-D model to computer-assisted design program to prototype. Eventually, the designers debug the prototype and a professional photographer puts the production model through its paces. 15 minutes. Princeton, NJ, Films for the Humanities & Sciences, 2002.

TE VIDEO 72

Collapse: Failure by Design

Discovery Channel School
VIDEO ---- When builders use innovative materials or implement creative design, sometimes the result is disastrous. Explore the flaws of four structures that failed the test of integrity and collapsed. Grades 6 - 12. 25:50 minutes. Bethesda, MD, Discovery communications, Inc., 2001.

Drafting and CAD Technology

TE CD ROM 8

Computer Aided Design Techniques

CEV Multimedia
CD ROM ---- Advancements have been made using CAD techniques to speed the production of metal and non-metallic materials. In order for students to upgrade their knowledge of Computer Aided Drafting, they will be introduced to scanning, prints and templates, which can be converted from graphic packages into the final production. This Microsoft PowerPoint presentation also will introduce basic fundamentals of non-metallic fabrication: planning, sketching, cost evaluation, ordering, layout and material preparation. 30 slides. Requires PC/MAC OSX, Office 2000 or better, IE 5.5, Internet connection, Adobe Acrobat Reader, Flash 5 Player. Lubbock, TX, CEV Multimedia, 2004.

Energy

TE DVD ROM 19

Fossil Fuel

Landmark Media Inc.
DVD ROM ---- This program considers the possible implications of society's addiction to fossil fuels for planet earth. It examines the opportunities offered by fossil fuel replacement and shows how transitional cars that run on such energy sources as hydrogen, solar, wind, and hydroelectricity will help reduce the greenhouse effect and lessen the political power of oil-rich nations. 52 minutes. Falls Church, VA, Landmark Media Inc., 2006.

TE VIDEO 23

The Prometheus Principle--Energy for the Future: The Grand Vision

Landmark Media Inc.
VIDEO ---- Addressing the ever-changing global climate, this program discusses the increasing global demand for energy. It looks at the race to find the most efficient and sustainable use of resources and energy, considering such forms as solar, wind, biomass, nuclear, and hydroelectric energy. 25 minutes. Falls Church, VA, Landmark Media Inc., 2001.

Exploring Technology

TE DVD ROM 20

Technology and Space

Discovery Communications, Inc.
DVD ROM ---- Discover the far-reaching influence of technologies developed for space exploration, including polarized sunglasses, product bar codes, laser surgery, and satellite communication systems. Grades 6 - 8. 25 minutes. Silver Spring, MD, Discovery Communications, Inc., 2006.

TE DVD ROM 21

How Things Work

Discovery Communications, Inc.
DVD ROM ---- See how airports operate and how a daily newspaper is produced, discover what happens to recycled items and how clothes are drycleaned, and watch advertising billboards going up as well as other interesting facilities and their inner workings. Grades 6 - 12. 30 minutes. Silver Spring, MD, Discovery Communications, Inc., 2006.

TE DVD ROM 22

Supercomputing: The Power of Visualization

Films for the Humanities & Sciences
DVD ROM ---- This program explores the phenomenal growth of supercomputing and its impact on medicine, oceanography, air traffic control, law enforcement, and other fields. Showcasing practical examples of dynamic visualization technology, the video looks at three-dimensional renderings of cities accurate to the square foot, medical imaging capabilities on the cellular level, and instantaneous collaboration between laboratories a hemisphere apart. Commentary by virtual reality pioneer Jaron Lanier and other innovators underscores the need to recognize the human factor in the age of supercomputers. 27 minutes. Princeton, NJ, Films Media Group, 2005.

TE EXPL 3

Technology Today and Tomorrow

James Fales
BOOK ---- Includes sections on communication, manufacturing, construction, transportation, and bio-related technology. IL, Glencoe, 1999.

TE EXPL 5

Technology: Shaping Our World

John Gradwell
BOOK ---- Book serves as an intro to various technologies and shows how they've used basic scientific principles. Textbook. Tinley Park, IL, Goodheart-Willcox, 2000.

TE EXPL 8

Technology Interactions

Henry R. Harms and Neal R. Swernofsky
BOOK ---- Includes sections on communication, production, power, bio-related, control and integrated technologies. Peoria, IL, Glencoe/McGraw-Hill, 1999.

TE VIDEO 13

Supply Chain Management in the Internet Age

Hau Lee
VIDEO ---- This video features the commentary of Stanford Business School Professor Hau Lee, and identifies the three stages of innovation--substitution, scale, and structural effect--and considers the impact of the Internet on supply chain management. It presents examples of supply chain structural changes that resulted in important new profit centers. 55 minutes. Mill Valley, CA, Kantola Productions, 2001.

TE VIDEO 39

Technology: At Your Service

Meridian Education Corporation
VIDEO ---- This program explores how the equipment we often take for granted has become an integral part of our daily lives. At work, at school, and in the home, technology has become one of our most valuable resources. Robots, computers, and many other types of high-tech hardware are introduced. 19 minutes. Bloomington, IL, Meridian Education Corporation, 2000.

TE VIDEO 76

Masters of Technology-Part One & Two

WGBH Boston Video
VIDEO ---- Meet five revolutionary thinkers who have changed the way we live today, and discover how their scientific and technological innovations will shape our future: Vinton Cerf, a digital pioneer; the first female to lead a NASA team, Donna Shirley; Geoffrey Ballard who developed a hydrogen fuel cell; Robert Langer whose inventions have impacted medical treatments; and pilot of experimental aircraft, Burt Rutan. Two videos. Total running time 150 minutes. Boston, MA, WGBH Boston Video, 2001.

Information Technology

TE DVD ROM 23

Can You Hack It? The Attack on Personal Information

Films for the Humanities & Sciences
DVD ROM ---- This program shows how crippling database invasions can be launched from almost any computer, grabbing massive chunks of personal information seemingly out of thin air. Several case studies are featured as well as the consequences arising when businesses are not obligated to disclose security breaches. 20 minutes. Hamilton, NJ, Films for the Humanities & Sciences, 2007.

Manufacturing

TE DVD ROM 12

Understanding Gizmos and Widgets: How Stuff is Made

Discovery Channel University
DVD ROM ---- In the 21st century, manufacturing is anything but boring. This program goes inside high-tech factories to see how products ranging from toys and makeup to bulldozers and helicopters are made. Viewers gain insights into the workings of the value stream; a process of going from raw materials to finished products that today includes on-demand fabrication, advanced robotics, and zero-defect quality control standards. 49 minutes. Princeton, NJ, Films for the Humanities & Sciences, 2002.

TE DVD ROM 60

Field Trip: Tractor Manufacturing

CEV Multimedia
DVD ROM ---- The John Deere tradition of building quality tractors started in 1918 and continues today at a factory in Waterloo, Iowa. View the many steps involved in the manufacturing of John Deere tractors. Beginning at the product engineering site and ending at the tractor assembly site, this program provides a comprehensive look at tractor manufacturing. A supplement is included. 18 minutes. Lubbock, TX, CEV Multimedia.

TE EXPL W63

Exploring Manufacturing

R Thomas Wright

BOOK ---- This book provides a complete picture of two activities: Material Procession Technology and Management Technology. You will learn about the types of materials from which manufactured products are made and their properties (what makes them what they are). Using this information you will be better able to assume the adult role of consumer, citizen, and career person. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2000.

TE EXPL W63A

Exploring Manufacturing

R Thomas Wright

BOOK ---- Instructor's Manual. The study of manufacturing is a key part of Technology Education. Technology Education describes an educational program concerned with : Technology - its evolution, utilization, and significance; Industry - its organization, management, processes, and products; The social-cultural impacts of technology and industry. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2000.

TE EXPL W63B

Exploring Manufacturing

R Thomas Wright

BOOK ---- Student Activity Manual. It is designed to be used with the Exploring Manufacturing textbook. This manual was developed to help you with your study of manufacturing industries, related occupations, and the many opportunities for a career that these industrial activities might offer you. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2000.

TE VIDEO 26

Field Trip: Tractor Manufacturing

CEV Multimedia

VIDEO ---- The John Deere tradition of building quality tractors started in 1918 and continues today at a factory in Waterloo, Iowa. View the many steps involved in the manufacturing of John Deere tractors. Beginning at the product engineering site and ending at the tractor assembly site, this program provides a comprehensive look at tractor manufacturing. A supplement is included. 18 minutes. Lubbock, TX, CEV Multimedia.

Safety

TE VIDEO 67

Metal Shop Safety

Meridian Education Corporation

VIDEO ---- This video demonstrates the kind of precautions that should be taken when working with metals. Sheet metal work, soldering, welding, foundry work, forging, along with general safety are summarized. Footage of actual fatal accidents is used to strengthen the importance of safety in the metals lab. Watch what happens when molten metal is spilled on water, when it explodes, and when molten aluminum is spilled on a non-protective tennis shoe. 19 minutes. Monmouth Junction, NJ, Meridian Education Corporation, 1993.

TE VIDEO 68

Auto Shop Safety

Meridian Education Corporation

VIDEO ---- This video stresses the need to follow safety rules in an auto shop to avoid serious injury or death. Running engines, moving cars, cars on jack stands or floor jacks, open fuel lines, and other things all have the potential to cause a catastrophe. Methods for preventing accidents are shown and emphasized. 22 minutes. Monmouth Junction, NJ, Meridian Education Corporation, 1999.

TE VIDEO 69

Electrical Safety

Meridian Education Corporation

VIDEO ---- This video provides a basic explanation of electricity, what it is and how it affects us. It also covers the color coding of wire and what each color means, the role of circuits and circuit breakers, and fuses and how to replace them. Also, examines insulation and how it works, the various hand tools used in electrical work, and what gauge wire to use in certain applications. Covers preventing electrical shock and how to treat a person who has received an electrical shock. 30 minutes. Monmouth Junction, NJ, Meridian Education Corporation, 1993.

Science, Technology, Engineering and Mathematics

TE DT P27

Invention by Design, How Engineers Get from Thought to Thing

Henry Petroski

BOOK ---- Engineering entails more than knowing the way things work. What do economics and ecology, aesthetics, and ethics have to do with the shape of a paper clip, the tab of a beverage can, or the cabin design of a turbojet? How do the idiosyncrasies of individual engineers, companies, and communities leave their mark on projects from Velcro to fax machines to waterworks? This book offers an insider's look at these political and cultural dimensions of design, development, construction, and production. Level: High School-Adult. Cambridge, MA, Harvard University Press, 1996.

TE DT W63

Technology: Design and Applications

R Thomas Wright, Ryan A Brown

BOOK ---- This book does more than tell you about technology. You will have a chance to apply what you have learned through carefully designed activities. You will build and test products. You may even use the products in competition with other students. You may be introduced firsthand to mass production or the use of tools. Another activity may ask you to investigate careers of your own choice and rate them against your own interests and expectations. Tinley Park, IL, The Goodheart-Willcox Co, Inc, 2004.

TE DT W63.1

Technology: Design and Applications

R Thomas Wright, Ryan A Brown

BOOK ---- This teacher's Resource Binder has been designed to present a broad, introductory, hands-on presentation of technology to young learners in this age group. The system is designed to help students develop technological literacy, which can be described as an ability to locate, interpret, and use information about tools, materials, and processes. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2004.

TE DT W63A

Technology: Design and Applications

R Thomas Wright, Ryan A Brown
BOOK ---- Teacher's Wraparound Edition. This book will help students learn how technology affects people and the world in which we live. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2004.

TE DT W63B

Technology: Design and Applications

R Thomas Wright, Ryan A Brown
BOOK ---- Student Activity Manual. The manual goes hand-in-hand with the Technology; Design and Applications textbook. Each section contains several activities. Some of them correspond to activities in the textbook, while others are independent of the text. Worksheets for the activities in your textbook are also included in this manual. Each chapter also contains study questions corresponding to the material in the textbook. Tinley Park, IL, The Goodheart-Willcox Co, Inc, 2004.

TE DVD ROM 4

Measurement: The Long and the Short of It

Shopware
DVD ROM ---- Emphasizing hands-on practice, this program is an excellent tool for introducing the basics of linear measurement: its history, terminology, systems, and practical applications. Using both customary and metric rulers, Measurement: The Long and the Short of It will guide your students through the process of taking measurements, performing related calculations using whole numbers and fractions, and arriving at answers they can feel confident with. Middle school, high school, and vocational/technical school. 16-minutes. Lawrenceville, NJ, Shopware, 2007.

TE DVD ROM 5

Math in the Real World

Films for the Humanities & Sciences
DVD ROM ---- This DVD ROM uses fascinating video segments and computer graphics to explore the math behind real-world events. A cross-curricular resource in math and physics, this DVD ROM offers an innovative new angle on teaching and testing upper high school and college-level mathematics. The program contains over 12 hours of video, including 15 mathematical modeling case studies, as well as text solutions, interactive exercises, explanatory video seminars, a built-in CAL program, and links to a related Web site. Requires a DVD ROM drive. Princeton, NJ, Films for the Humanities & Sciences, 2003.

TE DVD ROM 14

Green Matters: Recycling

Film Ideas
DVD ROM ---- As the world's garbage piles grow to even greater heights, many people and industries are finding new uses for old things. In Manila, the Philippines, local women are running a thriving business repurposing old papers into fashionable accessories creating a worldwide demand. In the U.S., recycling E-Waste is big business as producers and consumers consider important ways to reduce their toxic impact on the environment. Age Level: Intermediate and up. Approximately 23 minutes. Wheeling, IL, Film Ideas, 2008.

TE DVD ROM 15

Green Matters: Conservation

Film Ideas
DVD ROM ---- With a growing world population, paying close attention to the optimum use and not abuse of natural resources is a compassionate idea. Whether it's reclaiming the desert in China or harvesting water in Kenya, we'll understand the important benefits of resource allocation. Age Level: Intermediate and up. Approximately 23 minutes. Wheeling, IL, Film Ideas, 2008.

TE DVD ROM 16

Green Matters: Pollution

Film Ideas
DVD ROM ---- Most everywhere in the world, the air, the ground, the drinking water, the ecosystems and even made-made structures, are impacted by the harmful effects of pollution. It's a serious problem in need of some serious solutions. This global perspective on the topic of pollution takes a closer look at the where and what, along with the when and how, of this threatening environmental issue. Age Level: Intermediate and up. Approximately 23 minutes. each. Wheeling, IL, Film Ideas, 2008.

TE DVD ROM 17

Green Matters: Alternative Energy

Film Ideas
DVD ROM ---- Most everyone realizes the environmental and economic cost for the dependence on fossil fuels for energy, foreign or domestic. So it makes sense to embrace other technologies that are cost efficient and sustainable, yet reduce their negative impact on the planet. Governments, industries, and people worldwide are finding new ways to reduce their energy dependency and environmental impact by investing in sustainable energy alternatives. Age Level: Intermediate and up. Approximately 23 minutes. Wheeling, IL, Film Ideas, 2008.

TE DVD ROM 18

Green Matters: Bio Fuels

Film Ideas
DVD ROM ---- What do animal dung in Israel and leftover cooking oils in North America have in common? Both are being used as bio fuels for powering industrial equipment and motor vehicles. Combine this with efforts to process coconut oil from Uganda and soy from Argentina and you have the hopeful beginnings for fossil fuel independence. Age Level: Intermediate and up. Approximately 23 minutes. Wheeling, IL, Film Ideas, 2008.

TE DVD ROM 30

Everyday Physics

Discovery Communications, Inc.
DVD ROM ---- Examine the principles of physics behind activities of ordinary life, including climbing a ladder, riding a swing, and stacking dominoes to start an interesting chain reaction. Grades 6 - 12. 30 minutes. Silver Spring, MD, Discovery Communications, Inc., 2006.

TE DVD ROM 35

Forensics: Video Quiz

Sunburst Visual Media

DVD ROM ---- Students will learn how forensic scientists help solve crimes by using DNA when analyzing evidence. This program also explores how forensics are used to solve legal issues and to learn about ancient people. Segments include: Crime Scene; DNA; Forgery?; Mummies; and Arson. Contains vocabulary words, fun facts and more. Grades 4 - 10. Approximately 28 minutes. Hawthorne, NY, Sunburst Visual Media, 2004.

TE DVD ROM 41

The Lost City of New Orleans: A Case Study

Films for the Humanities & Sciences

DVD ROM ---- Throughout the world, sea levels are rising, coastlines are crumbling, and the intensity of hurricanes is increasing. Is the situation in New Orleans a glimpse into the future of all cities that exist near major bodies of water? Filmed six months after Katrina, this program analyzes why New Orleans flooded so catastrophically and asks whether the city, constructed on a steadily subsiding floodplain and losing coastal barrier land at the highest rate in the U.S. should be rebuilt at all. Louisiana State Climatologist Barry Keim; Harry Roberts, director of LSU's Coastal Studies Institute; hurricane expert Ivor Van Heerden; Colonel Richard Wagenaar, of the Army Corps of Engineers; and Hassan Mashriqui, who is developing coastal... Princeton, NJ, Films Media Group, 2006.

TE KIT 1

Measurement and Scale-Elementary

Discovery Communications, Inc.

KIT ---- In Measurement and Scale's three sections, students learn the use of units in measurement and scale. The sections cover time, how measurement standards are calibrated, how precious stones are measured, and more. Includes a teacher's guide on CD ROM. Grades 3 to 6. 26 minutes. Bethesda, MD, Discovery Channel Education, 2001.

TE MST B16

Science and Math for Technology

Thomas Barrowman

BOOK ---- This book organizes information by topic, including electricity, motion, power transmission, liquid, gases, and biotechnology, and includes an extensive cross-referenced index so beginning and advanced students can find the information they need in a hurry. Science concepts and math formulas and their relation to technology are explained in easy-to-understand text that is complimented by photographs and unusually descriptive drawings and cartoons. Level: Elementary-High School. Glens Falls, NY, Thomas R Barrowman & Ruth K Barrowman, 2001.

TE VIDEO 2

Science as Inquiry in Action

Schlessinger Media

VIDEO ---- Through engaging examples, viewers will learn how scientific evidence and explanation play important roles in scientific inquiry. Students will trace the path of scientific inquiry--guided by knowledge, observations, ideas and questions--as they combine scientific reasoning and critical thinking. This program is based on the concepts outlined in the National Science Education Standards for Science as Inquiry; Abilities Necessary To Do Scientific Inquiry and Understandings About Scientific Inquiry. 23 minutes. Grades 5 - 8. Wynnewood, PA, Schlessinger Media, 2000.

TE VIDEO 10

Space Facts

Global Sciences

VIDEO ---- This video takes a fact-filled look at 23 of the most important events from man's on-going adventure in space. Among the subjects covered are: The Mercury Astronauts, the first woman in space, the Gemini program, the race to the moon, Apollo 13, Skylab, the Viking and Voyager probes, the Space Shuttle and the discovery of possible life-form remains in a meteorite from Mars. 50 minutes. Thousand Oaks, CA, Goldhil Video, 1997.

TE VIDEO 11

Space Facts II

Adler Media, Inc.

VIDEO ---- This video explores the link between space exploration and its impact on technological, environmental and medical advances. The program examines the role of space exploration in fighting forest fires, controlling diseases, combating air pollution and mapping solar and lunar cycles which can inspire discussion on current and future gains from space exploration. 50 minutes. McLean, VA, Adler Media, Inc., 2000.

TE VIDEO 43

Modern Marvels: The Great Bridge 8 Miles of Steel

A & E Television Network

VIDEO ---- This eight-mile long span was once chosen as one of the seven engineering wonders of the modern world. Modern Marvels explores the history of the Oakland Bay Bridge from the plans of dreamers more than a hundred years before the bridge was built to the ambitious retrofit required by the damage from the 1989 earthquake that shook the Bay Area. Extensive footage chronicles the perilous construction, which claimed the lives of 29 workers. New York, NY, A & E Television Network, 1996.

TE VIDEO 45

Engineering Technology: Model Bridges

Shopware

VIDEO ---- This new video takes the viewer to the annual college engineering students' model bridge-building contest. Teams of students design 20' long bridges at their schools and then reconstruct them on location during a limited time. Bridges are stress tested for load capabilities. Level Middle and High School. 23 minutes. Monmouth Junction, NJ, Shopware, 2003.

TE VIDEO 71

Engineering Drawing and Design: Orthographic Projections

Delmar

VIDEO ---- This video explains the applications of orthographic projections and teaches the necessary skills for mastering their use. It provides detailed discussion of the engineering drawing and design process. 20 minutes. Clifton Park, JY, Delmar Learning, 2001.

TE VIDEO 80

Discovering Math: Concepts in Geometry

Discovery School

VIDEO ---- This program shows the role that math plays in the design, technology, and construction of buildings, from ancient Greek architecture to modern skyscrapers. Grades 9-12. 56 minutes. Silver Spring, MD, Discovery Education, 2005.

Teacher Resources

TE CD ROM 4

Technology: Design and Applications

Teacher's Resource CD

CD ROM ---- This CD will help you develop an effective technology education course, and includes ExamView Test Generator Software, which allows you to quickly and easily create and print tests from a test bank of over 1200 questions. System Requirements: Windows 98 SE or later; Min 32 megabytes of memory (64 megabytes RAM recommended); Adobe Reader (also supplied on CD). Tinley Park, IL, The Goodheart-Willcox Co Inc, 2004.

TE TR A47

Women Inventors

Linda Jacobs Altman

BOOK ---- This book introduces students to inventive women who have had an often-overlooked impact on the world, and it discusses some of the prejudices and difficulties they overcame (or failed to overcome) because of the gender. New York, NY, Factson File, Inc, 1997.

TE TR A52

Simple Machines Made Simple

Ralph St Andre

BOOK ---- Teach your students essential scientific principles and basic mechanics through hands-on, cooperative learning activities that are not only easy to teach but also inexpensive and fun. As students experiment with gadgets that slide, pivot, turn, rub, and work, they learn why and how machines operate the way they do. Includes illustrated step-by-step instructions, material lists, reproducible activities, assessment sheets, and estimated time required for the activities. Level: Middle School. Englewood, CO, Teacher Ideas Press, 1993.

TE TR B76

The Day the Universe Changed

James Burke

BOOK ---- This book examines eight periods in history when our view of the world shifted dramatically: The eleventh century, when extraordinary discoveries were made by Spanish crusaders; The fourteenth century when perspective in painting emerged; The fifteenth century with the advent of the printing press; The sixteenth century, with gunnery developments; The eighteenth century with the Industrial Revolution; The nineteenth century, when the discovery of dinosaur fossils led to the theory of evolution. Boston, MA, Little, Brown and Company, 1995.

TE TR D75

The Giza Power Plant: Technologies of Ancient Egypt

Christopher Dunn

BOOK ---- The author, a mechanical engineer, reverse-engineered the Great Pyramid at Giza to discover its use and his conclusions are startling. This book considers existing fact and artifact without relying on unprovable assertions that have given pyramid studies a bad name. Rochester, VT, Bear & Company, 1998.

TE TR K24

The Building of the Panama Canal in Historic Photographs

Ulrich Keller

BOOK ---- In 164 historic photographs and a well-researched text, noted photohistorian Ulrich Keller tells the compelling story of this hitherto unparalleled technological achievement. These historic prints document the Canal's construction and its way of life. New York, NY, Dover Publications, Inc., 1983.

TE TR M11

The Great Bridge: The Epic Story of the Building of the Brooklyn Bridge

David McCullough

BOOK ---- In the years around 1870, when the project was first undertaken, the concept of building an unprecedented bridge to span the East River between the great cities of Manhattan and Brooklyn required a vision and determination comparable to that which went into the building of the great cathedrals. Throughout the fourteen years of its construction, the odds against the successful completion of the bridge seemed staggering. This book is a sweeping narrative of the social climate of the time and of the heroes and rascals who had a hand in either constructing or exploiting the enterprise. New York, NY, Simon & Schuster Paperbacks, 1972.

TE TR M15

Against the Grain: How Agriculture has Hijacked Civilization

Richard Manning

BOOK ---- Drawing on the work of anthropologists, biologists, archaeologists, and historians, as well as his own extensive research, the author traces a commodification of grain that has reached its apex in contemporary agribusiness and that has helped to build some of the most familiar--and dysfunctional--features of our political and economic landscape. New York, NY, North Point Press, 2004.

TE TR P27

The Evolution of Useful Things

Henry Petroski

BOOK ---- The author takes a microscopic look at artifacts that most of us count on but rarely contemplate, including such icons of the everyday as pins, Post-its, and fast-food "clamshell" containers. At the same time, he offers a convincing new theory of technological innovation as a response to the perceived failures of existing products--suggesting that irritation, and not necessity, is the mother of invention. New York, NY, Vintage Books, 1994.

TE TR R77

Teachers On Call: Activities for Subs and Odd Days

Brian Rutherford

BOOK ---- Whether you are going to be away for a day or for a week, there are plenty of activities in this book to keep your students challenged and happy. Activities are most suitable for Grades 6-12 technology education or science classes, but many can be used anywhere. Pittsburg, KS, Pitsco, 2002.

TE TR W27

Primitive Technology II: Ancestral Skills

David Wescott

BOOK ---- This book will guide you to a better understanding of the skills and crafts that bind us all into this great human family. Learn to create stone tools that may be used to fabricate more complex technologies. Master the art of the bow and arrow, and the preparation of food. Build a shelter or fashion clothing from fibers or buckskin. Salt Lake City, UT, Gibbs Smith, 2001.

TE VIDEO 1

Reading a Ruler

Shopware

VIDEO ---- In the first lesson, the different forms of English measurement are discussed and displayed as they would appear on a ruler. The viewer also learns how to understand fractions when measuring and how to find exact measurements using a ruler. The second lesson deals with the metric system by introducing the meter and other metric measurements. Viewers learn how to read a meter stick, and common abbreviations of metric measurements are discussed. Viewers also learn how to convert measurements using the decimal point. 18 minute video and quiz. Monmouth Junction, NJ, Shopware, 1994.

TE VIDEO 4

Digital Dark Age? Gambling with Humankind's Knowledge

Films for the Humanities & Sciences

VIDEO ---- In this program, Stewart Brand, co-inventor of the TCP/IP Internet protocol, and others in the know assess the rapid proliferation of digitization; confront the alarming risk of massive data loss through technology obsolescence, platform incompatibilities, and storage media degradation; explore the potentially catastrophic impact of data loss on cultural identity; and outline some of the efforts being made to stave off a digital dark age. 53 minutes. Princeton, NJ, Films for the Humanities & Sciences, 2004.

TE VIDEO 40

Technology Unplugged

NMSU Board of Regents

VIDEO ---- A training expert uses plain English to explain fundamental concepts such as RAM, hard drives, databases, networks, and more. Las Cruces, NM, Leading Object, 2000.

TE VIDEO 44

Building BIG Bridges

Larry Klein, Mark Olshaker

VIDEO ---- Tower above the clouds on the Golden Gate, build the Brooklyn Bridge, and explore Europe's groundbreaking spans. Level Middle and High School. 60 minutes. South Burlington, VT, WGBH Educational Foundation, 2000.

TE VIDEO 46

The Edison Effect, The Phonograph

The History Channel

VIDEO ---- Life in the modern world would be unthinkable without the inventions of Thomas Alva Edison. How did a man with only three months of formal schooling change the way we live? The Edison Effect shows the complete story of the feuds, the ingenuity, the mistakes, and the successes behind Edison's most famous inventions. 50 minutes. New York, NY, A & E Television Networks, 1996.

TE VIDEO 47

The Edison Effect, The Electric Light

The History Channel

VIDEO ---- Life in the modern world would be unthinkable without the inventions of Thomas Alva Edison. How did a man with only three months of formal schooling change the way we live? The Edison Effect shows the complete story of the feuds, the ingenuity, the mistakes, and the successes behind Edison's most famous inventions. 50 minutes. New York, NY, A & E Television Networks, 1996.

TE VIDEO 48

The Edison Effect, The Motion Picture

The History Channel

VIDEO ---- Life in the modern world would be unthinkable without the inventions of Thomas Alva Edison. How did a man with only three months of formal schooling change the way we live? The Edison Effect shows the complete story of the feuds, the ingenuity, the mistakes, and the successes behind Edison's most famous inventions. 50 minutes. New York, NY, A & E Television Networks, 1996.

TE VIDEO 49

History of Spaceflight, Reaching for the Stars

Finley-Holiday Films

VIDEO ---- This fascinating video traces the evolution of spaceflight from earliest speculations to the marvels of future space technology. 60 minutes. Level: Middle School-Adult. Whittier, CA, Finley-Holiday Films.

TE VIDEO 57

Brooklyn Bridge

Ken Burns

VIDEO ---- Ken Burns captures the physical majesty of this greatest of all achievements of the industrial age, the dramatic story of the larger-than-life men who imagined and built it, and the immense charm this granite and steel structure has exerted on generations of city dwellers. 58 minutes. Alexandria, VA, Public Broadcasting Service, 1981.

TE VIDEO 65

Famous Americans: Henry Ford

Questar, Inc

VIDEO ---- View the intriguing story of how Henry Ford became the father of the American auto industry and invented mass production, sparking the twentieth century Industrial Revolution. 55 minutes. Level: Middle School & High School. Chicago, IL, Questar, Inc, 1999.

TE VIDEO 70

Hot Zones

Screenscope, Inc.

VIDEO ---- This video shows how closely human health depends on environmental health. The consequences of altering ecosystems and the outbreak of thirty previously unknown diseases in the last two decades are examined. The program visits Kenya, Peru, Bangladesh, and the United States to show how uncontrolled development leads to an increase in infectious disease. 57 minutes. Washington, DC, Screenscope Inc, 2003.

Transportation, Distribution and Logistics

TE DVD ROM 1

The Wright Stuff

Nancy Porter

DVD ROM ---- They were the two men who drastically changed the way we look at transportation, aerospace, and the science of flight - Orville and Wilbur Wright. Introduce your students to these amazing brothers, and watch how they made history in the early 1900s by demonstrating that powered flight in a controlled plane was possible. Although they were known as a modest pair, their lives are shared with viewers in this thorough film, which includes archival photos, home movies, and expert commentary. Boston, MA, WGBH Educational Foundation, 2003.

TE EXPL J53

Exploring Transportation

Stephen R Johnson, Patricia A Farrar-Hunter

BOOK ---- This text is concerned with relocation; it provides a thorough understanding of the systems and jobs that we use daily. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2000.

TE EXPL J53A

Exploring Transportation-Instructor's Manual

Stephen R Johnson, Patricia A Farrar-Hunter

BOOK ---- This manual provides the necessary resources to teach students about the variety of ways technology can be used for transportation as well as exploring the interrelationships of these technologies. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2000.

TE EXPL J53B

Exploring Transportation-Student Activity Manual

Stephen R Johnson, Patricia A Farrar-Hunter

BOOK ---- The activities found in this manual will challenge you to use the ability to come up with original ideas and to find new ways to solve problems. Tinley Park, IL, The Goodheart-Willcox Co Inc, 2000.

TE TRANS 1

Exploring Transportation

Stephen R. Johnson

BOOK ---- Two technology educators introduce the energy, power, and vehicular systems behind current and future modes of transportation. Includes color photos and illustrations, exercises, and a dictionary of technical terms. As Johnson teaches at Lawrenceburg High School, IN, the text aptly appears to be geared to high school students. Tinley Park, IL, Goodheart-Willcox, 2000.

TE VIDEO 5

Day of the Sun Cars

Gasless Carriage Videos

VIDEO ---- This program chronicles the beginnings of solar racing. It includes footage from the Sunrayce across Australia, the Swiss Tour de Sol, and the American Tour de Sol. In addition, there are excerpts from technical lectures by experts on various aspects of building solar race cars, including; photovoltaics, batteries, chassis, suspension and wheels, brakes, bodies, motors, and controllers. 90 minutes. Felton, CA, Electro Automotive, 1990.

TE VIDEO 6

Women In Electric Vehicles

Gasless Carriage Videos

VIDEO ---- This program is a collage of interview, action footage, and vignettes with more than a dozen women pioneers in the field of electric vehicles. Listen and watch as they relate what brought them to electric cars, and the excitement and love for the technology they share. 120 minutes. Felton, CA, Electro Automotive, 1993.

TE VIDEO 7

Electric Vehicles: Fact, Fiction, & Fantasy

Gasless Carriage Videos

VIDEO ---- In a seminar given to the Automotive Service Councils of California, Mike Brown (Electro Automotive) provides the answers to the questions everyone asks about electric cars: How far do they go, how fast do they go how much does it cost to run one, how many batteries do they use, and how do they work? 59 minutes. Felton, CA, Electro Automotive, 1992.

TE VIDEO 8

Mike Brown's Electric Vehicle Components Primer

Gasless Carriage Videos

VIDEO ---- Electric cars are simple, but choices of components can be confusing. Conversion authority Mike Brown (Electro Automotive) helps you sort out the pros and cons. 92 minutes. Felton, CA, Electro Automotive, 1991.

TE VIDEO 9

Convert It

Gasless Carriage Videos

VIDEO ---- Conversion authority Michael Brown, of Electro Automotive, leads you through the conversion process, from choosing a chassis and stripping it to maintenance and driving. 90 minutes. Felton, CA, Electro Automotive, 1994.

TE VIDEO 21

Shifting Gears: A Look at Alternative Transportation

University of Calgary

VIDEO ---- At no other time in human history has it become so apparent that we must reduce our reliance on fossil fuels and vehicles powered by internal combustion engines. In Canada and in the rest of the developed world we are learning about the economic limitations and environmental problems related to our transportation decisions. This video looks at examples from The Netherlands and China where the bike is either the primary mode of transport or co-exists with the car. The video was designed for junior and senior high school students to encourage them to question and discuss their current modes of transportation and to evaluate the many alternatives available to them. 15 minutes. Calgary, Canada, University of Calgary, 2001.

TE VIDEO 27

Field Trip: Southwest Airlines

CEV Multimedia

VIDEO ---- Watch daily operations, pilot and flight attendant training, mechanical maintenance and safety procedures. Historical clips, interviews- including co-founder and CEO Herb Kelleher- and footage of airline activities and the national headquarters in Dallas tell the tale of the airline famous for peanuts, prices and people. A supplement is included. 29 minutes. Lubbock, TX, CEV Multimedia, 1999.