Research Studies

The following research studies were completed for The Annenberg/CPB Project during 1985 and 1986.

- *Research on Student Uses of the Annenberg/CPB Telecourses in the Fall of 1984*, Research Communications, Ltd.
- *A Study of Telecourse Students — 1984*, Ronald Brey and Charles Grigsby
- *Diffusion of Instructional Television in Higher Education: Faculty and Administrator Utilization*, Robert T. Blackburn and Terry J. Ging
- *Exchangeability of Student Outcomes from Regular and Telecourse Instruction: A Feasibility Study*, The Rand Corporation
- *Higher Education Utilization Study: Video, Audio and Computer Technologies*, Research Triangle Institute
- *Nebraska Videodisc Science Laboratory Simulations*, Barbara Gross Davis

For More Information

For more information about The Annenberg/CPB Project Video and Audio Collection, demonstration projects, research studies or funding guidelines use the enclosed form or write to:

The Annenberg/CPB Project
1111 16th St. N.W.
Washington, D.C. 20036
202 955 5251

The Annenberg/CPB Project

1987

The Annenberg/CPB Collection

Educational Excellence Through Telecommunications

The Annenberg/CPB Project

Expanding opportunities for individuals to acquire a quality college education is the goal of The Annenberg/CPB Project. Since 1981 it has provided support for the development of a collection of courses that can be offered to students at times and places more convenient than the traditional classroom hours, and for demonstrations of new applications of the telecommunication and information technologies in higher education.

The Project's courses can be adopted by individual colleges and offered to matriculated students for credit. They are also available for supplemental use in traditional classrooms and for informal learning outside the classroom. All of the courses are designed for students seeking a baccalaureate degree in the liberal arts and sciences.

The subject matter of the courses covers the entire undergraduate curriculum, including the humanities, the social sciences, the natural sciences and mathematics. The formats vary, depending on what combination seems most appropriate for the subject. Some use video, others audio, still others use computers — and all are keyed to newly created or specially selected texts and study guides.

The video-based courses are delivered via the nation's public television and cable stations, thus assuring that they can reach informal as well as formal learners. They are also available on cassette, as are the audio-based courses, so that learners can have convenient access to the materials. In all, a total of 38 courses are now either in production or available for use.

Demonstration projects explore new ways to think about the accessibility and the character of education through such diverse technologies as computers, laser discs, communication networks, and cassettes. Their common purpose is to explore the improvements in education which technologies make possible, off and on campus.

In this brochure you will find brief descriptions of the full range of efforts currently underway. More detailed information may be requested by returning the reply form inside this brochure.

Demonstration Projects

Demonstration projects are intended to help educators explore the implications of the technologies for enhancing teaching and learning. They can test how a discipline can be taught more effectively, how learning can be made more accessible and how new materials can be developed, distributed and used.

Many demonstration projects explore alternative ways to conceive of the aims and content of education. For example, several projects are developing new methods for teaching undergraduates about languages and cultures. Each uses a different set of ideas about teaching and learning, and a different mix of technologies. The variety of these projects, and their shared commitment to significant improvements in teaching, exemplify the kinds of ideas and efforts that The Project seeks for all disciplines.

Many of the projects make learning more accessible, especially for students with difficulty attending classes at traditional hours and locations. Some experiment with new technologies for delivering education, such as videotext, electronic mail, local area networks, computer conferencing and voice-data networking. In addition, a consortium of colleges, associations and corporations is working to improve production and distribution of interactive teaching materials.

Most of the demonstration projects experiment with new approaches to teaching. One is developing a prototype "scholar's workstation" with facilities intended to be equally useful for undergraduates and for faculty intent on research. Others are testing new formats for courses serving students, off or on campus, including more cost-effective mixes of technologies.

Recognizing that faculty and administrators can benefit from better information about the implications of the technologies for higher education, The Project has supported a number of research studies that are included in the list on the back of this brochure.

Current Projects

MIT is working with applications of artificial intelligence, interactive video and audio to develop prototype resources for teaching five languages.

The PERSEUS Project at Harvard and Boston Universities is creating an experimental version of a text and visual database on classical Greece, plus a method for creating courses with this laser disc-based system.

The PICS Consortium is importing foreign language television programs to repackage on cassette and videodisc for teaching foreign languages and international studies.

The National Narrowcast Service of PBS is a service offering specialized full courses and short seminars directly to learners at their worksites.

The University of California at Irvine is developing pilot lessons to test the feasibility of a microcomputer-based course in precalculus mathematics.

University Tech-Tel is developing a new calculus course that will test the capabilities of live voice-data conferencing for distance education.

The University of South Florida has tested the advantages of supplementing a television-based course with electronic mail.

The New Jersey Institute of Technology is creating a new computer conferencing system with specific capabilities for supporting distance education, including new options for faculty and the ability to store graphics.

The University of Nebraska has developed prototype laboratory experiments on videodisc to test their effectiveness as alternatives to traditional wet labs.

Brown University's Intermedia prototype allows faculty and students to work with text, graphics, music and other electronic media to create associations between different kinds of information (e.g. linking a sentence in a text to an element of a picture or data in a database). Experimental materials have been developed for courses in literature and plant cell biology.

The Electronic Text Consortium headed by San Diego State University has tested the potential of electronic text to deliver full courses and supplementary material, and prepared ten analyses of educational developments in the field.

The EDUCOM Software Initiative is a consortium of individuals and organizations, including representatives from colleges and corporations, that is developing a variety of strategies to increase the availability of high quality interactive instructional materials.

The Annenberg/CPB Collection

The Collection of video and audio courses covers a wide range of subject areas essential for meeting college distribution requirements. Each course includes a series of video and/or audio programs that are accompanied by one or more texts, a study guide for students, and a faculty/administrator guide.

The course materials are designed to be used in a variety of ways:

- as complete college credit courses;
- as supplementary materials for on-campus courses;
- as noncredit offerings for continuing education programs;
- as discussion tools for community and special interest groups;
- as important additions to video and audio collections of libraries;
- as resources for gifted and advanced placement programs; and
- as resources for teacher in-service programs.

▽ Indicate Audio Courses.

Humanities

Voices and Visions
Spanning a century, this course explores the tradition of modern American poetry from Whitman and Dickinson to Plath and Lowell. Thirteen one-hour video programs and accompanying print materials raise the dominant issues of American literature, and communicate to the student how poems work, what they mean, and how history, the imagination and language are embodied in poetic creation. AVAILABLE JANUARY 1988

▽
Introduction to Modern English and American Literature I: The Nineteenth Century
This audio course introduces students to English and American prose and poetry from the period between the publication of Blake's *Songs of Innocence* (1789) and the death of Queen Victoria (1901). Using a specially developed poetry anthology, a selection of literary texts, and the 12 half-hour audio programs, students encounter the works of Wordsworth, Keats, Twain, Dickinson, Browning, Dickens, and other seminal writers of the 1800's.
NOW AVAILABLE

Social Sciences

The Constitution: That Delicate Balance
The limitation of presidential power by Congress, school prayer, abortion, and criminal justice versus a defendant's right to a fair trial are among the current issues that are the focus of the 13 one-hour video programs and texts. National leaders engage in intense debate as they examine the Constitution's role in today's complex society. NOW AVAILABLE

Congress: We the People
The historical development of Congress as well as lobbying, constituent relations, ethics, lawmaking, the courts and the media are examined in 26 half-hour video programs and a selection of texts. Host Edwin Newman provides an inside view of the U.S. Congress and the complex range of individuals, organizations, and processes it embodies. NOW AVAILABLE

▽
Political Science: American National Government
The American system of government — its principles, processes, relationships, and institutions — is the focus of this political science course. American government is analyzed in the context of the Western democratic tradition; and the distinctive features, possibilities, and limitations of our political system are examined. The 12 audio programs feature guest commentary by leaders from the fields of politics and law. AVAILABLE SPRING 1988

▽
Global Understanding: Contemporary Western Europe
How do the individual nations in Western Europe handle issues such as inflation, unemployment, immigration, energy supply and demand, social welfare, and national security? The 15 half-hour audio programs and text feature interviews with European citizens, policymakers, and government officials, and provide commentary by leading American and European scholars.
NOW AVAILABLE

▽
Global Understanding: The Challenge of China and Japan
The cultural, historical, and philosophical roots of Chinese and Japanese political systems are considered; and the different approaches of the two societies to social and economic problems are juxtaposed. Using the text and the 15 half-hour audio units, students gather insight from leading authorities and hear Chinese and Japanese citizens discussing such issues as educational reform, social welfare, energy, agriculture, defense policy, and foreign relations.
NOW AVAILABLE

Brain, Mind and Behavior
The role of the brain in vision, movement, sleep, learning, language, mental disease, aging and memory, addiction and other topics is explored in this course consisting of 8 one-hour video programs and a text. Advanced computer graphics, intimate case studies and accounts by the world's leading scientists convey the latest in brain research and its bearing on our understanding of human psychology.
NOW AVAILABLE

Seasons of Life: Psychology and The Human Life Cycle
Human behavior is examined through a life-span perspective in this introductory-level psychology course. Five one-hour video documentaries and a text use life histories to illustrate phases of development from birth to death; 26 half-hour audio programs take life cycle approaches to specific topics such as genetic influences, sexuality, marriage and parenting.
AVAILABLE 1989

▽
Introduction to Psychology
Examining the complexity of human thought and behavior, this audio course aims to introduce the student to a wide cross-section of topics in the study of psychology. Commentary by leading psychologists on such diverse issues as thinking and problem solving, psychotherapy, dieting and weight control, language, and

Economics USA
This introductory-level economics course examines the principles of macro and microeconomics through major economic events such as the establishment of the Federal Reserve, the breakup of AT&T, and the deregulation of the airline industry. Absorbing documentary footage, interviews and scholarly analysis are integrated in 28 half-hour video programs and accompanying print materials. The course is designed as a one-semester survey course or, with the addition of 28 half-hour audio programs, it can be taught as a one-semester macro *or* micro course. NOW AVAILABLE

▽
Introduction to Sociology
This course examines a broad range of human social relationships and social structures, and the many forces— historical, cultural and environmental — that shape them. The 13 half-hour audio programs and print materials define the discipline of sociology and take an in-depth look at such topics as the socialization of violence, the consequences of divorce, the influence of media on societal values, and support systems for the elderly. NOW AVAILABLE

▽
Sociology: Marriage and the Family
Few topics are more popular in conversation and in the mass media than the American family. Through 12 half-hour audio programs and a text, this course looks sociologically at definitions and varieties of families, explores the family life cycle, and examines some of the problems facing the contemporary family including stress, divorce, and the role of the elderly. AVAILABLE FALL 1987

The New Literacy: An Introduction to Computers
An overview of what the computer is, how it operates, and what it can and cannot do is provided in 26 half-hour video programs and a choice of texts. This course introduces the burgeoning field of computers: system design and programming, data communications, office automation, microcomputers, computer files, and databases.
NOW AVAILABLE

Introduction to Modern English and American Literature II: The Twentieth Century
This second in a two-course sequence covers representative works of 20th-century English and American literature. The print materials and 12 half-hour audio programs first introduce students to influential figures of literary modernism (Yeats, Hemingway, Frost, Woolf, Faulkner), and then examine some distinctive voices of postmodernist writers from World War II to the present (Malcolm X, Alice Walker, Philip Roth, Elizabeth Bishop, and others). AVAILABLE SPRING 1988

The Write Course
This course uses the process approach to provide students with the expository writing skills they need to continue their college careers and to write effectively in their jobs. The 30 half-hour video programs and text advance through many stages of the writing process — prewriting, drafting, revising and editing — with practical advice from contemporary authors. NOW AVAILABLE

Basic Concepts of Music
This introductory survey course presents basic concepts in music through a brief chronological overview of Western music. Theory, stylistic elements, and history are integrated into a logical sequence of ideas; and concepts are illustrated in the audio programs with familiar examples from both classical and popular music. AVAILABLE 1989

French in Action
This two-semester course uses an original romantic comedy filmed on location in France to provide an in-depth introduction to the French language and culture. Entirely in French, each of the 52 half-hour video programs presents an episode of the story, followed by a variety of images drawn from the French-speaking world that illustrate and explain its content. The video programs are accompanied by 52 audio lessons, workbooks for each semester, and a textbook. AVAILABLE FALL 1987

A History of Western Art
Western European painting, sculpture, and architecture from ancient Greece to the present are examined in 9 one-hour video programs and a new text/study guide that is tied to several widely-used art history textbooks. Moving chronologically and with attention to cultural context, each program presents two major works of art illustrative of an historical period. AVAILABLE 1990

The Western Tradition
Based on the classroom presentations of Dr. Eugen Weber at UCLA, this two-semester video course spans the history of the western world from antiquity to the present. The first semester covers pre-western civilizations to the Middle Ages; the second begins at the end of the Middle Ages and continues to the present. Each course semester is composed of 26 half-hour video programs with texts. AVAILABLE 1989

The Africans
The coexistence of three legacies — an indigenous heritage, western influences, and an Islamic culture — are examined by Dr. Ali Mazrui and other noted scholars to explain the diversity of the continent and the African people. Nine one-hour video programs, largely shot on location in Africa, a book of historical and contemporary writings, and a trade book provide a view of Africa from the inside looking out. NOW AVAILABLE

Legacies: An Introduction to the History of Women and the Family in America, 1607-1870
The history of women and the family in the United States from English settlement to the Civil War is covered in this one-semester course that includes 18 half-hour audio programs, a student source book and text. The audio programs include discussions with leading scholars of women's and family history, as well as readings from primary sources including diaries, letters, and court documents. NOW AVAILABLE

Philosophy: Ethics in Business
Examining the difference between legal and moral issues in business from a philosophical perspective, this audio course uses actual cases to motivate interest in this timely subject. An anthology of contemporary readings accompanies 12 half-hour audio programs featuring scholarly discussion and dramatic vignettes that focus on real-life applications of philosophical principles. AVAILABLE SPRING 1988

Ethical Decision-Making in America
This 13-unit video course in moral reasoning and applied ethics illustrates the process of recognizing, defining, and analyzing ethical issues; and the application of that process to professions such as medicine, the military and business, and to contemporary social issues. AVAILABLE 1990

American History, 1492 To the Present: The Origin and Growth of the United States
The first semester of this sequential survey of American history examines themes from the English settlement at Jamestown to the Civil War. The second semester begins with reconstruction of the South after the war and extends to the present. Each semester consists of a text, supplementary readings, and 13 or 15 half-hour audio programs that blend commentary by noted scholars with music, dramatization and narration. NOW AVAILABLE

History of the Nuclear Age
Using an interdisciplinary approach, this course covers the period from the Manhattan Project to the present, exploring the origins and evolution of nuclear weapons, strategy and policy. The 13 one-hour video programs and text/anthology present a balanced, historical account of the past, while also addressing a framework of ongoing issues that affect the present and future. AVAILABLE 1989

drug addiction. Highlight the 13 half-hour audio programs that supplement printed course materials. NOW AVAILABLE

New Directions in Archaeology
Archaeological sites world-wide, including the Copan Archaeological Project in Honduras, are the focus of this introductory course in archaeological theory and method. The 8 one-hour video programs and text examine social, political and environmental influences; how human beings organize themselves; and how the archaeologist gleans this kind of information from the archaeological record. AVAILABLE 1990

Science and Mathematics

The Mechanical Universe . . . and Beyond
This year-long introductory physics course presents the basic ideas of physics, including the history of how they were discovered, and the spirit and methods by which science operates. The first semester focuses on classical mechanics, including the laws of motion discovered by such intellectual giants as Galileo, Kepler, and Newton. The second semester covers electricity, magnetism, waves and optics, heat and thermodynamics, relativity and modern physics. Each semester includes 26 half-hour video programs and two texts, one for science and engineering majors and one for non-science majors. NOW AVAILABLE

Planet Earth
Seven one-hour video programs and a text trace the formation of the solar system and evolution of the earth, leading students through the theories behind the earth's layers, continents, resources and climate. Earth's relationship to the sun and other planets, and its prospects for the future, are discussed by leading scientists. NOW AVAILABLE

The Chemical World
This introductory chemistry course for non-science majors is designed to teach students about the principles of chemistry and about the way chemists work and think. The course is composed of a text and 26 half-hour video programs that use real-life footage, laboratory experiments, demonstrations, and animation, to show the methodology of scientific inquiry. AVAILABLE 1990

Nutritional Sciences: Nutrition Today
This audio course presents the basic concepts that constitute the study of human nutrition. Topics include nutritional needs and assessment, weight control, the effects of various food components on health, and special concerns at various stages of life. AVAILABLE 1989

For All Practical Purposes: Introduction to Contemporary Mathematics
The pervasiveness of mathematics in today's world is demonstrated in five areas: statistics; management science; social choice; computers; and size, shape and growth. The 26 half-hour video programs and text introduce mathematical concepts and quantitative methods in the context of their application to contemporary issues. AVAILABLE JANUARY 1988

College Algebra
Utilizing the techniques and problem-solving methods of elementary mathematics, this course introduces the more abstract reasoning required for the study of higher mathematics. The 13 half-hour audio programs provide an important tutorial element, with question-and-answer sessions leading students through problems and helping them to avoid possible misconceptions. AVAILABLE FALL 1987

Principles of Statistics
This audio course is intended to introduce students with limited mathematical background to the basic ideas and techniques of analyzing data for the purpose of making decisions. Graph-making as a first step gives students a chance to see the results of experiments come to life; then, calculation is used to confirm or refute first impressions. AVAILABLE 1989

Introduction to Data Analysis
Reflecting the idea that statistics require an understanding and analysis of data, this course gives more attention to description and collection of data than is typical. The text and 26 half-hour video programs also reflect current thinking in the discipline by emphasizing the relevance of statistics and by highlighting contemporary applications. AVAILABLE 1990

Introductory Calculus
Interactive technology is being employed to create this calculus course. Using a newly developed modem that permits simultaneous transmission of both voice and data over one telephone line, students and their instructor communicate by voice, by text, and by images on their computers. Course materials include a text and computer software. AVAILABLE FALL 1988

For more information . . .

Return to: The Annenberg/CPB Project, 1111 16th St. N.W., Washington, D.C. 20036

☐ Send me more information about the following courses, demonstration projects, research studies:

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☐ Send me the funding guidelines

Name _____
Title/Dept _____
Institution _____ Phone _____
Address _____
City _____ State _____ Zip _____