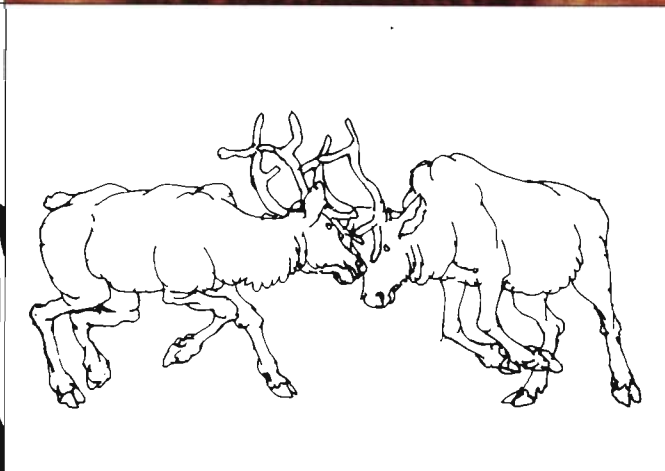
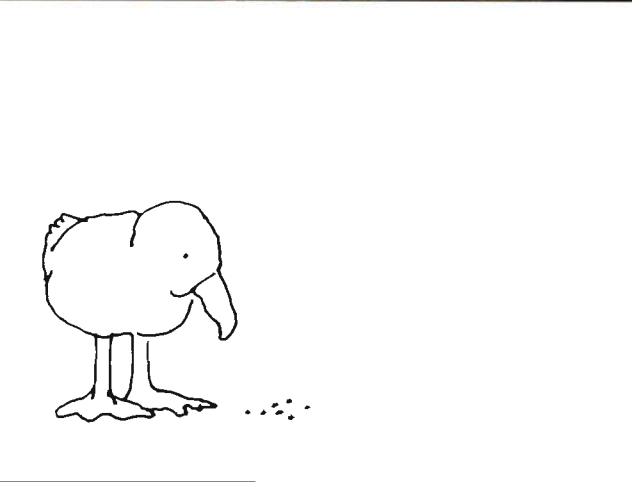
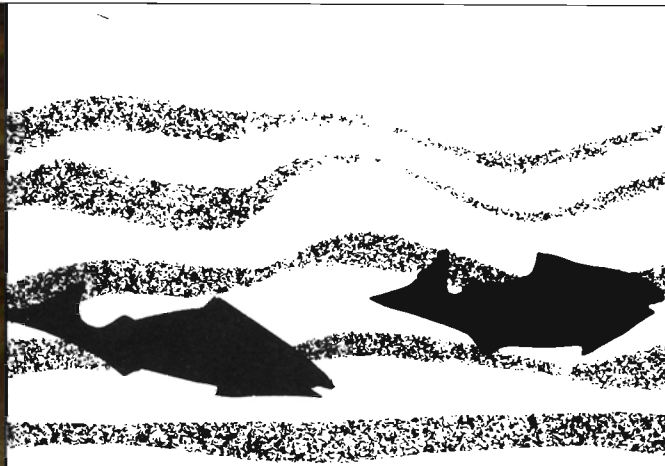


MAN: A COURSE OF STUDY





MAN: A COURSE OF STUDY

A flexible course for upper elementary and middle school children developed by the Social Studies Curriculum Program of the Education Development Center, Inc., Cambridge, Massachusetts, under grants from the National Science Foundation. Disseminated by Curriculum Development Associates, Inc., Washington, D.C.

Course Director: Peter B. Dow

Consulting Scholars: Jerome S. Bruner
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Harvard University

Irven DeVore
Professor of Anthropology
Harvard University

Asen Balicki
Professor of Anthropology
University of Montreal

What is human about human beings?

How did they get that way?

How can they be made more so?

These three questions define the concerns of a new social studies course currently being introduced in schools across this country and abroad. Jerome Bruner, Director of the Center for Cognitive Studies at Harvard University, sketched the broad outlines of this course in 1965:

The content of the course is man: his nature as a species, the forces that shaped and continue to shape his humanity . . .

After shepherding the course through seven years of development, pilot-testing and evaluation, Bruner observed in early 1970:

We want to give children some appreciation of what a fantastic species man is — that he's not helpless, that he's capable of growth, of amplifying his own powers by culture.

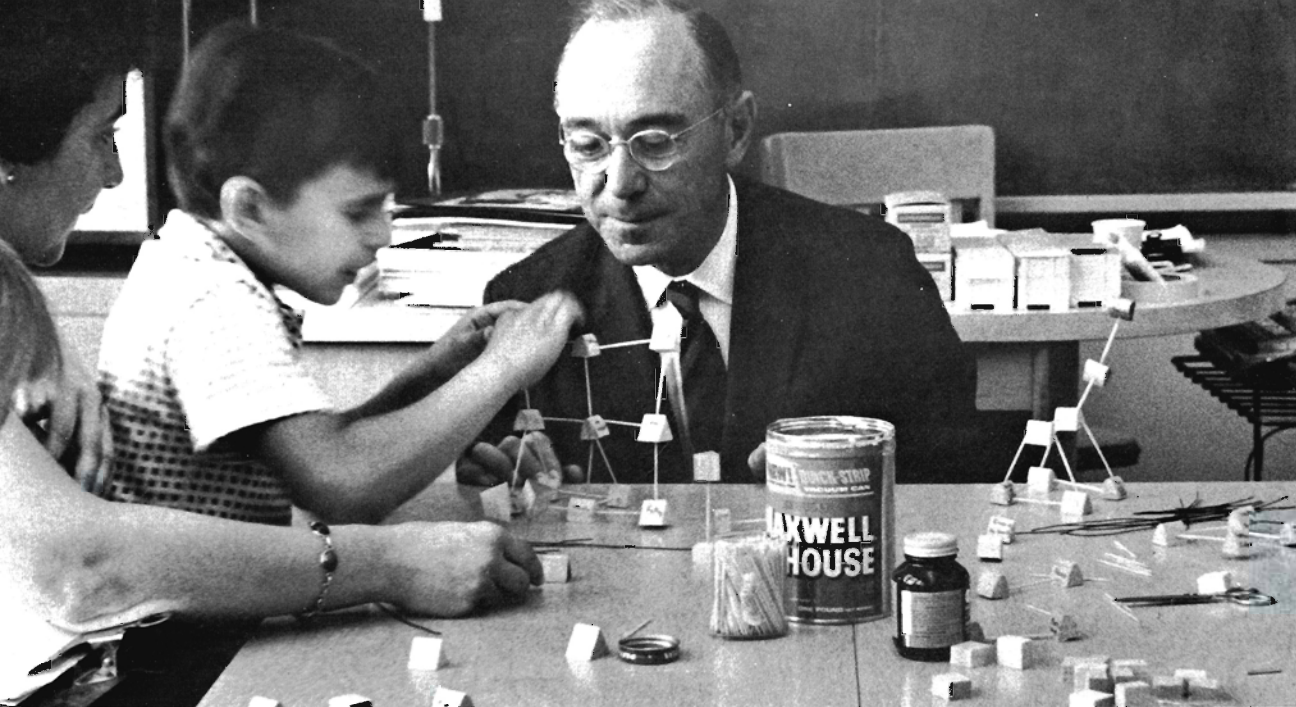
The student materials for this course have been created from ethnographic film studies and field research, heretofore the province of college and graduate students. Much of the data represents the most recent findings in the behavioral sciences. Using these sources, classroom teachers and students explore together the roots of man's social behavior through the study of selected animal groups and an intensive examination of a remote human society very different from our own.

Fundamental questions about the nature of man are introduced by way of animal contrasts. A unit on the life cycle of the salmon introduces the study of generational overlap. By exploring

the behavior of a species in which, without parental protection, enough offspring survive for the species to endure, children encounter questions about the need for parental care in human beings. If salmon of the Pacific can live without parents, why are human beings born so helpless? This question, and others related to it, is the central issue of the salmon unit. Through film and field studies children become acquainted with the internal mechanisms by which the salmon is able to survive. In addition to many basic questions about human growth and development, this unit introduces the vocabulary and intellectual framework for the studies that follow.

The second unit, based on the ethological concepts of Lorenz and Tinbergen, focuses on the behavior patterns of herring gulls. This unit extends the discussion of parenthood by looking at a species whose family structure is strikingly similar to that found in human society: two parents usually mated for life and a small number of dependent offspring. The young, born relatively helpless, must still care for themselves by pecking on their parents' beaks to get regurgitated food. This instinctive behavior illustrates successful adaptation and provides a basis for distinguishing between instinctive and learned behaviors. The herring gull study helps children examine behavior, including that of humans, by seeing how learning relates to adaptation, how the structure of an organism reflects its function, and how all behavior must be understood in terms of requirements for survival.

Free-ranging baboons are the subject of the third unit. This study is based upon the field research of Sherwood Washburn and Irven



DeVore in the Amboseli and Nairobi Game Parks in Kenya during the late 1950's and early 1960's. This research brought out the role of dominance in defining group structure and individual behavior of baboon troop members. Infant rearing, food gathering, defense against predators, intergroup relations and communication are studied as a background against which to examine and contrast human social behavior. Baboon behavior raises some interesting questions about the functions of dominance, aggression, sharing and reciprocity, territoriality and exchange, and various interpersonal relationships within small groups, human and nonhuman alike. As the only other ground-adapted primates, baboons offer an unusually provocative contrast for examining the child-rearing practices and social behavior of man.

The culminating unit of MAN: A COURSE OF STUDY investigates the concept of culture through a study of the Netsilik Eskimos, the purest surviving example of traditional Eskimo culture. Drawing materials from the writings of the famous Danish explorer Knud Rasmussen, and film-based ethnographic studies carried out by Asen Balikci between 1963 and 1965, this unit is probably the most complete record of another culture ever introduced into elementary schools. Here children begin to discover the meaning of man's humanness by examining the similarities and differences between themselves and a group whose lives appear so different from their own. Subsistence activities, child-rearing practices, the structure of a family and

the behavior of its members, the cooperative activities of a society, its values and beliefs are studied in an attempt to understand the cohesiveness of culture and its universal aspects. By the end of this course students have developed a vocabulary for thinking about the distinctiveness of man and an increased sensitivity to the common humanity that all cultures share.

The aims of MAN: A COURSE OF STUDY can be summarized briefly:

- To give pupils confidence in the powers of their own minds
- To give them respect for the powers of thought concerning the human condition, man's plight and man's potential
- To provide them with a set of workable models for analyzing the nature of the social world in which they live, the condition in which man finds himself
- To impart an understanding of the capacities of man as a species in contrast to other animals
- To instill concern for the human condition in all its forms, whatever race or culture

The development of MAN: A COURSE OF STUDY has been strongly influenced by Jerome Bruner's emphasis on the power of organizing ideas to shape and stimulate thought. "The curriculum," says Bruner, "should be determined by the most fundamental understanding that can be achieved of the underlying principles



that give structure to that subject. The best way to create interest in the subject is to render it worth knowing, which means to make the knowledge gained usable in one's thinking beyond the situation in which the learning has occurred." These principles guided the developers of MAN: A COURSE OF STUDY at every stage as they created materials, framed questions and presented ideas to help students give meaning to the immense diversity of human experience.

THE CHALLENGE FOR TEACHERS AND COMMUNITY

MAN: A COURSE OF STUDY makes new demands on teachers and on the teachers of teachers. The subject matter and processes of teaching drawn from current research in learning and in the behavioral sciences establishes the need for the continuing education of teachers. Classroom situations occur in which the materials raise questions that are open-ended and open-minded. Thus, controversial value issues related to the study of reproduction, aggression, religion, life and death, may become topics of classroom and small group discussions. In workshops, teachers explore and learn to handle in a non-judgmental way value issues which are formatively taught in the home. Teachers are challenged by new teaching-learning strategies and by opportunities to be experimental in developing new roles for themselves. This serves to enhance divergent thinking as well as cognitive and affective learning on the part of the children.

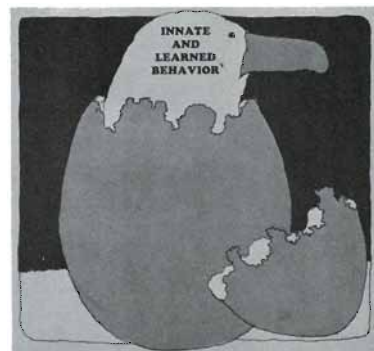
To help teachers respond to these new challenges and to encourage professional growth, staff development workshops for MAN: A COURSE OF STUDY involve scholars, readings, films and tapes. Teacher education sessions built around issues of content and pedagogy constitute the substance of the workshop series that may be run concurrently with the teaching of the course. The design of the workshops and teacher curriculum is flexible enough to permit a range of instructional and planning options. With modification it is being utilized in pre-service instruction in college curriculum and methods courses, and in adult or community education programs.

The challenge of MAN: A COURSE OF STUDY is even more powerful than pre-service and continuing education of teachers suggests. MACOS demands community and can be most effective when introduced simultaneously to children and adults.

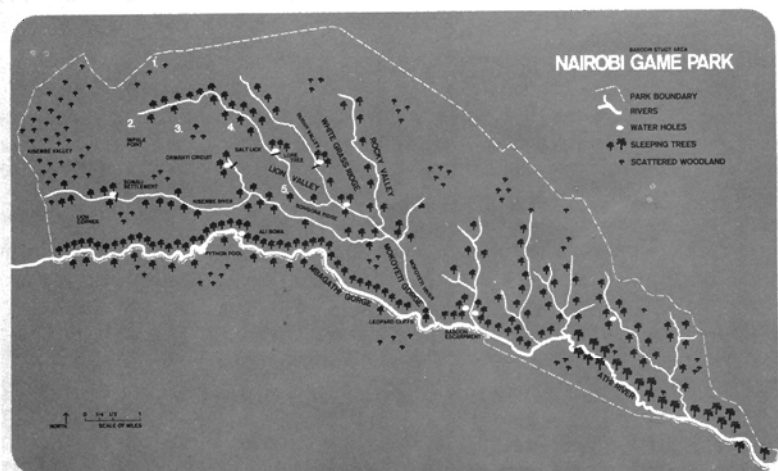
MATERIALS OF THE COURSE

One test of a good social studies course is the degree to which it stimulates enthusiasm and rigorous thought in all students, not just students with particular interests and abilities. MAN: A COURSE OF STUDY provides a range of media, styles and complexity in materials broad enough to involve children of varying aptitudes and interests in the ideas and problems of the course. The materials fall into three categories: film and other visuals, written materials, and enactive devices such as games.

(cont'd page 5 following centerfold)



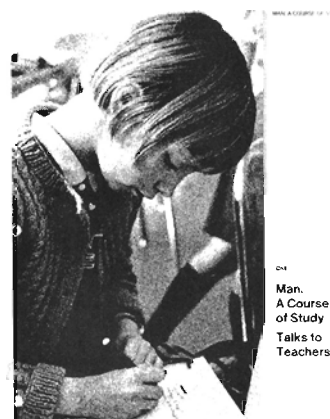
booklets



map



record



teacher's guide

Film is the primary source of data in the course. The film is in color, with natural sound and a minimum of commentary. It is used largely as a simulation for field observations. Children gather information and form questions on the basis of repeated viewings in small or large groups. Twenty-three booklets of differing styles and purpose replace the usual textbook. Some booklets supply data for various units. Others stress concepts such as adaptation, and their use spans several units. In addition, there are field notes, journals, poems, songs and stories. Games, construction exercises, and observation projects are other learning activities that permit children to work with a minimum of teacher direction in small groups and individually. The design of all materials stresses Jerome Bruner's emphasis on the three ways of obtaining knowledge — the enactive, iconic and symbolic modes of expression.

The materials intentionally provide content overlap. Often information and concepts are embedded in several media, each contributing to the total learning. Extensive evaluation of the course shows that children learn more when an idea or fact appears in several forms, especially if one of them is film.

The materials of MAN: A COURSE OF STUDY create an opportunity for students to gather and organize data in ways similar to those of a social scientist. But this emphasis does not obscure the affective domain — the emotional, artistic and spiritual life of the child. Stories and poems were selected with an eye to drama, pathos and humor. The artistry of the films, the careful integration of text and illustrations, and the ingenuity of the games and activities provide an atmosphere in which children can openly express their feelings and can create materials to reflect their own thoughts, their interests and their artistic perceptions.

FILMS

- "The Life Cycle of the Salmon" (10 min.)
- "Herring Gull Behavior" (10 min.)
- "Animals in Amboseli" (20 min.)
- "The Younger Infant" (10 min.)
- "The Older Infant" (8 min.)
- "The Baboon Troop" (22 min.)
- "Miss Goodall and the Wild Chimpanzees" (29 min.)
- "Fishing at the Stone Weir" (30 min.)
- "Knud" (31 min.)
- "Life on the Tundra" (14 min.)
- "At the Caribou Crossing-Place" (29 min.)
- "Autumn River Camp," Part I (26 min.)
- "Autumn River Camp," Part II (32 min.)
- "Winter Sea-Ice Camp," Part I (32 min.)
- "Winter Sea-Ice Camp," Part III (30 min.)
- "The Legend of the Raven" (20 min.)

BOOKLETS

- Life Cycle
- Animal Adaptation
- Information and Behavior
- Innate and Learned Behavior
- Natural Selection
- Structure and Function
- Salmon
- Herring Gulls
- The Observer's Handbook
- Animals of the African Savanna
- Baboons
- The Baboon Troop
- Baboon Communication
- The Field Notes of Irven DeVore
- A Journey to the Arctic
- Songs and Stories of the Netsilik Eskimos
- Antler and Fang
- The Arctic
- On Firm Ice
- The Many Lives of Kiviok
- This World We Know
- The True Play
- The Data Book
- 7 Additional Animal books

OTHER MATERIALS

- Words Rise Up (2-12" records)
- In the Field (2-7" records)
- 5 filmstrips
- 23 maps, posters and photomurals
- 3 educational games
- Eskimo cards

TEACHER'S GUIDE

9 books containing background information, bibliography, suggested lesson plans, suggested topics for inservice workshop sessions, and strategies for evaluation (770 pages).

EVALUATION

MAN: A COURSE OF STUDY has been submitted to a systematic and thorough evaluation in the field. Previously, in the development of new curricula there have been few such efforts to assess the impact of materials in real-life situations and to take findings of research into account in revising course materials.

Evaluation of early pilot versions of the course revealed problems in several suggested lessons and in some student materials. The curriculum developers based their revisions on evaluations and field-tests conducted in both 1967-68 and 1968-69. The current edition has emerged from these large-scale evaluations as a unique curriculum.

TEST PERIOD: 1967-68

1968-69

METHODS AND PROCEDURES

Number of Classrooms:	123 classrooms in 16 school systems across the country in both urban and suburban settings.		
Number of Students:	3003		
Demographic characteristics:	51% Male	3% Fourth grade	
	49% Female	54% Fifth grade	
		36% Sixth grade	
		7% Ungraded	
Testing of students:	Pre-post test containing multiple-choice and open-ended items on information, concepts and attitudes. Three student checklists covering involvement and participation, classroom environment, success of various media, personal attitudes and learning styles.		
Selected student interviews:	127 students in 19 classrooms. Local students were seen an average of five times.		
Selected teacher interviews:	Beginning and end-of-year interviews with teachers in classes where students were also interviewed.		
Classroom observations:	109 observations in 29 classrooms taught by 7 men and 18 women.		
Interviewers and observers in the field:	7 evaluation staff members; other observations by course developers supervised by evaluation staff.		
Teacher evaluations of the course:	70 questionnaires returned from teachers in tested classrooms.		
Methods of evaluation:	Statistical analyses of objective instruments and clinical interpretations of interviews and descriptive materials.		

TEST RESULTS

- ☐ Children acquired and retained a significant amount of information and developed an increased ability to reason.
- ☐ Boy-girl differences traditionally associated with school work essentially disappeared in MACOS classes. Boys and girls had similar reactions to the classroom environment and to learning styles and materials.
- ☐ Among the most remarkable of the findings is that individual differences are not associated with students' intelligence or previous knowledge of the area. Clearly, those students with poor academic background, found so often in the inner city, gained in learning and mastery over the ideas and concepts as much as those whose beginning positions were much stronger. On the other hand, the improvement of these students was not se-

cured at the sacrifice of the most knowledgeable students, for their gains were equally large.

- ☐ The differences that were found among school systems at the beginning of the program tended to be reduced by the end of the course.

FILMS IN INSTRUCTION

- ☐ The relevance of MAN: A COURSE OF STUDY to the lives of children was demonstrated by the way they compared episodes in the films with their own behaviors and feelings.

On the films, I liked the Eskimos best because . . . they seemed more like us. They sort of gave me a picture of my family if I were out there . . . they looked sort of happy together.

- ☐ Boys and girls sensed the power of ethnographic films to make unfamiliar human habits less strange and thus acceptable as part of the range of human behaviors that arise from different ways of life.

There were a lot of things I didn't like . . . Like when they took the animal apart . . . skinned him . . . but there's no reason why you should change it, because it's true and that's what they did.

- ☐ Films have special value for inner city classes.

. . . you learn more about it than reading. You see how they act and in reading you just see the pictures. Like the salmon. (In reading) you don't see the way he acts, how fast he goes. (You have to) make believe the water's flowing by.

READING MATERIALS

- ☐ Children are more eager to read the booklets of MAN: A COURSE OF STUDY than traditional classroom texts.

I like the booklets. They took a very hard question and broke it up . . . See, they had a question at the beginning and then they had a story to tell you about the question.

- ☐ Because the course is dependent upon the sharing of learning among youngsters, children who do not read or write easily can view or listen and can express their thoughts in group discussions.

- ☐ The combination of text and illustrations used in MAN: A COURSE OF STUDY appeared to facilitate reading and understanding, for children frequently referred to the illustrations as putting into pictures the ideas of the printed word.

OTHER FINDINGS

- The reinforcement of an idea through various media and creative exercises resulted in a substantial gain in learning. Active involvement in projects such as creating environment boards became powerful motivators of pride in work and interest in course themes.

I think it's partly because there's all the materials like the films, the booklets, and you know, I could keep on going. It makes it more interesting and easier to do instead of: "Here is the book. Read." (A typical student comment.)

- Group participation and interaction seemed especially valuable as a device that elicited expansion of children's ideas. Students recognized and expressed the value of small-group discussion.

"If we worked in a big group we couldn't say whatever we wanted to say. But in the small ones we could say, and then we could build into it . . . and then we could tell it to everyone."

- Checklist results showed group work and the didactic pattern of working with one friend were overwhelmingly preferred to solitary endeavors.
- Communication skills were viewed by teachers as major growth areas in change in child learning over the course of a year.
- Students felt they learned most from films and booklets, that learning was easiest through films, and that taking part in class discussions was important.
- Hunting games in MAN: A COURSE OF STUDY were highly successful as teaching devices, particularly when students were encouraged to reflect on their play, studying past games, and planning future ones.
- Interviews with youngsters revealed a growing sense of the interdependence of species members, particularly among primates, and a greater appreciation of human needs, particularly in the areas of cooperation, nurturance, protection and the sharing of responsibilities.

EFFECTS ON TEACHING

- Positive changes observed in teaching style were attributable to the methods and materials of the course. Teachers became less the focus of the classroom as students grew in ability to express ideas and to share and discuss the material with one another.
- In-service workshops were viewed by teach-

ers as essential to their use of the course, enabling them to share and experiment with new methods to which they responded with enthusiasm.

I'd say the best part of it is the workshop we have to take. You get in with a bunch of people, and the excitement is contagious. It goes around and you get excited. Somebody says, "Well, I did it this way." You go home and you think, "What different way can I do it?"

- Just as student work promoted classroom interaction, the teacher workshops provoked serious consideration of the substantive and pedagogical issues of the course and promoted reflective thought.

Somehow I'm doing more evaluating of my methods . . . it's so firmly built into this. Whenever you go to a workshop with other teachers, it's required of you to think of what you're doing, and I have — a lot. You are asking yourself, "What is important to me?"

- Over half of the teachers related the course to science; all related it to the various language arts, using it in connection with reading and writing lessons.
- Teachers felt that the materials suited all ability levels and were eminently useful in a heterogeneous grouping.
- Teachers found the course a great motivator of interest and participation on the part of less able students.

CONTINUING RESEARCH AND PROGRAM DEVELOPMENT

- The Education Development Center and Curriculum Development Associates are continuing to promote and engage in research and development activities. The results of these efforts are being made available to users of the program on a continuing basis. Two recent examples of this are Teacher's Guide #9, *Evaluation Strategies*; and *Curiosity, Competence, Community Man: A Course of Study: An Evaluation*.

DISSEMINATION AND TEACHER EDUCATION

In the past and currently MAN: A COURSE OF STUDY is available, under controlled conditions, to schools, colleges and universities. School systems now teaching the course in pilot programs may expand MACOS throughout their districts as they expand their teacher training. Curriculum Development Associates offers consulting services and staff to help plan these workshops. Schools desiring to introduce or

adopt MAN: A COURSE OF STUDY will be able to purchase materials by planning to enroll participants in a National Science Foundation-sponsored summer institute or in approved area or local workshops established by universities or school systems in cooperation with Curriculum Development Associates. Dissemination of the course will continue to emphasize quality control. The first requisite of this will be compliance with teacher education requirements.

Just as classroom and workshop experiences with MAN: A COURSE OF STUDY affect the behavior of children and teachers, so a new method of dissemination is planned to create a model of professional responsibility for achieving change and innovation in schools. University-based Regional Centers (supported by the National Science Foundation) at selected sites throughout the country have major responsibilities for implementation activities which encourage the introduction of MAN: A COURSE OF STUDY. The Regional Centers have as their charge:

- ☐ To provide a regional source of general information about the course
- ☐ To encourage participation in pilot programs
- ☐ To aid schools in selecting participants for summer institutes
- ☐ To prepare workshop leaders for local schools or areas in summer institutes
- ☐ To help school districts organize staff development programs
- ☐ To support the local workshop programs during the school year
- ☐ To encourage colleges and universities to plan preservice and inservice training programs
- ☐ To train staff members from satellite institutions conducting other summer institutes
- ☐ To maintain close liaison with Curriculum Development Associates and to coordinate professional dissemination efforts on a national and international level

In addition to the existing Regional Centers, Curriculum Development Associates is in the process of creating a network of affiliated

teacher education institutes throughout the United States and abroad to meet the growing needs of school systems and universities. Colleges or faculty members interested in the establishment of a center for research and/or teacher education programs with MAN: A COURSE OF STUDY should contact Curriculum Development Associates at the address below.

Educators have often been stymied by the lack of materials through which new ideas in the social sciences can be explored at the preservice level. The Regional Centers and Curriculum Development Associates respond to this need by helping colleges and universities introduce MAN: A COURSE OF STUDY materials into courses on social science curricula and methodology, in the philosophy of education, and in the behavioral sciences. MAN: A COURSE OF STUDY may also be used in laboratory schools and in observation and intern or student-teaching programs.

Because of the evocative nature of the material, teachers participating in MAN: A COURSE OF STUDY workshops will be challenged and motivated toward greater personal professional development. From the beginning, teachers have brought to the program their own experience and contributions. MAN: A COURSE OF STUDY and its unique dissemination plan may become a model for other such efforts, but it should be only the starting point for consideration of the needs and opportunities for change in our educational system with teachers as the prime movers.

INTRODUCING THE COURSE

Schools, colleges and universities interested in MAN: A COURSE OF STUDY can obtain information on enrollment in teacher-training institutes, consultation service on creating on-site year-round staff development programs, community involvement projects and materials from Regional Centers in their area (see centerfold) or from:

Curriculum Development Associates, Inc.
Suite 414
1211 Conn. Ave., N.W.
Washington, D. C. 20036 202-293-1760



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