This report is primarily a statement of needs, which will hopefully be used as a basis for formulating a national policy that places a high priority on population education. It sets forth a definition of population education, its relationship to other parts of the curriculum, general content and objectives, and some observations on the present status and future directions of population education in the United States. Throughout, there is an emphasis on population education as a process of understanding population characteristics, processes, and changes, and the interaction of these phenomena with individual lives—as opposed to viewing it solely as the cause of environmental degradation. The report concludes with a memorandum to the Commission setting forth the specific efforts that increased funding might support. These include: research and development centers; materials development; teacher training programs; and, model programs. The appendix consists of a preliminary list of available instructional materials and children's books, as well as a list of institutions concerned with population education. The final report to the Commission will be completed in September 1971. (JLB)
A number of those who have appeared before the Commission have urged consideration of population education through various agencies of the society, including and especially the schools. Before discussing what population education is and might be, it is important to keep in mind that recommending an education program in response to the identification of a national problem is a uniquely American phenomenon dating back at least to the early years of this century and the influence of John Dewey.

Consider the programs that educators are now being urged to include—-or have recently included—in the school curriculum: urban studies, black studies, area studies (now sometimes referred to as inter-cultural studies to include problems of blacks and other minority groups in the United States), drug education, driver education, sex education, family life education, environmental education, and now population education. Each of these proposed programs has its own history, its own body of adherents. It is easy to argue that each should be—-must be—-in the curriculum if we agreed with Whitehead that "there is only one subject-matter for education, and that is Life in all of its manifestations." But the length of the list (which could be expanded even further—health education, nutrition education) by its very nature makes it difficult for educators to decide what to do and how to do it, short of revamping the entire
educational system. Thus, if we are not farther along than we are in the development of population education, it is well to remember the setting and its problems.

What is population education?

Population education may be defined as the transmission of knowledge about and methods of analyzing population processes, population characteristics, the causes of population change and the consequences of that change for the individual and for the society. It is a process of education whereby the student learns that individual acts, such as having children or moving from one place to another, have demographic consequences. These in turn have implications—both social and biological—for the family and for the society as a whole, implications which affect the individual thereby completing the circle.

Population education, as defined here, is concerned primarily with programs in the formal school system, and especially the elementary and secondary school. The definition recognizes that time spent in the formal classroom or in school-related activities is only part of the educational process. Educators must, therefore, consider the nature and context of the students' non-formal education about population, planning school programs accordingly.

The goal of population education is to get concepts and materials related to population into the formal school curriculum in order to educate the next generation, to assist them to make individual and collective decisions about population matters utilizing appropriate information and analytic skills. For the family the goal can be stated as responsible fertility behavior, for the community, as responsible decisions on population and public policy.

Population education programs may include concepts and subjects now taught in many different disciplines, such as biology, geography, history,
family life and sex education, sociology and demography. But because it is phenomenon-oriented or problem-oriented rather than discipline-oriented it is misleading to think of population education belonging more or less to any of these fields. Rather than the random sampling of knowledge that characterizes much of discipline-oriented study, population education requires a statement of precise objectives that provides a set of criteria on which to decide what knowledge and skills will be drawn from which disciplines in order to most clearly elucidate the population phenomena.

Population education is meant to educate, not to propagandize or indoctrinate. Population education views population less as a "problem" to be solved, than as a "phenomenon" to be understood. This understanding will ideally enable the students to perceive when and if the United States has "population problems," what the nature and magnitude of the problems might be, and what governmental policies and individual actions might be necessary in order to deal with them. Population education, as suggested earlier, encourages the individual to view himself within the context of a broad range of familial and societal relationships which his actions and his life style affect and are affected by.

Having gone this far in "defining" the field, a few flags of caution must be raised. It was less than 10 years ago that Phillip Hauser, writing in the *Teachers College Record*, first identified population as an area that should be of interest and concern to educators. Thus the history of the idea of "population education" is short. And, needless to say, one article does not create a mass movement--the Hauser one is no exception. It is only in the last two or three years that serious attention on any scale has been paid to the problem of population education in the United States. The number of persons working in the field is small--perhaps no more than
25 full time equivalents for the whole country. The number of universities delineating and developing the idea number less than a half dozen. And it was not until this month--May 1971--that the first two formal centers with a significant interest in population education in U.S. schools were inaugurated--at North Carolina and at Columbia's Teachers College. Thus it should be clear that the definition offered above is not something that is fixed, but is rather a shorthand awaiting further clarification.

Population education, sex education and family life education

Population education is not sex education, and it is not family life education. It differs from these two fields in that the demand for population education arises from a different set of historical circumstances and in response to a different set of problems. The Commission's own Interim Report provides the rationale for population education in noting that "the cumulative nature of population growth requires us to take the long view. The children born in this decade will be the parents of most of the children born in the year 2000." (5) If these children are to make free and rational decisions concerning their future they must be provided with the knowledge and the tools necessary for decision making.

Sex education developed in response to a concern for changing sexual mores and behavior, and in reaction to an increase in the incidence of venereal diseases and out-of-wedlock pregnancies.

Family life education grew out of a recognition that much poor academic performance among students arose as a consequence of personal and family conflicts, and out of growing evidence of family instability.¹

The content of sex education includes male and female anatomy, the physiology of reproduction, psychological differences between the sexes, and ethics of sexual behaviors.²
The content of family life education includes facts, attitudes, and skills related to dating, marriage, and parenthood.³

While recognizing that both of these statements of content are open to debate by specialists, what can be generally stated is that both fields emphasize the individual. The concern is with interpersonal and familial competence and is on the self-worth of individual. Population education on the other hand is concerned with the interaction between the individual and the society in response to a perceived problem which is different from the problem that gave rise to the other fields. In noting the differences between the fields it should be emphasized that each is important in and of its own right, and that they are probably complimentary. Aspects of sex and family life education, such as human reproduction, may be necessary but are not sufficient for the development of population "literacy."

The Content of Population Education: What is Population Literacy:

Although the boundaries that describe the field of population education are not clearly defined it is useful to try to describe what a student might be expected to know having completed a primary and secondary school program in population education.

He could be expected to have developed some basic understandings of demographic processes. As a result he will better understand why and how personal and societal decisions made today have an impact many years in the future, and the advantages and disadvantages associated with the small family norm for himself and for his community.

He could be expected to have developed some basic understandings of the interaction between population and public policy. As a result he will understand how various societal actions, such as a change in the role and status of women, affect and are affected by population policies, he
will understand the causes and consequences of urbanization, and the nature and rationale for his country's population policies.

Finally, he will have developed some basic understandings of the nature and consequences of human reproduction. As a result he will hopefully be in a better position to plan his family, making use of the services that are available to that end, if he so decides.

Population Education in the United States: Some Preliminary Observations

The following are some preliminary observations about the situation as is exists in the United States today. These will be tested and modified for the final report to the Commission.

1. Few educators seem to be concerned with population per se. Most of the concern among educators, where it exists, is crisis-oriented and stems from fears of environmental deterioration which are more often than not seen in one-to-one relationship with population growth. For example, the first objective of the population dynamics unit of the "Man and Environment" curriculum developed by Miami-Dade Junior College and very widely circulated by the U.S. Office of Education is "to make the student aware that overpopulation is the underlying cause of our environmental problems." 4

2. As the above quote suggests there is also a tendency, that can be seen in other curricula as well, to oversimplify what are fundamentally complex problems.

3. There is a tendency--sometimes open and sometimes not--to propagandize and indoctrinate toward a two child family norm. As one educator put it, "I support (a particular book's) 'coercive thrust' and believe it to be more realistic kind of reactant against current pronatalistic children's literature." 5

4. The emphasis in dealing with population is on growth rates and on
absolute size, which are almost always portrayed as bad. Other population characteristics—such as distribution, density, age structure—are given too little attention.

Just as there is no country in the world which one can point to as a model for others to emulate, so too is there no school system, state or local, which represents a population education model for the United States. Baltimore City Schools, with the assistance of Planned Parenthood of Maryland, developed a resource unit in 1967 for use in the social studies. But there is some evidence that teachers do not get to that part of the curriculum. This year Baltimore is again making a major effort in teacher training and unit development, the results of which will be eagerly awaited.

More than fifty teachers have participated during the summers of 1969 and 1970 in institutes sponsored by NSF at Utah State University. That program's emphasis on technical and substantive demography can be seen in the course outlines developed by the teachers in their individual schools.

That many teachers are anxious to learn more, and to teach more, can be seen from the large number of requests for information, and applications filed for the Utah State Institute. Another indication is the large number of applicants for the so-called Manressa workshop 1970, which required evidence of classroom work in population for application. But by and large their efforts have been personal and not diffused to others. And supplementary text and other materials for both teacher and student use are lacking.

It is often suggested by educators that textbooks are the curriculum. If so we still have a long way to go in the population field. Except in the most recent books—and then only in some—population material is highly descriptive and not analytic concerning the causes and consequences of population change. The discussion is not very extensive and often comes late in the book, which usually means that the teacher does not yet to it. This is especially so in the social studies and history areas.
No comprehensive curriculum plans with associated materials are yet available. Some that are just over the horizon are very ambitious with regard to trying to combine environmental and population concerns in one package, and seem to suffer many problems as a result.

Where materials do exist--the appendix offers a preliminary list of some already available or in process of development--they have been created without specific reference to their use in the schools. As a result they are less used than they might be. The type of packaged materials--texts, test items, teachers' guides, and supplementary materials--that seem to be of greatest interest and use to teachers do not yet exist. Where the use of materials is most clearly specified--as in the case of the unit in the Investigating Man's World series (Scott, Foresman) -- the use of population data is incidental to the purpose of the course. At present, therefore, we have a reasonable amount of material for a field so young, but it is not part of an integrated, graded and sequential population learning program.

Given the already crowded curriculum we do not see many population courses being developed at the pre-college level. We do see some attempt at infusing population concepts where relevant throughout the curriculum, whether the subject be compound interest in mathematics or the industrial revolution in history. A third alternative, the development of modules or units which replace existing units with different subject content, is being tried at Indiana in an effort to develop a unit for a twelfth grade "Problems of Democracy" course.

The strengths and weaknesses of the three approaches--both from the viewpoint of increased population learning, and easier access to the school--needs further exploration. In the end, a mixture of all three is likely to characterize population education programs.

The Future for U.S. Population Education

As soon as possible we need to identify and find the development of
a small number of university population education research and development centers that would devote significant human resources to defining the field and to developing materials and methods for their diffusion into the schools.

Funds need to be made available for the development of packages of materials—student and teacher texts and guides, test items, audio-visuals, etc.—for immediate use until more fully developed programs are articulated.

Since it is impossible to make all teachers competent in handling population materials a strategy for training a hierarchy of teachers within school systems must be developed to provide a broad range of competence to the system. Funds will be needed for support of pre-service and in-service training, summer institutes, etc.

State departments of education should be encouraged to identify one or more specialists to assume responsibility for coordinating state programs. Funds to train these specialists, and perhaps even to assist states in developing such a position, should be available.

Research on a wide variety of subjects should be initiated. More needs to be known about the students', teachers', administrators', and communities' knowledge of and attitudes toward population matters. This information is important for curriculum design and later program evaluation, and also for assessment of possible sensitivities in order to plan for them. Much more needs to be known about the development in the child of population-related concepts, such as family size. More also needs to be known about the influence of family size on family welfare, and about the psychological and economic value of children, among other important aspects of the knowledge base upon which education programs will rest.

Efforts to increase and improve communication between specialists and practitioners in the field will be needed to insuce effective and expeditious program development.
The funds that may be needed for these and other programs will be estimated for the final report to the Commission.

It is likely that a unit or office within the U.S. Office of Education will be needed to disburse special funds that may need to be appropriated by the Congress and to coordinate the use of funds already available under existing legislation. The unit for Environmental Education recently established under USOE's Office of Priority Management is not at present suited to the task; they have, in fact, said that population education is not part of environmental education.

It has been suggested by some that population education will be viewed as sensitive by segments of the U.S. population—notably some Catholics and some blacks. Since population education involves a consideration of alternative futures, a discussion of values is inherent in the program. However, the goal is not to be conclusion-oriented—i.e. "try for two"—but rather it is to be open-ended. The student is viewed as an inquirer. It may be impossible to be value free, but it is fully possible to be value fair. Thus, rather than trying to protect oneself against a charge of black genocide, for example, a unit should be devoted to discussion of the arguments surrounding the issue and to an examination of the values inherent in the different positions.

Last, but certainly not least, we will have to consider what are reasonable objectives for population education programs. We will have to define responsible behavior. And we will have to determine the extent to which schools can legitimately be expected to have an impact on changing behavior. Recent studies by Barnett and Swan suggest that knowledge and awareness of a problem do not necessarily lead to what might be considered responsible action in the face of the problem.

Despite these cautions school education programs can be helpful, if
properly defined and described, in creating an atmosphere and a forum where important public issues—such as population—can be discussed. With good planning and proper support we will be able to move ahead intelligently and expeditiously in planning such population education programs.

Schools tend to follow and respond to society's wishes rather than to lead. The educator, as indicated earlier, is pressured from many sides to add new programs to the school curriculum. Thus population education, an important element in a national policy, may be difficult to get into the schools until such time that a national policy is formulated which raises population to a high level of consciousness within the society as a whole.
Notes:


3. Ibid.

4. "Man and Environment: Revised Curriculum, November 1970." Miami, Florida: Miami-Dade Junior College, p.34. This curriculum is gaining considerable exposure as a result of efforts made by the U.S. Office of Education.


6. This position was well stated by Dean David Clark of Indiana University at the Population Education Conference held May 10-12, 1971 under the auspices of the University of North Carolina School of Education.

APPENDIX

Population Education in the U.S.: A Preliminary
List of Available Materials and Projects (May 1971)

1. Teachers' Materials


2. Classroom Materials


* In Process

* Population Profiles. Center for Information on America. Washington, Conn. Thirteen units, which can comprise a course or which individually can be used in a variety of courses, are being prepared by Everett Lee, in cooperation with the Council of State Social Studies Supervisors.


Populations (1969). Science Curriculum Improvement Study (SCIS). University of California, Berkeley, California. A preliminary edition of a unit on populations--plant and animal--to be used in the third year of the total program sequence; includes activities and teaching suggestions. The emphasis is on the biotic community; little reference to man directly.


3. Books for Children


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3. Books for Children


4. **Training and Research Centers**

Center for Population Education. Teachers' College, Columbia University, New York, N.Y. (Director to be Announced). Established 1971

Center for Population and Environmental Education. University of North Carolina, Chapel Hill, N.C. Dr. Norton L. Beach, Dean, School of Education. Dr. David Burleson. Established 1971.

Other Universities with an interest in Population Education:

- Cornell University, Ithaca, New York
  Professor Joseph M. Stykos, Professor Parker Marden

- Florida State University, Tallahassee, Florida
  Professors Charles Nam, Byron Massialis, James Sundeen

- Harvard University, Cambridge, Massachusetts
  Dr. David Kline, Professor Russell Davis

- University of Michigan, Ann Arbor, Michigan
  Professor Thomas Poffenberger

- University of the Pacific, Stockton, California
  Professor Edward Pohlman

- Western Washington State College, Bellingham, Washington
  Professor Irwin Slesnick

5. **Teacher Training Programs**

Population Problems: Population Analysis. Utah State University. Logan, Utah
Professor Yun Kim. Courses in technical and substantive demography for school teachers. Final weeks devoted to curriculum planning. Each summer since 1969, for eight weeks. NSF supported.


6. **Organizations with Special Interest**


Date: May 27, 1971

Memo to: The Population Commission

From: Stephen Viedereman

Subject: Possible recommendation concerning population education

The following recommendation concerning population education is proposed for the Commission's consideration:

The Commission recommends that the Congress appropriate significant funding to agencies and organizations at the national, state, and local levels for the development of educational programs concerning the causes of population change and its consequences for the individual and for the society, so that the next generation will be better prepared to understand the nature of the challenge to themselves and the society arising from population growth, and will take responsible action as citizens regarding public policy and individual fertility behavior.

Funds will be needed for the following broadly stated purposes:

1. The establishment and support of a small number of university based population education research and development centers that will devote significant attention to defining the field and to developing materials and methods for their diffusion into the schools.

2. The development of packages of materials--including student and teacher texts and guides, test items, audio-visuals, etc.--for use in the schools.

3. The support of teacher training programs--pre-service, in-service, summer institutes, workshops, etc.

4. To encourage state departments of education to identify population education specialists who will assume responsibility for coordinating state-wide programs, funds both to train specialists and to assist the states in supporting such positions.

5. Research on a wide range of subjects related to the introduction of population education into the schools.

6. For the development of model programs whose progress can be closely followed in order to isolate lessons for future program development.

7. To increase and improve communication between specialists and practitioners in the field in order to inspire effective and expeditious program development.

Estimated amounts needed to develop population education programs will be included in my final report to the Commission.

In order to insure that this broad program is properly developed, a unit will have to be established in the U.S. Office of Education for the disbursement of funds and coordination of activities. Other agencies of government concerned with educational development, such as the National Science Foundation and the proposed National Institute of Education, should also be encouraged to assist with population education programs.