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ABSTRACT

This revised report has been developed by the Economics Advisory Panel for the California Statewide Social Sciences Study Committee. The main purpose is to present a set of guidelines for the Statewide Social Sciences Study Committee for determining the manner in which the subject matter of Economics should be integrated into the Social Sciences Curriculum (K-12) in California. The presentation is developed in terms of a program of social science education. The report: 1) discusses objectives of the social sciences; 2) examines reasons why economics have not been an integral part of past and present social science curricula; 3) gives a rationale for including economics in the modern social sciences curricula; 4) provides an overview of economic education in contemporary social science curricula; 5) suggests a blueprint for integrating economics into future social science curricula; and, 6) devotes half of the report to giving directions for implementing a program in economic education in California. Focus is upon placement of subject matter content and economic education for teachers. An annotated bibliography of selected resource materials is provided. (Author)

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DRAFT VERSION - FOR REVIEW PURPOSES ONLY

REPORT of the

ECONOMICS ADVISORY PANEL

to the

STATEWIDE SOCIAL SCIENCES STUDY COMMITTEE

December 1967

Max Rafferty
Superintendent of Public Instruction
California State Department of Education

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FOREWORD

The Statewide Social Sciences Study Committee has been engaged in the development of a new curriculum in the social sciences for grades kindergarten through twelve. The Statewide Committee determined at the beginning of its activity to represent history and the social science disciplines appropriately in its new curriculum. In January 1966 the Committee established Disciplinary Advisory Panels in each of the separate disciplines and requested each Advisory Panel to prepare a report which described the role of the discipline in a K-12 social science curriculum; its contributions in content and methodology, philosophy and its position regarding the curriculum and related matters.

Since understanding content from the disciplines should be the objective of the curriculum in history and the social sciences, it is essential for educators in California to understand the recommendations of the disciplinarians about the substance of the proposed program. Certainly the State Board of Education, the Curriculum Commission and the educators of California need to know that the disciplines have been represented accurately in these Advisory Panel Reports to the State Committee. Accordingly I recommend that educators and academics in California give these documents very careful and critical study. I recommend that the results of this study with specific comments, criticisms and suggestions be directed to the attention of the Study Committee.

Max Rafferty

Superintendent of Public Instruction

INTRODUCTORY NOTE

ABOUT ADVISORY PANEL REPORTS

The California Statewide Social Sciences Study Committee is an ad hoc advisory committee to the California State Curriculum Commission, the California State Board of Education and the California State Department of Education. The Committee was appointed by the State Board of Education in April 1965. A list of the members of the Committee is included.

The principal charge to the Committee is to produce a guidelines document outlining the major characteristics of the social science curriculum for kindergarten through grade twelve in the California public schools.

The Committee has met regularly almost every month since January of 1966. In order to accomplish its task, the Committee established a substructure in January 1966 of Disciplinary Advisory Panels. Each Advisory Panel was chaired by the academic scholar(s) representing that discipline on the Statewide Committee. The membership of the Advisory Panels frequently included other members of the Statewide Committee. The principal charge to the Advisory Panels was to prepare a report describing the role of the discipline in a K-12 social science curriculum; its contributions in content and methodology, philosophy, and its position regarding the curriculum and related matters.

Preliminary reports from many of the Advisory Panels were prepared by June 1966. These reports were studied and reviewed by the Statewide Committee in the summer and fall of that year. The Advisory Panels produced final reports by June of 1967 based upon review comments and reaction from members of the Statewide Committee.

The Advisory Panel Reports will be a major element of input to the Statewide Committee in the development of its curricular guidelines document. The Committee now needs to have from a variety of sources critical review and comment about the Advisory Panel Reports in the following areas:

1. Are the representations about the disciplines reasonable in view of other scholars in the same disciplines?

2. How do scholars in different social science disciplines react to positions taken in the Advisory Panel Reports of the disciplines other than their own?

3. Would these documents be useful to teachers, curriculum and supervisory personnel, and administrators in the development of local courses of study and in the support of improved instruction in the social sciences at the local level?

4. Are there significant uses to which these materials might be placed in preservice and in-service education of teachers?

Although the materials are designed primarily to support the Statewide Committee in the accomplishment of its basic task, the possibility that they may serve significantly wider uses is a matter of considerable importance to the Committee and the organizations to which the Committee is responsible. Since the curriculum being developed by the Statewide Committee is substantially based upon these inputs from the academic social science disciplines it is important to the Committee to be able to certify to the Board of Education of the State of California in support of its curriculum that the positions represented within the Advisory Panel Reports are appropriate.

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I. INTRODUCTION

This revised report has been developed by the Economics Advisory Panel for the California Statewide Social Sciences Study Committee. The main purpose is to present a set of guidelines for the Statewide Social Sciences Study Committee in determining the manner in which the subject matter of Economics should be integrated into the Social Sciences Curriculum (k-12) in California.

The reader will note that the Advisory Panel has not confined its efforts to the matter of a narrowly defined framework for the Social Sciences. Rather, in keeping with the more comprehensive focus of the Statewide Social Sciences Study Committee, we have developed our presentation in terms of a Program of Social Science Education. This involves (1) the placement of the subject matter of Economics within the curriculum; (2) the all-important question of resource materials for classroom use; (3) adequate teacher economic education; and (4) a program of implementation.

It goes without saying that the ideas of many educators and economists are reflected in this document. In many respects we have simply brought to fruition the work of those who have been working in the field of economic education for the past two decades. Hopefully, our report reflects the best thinking of the community of scholars and teachers who have been concerned with effective economic education within the context of a modern Social Sciences Curriculum.

In view of the priority need to improve the economic literacy of the American public, we strongly recommend that the subject matter of Economics become an integral and explicit dimension of the Program of Social Sciences Education (k-12) in California.

II. OBJECTIVES OF THE SOCIAL SCIENCES

Social aspects of the social sciences are concerned with the interactions of men within the fabric of the society, the system of rights and responsibilities, the systems of organization, the institutions, the values, the goals, and the underlying philosophies which are the essence of the fabric, as well as the forces of change--internal and external--which create new ideologies, new organizational structures, and new ground rules of interaction (all of this within the time perspective of history.)

The social scientist should foster in the individual a sense of tradition; a sense of the impact and significance of evolutionary social change; a sense of man's responsibilities (his system of rights and privileges) within the organizational structure of his society; a sense of social values; including freedom, justice, progress, stability, security, the dignity of man; a sense of generally accepted social institutions and their basic functions; a sense of the various social processes (e.g., political and economic, and how they interact); a sense of the

organizational structure of the society; a sense of factual reality in relation to the ideal; a sense of the impact of modern science and technology on the values, the institutions, the goals, and the philosophical underpinnings of the social system; a sense of the inevitable lag in philosophical changes; a sense of the priority need to narrow the "knowledge" and "attitudinal" gaps between the Pure Sciences (physics, etc.) and the Social Sciences; a sense of each individual's responsibility to influence the value-structure and the institutional workings of his society as the future becomes history.

The scientific aspects of the social sciences are concerned with the development of:

> An understanding of key concepts, generalizations and themes in a form that gives a sense of structure to history and the social sciences.
>
> Competence in using methods of inquiry that are drawn from the disciplines and are most useful in lifelong learning.
>
> Basic skills needed to use conceptual systems and modes of inquiry in studying social sciences materials.
>
> Attitudes of objectivity, thoughtful skepticism, regard for evidence, open-mindedness, and respect for differing viewpoints.
>
> Favorable attitudes toward and appreciations of history and the social sciences as fields of inquiry.

Science, in short, brings objectivity, logic, rationality, understanding, the ability to establish social priorities, and the capacity for distinguishing the ideal, the real, and the myth. It allows social man to maintain a sense of orientation vis-a-vis the social processes, the system of organization, the social value structure, and the social ethic as forces of change impinge upon these elements of the society.

Man, in essence, is a social, spiritual, cultural, ethical, moral, and scientific being. As a social being, he is an integral part of a system of social organizations and is subject to the dynamics of changing social processes. As a scientific being, man probes the complexities of nature and the infinite reaches of the universe. As a cultural being, man contemplates the forms and the media of beauty. As an ethical being, man is concerned with the meaning of truth and justice: his spiritual and moral dimensions transcend himself.

Education should enable each individual to better understand himself and the greater social, cultural, spiritual, ethical, and scientific universe which define his environment. The process of education, in short, should produce a related group of understandings--spiritual, ethical, cultural, scientific, and social. The production of social

understandings defines the general objective of education in the social sciences. Both social understanding--that is, recognition of the relevance of social values and goals--and scientific understanding of the intricate workings of the social system and the complexities of social interaction, must emerge as end products of social sciences education.

III. WHY HASN'T ECONOMICS BEEN AN INTEGRAL PART OF PAST AND PRESENT SOCIAL SCIENCE CURRICULA K-12?

Economics lost its place in the high school course of study when our nation was in the midst of the depression. People gave little thought to economic theory in their overriding concern with their own practical economic problems. Economics at that time was rigorous, abstract, and dull. It was unpopular with both students and teachers and disappeared quickly.

The nation today is enjoying an unprecedented affluence. People are interested in the state of the nation and in the various economic devices being used to keep the economy growing and stable. The "new economics" is headline material in news media, and both students and teachers are able to relate economics to their everyday world. Thus, the stage is set for a grand re-entry of economics into the curriculum. While most educators agree that economics is "wanted" and "needed," they see three obstacles to be overcome: the "overcrowded" curriculum, the lack of adequate pupil and teacher materials, and the lack of adequate preparation of teachers.

The "Overcrowded" Curriculum

The curriculum has become overcrowded because of the historical buildup of required courses which were added one after another without elimination of any existing courses. Also, the "new knowledge" which suddenly became exceedingly important with the Sputnik embarrassment, caused further overcrowding. To add economics to the curriculum was viewed with mixed emotions. However, it was widely recognized that our private enterprise system was an integral part of the very democratic way of life we sought to protect.

The Materials

The problem of adequate economics materials geared to the developmental needs of a K-12 program shows evidence of being alleviated. Publishers are aware of the need and are filling the gap.

Teacher Preparation

A problem exists in teacher preparation. Most elementary teachers

have little or no formal courses in economics. The same is true to a large extent at the junior and senior high school level.

In a 1966 California State Department of Education Study[1] it was shown that over 27 percent of those teaching the separate economics course have had no economics training and over 53 percent have had less than 20 semester units of college economics. Further, in a 1967 study,[2] "Teacher Education Requirements in Economics at California Collegiate Institutions,"...it was found that out of a total of 34 institutions surveyed, only 8 (23.5%) had a required course or courses in economics as part of the general education requirements for a baccalaureate degree. However, only one institution out of the above eight had required six semester units of economics. The remaining institutions required three semester units of economics only (for all candidates). With the exception of business education, the picture is not much brighter for those who are majoring in the following selected group of subjects:

Anthropology:	None of the institutions surveyed required a course in economics.
Geography:	Twenty-three institutions had indicated a major in geography, however 13 (56.5%) required no economic course or courses. Eight of the remaining 10 required three semester units for all candidates. Only one institution required six semester units of economics.
History:	Only four out of 33 institutions which offered history as a major had required economics. Three institutions required three semester units, one required six semester units of economics, and the remaining 29 (87.9%) did not.
Home Economics:	Seven out of 11 institutions required economics, six institutions required three semester unit courses, and one required two courses of three semester units each. It should be noted that in the majority of cases, these courses referred to are "consumer economics."

[1]Milton S. Baum, Economic Education in California Public Schools, Report of California State Department of Education, February 1967, p. 4.

[2]Adil Alhaimus, Teacher Education Requirements in Economics at California Collegiate Institutions, Northern California Council on Economic Education, San Francisco, April 1967, pp. 10-11.

Political Science: Twenty-five (80.6%) of the total 30 institutions offering political sciences as a major did not require economics. Three institutions required a three-unit semester course in economics, and only one institution required two courses, totaling six units.

Social Science: (This includes all candidates with the exception of those who chose economics as an area of emphasis.) Fourteen (77.8%) of the 18 institutions did not require economics. Two institutions required six semester units, one institution required three semester units, and surprisingly, one institution required nine semester units of economics.

Sociology: A total of 29 institutions had indicated offering sociology as a major. Twenty-eight (96.6%) did not require any economic courses. Only one institution required nine semester units of economics for all candidates majoring in sociology.

Business Education: In comparison to the above subjects, business education is by far the leading field of concentration regarding economic requirements. One hundred percent of the 25 institutions offering this field had indicated economics as a required course.

1 institution required	3	semester units
8 institutions required	6	semester units
10 institutions required	9	semester units
6 institutions required	12+	semester units .

It must be concluded then, that at present, most California teachers are certificated without completing a single course in college economics.

IV. THE RATIONALE FOR INCLUDING ECONOMICS IN THE MODERN SOCIAL SCIENCES CURRICULA, K-12

Social Studies Curriculum Ends and Means: The Economist's View and Rationale

The social studies curriculum is part of the general education program for all students. As such, its purpose is to help students become effective in their social relations and to prepare them for their roles in this society. This requires students to learn about our own and other societies, to develop a value system which is consistent with the basic values of our society, and to combine this knowledge and value system with problem-solving skills to make decisions and take action.

The most controversial aspect of social studies curriculum development is the values issue. It may be the central issue as well, for, to some extent, decisions about what and how students are to learn depend on the values the curriculum builds. To varying degrees all social studies curricula aim at developing in students certain values or beliefs which become the basis for personal decision-making and actions: e.g., loyalty to one's country and its institutions; belief in the dignity of man and in democratic ideals which create and protect human dignity; and desire for a higher standard of living and acceptance of one's role as producer and consumer in a private enterprise-market economy.

We recognize the importance of developing humanistic values in students, but we question the feasibility of teaching such values by didactic methods. We feel that students should be encouraged to become independent, rational thinkers who value and use their own intellectual freedom in examining and refining their value systems. Most students acquire their values initially as a natural part of growing up in interaction with their environment; if their experiences have not led them to appreciate society's important values, it is unlikely that they can be directly "taught" to accept these values in school. This implies that the social studies should allow students the freedom to develop their own values in the process of exploring our own and other societies.

From this point of view the curriculum should support scientific, rational thinking and actions. In the process of observing and inquiring into the nature of social life to find rational solutions to problems, most students would also learn to value freedom and justice for mankind.

Thus, as social scientists, we advocate that the general social studies objectives be achieved by helping students to develop a scientific and humanistic frame of mind about solving personal and public social problems. For thinking to be humanistic as well as scientific, it must be scientific in the broadest sense--a search for meaning and for understanding of man and his social organization through the use of rational inquiry. This means that students learn humanistic values within the framework of mind about solving personal and public social problems. For thinking to be humanistic as well as scientific, it must be scientific in the broadest sense--a search for meaning and for understanding of man and his social organization through the use of rational inquiry. This means that students learn humanistic values within the framework of the philosophic tradition of our western civilization.

Given this general position an overall objective and strategy, we can now make more specific recommendations about the use of the social sciences (and economics) in the social studies curriculum:

1. The basic concepts and methods of the individual social sciences should be the organizers of student learning in the search for understanding of societies. That is, conceptual structures of the individual disciplines should be devised and used to help students learn how to perceive and interpret social life, and how to attack and solve certain general kinds of social problems.

2. Students should learn the methods and attitudes of the social sciences. They must become inquirers. This means that the curriculum should capitalize on the student's natural curiosity about life around him, and should keep that curiosity alive by giving him command over more and more powerful cognitive skills and organizing concepts which will increase his sensory perceptions as well as his analytic abilities.

3. The K-12 curriculum should be designed to allow students to learn more and more about the usefulness of these basic social science abstractions and methods. That is, there should be a spiral development of a point of view and of problem-solving methods which prepares students for future levels and reinforces learning from earlier levels.

4. Social studies must be useful and relevant to students. Each level should allow students to get a clearer understanding of the world which confronts them at that time.

In this kind of curriculum the social science disciplines provide students with a point of view or context for observing social life and a "discipline" for analyzing what they observe. Thus, the disciplines provide the muscle and means to the ends of the curriculum--they are not the ends themselves. Many assume that more emphasis in the curriculum on the social sciences means fragmenting the curriculum into separate courses in each science in which students learn social science theory and practice in the abstract, without relating it to the study of society. This assumption derives in part from viewing the sciences as subjects of study rather than as disciplines or means of studying. We do not contend that the disciplines, as they are currently used for research and scholarship, are appropriate bases for curriculum organization. Rather, our approach requires that the individual disciplines be analyzed to identify organizing concepts and methods which are generally useful and therefore appropriate for social studies courses, that wherever relevant to the subject under study, children learn to use these organizing principles and concepts to order their experience and derive meaning from it.

The conceptual structure presented here is a system of concepts and generalizations which define what economists study, link the study of economics to the study of society, and show how economies change. The generalizations derived from these concepts are not verifiable laws or theories; they, like the concepts, are the currently accepted conventions; tautologies, which give a frame of reference for studying economic questions. All problem-solving schemes in economics involve an application of this structure; they provide a viewpoint for perceiving and analyzing economic issues.

The two diagrams (pp. 9 and 10) are alternative schematic statements of the conceptual structure. Diagram 1 defines economics and economic activity as deriving totally from the scarcity condition; the assertion that for most people wants are greater than available resources. It shows that all the major concepts in the conceptual framework are basic because they help describe the function of the economic system in

attenuating scarcity. They are derived from the initial premise that scarcity exists and the assumption that people try to do something about it through social organization to increase productivity, and to attenuate conflict.

Economics is the science which studies behavior as a relationship between ends and scarce means which have alternative uses. The cultural and physical environment establish the constraints within which an economy functions The forms of decision making (custom, authority, and market bargaining) and the goals of society (the relative importance of justice, freedom, security, and progress) determine the characteristics of an economy.

Studying an economy means studying the society's system of economic institutions to determine how effectively the individual institutions perform their function in the system (micro-economics) and how effectively the total economic system operates to satisfy the people's material wants (macro-economics). A society's economic institutions are the total of group organizations which perform its economic functions: they make the four basic allocation decisions about the use of scarce resources and, on the basis of these choices, they carry out the five primary economic activities.

The process of allocating scarce resources involves a normal condition of conflict. Economic organization attenuates and resolves conflicts and in so doing the economic organization changes to reflect the relative power of the contending economic interest groups. Through specialization of production, societies make scarce resources more productive. The proof that specialization increases productivity is stated as the theory of comparative advantage, and the existence of a limit to the productivity of a resource is asserted in the law of diminishing returns.

Production specialization necessitates distribution and exchange; money is needed to facilitate exchange. The dependence of people on money for purchasing power leads to the creation of forms of credit which further facilitate exchange by expanding people's purchasing power. Through savings and investment a society creates and accumulates wealth (capital) which increases the productivity of resources and thereby the production of want-satisfying goods and services. An economic system grows (accumulates capital) through a constant process of want satisfaction and want creation.

Diagram 2 shows the same concepts in another way. Its purpose is to describe the dynamics of change by relating the economy to the physical world and society, and to indicate the change is the result of the interaction of all these "worlds". The circles are the same circumference because, in a sense, they all represent different ways of looking at the same thing--the earth. Change in any one--the physical world, the society, the economy--changes the others. The arrows indicate the primary direction of change. The three worlds together describe a system, a changing system.

The Theoretical Structure. In addition to this conceptual framework, there is a body of theory about the organization of an economic system

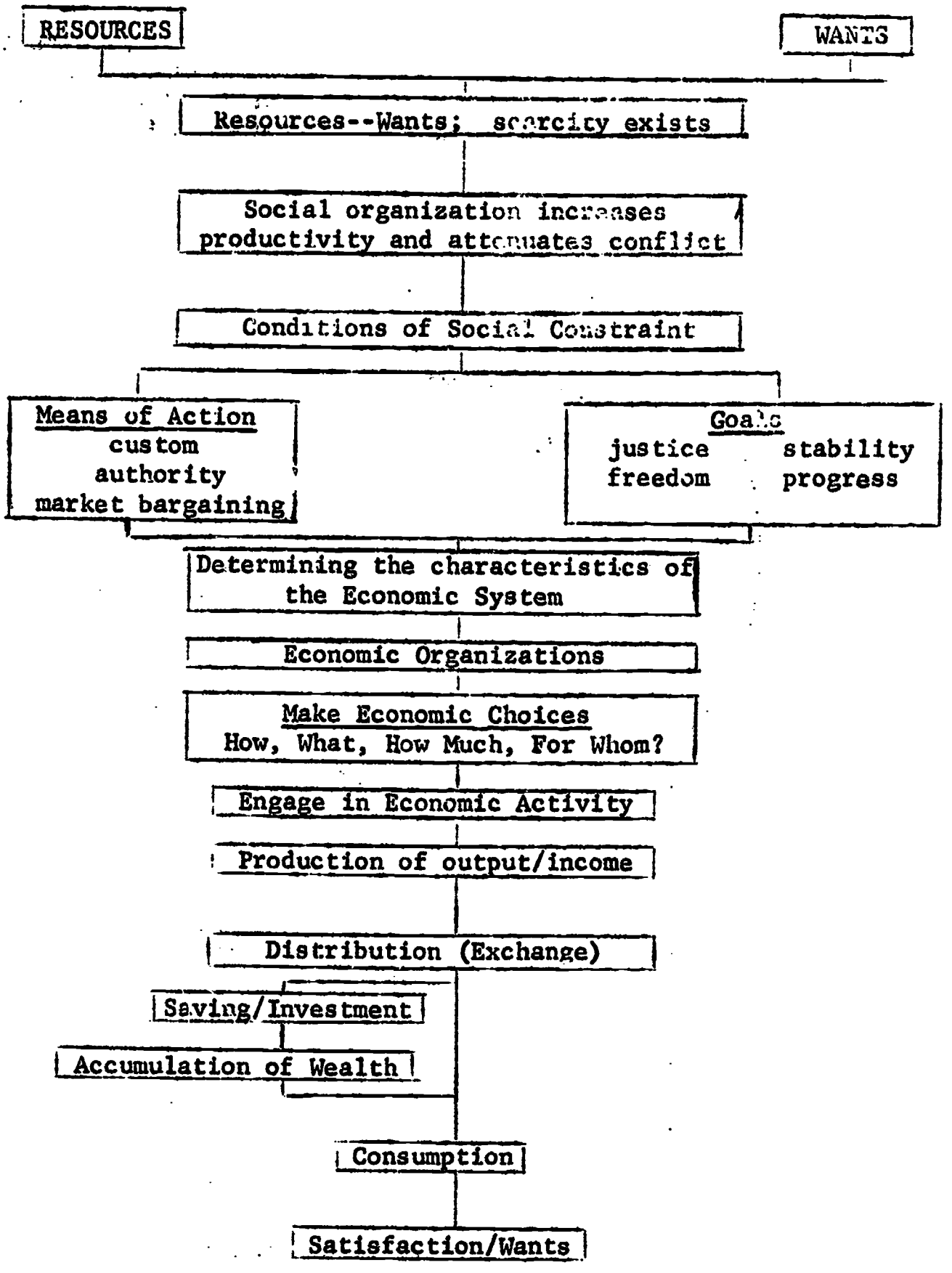
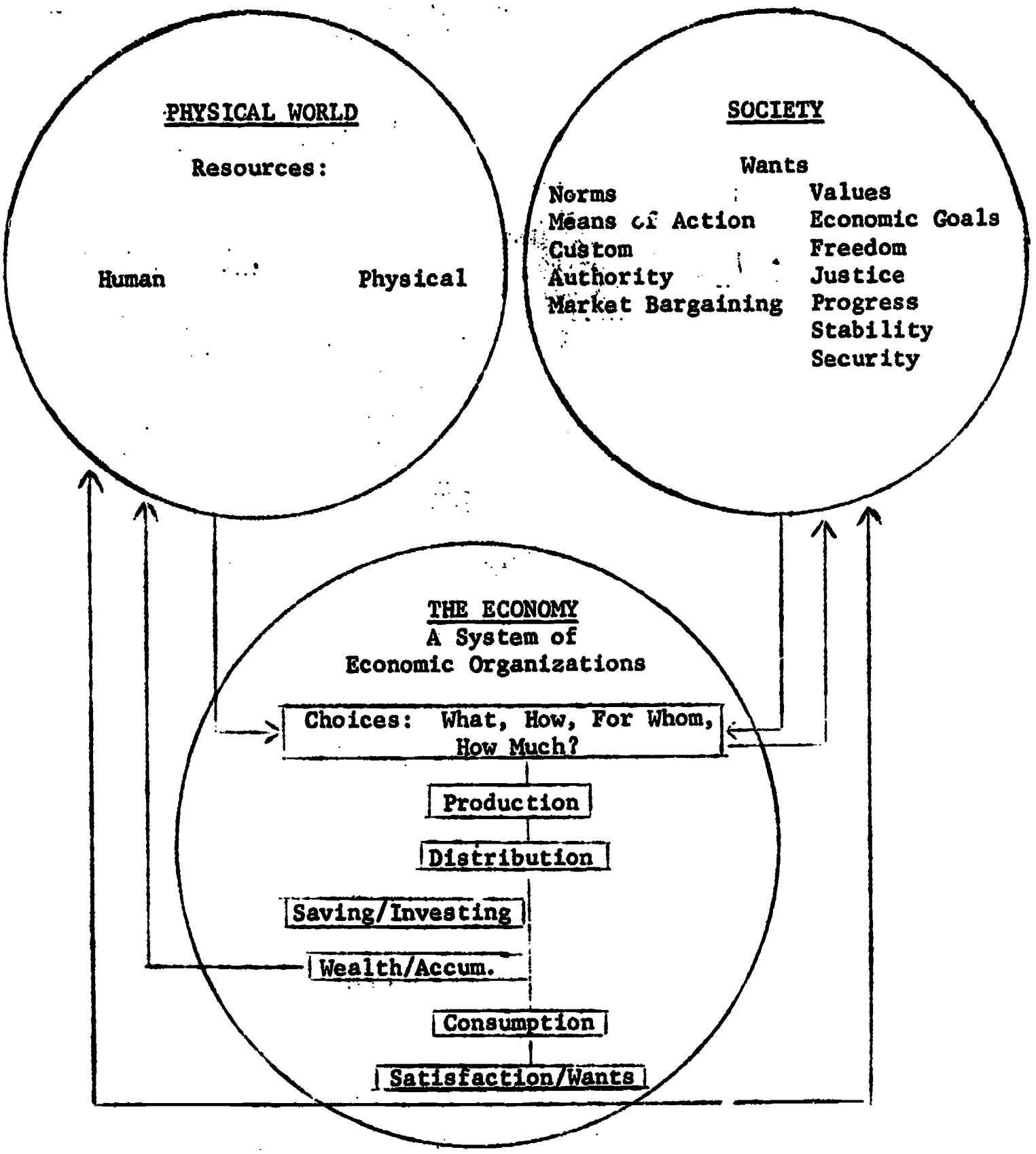


DIAGRAM 1

Conceptual Structure of Economics

DIAGRAM 2

The Conceptual Structure of Economics
Showing the Process of Change as
the Interaction of the Economy,
the Society, and the Physical World



(primarily, the organization of a market economy). Macroeconomic theory states hypotheses about the determination and growth of the income and output of the total economy--the causes of instability in the rate of output and the rate of growth.

Society establishes norms and values: it defines our wants; it sets forth the abstract justification for those wants in terms of the economic goals of freedom, justice, progress, stability of security; it determines the mode of decision-making (a unique mixture of custom, authority, and market bargaining). The material world establishes the physical constraints--the amount and quality of the human and physical resources. The economy allocates resources and organizes the activities which transform resources into want-satisfying goods and services. The economic system is the mechanism whereby wants and resources change and grow (or decline).

Economics is both a subject and a method of study. Lionel Robbins defined the subject of economics as "the science which studies behavior as a relationship between ends and scarce means which have alternative uses." This definition can be elaborated on to more-or-less define the boundaries of the subject matter usually studied by economists today, but generally any human activity related to coping with the condition of scarcity can be considered an economic question.

The discipline of economics consists of a set of organizing concepts and principles (definitions, assertions, tautologies); theories; and techniques of observations, measurement, analysis--used together in various combinations or problem-solving modes for inquiring about the subject matter of economics. An economist acquires these organizers through training and scientific inquiry; they are the intellectual equipment he has available to study a problem in economics. He uses them in all parts of his scientific investigation. They affect the subjects of study he considers important to study, how he perceives or states the problem, how he gathers data, how he analyzes data to derive new meaning (discoveries) about the phenomena under investigation.

V. ECONOMIC EDUCATION IN CONTEMPORARY SOCIAL SCIENCE CURRICULA, K-12

AN OVERVIEW

Today an ever-increasing number of schools around the country are introducing economics into the curriculum. Twenty-nine major school systems--ranging from Seattle to Miami, from New York to San Diego, and from Minneapolis to Little Rock--are engaged in an intensive effort to bring economics into every grade K-12, as part of the Developmental Economic Education Program of the Joint Council on Economic Education. Other schools are working on their own--some to introduce economics to all grades, some to introduce it into the elementary grades or junior high or senior high, and some to introduce it into particular courses such as U. S. history or geography.

Across the nation, teachers are attending the economic education workshops of the Joint Council on Economic Education and the institutes sponsored under the National Defense Education Act or by the National Science Foundation. They are learning more economics and they are learning how to apply their new-found knowledge in the classroom in a variety of ingenious ways that can only arouse the admiration and enthusiasm of professional economists.

Although a wide variety of programs are being carried on, it is now possible to describe certain directions which economic education is taking in American schools.

The General Approach

In general, there is a growing awareness of the fact that economic concepts need to be integrated into the curriculum in an organized, structured way at every grade level, K-12.

The basic economic ideas, concepts, and topics which collectively constitute the minimum understandings for responsible citizenship--that is, what we would like every high school graduate to know--have been identified and spelled out clearly in the "Report of the National Task Force on Economic Education", and in more detail, in Teachers' Guide to DEEP: Part I, Economic Ideas and Concepts. Teachers all over the country are now working on ways of introducing these basic ideas, concepts, and themes into the curriculum so that by the time a student completes the twelfth grade he will have been exposed to all of them and to most of them on several occasions.

The integrated approach to economics in the curriculum conceives of the student moving logically to higher levels of sophistication in economics as he moves from grade to grade with the knowledge acquired in one grade providing the basis for more advanced comprehension later. As an example of this, the concept of specialization may appear in the first grade in terms of the division of household chores among the members of the family, in the second grade as the various specialized tasks performed by members of the community, and later still in terms of specialization among nations as the basis of world trade. The allocation of scarce resources among competing ends may appear in the second grade as a child with 25 cents choosing between candy, ice cream, and a comic book, and then again in tenth grade world history as the Gosplan allocating resources between consumers goods, capital goods, and defense hardware in the Soviet Union.

No effort is made to convert a world history or geography course into an economics course, nor to introduce all economic concepts at every grade level. The objective is for the teacher to enrich what he or she is already doing with economic insights and overtones. The result is a cumulative impact on the student as he progresses from grade to grade.

In particular, the objective of teachers is to develop in the students a "way of thinking" about economics, which they will be able to use in a variety of situations. The payoff in economic education is to be found in the acquisition by the student of the ability to use economic analysis in a variety of situations, many of which may be entirely new ones arising after the initial learning.

The Elementary Grades

In the elementary grades, emphasis is placed on the basic ideas and concepts which constitute the heart of modern economics--people's wants, the consumer and consumption, production of goods and services to satisfy wants, the nature of productive resources and the scarcity of these resources relative to human wants, the need for constant decision-making among alternatives, the opportunity cost involved when decisions are made, and the need in every society for some kind of an organized social approach to decision-making--that is, the need for an economic system. As the child progresses he is introduced to the main features of the modified market economy of the United States--to the idea of the market and of the roles played by consumers and business, to money and its flow through the economy, to the economic role of government, and to banks, corporations, the profit motive, and other economic institutions.

Junior High and Senior High School

In junior and senior high school, students will have the background in basic economic ideas and concepts and in simple economic analysis that will permit teachers to expose them to more sophisticated economic problems and to more formal analysis. There are limitless opportunities for the introduction of sound economics into existing courses. For example, the eighth and eleventh grade U. S. history courses offer many opportunities for discussing the nature, importance, ingredients, and problems associated with economic growth, the rise of the market economy, the economic role of government, and many other important economic topics. The ninth grade world history course provides opportunities for discussing other economic systems. World trade problems can easily be introduced into geography courses, the role of the consumer into home economics, and the economic role of government into civics courses. Many of these economic problems can be introducted into business education courses in junior and senior high schools.

Conclusion

Enough has been achieved in schools around the country for us to be able to conclude the following:

1. Economics is not "too difficult" for schoolchildren, even very young ones, if it is handled properly by trained teachers.

2. Economics is not an abstract subject of little relation to the real world. On the contrary, the really successful teacher of economics utilizes local examples and personal experiences to make the subject come alive. As one Arkansas teacher has said, "Economics is where you find it."

3. <u>The introduction of economics into the curriculum is best achieved by means of an organized, integrated approach involving every grade level, K-12</u>.

4. Introducing economics at every grade level does not require either eliminating subjects or converting some course into an economics course; rather it is the enrichment of what is already being done.

5. The successful course is one which strengthens the student's comprehension of and ability to use the tools of economic analysis--that is--a course which develops a "way of thinking" about economic society rather than just the accumulation of facts. This means development of concepts, theories, and analytical models and is concerned primarily with process rather than subject or product.

6. The measure of success in achieving these objectives lies in the affective as well as the cognitive domain. The attitudes, feelings, and behavioral responses of individuals to social problems are the real measure of the quality of socio-economic understanding.

VI. INTEGRATING ECONOMICS INTO FUTURE SOCIAL SCIENCE CURRICULA: A SUGGESTED BLUEPRINT

The Panel feels that it is meaningless to speak of "integrating" economics into future social science curricula without specific concepts (or principles) of integration. Accordingly, the Panel developed two types of integrating concepts: functional and organizational. The functional concepts develop the operational "how," both the hardware and the calculus of decision-making underlying the integration of economics into future social science curricula. The organizational concepts begin with the discipline content itself and spell out the conceptual avenues along which disciplinary integration can occur--both internal to economics and external between economics and the other social sciences.

Functional Integration: Form and Decision-making

The Panel proposes three functional integrating concepts in terms of form: (1) the enrichment concept, (2) the unit concept, and (3) the course concept. In each of these, determinations must be made in terms of what economic concepts lend themselves to meaningful inclusion at each level.

The Enrichment Concept

The enrichment concept assumes that a substantial portion of the content of the social science curriculum (K-12) contains elements which can be enriched by the discipline of economics. In the elementary grades, economics can contribute productively to learning about specialization via the roles of the farmer, policeman, fireman, etc. In U. S. history, economics can contribute to the understanding of inflation, cheap money, bank failures, etc., via some simple principles of money and banking.

In the concept of integrating economics through enrichment, basic subject matter concepts are developed in greater depth with the inclusion of economics. The purpose is not to teach economics as such, although it is hoped that students will get a feeling for it, but to develop greater depth of understanding in the basic subject matter.

To put enrichment into practice effectively, all the elements of a social science curriculum must be viewed by both the subject matter specialist and by the economist in order to determine the areas where enrichment is appropriate and productive, and to determine which economic concepts are to be used.

The Unit Concept

In certain subject matter areas of the social science curricula, the importance of related economic elements may be so great that a unit of economics instruction may be warranted. In such cases economics would be integrated functionally into the curriculum through a block of time of economics instruction (significantly longer than that allotted to enrichment), designated as a unit. The unit of economics is, of course, carefully integrated into the subject matter of the course. For example, in a course on U. S. government, an economic unit on government fiscal policy and budget might be appropriate. Or, in an early geography course, a unit on international trade might be called for. In U. S. history courses units on money and banking might help to develop greater student understandings. A unit of economics within a course, or in the self-contained classroom might be very brief, or might extend over several weeks. Through the unit, economics is integrated into the curriculum on a larger scale and is taught somewhat more systematically from the standpoint of the discipline than in enrichment.

To put the unit concept into practice effectively, the future social science curriculum should be examined jointly by the relevant subject matter specialists and by economists to determine those places in the curricula where units of economics of varying lengths could most productively be added. The number of units of economics that will be integrated within a given course must be determined by the value of the contribution of the units to increased understanding of the social science course.

The Course Concept

The Panel proposes that economics be integrated into the social science curriculum in the form of a formal course or courses. The arguments in favor of a discipline-oriented course in economics at the secondary level may be summarized as follows:

1. The course becomes a capstone-course in pulling together and integrating the various elements of economics already learned (K-7 or K-12) by students through the enrichment and unit concepts. Thus, the course possesses special educational potency in that many of the elements have already been learned in conjunction with a large and broad variety of subject matter experiences.

2. A one-semester course is a requisite if students are to experience the analytical coherence and problem-solving power of a social science discipline. Further, certain problems and areas of experience cannot be treated by the smaller scale concepts of units or enrichment.

3. The discipline of economics treats a highly significant, strategic area of experience and citizenship for students as well as for the community, state, and nation. If economics is learned by students, the benefits are enhanced by the fact that the discipline of economics has already been widely accepted and integrated into public policy-making decisions. As Walter Heller has stated, "Today's talk of an 'intellectual revolution' and a 'new economics' arises not out of startling discoveries of new economic truths but out of the swift and progressive weaving of modern economics into the fabric of national thinking and policy." (Heller, Walter, W., New Dimensions of Political Economy, New York: W. W. Norton, 1967, p. iv.)

4. The status of economic education, in the teaching of economics to teachers, both preservice and inservice, is moving rapidly.

The grade-placement of the capstone economics course, is subject to two "pulls." On the one hand there is a tendency to pull it to the twelfth grade, where it is of greatest use in readying terminal students for entrance into the everyday world of experience. On the other hand, is the pull of placing the course at a lower secondary level, e.g., ninth, tenth, or eleventh, where the value of the course will be reflected in students pursuing other social science courses. This may be the only exposure in economics by potential "dropouts".

The Panel suggests a second course where economics may be integrated into the social sciences. This would be a course in "Comparative Social Systems." It is felt that although other social sciences would be involved in the course, economics would play a central role. The discipline provides a coherent analytical framework by which different economic systems (e.g., capitalism, socialism, communism) may be treated and taught. This firm analytical foundation can be the base of the course, with enriching units contributed by other social science disciplines.

Finally, it should be emphasized that the Panel's recommendation in terms of the above courses is not an arbitrary one. It is felt that current social science curricula have a severe shortage of analytically based elements of instruction, especially on the scale of an entire course. Further, the strategic relevance of economics to our contemporary social problems, and the existing adoption and use made of the discipline by public policy-makers necessitates formal instruction in economics.

Organization

Integration of economics into the future social science curriculum will take place also through patterning and structuring--in short through organization--as well as through the functional and decision-making concepts just discussed. The organization appropriate to integrate economics into the social science curriculum will be internal and external to economics: it will have to take place (1) internally among the various economics elements being introduced into the curriculum; and (2) externally between these economic elements and the elements introduced by the other social science disciplines.

Internal Organization (Within Economics)

In the preceding major section, the Panel spoke of economic elements introduced via enrichment, units, and courses, K-12. In this section, the Panel is saying that not only must the essential economic content to be integrated be carefully defined in terms of concepts, but also that these concepts must be organized in terms of a holistic, productive K-12 sequence of experiences. The organization of essential economic concepts, K-12, must be developed along three basic lines:

1. The basic economic concepts must systematically and sequentially "spiral" upward through the grades, being successively taught and logically developed in ever-deepening analytic rigor and sophistication. For example, we should expect to find "specialization" as taught in the first grade far different from specialization as taught to enrich a seventh grade geography course.

2. The essential economic concepts, as they spiral upward through the grades, must be related to the ever-widening and enlarging social experience and horizon of the students. For example, specialization in the first grade is taught in terms of the home; as the concept spirals upward it is taught successively in terms of the community, the state, the nation, and the world.

3. The basic economic concepts, as they spiral upward, must be related to each other, within the concept of a system. For example, the concepts of money and banking and the federal budget must be related, even though they are taught under separate and unique conditions. Such relationship will bridge not only the concepts, but also furnish much-needed integration of the several social sciences courses and units.

Clearly, organization for internal integration can be achieved only by the intensive work of economists and related subject-matter specialists in constructing the social science curriculum.

External Organization (Between Economics and Other Social Sciences)

Here the Panel specifically proposes that economics be integrated with elements of the other social science disciplines. In analysis, the economics that the Panel proposes contains the following broad elements:

1. Concepts (e.g., the idea of choice).
2. Problems and themes of social development (e.g., urbanization, technology, growth).
3. Values (e.g., freedom, justice, stability).

The Panel suggests that since these three broad elements are to a large degree common to all social science disciplines, the integration of economics and the other social sciences should be along these lines of commonality.

VII. IMPLEMENTING A PROGRAM OF ECONOMIC EDUCATION IN CALIFORNIA

We endorse the following recommendation of the National Task Force on Economic Education: "We recommend that professional economists play a more active part in helping to raise the level of economics in the schools. We urge our fellow economists to participate more actively to help improve the teaching of economics in the schools. To fail to do so is to shirk an important professional responsibility."[3]

The movement for economic education in California has received tremendous support from agencies and institutions at the state, national, and local levels. The State Board of Education and the Curriculum Commission have initiated the development of a framework for the social sciences through the work of the Statewide Social Sciences Study Committee and Social Science Panels. The Office of the Chancellor of the California State Colleges has sponsored establishment of Economic Education Centers in colleges in cooperation with the various national and regional councils on economic education. Foundations and public agencies have shown willingness to fund worthwhile economic education programs. Tangible contributions have been made by textbook authors and publishers, by schools of education, and by local school administrators and classroom teachers. Opportunities for developing sound economic concepts in the California public school curriculum are truly numerous.

Centers for Economic Education

The Centers for Economic Education represent a core of colleges and universities committed to economic education and contain a dedicated nucleus of similarly committed professional economists and educators. The Centers incorporate a strong cooperative relationship with Departments of Economics, Schools of Education, and local school systems in the area of the institutions. This represents a favorable situation for the development of economic education programs. Centers offer themselves as a focal point for economists and educators in the development of curriculum projects and support materials needed by and testable in school districts. Centers operate workshops and institutes for teacher inservice, provide consultant services to individual school districts for specific projects, and can be the focal point for foundation and public agency financial support.

Councils on Economic Education

The Joint Council on Economic Education and the State and Regional Councils may well be the appropriate groups to coordinate and develop the overall operational aspects of implementation of economic education programs.

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[3]Economic Education in The Schools, Report of the National Task Force on Economic Education, Committee for Economic Development, New York, New York, September, 1961, p. 77.

The State Department of Education

The State Department of Education should continue to encourage and work with all persons and groups involved in the improvement of teacher training and education in economics. The preparation of teachers affects the educational programs of the schools in the State. Therefore, it is appropriate that staff members of the State Department of Education should participate in activities designed to improve this preparation.

The Placement of Subject Matter Content, K-12

(With Examples)

If economics is integrated into the curriculum at all grade levels, students by the time they graduate from high school should have acquired the minimum economic understandings necessary for responsible citizenship. These minimum economic understandings are well-known having been described in the Report of the National Task Force on Economic Education and spelled out in more detail in the Joint Council on Economic Education's publication, DEEP, Part I: Economic Ideas and Concepts. The task now is to describe how they may be developed at different stages of the child's school career.

Because the abilities of students and teachers and the organization of courses vary from school system to school system, we recommend using the block approach, which indicates those economic concepts and problems which seem most appropriate to early elementary, kindergarten through grade three; to later elementary, grade four through grade six; and to junior and senior high, grades seven through twelve. It is assumed, however, that students will move to increasingly sophisticated levels of treatment of economics as they move from grade to grade.

Early Elementary, Kindergarten Through Grade Three

In the early elementary grades emphasis will be on the complex of related concepts which collectively constitute what economists call the central economic problems facing all society. Instruction will, of course, be geared to the level of maturity of these very young pupils. Specifically, children will learn about the wants we all have for goods and services. They will learn that they are consumers engaged in the process of consumption. They will learn that the production of goods and services must take place if we are to be able to satisfy our wants and that production requires the use of productive resources. They will learn the nature of these productive resources, natural resources, labor, and capital goods and the significance of specialization and production. They will learn that specialization requires exchange and that this in turn necessitates the use of money as a medium of exchange. Above all, they will learn about scarcity, that productive resources do not exist in unlimited supply and that choices must consequently be made about alternative uses for them. In this connection they will learn about opportunity

cost and the need for economizing, making the most efficient use of scarce resources. One of the choices they will come to understand is that involved in saving, or spending one's income with savings going into investment and capital.

Clearly, most of these economic ideas and concepts will be presented to the child at first in the context of personal experiences rather than in contexts remote from these experiences. Nevertheless, the rising level of sophistication in the treatment of these economic ideas and concepts is possible even at this stage. For example, the concept of capital goods may appear first as the vacuum cleaner in the home, then the cash register in the store, and finally as a machine in a nearby factory. Capital formation can be understood by discussing Robinson Crusoe's economy. Specialization can appear first in the form of specialized jobs of such persons as the mailman, the school nurse, the policeman, and later still in the form of the specialized functions of supermarkets, garages, fruit orchards, and so on. The concept of choice and opportunity cost might appear first in the form of the child allocating his allowance among ice cream, candy, and soft drinks and later in the form of alternative use of a piece of land as a parking lot, the site of a house, farmland, or location of a shopping center. The following are some examples of how this is being done:

1. In a kindergarten class in Richmond, Virginia, an unexpected shortage of milk in the school cafeteria led to a class project on "The Story of Milk from Farm to Family" in which such concepts as consumers' wants, producers, the role of the middleman, demand and supply, and the factors of production were introduced.

2. In Tulsa, Oklahoma, a first grade class studied the effect of advancing technology and specialization in making the producer and consumer more interdependent. Students formed a "farm committee," a "neighborhood committee," and an "urban committee," and focused on the economy of Tulsa and its environs. These committees studied such things as wants, specialization, the nature of capital, the role of money, and the interdependence both of individuals and of regions.

3. In Kalamazoo, Michigan, when the school gym had to be closed for repairs and workers appeared with tools and machines, a second grade class used this event as a vehicle for studying the role of capital and the process of capital formation in our society.

4. In Tulsa, Oklahoma, a third grade class studied consumption, production, the factors of production, the circular flow of income, technology, productivity, and specialization, in terms of the economics of the petroleum industry and the interdependence of Tulsa with the rest of the nation.

Later Elementary, Grade Four Through Grade Six

As the child moves out of the early elementary grades, he will be beginning to think at a somewhat higher level of abstraction--more in terms of society and not so much in terms of himself and his family. The process of developing a way of thinking about economics will have begun. In the later elementary grades children will increase their familiarity with the constituent parts of the central economic problem begun in early elementary grades.

They will also learn that every society has an organized approach to economic decision-making with respect to the alternatives confronting it--an organized approach which we call its economic system. They will learn that economic systems may rest on the basis of tradition, or they may be characterized by command decision-making or by decision-making decentralized among millions of individual consumers, producers, workers, savers, and investors or a combination of these .

At this stage children will begin to learn about the main characteristics of the American economy including the concept of the market, price competition, private enterprise, the profit motive, labor unions, banks, and other institutions. They will begin to understand how markets and prices together constitute the mechanism which decides what goods and services will be produced, how they will be produced, and for whom they will be produced.

Pupils will also learn that decision-making among alternatives takes place within the framework of certain objectives or goals. Some, though not all, of the economic goals of our society will be identified. These might include economic growth, economic freedom, economic security, and economic justice. They will also begin to learn that often these goals conflict with one another and that choices and compromises must constantly be made in the light of individual's personal values and our society's goals.

The treatment of these matters will again take place at a rising level of sophistication. The idea of an economic system might begin in the fourth grade study of California history with a view of an early mission community or an Indian tribe and then be developed later in terms of our more complex present-day economy. A goal like economic growth can grow from citing examples and experiences in the community, in the state, and later in terms of the history of the United States. At the same time concepts first introduced in early elementary grades will reappear. For example, specialization will reappear in terms of regional specialization within the state and nation, and finally in terms of international specialization or world trade. The following examples show how this is being done:

1. In Torrance, California, a fourth grade class studying the history of California considered an early mission settlement as a kind of economic system. The students investigated such things as the kinds of wants people had in such societies, the natural, human, and capital resources available to them,

the degree of specialization practiced, the types of goods and services produced, and the way in which economic decisions were made. Later in the course, modern California's economy was studied, using the same basic economic ideas and concepts.

2. In Little Rock, Arkansas, a fifth grade class used the stock market as a vehicle for discussing such economic topics as supply and demand, markets and prices, profits, types of business organization, big business, the Gross National Product, monopoly, and economic growth.

3. In Portland, Oregon, a sixth grade class used a village in Latin America as a vehicle for discussing the need for an economic system, the alternatives of tradition-oriented, command, and market decision-making, the nature and ingredients of economic growth, per capita GNP, the importance of capital, etc. Guest speakers were brought in, committees were formed, reports were prepared, and recommendations were made on policies to promote economic growth in Peru. The class learned why much of Latin America is underdeveloped and they acquired a way of thinking" about economic growth and economic systems.

Junior and Senior High School, Grades Seven Through Twelve

In the junior high grades students will start delving in depth into significant economic problems and using simple economic analysis to think their way through such problems. For example, the eighth grade course in U. S. history provides an excellent opportunity to discuss the process of economic growth. A ninth grade civics course provides an opportunity to discuss the economic role of government. International trade, the economic problems of underdeveloped areas, the role of big business in our economy, and the characteristics of economic systems in other countries are other matters which can be handled at the junior high level. In particular, students will acquire a more sophisticated understanding of the characteristics of the American economy, its achievements, its unsolved problems, and the changes taking place in it.

In senior high school the same kinds of problems will be discussed but in more detail and at a more advanced level. For example, in junior high the inputs of growth process can be discussed, including the role of the immigrants, the inflow of foreign capital, increases in productivity, and the contributions of the great entrepreneurs in American history. In senior high school the demand side of growth, the problem of maintaining effective demand through the proper use of monetary and fiscal policies, will be stressed as well. In junior high the discussion of big business might include an analysis of some of the economies of large scale production. In senior high school the Berle and Means analysis of the separation of the functions of ownership and control in the large corporations could be covered. In junior high school discussion of international trade would include the arguments for and against tariff protectionism. In senior high school case studies of the Common Market and the General Agreement on Tariffs and Trade could be undertaken. In junior high school a simple analysis of the effects of monopoly and the significance

of the Sherman Act and of regulatory commissions could be covered. In senior high school a more sophisticated analysis of such things as administered pricing and the wage-price guideposts might be undertaken. In senior high school students could also consider such matters as policies to achieve full employment without inflation, the functioning of the Soviet economy, and issues in labor-management relations.

In senior high school the student's use of economic analysis should have become relatively highly developed. Yet this development will be a logical consequence of simple beginnings in the elementary grades. The first grader who is considering the opportunity cost of spending his twenty-five cents allowance on candy rather than ice cream will in the twelfth grade be considering the allocation of productive resources by the Gosplan in the Soviet Union among consumer goods, capital goods, and defense hardware. The fourth grader who has studied the economic system of an early California mission or an Indian tribe will in the eleventh grade use the same framework of analysis to understand the economic system of an underdeveloped country in Asia. The third grader who has played the role of the consumer in the market will in senior high school be studying the effect of changes in total consumer spending on the Gross National Product. The fourth grader who had learned about capital formation in Robinson Crusoe's economy will in senior high be learning the reason for the volatility of private investment in the American economy and the effect of this on the stability of the economy.

These examples illustrate the vital importance of integrating economics into the curriculum at all grade levels in an organized way. The study we have recommended for inclusion in junior and senior high school can only be done if the groundwork has been laid in the elementary grades.

The following are some examples of how this is being done:

1. In Escondido, California, a seventh grade organized two mythical countries. Each had a unique set of geographic resources. Concepts of specialization, necessitating a market; the market being facilitated by money and transportation; and the allocation of land, labor, and capital were achieved in a simulation-type mode of instruction.

2. The eighth grade U. S. history course is used in many schools around the country as a vehicle for covering both the evolution of our modified market economy and the economic growth of the nation. A specific event like Jackson's fight with the Second Bank of the United States becomes a vehicle for discussing money and banking and its relation to growth. The Sherman Anti-Trust Act leads into meaningful discussion of the consequences of monopoly for a market economy. Immigration, the Homestead Act, federal subsidies to the railroads, the tariff, and the inventions of Edison and others cease being merely interesting "facts" and become a key to understanding such things as productivity, technology, and the process of growth.

3. In San Diego, California, a six-week economics unit has been included in the ninth grade world geography course. Some of the basic areas covered here include economic reasoning and logical analysis, the American economy--its measurement and distribution, growth and stability, and contrasting economic systems.

4. In the tenth grade world history course, the most common economic topic studied is comparative economic systems. In Seattle, for example, the framework of analysis developed for use in different units consists of the following: The nature of wants, the availability of productive resources, the organization of production, how decision-making was or is organized (how much dependence on tradition, how much on command, how much on the market), and how well the economy performed in the light of identifiable goals (such as growth, efficiency, freedom, strengthening the power of the state, religious goals, etc.). This framework is applied to a series of civilizations and societies ranging from the Stone Age through Ancient Egypt and the Manorial System in Europe down through mercantilism and 19th century laissez-faire to modern, modified market economies and communism. The Stone Age, incidentally, has turned out to be as useful as the Robinson Crusoe economy long favored by economists as a way of explaining economic fundamentals. The important thing in the tenth grade world history course is the development of a "way of thinking" about economics systems in general.

5. In North Little Rock, Arkansas, an eleventh grade teacher of U. S. history introduces several important economic themes. One of these is the conflict between unlimited needs and wants and limited natural, human, and capital resources. This is discussed primarily in the framework of the period of exploration and settlement of the New World. Another theme is the way in which public policy, derived from a people's value system, is used to modify the operation of the market to promote economic growth, stability, and security. Students divide into groups. One studies growth and the effect of the tariff, railroad subsidies, immigration, innovation, the Homestead Act, the establishment of the Federal Reserve System, and other historic developments on growth. Another group studies stability and discusses the business cycle, automatic stabilizers, the New Deal, the Employment Act, farm price supports, and fiscal policy. A third group studies economic security and concerns itself with the union movement, social security, federal deposit insurance, and other such matters. These are selected examples rather than a comprehensive picture of an elaborate and skillfully developed course.

The Capstone Course

Sometime during the high school years the student should have his "capstone experience" in economics. The timing of this should be an individual matter depending upon each student's background and readiness. This will be either a one-semester course in economics or a well-organized section of the American Problems or Problems of Democracy course. This

experience will be a recapitulation, the final drawing together of basic economic ideas and concepts, a final refinement of the tools of economic analysis, and a final exposure to the use of these tools in dealing with current economic problems. The ultimate test of economic understanding is the ability to deal with new economic problems as they arise using familiar concepts of analysis as problem-solving aids. At the conclusion of their high school program students will hopefully grasp this point and go out into the world better equipped to deal with the economic problems which they will encounter in their personal lives and in their social environment.

1. One of the most sophisticated and carefully structured twelfth grade economics courses is that taught in the schools of Contra Costa County. Econ 12 (Design and Evaluation of a Twelfth Grade Course in the Principles of Economics) was developed with a United States Office of Education Grant and the support of the Joint Council on Economic Education.

2. Another excellent offering is the one-year course in economics in Staples High School in Westport, Connecticut, which utilizes team teaching and elective units. During the first semester, each teacher presents a fairly traditional one-semester course in economics, emphasizing the basic tools of economic analysis. In the second semester, the different classes are merged into one with a team of four teachers. The student elects four in-depth units of 4½ weeks each from an offering of seven problem units. The seven are: (1) Investment and capital formation, (2) Foreign trade, (3) Urban problems, (4) Labor, employment, and manpower, (5) The Soviet economy, (6) The under-developed nations, and (7) Independent study. While the units are self-contained, the analytical concepts transcend the specific topics and are applicable to all.

Economic Education for Teachers

The economic education programs being conducted or being planned for the schools, kindergarten through grade twelve, require a new approach to the training of teachers in both preservice and inservice status. Courses for teacher trainees in colleges and universities need to be constructed with the specific objectives of preparing competent instructional personnel for the public schools. Traditional courses designed to produce economics majors, scholars, or professional economists are not deemed adaptable to the type of economic education needed by future teachers. This section of the report describes in some detail the specific objective of the preservice courses envisioned as well as some of the means of implementation and content to be included.

The same basic orientation posited for preservice experiences is required for inservice programs. At every level--state, county, and local--this basic program should be implemented. Because of the wide variety of needs and resources and differences in experience in economic education

among school districts, it is impossible to describe in detail here the multiple programs which would be appropriate in the various local situations. Such programs will need to be designed in cooperation with consultant agencies and colleges and universities keeping in mind the basic proposals made here for preservice education.

The Economics Panel recommends the guidelines developed by the Advisory Seminar to the California State Department of Education as basic to both preservice and inservice programs as follows:

Those who teach economics in the schools fall into three main groups. We present separate recommendations for each of them.

1. Most numerous at present are those who teach some economics as part of other courses. They are elementary school teachers in self-contained, non-specialized classrooms, typically K-6, who encounter basic eccnomics, especially in their readers, their discussion of father's occupation, of local population, etc.

2. Next come the teachers in specialized classrooms, typically grades 7-12, specializing in economics-related subjects, e.g. history, geography, government, business education, social studies, etc., which generally include some economic concepts or information. For effective education in economics, more such concepts should be included.

3. Only a small percentage teach economics as a discipline in a one-semester economics course, typically in grade twelve. (In some cases, economics is taught as "economics" in a solid six to ten week "unit" within a United States Government course, Problems of Democracy course, or similar social studies course.)

Our suggestions for improved college preparation and inservice education for all three groups rest on a fundamental belief--that to teach well, instructors in K-12 must understand how basic economic concepts and principles can be used, or applied, in thinking about economic problems and policies on an objective, orderly basis.

Preparation in Economics for the Teacher of Elementary Grades (typically K-6) in the Self-Contained Classroom

As minimum preparation for teachers, we recommend a one-semester, non-traditional, "basic" course (3 semester-hours credit) in economics. Our recommendations are focused on the problem of providing an effective foundation for the teaching of economics, but we suggest that this "basic" course (with or without the supplementary one-hour "classroom laboratory" course described below) is appropriate not merely for all non-economics majors, but even as a first course for majors.

Objectives of the Basic Course

The prime objectives of the basic course should be:

1. To stimulate an awareness of the major economic problems in our society.

2. To provide for all students, including teachers, a firm understanding of basic analytical concepts and principles (in the form of models), that will enable them to analyze major economic problems. This implies the elimination of much of the more elaborate, technical aspects of economic theory often included in elementary courses.

3. To develop a rational, objective way of thinking about and solving economic problems.

4. To foster proficiency in using and evaluating qualitative and quantitative evidence, especially when conflicting views on economic problems are presented.

5. In order to accomplish these objectives, at least one-fourth of all class time should be devoted to applications and problems which are relevant to voters, sellers of services, and home managers.

Approach and Philosophy of the Basic Course

These objectives imply an important change in emphasis and approach from the traditional, survey-type principles course taught at many institutions. The course we suggest should not, indeed could not, cover the entire subject matter area of the traditional principles course. Instead, we urge selecting two or three major areas of economics, with primary focus within each on teaching well a few analytical concepts and principles or models, and within each, major stress on the application and use of these concepts and models by the students in working through economics problems and policy issues for themselves.

The critical recommendation is the educational approach, stressing learning well a small number of fundamental concepts and principles in the areas covered and equally the use or application of these concepts and principles by the student in learning to think through economic problems and policy issues for himself. A way of thinking about economic problems is thus a primary goal of the course, parallel in importance to the concepts and principles themselves which make up the analytical foundation of economics. We believe that teaching students how to think in an orderly, rational way about economic issues is the first contribution of a basic course in economics, and that this lesson is a hard one for most students to grasp. In this emphasis, we follow the National Task Force on Economic Education.

We do not believe that the specific economic problems and issues chosen for study are critical, although we recommend strongly that they be ones that will motivate students to become involved in economics. These applications may involve consumer illustrations, and can readily include the ideas of consumer interests and consumer sovereignty. But focus on consumer education in the narrow "how to buy," etc., sense would not be basic economics as we recommend it.

"Laboratory" Supplement to the Basic Course--Future Teachers Only

We recommend that the basic course be supplemented (for future teachers only) by an additional one-semester-credit-hour for casework on economic materials. Such "classroom laboratory" work should consist of applications of the economics learned to the actual classroom situations which the future teachers will confront. Ideally, this hour should be a joint effort of representatives of the Department of Economics and the School of Education. The one-hour classroom laboratory should be taken concurrently with the basic course for all the public school preservice social science and elementary teachers. The instructors of the basic course should be encouraged to add the supplementary equivalent of one unit as they see best, that is, "mixing" it in with the other materials if this seems to them to be the most effective means. Since the equivalent of four semester hours is to be covered, there will be no overlapping or diminution of the basic course.

Frequently, however, students may not know that they want to be teachers until their senior year, and sometimes well along in their work in economics. As a result, they may not have had their supplemental one-hour classroom laboratory experience. In that event, they should consult with an instructor in the basic course and make up the deficiency as soon as possible. For inservice this laboratory experience is a must. It should include the development of pupil and teacher materials appropriate for classroom use.

Preparation in Economics for Teachers of Economics-Related

Subject in the Specialized Classroom (typically grades 7 - 12)

Teachers of history, geography, government, problems of democracy, civics, business education, etc., require skill and understanding in economics to do full justice to the rich meanings of all events, institutions, and patterns of living they must convey to their students.

As a minimum preparation in economics for these specialized subject-matter teachers, a three-course sequence in economics is recommended, or a total of nine semester hours.

The Basic Course

The initial course recommended is the basic course, identical to that described above, including the supplementary classroom laboratory hours.

The Second Course: Contrasting Economic Systems

The second recommended course is one on "Contrasting Economic Systems." This should be an analytical comparative study of advanced economic systems (e.g., United States, Russia, England) and the historical systems out of which they arose, in terms of the major economic questions, problems, and fundamental organizing principles faced by all economies. Such comparative study also should constitute a framework for further study and analysis of selected economic topics, e.g., international economics, unemployment, inflation, economic development. The additional study and analysis of specific topics (within the comparative framework) should of course, go beyond the scope and coverage of the basic course, but should retain the same general approach and philosophy. Specifically, this would involve the development of additional analytical models and their application and use by students to selected problem areas encompassed by the additional scope of the second course.

The Third Course: Advanced Problem Courses

The Seminar recommends that a final three semester-hour course in the sequence should focus on a specific problem area (or areas) and involve advance applications and analysis, using economic data, but developing further the basic objectives, approach, and philosophy of the basic course. To provide flexibility and allow for different situations in different departmentscf economics, two alternative courses are suggested. In both, the basic approach--i.e., a study in depth, involving advanced analysis and applications--should be the same.

1. Any existing applied course in economics offered by the Department of Economics, e.g., public finance, labor economics, money and banking, international trade, economics of demand, provided that it is selected by the teacher with an advisor's help, is appropriate to the student's field of interest or teaching specialization, and is taught as the basic course is taught but at a more advanced level.

2. A specially designed course for teachers and others not majoring in economics, demanding advanced analyses, applications, and use of economic data in areas or current problems. The Seminar recognizes that such a course is already being offered by a few Departments of Economics in the preparation of future teachers.

Relation of the Recommended Sequence to the Traditional Two-Semester Principles Course

We recognize that the first two recommended courses, taken together, comprise an alternative to the traditional two-semester principles course. We advance this alternative because we believe that it embodies a basic teaching approach and philosophy more suited to the needs of teachers who will have only a limited exposure to economics in their college experience. Further, it may be useful to offer the two alternatives side by side so that the comparative teaching effectiveness of both approaches for different types of students can be assessed.

College Preparation in Economics for Future Teachers of the One-Semester High School Economics Course

Recommended Minimum Preparation: A Minor in Economics

A minor in economics, comprising 21 semester hours of work in the field of economics, is recommended as minimum preparation to teach the one-semester high school course in economics. (California State Law concerning teaching requires a minor, defined as 20 semester hours, to teach in a subject matter area in the public schools.) The course content recommended for a 21 semester-hour minor includes:

	Semester Hours
1. The Basic Course	3
2. Contrasting Economic Systems	3
3. Macro-economics and Policy Course*	3
4. Micro-economics and Policy Course*	3

*These courses would differ from the traditional intermediate micro- and macro-theory courses in allotting substantial time to the study of industrial organization, price determination, monetary and fiscal policy, and other applications of relevant theory. Significantly less time would be allotted to the study of the purely formal, technical, theoretical materials often emphasized exclusively in traditional intermediate theory courses.

5. Quantitative Methods (Fundamental statistics and its application to economics and business)	3
6. Two Elective Courses in Economics (Involving additional analytical tools and their applications, with use of economic data)	6
	21

The Major in Economics as Preparation for Future Teachers

Advanced Placement Programs in the high schools are being more widely adopted. This foreshadows the time when the upgrading of teacher preparation to a major in economics may be desirable for the one-semester high school course in economics. In the meantime, the Seminar recommends that a major in economics be a reasonable minimum of preparation for teaching in the Advanced Placement Program in economics.[4]

The Northern California Council on Economic Education with endorsed support from the Southern California Council on Economic Education and the San Diego County Council on Economic Education presented a resolution to the Education Committee of the California State Department of Education as follows:

> Whereas, the California State Department of Education has recently published a study, "Economic Education in California Public Schools," which shows that only 30,116 high school students were enrolled in a one-semester economics course in 1966, and the teachers that are teaching economics courses have little or no training in economics; and
>
> Whereas, the Northern California Council on Economic Education has recently published a study, "Teacher Education Requirements in Economics at California Collegiate Institutions," which shows that most California collegiate institutions do not include economics as a requirement of the teacher training program in the great majority of fields of concentration; and
>
> Whereas, the California State Department of Education has recently published "College Preparation for Teaching Economics," a report and recommendations of an Advisory Seminar whose members were all outstanding economists and educators and whose recommendations constitute an educationally sound and reasonable list of requirements for future teachers in California schools; now therefore be it
>
> Resolved, that the Advisory Seminar's recommendations listed below become the basis for certification of teachers in California:
>
> A. For all teachers K-12:
>
> The basic course, three semester-hours, stressing:
>
> 1. Economic reasoning
> 2. Basic concepts and models
> 3. Applications to problem and policy situations

[4] College Preparation for Teaching Economics, Report and Recommendations of an Advisory Seminar to the California State Department of Education, November, 1966, pp. 3-9.

B. For all social studies and business education teachers, grades 7-12:

A three-course sequence in economics ---- 10 semester hours

1.	The basic course	3 semester hours
2.	Contrasting economic systems	3 semester hours
3.	An elective--preferably an advanced problems course	3 semester hours
4.	One unit Laboratory Experience	1 semester hour

C. For teachers of grade 12 courses in economics:

A minor in economics ---- 22 semester hours

1.	The basic course	3 semester hours
2.	Contrasting economic systems	3 semester hours
3.	Macro-economics and policy	3 semester hours
4.	Micro-economics and policy	3 semester hours
5.	Quantitative methods	3 semester hours
6.	Two electives in economic problems	6 semester hours
7.	1 Unit Laboratory Experience	1 semester hour

The resolution was approved and accepted by the Education Committee. The resolution now goes to the Teacher Preparation Committee of the California State Board of Education for its review. Then, to the Board for its final approval.

Resource Materials

The Panel has reviewed some recently developed materials in economic education that reflect some of the basic considerations set forth in this report. The list is by no means all inclusive of the many materials available but is presented as the type of material with which curriculum workers should become familiar.

Elementary

Dr. Lawrence Senesh, Our Working World, Science Research Associates, Inc., Chicago, 1965. Dr. Senesh has structured the discipline of economics in a conceptual framework that is clearly defined and graphically portrayed. He has simplified the vocabulary so that anyone--even those without extended knowledge of economics--can understand and utilize economics on a more pragmatic basis. Specifically, Dr. Senesh details the fundamental idea relationships of economics as being:

1. The conflict between unlimited wants and limited resources.

2. The fact that men have always sought ways and means of lessening the gap between unlimited wants and limited resources. That they have found that by dividing the labor they can produce faster and better. This, in turn, necessitates specialization. Specialization can be divided three ways:

   - Occupationally
   - Geographically
   - Technologically

3. This creates the concept of interdependence.

4. This interdependence creates a need for a market which, in turn, is facilitated by:

   - A monetary system
   - Methods of transportation

5. Because resources are too limited to permit the fulfillment of all wants, all societies develop allocating mechanisms that determine:

   - What kinds of goods will be produced
   - The quantity of goods that will be produced
   - The methods of production
   - The level of production and employment to be obtained

6. In our economic system the market is the major allocating mechanism.

7. When the market mechanism does not provide things that are necessary or desirable, society modifies the decisions of the market. This is done by public policy derived from the interaction of people's value preference.

8. Our value preference can be grouped roughly around five social goals:

   - Economic growth - a rising standard of living for an increasing population
   - Economic stability - full employment without inflation
   - Economic security - protection of income against old age, accident, disability, and employment
   - Economic freedom - freedom of choice for each individual, producer, and consumer as long as it does not abridge the freedom of others
   - Economic justice - economic opportunities for all

In analyzing the actual materials used in the classroom, both pupil and teacher materials, the concepts developed are consistent with the conceptual framework outlined above. The component parts of these materials are outlined by grade level as follows:

Grade One--Families at Work

Children's Fundamental Ideas Are Related to Life in the Home

Components:

A. Resource Unit (Teacher) Part I and II
   Purpose of Lesson
   Reinforcement of Recorded Lesson
   Activities
   Stories, Poems, Songs
   Bibliography

B. Records. Fourteen 2-15 minute lessons on each
   Recorded lessons - booklet - teacher

C. Picture Book Read (hard text)
   Part I - Children follow with record
   Part II - Discussion pictures and reading

D. Activity Book
   Pictures related to decision-making

Grade Two--Neighbors at Work

Children Know Neighborhood Almost as Well as Home

Components:

A. Resource Unit (Teacher) Part I and II
   Purpose of Lesson
   Reinforcement of Records
   Activities
   Stories, Poems, Songs
   Bibliography

B. Records. Eight 15 minute lessons on each

C. Textbook (hard cover)
   15 Lessons- Each lesson is two pages color pictures
   for introduction with record
   Let's take a trip
   Illustrated story
   What did we learn?

D. Activity Book
   Related to decision-making

Grade Three--Cities at Work (Not completed)

(Title not completed)

Components: A. Resource Unit (Teacher)
Purpose of Lesson
Introduction Essays (concept unit)
Case Studies
Story or Poem
Activities
Stories and Poems
Bibliography

B. Textbook
Begins with concept unit
Case Study
Illustrated story or poem

Dr. Senesh employs a concept development vehicle closely related to the expanding environment concept. In first grade he uses the family, in second grade he expands to the neighborhood, in third grade he emphasizes cities. It is anticipated that materials will also be developed for grades four, five, and six.

Economic Education for Washington Schools: Kindergarten Through Grade Six, State Superintendent of Public Instruction, Olympia, Washington, 1966. The economic education program developed by the Seattle Schools as part of the DEEP Program in cooperation with the Northwest Council for Economic Education under the supervision of the Office of the State Superintendent of Public Instruction, has been adopted by the State of Washington as its official Guide. The Guide has drawn heavily from the DEEP Part I and Part II materials developed by Dr. Calderwood and others for use as guidelines by the school systems working with the Joint Council on Economic Education. Primarily, the work is based upon a series of recurring economic areas or economic themes. The Guide is conceptually oriented and is well-paced for concepts developed at the elementary level. Its greatest strength lies in the simplicity of organization, its specificity in terms of concept development, and its translation of concepts to children's interpretations. The suggested activities that are part of the Guide relate specifically to the economic concepts proposed and are directly related to what the typical social studies program covers at different grade levels. It is conceivable that a social science program could include most of the social science disciplines if they were treated in a similar fashion.

Economic concept development in the Washington program proceeds at a realistic pace which is commensurate with the age level abilities and capacities of children. It has a definite developmental sequence with adequate reinforcement of previously learned concepts at different grade levels in a new context with increasing sophistication. The suggested bibliographies and other materials seem adequate yet not over-elaborated. Provision is made for supplementary activities if the classroom teacher so desires. This is an optional feature of the program and is extremely well done.

Contra Costa County Social Studies Units, Contra Costa County Department of Education, Pleasant Hill, California, 1965. The Social

Studies Guides developed by the Contra Costa County Department of Education were obviously developed with the factors of human growth and development uppermost in mind as they influence the learning abilities of the various age level groups in the K-6 program. Also, economics is treated as only one part of the total social science program which is tied in closely with the California Social Studies Framework for the Public Schools. Primarily, the program was developed with a series of individual units and is built on a contrived sequence which can be adapted to children at their level of performance and also allows for divergent thinking without pressure to arrive at the right answer. The basic themes, trends, or strands which tie the developmental sequence to common objectives are elaborated as (1) differences, (2) interdependence, (3) change, (4) control, and (5) specialization. Inservice education for teachers is required for teachers since the program is highly structured and leans heavily on the mode of instruction, teaching techniques, sequence of learning experiences, etc. The units utilize levels of thinking as outlined in Bloom's Taxonomy to create learning experiences that will assist children to operate at higher thinking levels.

Secondary

Econ 12: A Progress Report of, (Design and Evaluation of a 12th Grade Course in the Principles of Economics), Office of Education Project H-153, May 1966. Econ 12 is a teaching system developed at San Jose State College and in the Contra Costa County, California, high schools under a cooperative research grant from the United States Office of Education Project H-153 and a grant from the Joint Council on Economic Education to the Contra Costa County Department of Education. Developed over a period of three years, the final version of the Econ 12 course and materials incorporates changes in content, organization and teaching strategies based on evaluations of four trial uses of the course involving approximately 25 teachers and 3,000 students from 14 county high schools. The resulting course organization assumes certain things about students and teachers:

1. Student ability and achievement range is the upper 2/3 of the twelfth grade student population.

2. Students have had no previous introduction to economics and have completed high school social studies courses emphasizing U. S. history and world history and geography.

3. The teachers regularly assigned to teach twelfth grade government or American Problems courses have completed at least six units of college economics and the Econ 12 training-orientation course.

4. Classes range from 15 to 35 students or are large classes with team teaching and seminar sections of 15 to 35 students.

The primary objectives of the Econ 12 course are to train students to analyze, make judgments about, and take effective action on economic

questions. The course attempts to achieve this by organizing around eight pervasive issues: (1) ideological differences between capitalism and communism, (2) school desegregation, (3) the relation between government and private economic organizations in the United States, (4) union-management relations, (5) poverty in the U. S. A., (6) public monetary and fiscal policy to promote growth and stability, (7) planning for development in underdeveloped countries, (8) Soviet planning. Econ 12 materials present diverse points of view on these issues but in most instances the course itself is free of advocacy; the learning experiences are designed to encourage and train students to use techniques of economic analysis to make their own judgments.

This training is provided through a lesson sequence which attempts to develop in students a scientific perspective for studying and judging the effectiveness of economic organization. The approach requires students to attain a certain level of knowledge about economics as a discipline, and to learn to apply this knowledge of economics concepts and analysis to the important contemporary issues raised in the course. Econ 12 integrates the analytic and problem-solving approaches to teaching economics. First, students are given a conceptual framework with which to view all economic problems along with a set of analytic models which use this framework in the study of certain aspects of society. Then, students explore the use of these general problem-solving modes in the course problems.

Econ 12 teaching strategies emphasize the development of verbal skills--acquisition of an economics vocabulary, precision in the use of language, expressiveness in the statement of personal beliefs, and greater facility with rules and forms of logical discourse. A considerable portion of class time is devoted to student discussion and writing; the class becomes a forum for practicing verbal skills and the teacher's major function in these classes is as an organizer-facilitator.

It is hoped that the Econ 12 course organization and materials help orient and train teachers to be effective economics instructors. The systems approach to course and materials design provides flexibility through a set of interrelated components which give the teacher a course and carefully organized lessons, but also many options for course organization, coverage, subjects, and teaching methods. When the course is complete, it will include a short summary text; short, programmed instruction modules, correlated readings, workbook exercises; overhead transparencies; and an instructor's manual.

Dr. Edwin Fenton, Teaching the New Social Studies in Secondary Schools, An Inductive Approach, Holt, Rinehart and Winston, Inc., New York, 1966. The essence of Fenton's approach to the teaching of the social sciences is the Inductive Method. If one can approach his writings for an underlying message--it is that the best way to teach concepts meaningfully is to do so through the Socratic question-and-answer technique based on a "well-defined structure." This whole thesis revolves around this and relies heavily for support on Bruner's The Process of Education and Bloom's Taxonomy of Educational Objectives: Affective and Cognitive Domains. The Holt Social Studies Curriculum

has as its three basic tenets:

1. The development of attitudes and values.

2. The development of the ability to use the method of inquiry of history and the social sciences.

3. The acquisition of knowledge of selected facts and generalizations from history and the social sciences.

An outline of the systems social studies program is given called the "Chart for the New Curriculum" and is described by grade level and semester content. The chart is as follows:

First Semester	Second Semester
Grade 9. Comparative Political Systems A comparison of a primitive government with contemporary governments of the United States and the Soviet Union, examining the nature of leadership, the institutional setting, decision-making, the role of the individual citizen, and ideology.	Grade 9. Comparative Economic Systems A comparison of a traditional economy with systems where most decisions are made in the market (United States) and where most decisions are made by command (Soviet Union), focusing upon three basic questions--what is to be produced, how it is to be produced, and for whom it is to be produced.
Grade 10. The Shaping of Western Society A study of change over periods of time in four areas of Western society--politics, the economic system, the social organization, and patterns of thought.	Grade 10. Studies in the Non-Western World An examination of four non-Western countries--South Africa, China, India, and Brazil--analyzing in each case the traditional society, the impact of Western ideas and institutions, and one major contemporary problem, such as economic growth.
Grade 11. American History A study centering on four major themes--the development of the American economic system, the growth of the American political system, the changing American social structure, and the reflection of these developments in the American intellectual tradition.	

Grade 12. Introduction to the Behavioral Sciences

A study of two issues: the methods of inquiry of the behavioral sciences (psychology, sociology, and anthropology) and selected generalizations about the behavior of men as individuals and in groups.

Grade 12. The Humanities in Their Social Settings, or Work, Leisure, and the Arts

A study of literature, philosophy, and the fine arts in three settings--fifth-century Athens, Renaissance Florence, and contemporary New York City--which examines various works for their artistic and intellectual merits and as products of their particular cultures.

The Teachers Guide to these experimental units emphsaizes the importance of variety in the instructional process, and of breaking away from the monotony of a single-activity period. Allowing the student considerable time for note-taking and personal articulation is considered of paramount importance in inductive teaching. Dr. Fenton and the publishers have also made available a series of films which illustrate how the first week of a history class, using the inductive techniques, should be conducted.

Much emphasis throughout Fenton's materials is placed on learning by comparisons. This is illustrated by his economics unit, given in the second semester of the ninth grade, and writings by George B. Bach and John R. Coleman in Fenton's book, Teaching the New Social Studies. Without attempting to evaluate the techniques outlined in these materials, it is quite apparent that they should be used with an above-average group of youngsters if meaningful results are to be attained within a reasonable period of time.

Economics Readings for Students (Eighth, Ninth, Eleventh and Twelfth Grades), Pittsburgh Public Schools, Pittsburgh, Pennsylvania, 1966. These materials were developed by the Pittsburgh Public Schools in cooperation with Carnegie Institute and the Joint Council on Economic Education which awarded a grant to the Pittsburgh Schools as part of the DEEP Program. The purpose of the grant was to provide the working tools for inclusion of economic concepts in the various social science courses, grades eight through twelve. Throughout the materials a consistent set of objectives are worthy of note.

Objectives

1. Development of cognitive skills essential to critical thinking

   a. Each daily lesson plan specifies for emphasis one or more of the skills drawn from Bloom's Taxonomy.

   b. Objective test items as well as some essay questions are specifically designed to determine how well students are progressing toward the mastery of cognitive skills.

c. Cognitive skills progression:
   - comprehension and application
   - analysis and synthesis
   - evaluation

2. Development of affective objectives

a. Includes:
   - a set of attitudes towards individuals and groups
   - a way of arriving at decisions through a rational decision-making process
   - a personal value system in accordance with a democratic credo
   - a body of information about society and government which can serve as the basis for a rational decision-making process in personal and civic affairs

b. The lower ranges of affective objectives, receiving and responding, must be taught primarily by the way in which a class is conducted.
   - hence teachers must use a variety of teaching techniques and ways of grouping students in order to reach them

c. The higher order of affective objectives involving the development of a value system and of an integrated personal philosophy of life comes both from the way a class is conducted and from the content which students read and discuss in class.

3. Using the mode of inquiry of the discipline and the social sciences

a. Draws sharp distinction between knowledge of the method of the discipline and the ability to use that method.
   - knowledge of method means ability to repeat
   - use of method implies ability to isolate a problem, to carry on a scholarly investigation, and to write the result with no help from teachers or fellow students

b. In traditional high school curricula, social science method is taught--if at all--implicitly. Students read articles or books or hear lectures which employ the methodology of the discipline but they are not exposed consciously to materials designed specifically to teach the steps of the method of social science study.
   - to overcome this handicap a number of lessons were designed in each course for the specific purpose of teaching one or more aspects of social science scientific inquiry

- testing of the mastery of the mode of inquiry was done by assigning independent research papers which require students to make investigations without help from their teachers
- by a battery of analytical questions, the students are helped to learn the structure of the discipline

4. Knowledge of selected facts and generalizations

   a. Criteria includes:
      - arousing interest of the student
      - raising ethical and moral problems, each in its own setting socially, which press upon modern young people
      - letting some of the problems of contemporary society guide the selection of content
      - choosing some content areas to assure knowledge of a small body of knowledge about society which any educated American living in the mid-twentieth century should have

Implications for Materials

1. Both objectives and teaching strategies imply a variety of materials

   a. Great use is made of individual readings, each of which begins with an introduction and several study questions; use of a conventional text is the exception.
      - choose reading with great care to be certain it contributes to an overall understanding of the subject with which it is concerned
      - some are simple expositions
      - others are biographies typical of a particular development
      - groups of charts or tables containing information from which generalizations can be drawn
      - an analytical article written by an appropriate scientist in the field
      - many other sorts of materials

   b. Class handouts--a mimeographed page or two of information used to focus class discussion

   c. Audio-visual materials
      - tapes
      - slide tapes
      - single concept filmstrips
      - transparencies for overhead projector

Teaching Strategies

1. Objectives imply teaching strategies

   a. There is plenty of evidence that students accumulate facts and generalizations as well if they have attended lectures and read textbooks as if they have been in small discussion groups.

   b. If we wish to see if they can use the mode of inquiry independently of the teacher, we must launch them on an investigation of their own.
      - expository techniques not enough, must have individual work

      (Frequently pause during discussion class for four to five minutes to write an hypothesis or draw together a conclusion from scattered evidence.)

Experimentation and continuous evaluation has highlighted some of the inadequacies of the program and will be part of the subsequent revisions. We list these shortcomings, clearly defined by the staff at Pittsburgh because they are some of the most crucial problems experienced by others working in the development of economic materials. We can all profit from the sharing of these problems.

Shortcomings Which Have Become Obvious As Experience Has Been Gained

1. Failure to develop a way of stating affective objectives (attitudes and values).
2. Failure to distinguish in stating daily objectives between general skills and abilities common to all intellectual endeavor and their specific application in the social science disciplines.
3. Inability to specify all the facts and generalizations which students were expected to learn.
4. Failure to translate statements of appropriate skills and abilities made in Bloom's Taxonomy into the materials of the course.
5. Failure to specify the behaviors which students who had mastered these skills and abilities would exhibit.
6. Failure to employ a sufficient range of strategies. (Socratic method should be used, but not to exclusion of other styles.)
7. Weekly independent analysis assignment not too successful.
8. Examinations poor, too much required, only recall of facts and generalizations.
   a. Very few test the higher order cognitive abilities.
   b. Almost none get at the affective domain.

Development of Economics Curricular Materials for Secondary Schools, (Cooperative Research Project No. HS-082), Meno Lovenstein and others, The Ohio State University Research Foundation, Columbus, Ohio, 1966.

The general approach to the Curricular Materials is a two-fold one. First, formulating a structure of economics and using it as the basis for the materials and second, developing learning situations to be used in the classroom by teacher and students. It is intended that these materials be used in the ninth grade on the theory that students at that level are on the threshold of abstract reasoning and are thus receptive to abstract concepts providing appropriate and meaningful methods are used to illustrate them.

Eighteen units are offered encompassing the major concepts which the author feels are essential for the understanding of basic economics. Although these units are designed to fit a semester-length course, no attempt is made to set time limits for individual learning situations. Much emphasis is placed on student participation in the discovery of main economic concepts and efforts to avoid didactic presentations of "economic truths."

As has been said before, the student materials are in the main of a participatory nature and are not intended to replace a text or workbook. In the testing devices used and, in the statement of objectives, heavy reliance is obviously placed on Bloom's Taxonomy of Educational Objectives, The Cognitive Domain. The eighteen units are divided into three major areas:

A. Scarcity and Basic Economic Resources

1. Definition of Scarcity
2. Definition of Factors of Production and Factors of Production
3. What to Produce
4. Allocating the Resources
5. Stimulating Efficiency
6. Dividing the Goods and Services

B. The Flow of Goods and Services and the Flow of Money

7. Definition of Flows
8. Measure of a Nation's Income
9. Definition of Economic Growth
10. Composition of the Gross National Product
11. Determining the Nation's Income
12. Role of Money and Financial Institutions
13. Monetary and Fiscal Policies
14. International Trade

C. The Coordination of Economic Activity

15. Types of Economic Systems

16. Basic Economic Decisions in Market and Planned Economics

17. Economy and Government

18. Economic Problems and Policies

The Panel recognizes the importance of suitable materials for accomplishing the objectives of our report. We recommend that publishers be encouraged to develop materials along the line of the few samples cited here.

VIII. ANNOTATED BIBLIOGRAPHY OF SELECTED RESOURCE MATERIALS

Amner, Dean S. Readings and Cases in Economics. Boston: Ginn and Company, 1966. 330 pages.

An interesting and effective supplement for the teachers of a high school economics course. It helps apply abstract economic principles to real-world situations. The emphasis is on current economic problems, but a few readings from early economists help give a historical perspective to present problems.

Barron, J. F. and Hoff, Marilyn L. Some Concepts Essential to a Basic Understanding of Economics. South-Western Publishing Company, Monograph 110, Cincinnati, 1964.

An aid to the teacher in making him aware of the fundamental economic concepts with which he should be familiar in order to teach economics. The publication presents the elements of economics in terms of the student's actual experiences and his knowledge of his environment.

California State Department of Education. Guidelines for a Course in The Principles of The American Economy. Compiled by George L. Roehr, Consultant in Secondary Education, Sacramento, 1964.

This document endeavors to synthesize the thinking of scholars relative to the fundamentals of economics for the purpose of understanding the American economy. It concentrates upon the American economic structure, recognizing that the student should understand a reasonable sample of existing economic situations.

California State Department of Education. Teaching Economic Understandings in Business Courses, Sacramento, 1962 and 1966.

The material for this report was developed at a workshop held in June 1961 and reviewed at conferences of businessmen and business educators. The participants of this workshop were members of the National Workshop in Economics for Business Education Teachers held in 1960.

The information contained in this report includes examples of economic understandings which could be used in business subjects such as Bookkeeping, Business Law, Business Mathematics, General Business, Merchandising, Shorthand, Typing, and Business English.

Dodd, J. Harvey; Kennedy, John W.; and Olsen, Arthur R. Toward Better Economic Education. South-Western Publishing Company, Monograph 104, Cincinnati, 1961.

This publication discusses the values and the relationships of liberal education, vocational education, and the study of economics.

Goodman, Harriss. Economics An Analytical Approach. Boston: Ginn and Company, 1966. 532 pages including glossary.

The objective is to present to high school students the most important elements of the economy and how the economic forces operate. Both economic institutions and economic theory are treated. The themes of growth, development, and progress of the American economy are repeated.

Hailstone, Thomas J.; Martin, Bernard L.; and Wing, George A. Contemporary Economic Problems and Issues. Cincinnati, Ohio: South-Western Publishing Company, 1966.

A problems approach to some important issues of the American economy. The book presents chronological developments or evolution, provides facts, and analyzes alternative solutions. Illustrates the transition from the study of theoretical material to the analysis of important problems and issues of our economic system.

Lindholm and Driscoll. Our American Economy (Third Edition). New York: Harcourt Brace and World, Inc., 1967. 518 pages including glossary of economic terms.

The book contains both descriptive and analytical economics and is aimed at both the terminal and college-bound student. It treats major economic problems such as the needs of the cities, automation impact, European Common Market, and growth and development in America, in the Communist bloc, and in underdeveloped countries.

A teachers' manual, a resource guide with answer key for questions, and workbooks are available.

Lovenstein, Meno; Furst, Edward J.; Jewett, Robert; and Maccia, Elizabeth Steiner. Development of Economics Curricular Materials for Secondary Schools. The Ohio State University, Research Foundation, 1966.

The research reported in this volume was supported by the Cooperative Research Program of the Office of Education, U. S. Department of Health, Education, and Welfare. The project included the development of the theory of the course including student behavioral outcomes and the structuring of the curricular materials, preparation of curricular materials for the teacher and the student, evaluation of the curricular materials, and a consideration of the relevance of the project for the social studies curriculum.

Lumsden, Keith G. The Free Enterprise System. New York: McGraw-Hill Company, Inc., 1963. 274 pages.

This is a programmed text consisting of a large number of statements, each of which explains something and asks questions about the material read by the student. New material is introduced a little at a time and old material is reviewed.

Martin, Richard S. and Miller, Reuben G., (Kenneth E. Boulding, Consultant Editor). Economics and Its Significance. Merrill, 1965.

This book is one of the six volumes included in the Social Science Seminar Series, which presents scholarly viewpoints on and information about history, geography, political science, economics, sociology, and anthropology.

This volume presents information on the nature of economics: the emergence and development of economics as a distinctive discipline; some questions with which economists are concerned; certain theories, findings, and tools developed and utilized by economists; and the importance of economics to the contemporary scene.

Also included is a chapter on suggested methods for teachers. Five economic generalizations were selected from the content included in the book. A number of methods that might be used to present these topics are presented in the concluding chapter.

National Association of Secondary School Principals. The Bulletin (November, 1965). "Economic Understanding: Continuing Quest in Secondary Schools."

This issue of The Bulletin contains articles which emphasize the importance of including economic understandings in the secondary school program. It also includes descriptions of six economic education programs.

National Council for the Social Studies. Social Education, April, 1966.

This issue of Social Education is devoted to economic education. Dr. Moe Frankel, Director, Joint Council on Economic Education, wrote an introduction to the publication which includes articles on: Overview of economics, building teacher effectiveness, and the school curriculum.

National Education Association and National Business Education Association. Business and Economic Education for the Academically Talented Student. Editors - Milton C. Olson and Eugene L. Swearingen, Washington, D. C., 1961.

This publication, directed toward economic education for the academically talented, is helpful as a guide to the methods of including economic understandings in business education courses and of including a course in economics in the education program of all students.

San Diego County Department of Education. Economic Education - A Topical Review for Teaching Our American Heritage. San Diego, 1963.

This review of economic topics is designed to assist the teacher in introducing students to some of the facts, ideas, concerns, and ways of thinking of economics. Contrasting economic systems are discussed in addition to the economic system of the United States.

Uhr, Carl G. Economics in Brief. New York: Random House, Inc., 1966. 140 pages.

A book designed for teachers who have not completed formal college courses in economics. The material is nontechnical and brief in presenting the central ideas of economics. This brief excursion into economics may whet the teacher's appetite for a more penetrating study of the subject.

U. S. Department of Health, Education and Welfare, Office of Education, Bureau of Adult and Vocational Education, Division of Vocational and Technical Education. Economics for Young Workers. Washington, D. C., 1966.

This guide was prepared under contract with the University of Minnesota under the direction of Warren G. Meyer, Professor of Distributive Education, with Dr. Roman F. Warmke, Executive Director of Ohio Council on Economic Education, acting as consultant.

Although it was developed primarily for use with high school distributive education students enrolled in cooperative programs, it is adaptable for use with students enrolled in any vocational programs.

(At the time of writing (May, 1967) this publication was available for discussion purposes only. Plans are for publication by the Government Printing Office.)

Pamphlets

Area Studies in Economic Progress. Curriculum Resources, Inc., published by Scott, Foresman and Company, Chicago.

A series of pamphlets on the economic problems of various major geographic areas of the world, such as Western Europe, the Middle East, and China. Each pamphlet is by a different author.

Comparative Economic Systems, Student Readings and Teachers' Manual, Curriculum Development Center, Project Social Studies, Carnegie Institute of Technology and the Pittsburgh Public Schools, General Systems and Graphics, Inc., 933 Penn Avenue, Pittsburgh, Pennsylvania, 15222.

A one-semester course in comparative economic systems intended for the second semester of grade nine as part of a sequential four-year high school program for the top twenty-five percent of a typical high school class. The subjects covered, government and economics, are also studied in standard civics classes, but the emphasis here is on governments and economic systems other than that of the United States to a much greater degree than is customary.

Economics and the Consumers. Joint Council on Economic Education. New York 10036, 1966. 40 pages. 75¢ single copy.

Objective is to identify and elaborate economic principles which high school graduates should understand to equip them to make intelligent decisions as consumers. The pamphlet uses experiences of the student and his family to develop competence in economic analysis. High school students who find the abstract economics course uninteresting should find that this pamphlet will increase their interest in the subject.

Economic Series. Curriculum Resources, Inc., available from Webster Publishing Company, 1154 Reco Avenue, Saint Louis 26, Missouri.

A wide range of economic topics is covered in this series which includes volumes for first through twelfth grade levels. The pamphlets can be quite useful as supplementary reading in social studies or social science courses at the appropriate level.

Mayer, Martin. Understanding and Using Economics. Iowa: Better Homes and Gardens. 41 pages. 50¢, with reduced prices for quantity purchases. Better Homes and Gardens, Department "A" Reader Service, Des Moines, Iowa. 50303.

Designed to bridge the gap between economic theory and perscnal economics. For a brief document it is very enlightening and should whet the student's appetite to understand more about the economy. The booklet should be useful for supplementary reading in a business education or social science secondary school classes.

Series for Economic Education. Federal Reserve Bank of Philadelphia. Free for distribution by schools and certain other organizations.

A series on various economic topics such as Gold, The Price System, Unemployment, In Prosperity Why?, The Mystery of Economic Growth. Very well written in easily understandable, concise language and should be useful as supplementary materials in economics, social science, or business education courses.

Townshend-Zellner, Norman. A Resource Document for a High School Course in the United States Economy. Sacramento: California State Department of Education, 1967.

This resource document is an interim step in the creation of an instructional guide. It focuses on organizing and outlining the essential content of a high school course in economics. The document should help teachers understand the fundamental issues, develop a comprehensive and integrated approach to economics, and highlight the major problems of the United States economy. Options in depth are developed depending upon the qualifications and motivations of the students. The approach is a systems approach to the study of economics which helps the student to think of the economy as a complex interrelated system with component subsystems.

Wronski, S. P.; Doody, F. S.; Clemence, R. V. Modern Economics. Boston: Allyn and Bacon, Inc., 1964. 422 pages including glossary.

Text is analytical in nature and is designed to give a fundamental understanding of economics without a mass of data. It stresses problems and solutions. The end-of-chapter materials include vocabulary summations, chapter review questions and proposed class projects, and a summary of each chapter.

To supplement this annotated bibliography, attention is drawn to the following organized listings of materials:

Study Materials for Economic Education in the Schools, October 1961 and October 1963, (Report of Materials Evaluation Committee), Committee for Economic Development, New York, N. Y., 1961 and 1963.

These bibliographies break down areas of interest under such subheadings as Production, Distribution of Income, Inflation, Recession, Stabilization Policies, etc.

Suggestions for a Basic Economics Library, Joint Council on Economic Education, 1212 Avenue of the Americas, New York, N. Y., 1965.

This is a compilation which suggests a format for the creation of an economic library. There are priority lists recommending

materials for use in the initial construction of the collection followed by a systematic breakdown according to topic, e.g., Economic Theory and Analysis, Economic History, etc. These categories are further broken down into more specific areas of emphasis.

Paperbound Books in Economics: An Annotated Bibliography, J. Woodrow Sayre, Council on Economic Education, State University of New York at Albany, Albany, New York, 1965.

This useful addition to a bibliography lists according to major concepts references in reasonably-priced paperbound editions.