

DOCUMENT RESUME

ED 053 502

EC 032 880

AUTHOR Popham, Donald F.
TITLE Teaching Gifted Students Social Sciences in Grades
Ten through Twelve.
INSTITUTION California State Dept. of Education, Sacramento.
Div. of Special Education.
SPONS AGENCY Bureau of Elementary and Secondary Education
(DHEW/OE), Washington, D.C.
PUB DATE 71
NOTE 37p.
EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Exceptional Child Education, *Gifted, *Honors
Curriculum, Program Design, *Senior High Schools,
*Social Sciences, Teacher Developed Materials,
Teaching Guides
IDENTIFIERS California

ABSTRACT

The monograph is designed to assist secondary school teachers in grades ten through twelve who teach social sciences to gifted students. The introduction encompasses such topics as the role of leadership, the variability of instruction, and problems in social science instruction. The identification of the gifted student in social sciences and the successful teacher of the field is considered. The importance of the development of an inquiry-conceptual process of reflective reasoning in order to equip the gifted student for social understanding is stressed. Program themes and structure for each of the grade levels are discussed and subject matter skills and teaching strategies are looked at. The monograph concludes with a summation of the projected design of the new social science framework for California as taken from the findings of the California Statewide Social Sciences Study Committee. A complementary document (EC 032 579) deals with the same topic at the elementary school level (grades 4-6). (CD)

ED053502

EC032880

Teaching Gifted Students
Social Sciences in Grades
Ten Through Twelve

Prepared for the

DIVISION OF SPECIAL EDUCATION
California State Department of Education

by

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This publication, which was funded under provisions of the Elementary and Secondary Education Act, Title V, was edited and prepared for photo-offset production by the Bureau of Publications of the California State Department of Education, and published by the Department, 721 Capitol Mall, Sacramento, California 95814.

Printed by the Office of State Printing

1971

FOREWORD

"The vocation of every man and woman is to serve other people," Tolstoi once wrote. That statement has special meaning for the teacher, for he serves the young, who are entrusted to him when they are most impressionable. His influence on them will be as great as his service.

The mentally gifted need a large share of the teacher's help. It is true that they comprise only a small part of the student population in California and can move successfully through an ordinary curriculum with ease. But the gifted will have an influence on our state and nation far beyond their numbers; many of them will, one day, be among the movers and shakers of our society. To ignore their special needs is to frustrate them. Frustration, in turn, can divert them from constructive goals, and we will all be the losers for it.

The teacher, then, must pay attention to the mentally gifted. He must serve them by shaping the curriculum to their needs. By varying the manner in which a subject is taught and the rate at which it is taught, the teacher of the mentally gifted can win their interest.

To assist the teacher of the mentally gifted, the State Department of Education has directed and coordinated a project to develop appropriate curriculum materials. This publication, one in a series, contains important concepts and suggestions for the use of teachers of the mentally gifted. It is our hope that these teachers will find the publication useful in the important work entrusted to them.



Superintendent of Public Instruction

PREFACE

The intent of this publication is to assist those who teach social sciences to gifted students in grades ten through twelve. More specifically, its aim is (1) to identify the successful teacher of social sciences to the gifted; (2) to identify the student who is gifted in the social sciences; (3) to focus on the importance of the maieutic function of education; and (4) to suggest certain methods of teaching in the social science honors program.

By making use of the material contained in this publication, the teacher of social sciences to the gifted should be able to help the young students in his care prepare themselves for the roles of leadership that many of them will assume later in their lives.

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Chapter 1

Introduction

Thomas Jefferson wrote in 1779 that "for promoting the public happiness, those persons whom nature has endowed with genius and virtue should be rendered by liberal education able to receive and able to guard the sacred deposit of the rights and liberties of their fellow citizens; and they should be called to that charge without regard to wealth, birth, or accidental condition or circumstance." The third President of the United States recognized that there is no inconsistency between the goal of social education and enlightenment for all and the development of special social competence among the gifted. Although the skills of citizenship are essential to all functioning members of a democracy, gifted youth are in a position, because of their talents, to exert special influence on society.

Role of Leadership

It is the gifted student in our high schools today who will probably be a leader in the fields of American business, finance, industry, science, education, politics, and religion. The absence of "official truth" in a democratic society such as ours makes it essential for future leaders to reason reflectively and to study competing points of view. The good mind is not nourished by dreary and conventional descriptions of fact. It is largely by studying controversial matters and ideas that intellectual fulfillment is most likely. The study of absorbing, controversy-producing problems allows persons who are informed and flexible to make wise decisions.

The social sciences should help to prepare the gifted for the role of leadership by providing learning opportunities that will tap their intellectual and leadership potential. Because of their more acute perceptions and keener insights, gifted students should be particularly trained to understand and analyze the values, judgments, and attitudes that underlie American society and to recognize and comprehend the attitudes and values of cultures other than their own. Intelligence, of course, is only one of the many components of leadership ability. Yet, a democratic government can maintain justice and order, peace and freedom, only by the exercise of intelligent

decision making; and the primary aim of education is to make people more intelligent. Consequently, consent of the governed should mean that every act of assent on the part of the governed is a product of learning. Unless everybody can be educated -- from the gifted to the dull -- democracy is a fraud and an illusion.

Importance of Liberal Education

The American public high school is a testament to the belief of the American people that enlightenment and liberty are handmaidens. The role of the social science educator is vital to any program of citizenship education and understanding of political, economic, and social behavior. The social sciences are and must continue to be a basic and indispensable aspect of the program of common liberal arts studies of the American comprehensive high school.

Liberal education is nonspecialized, nonvocational, general education. With specialization and differentiation increasingly emphasized at the post-high school and higher education levels, the high school is the last refuge of general education. A liberal education is not a survey of almost everything. It consists rather in grasping the principal skills and ideas that can be used most significantly and widely in order to deal with life in our times. It seems increasingly clear that young people need to be grounded in general studies before preparing for specialized careers; specialization can be undertaken after high school. A liberal education at the high school level, then, is a common education for all educable adolescents in all their great diversity.

The cultivation of diversity in education is essential for the growth and survival of society. It is human diversity that enables society to adapt itself to changing situations, and it is the teacher in the classroom who can recognize and cultivate diversity among human beings. But how will a common program of liberal arts studies, including the social sciences at the high school level, provide for diversity of abilities and interests among adolescents? How will a liberal education meet the needs of the gifted and the dull?

Variability of Instruction

Variability for different ability levels can be obtained by adjusting the sophistication and detail of what is taught. In the adaptation of instruction to differences in ability, the variable element is not the content but the way in which it is taught, the rate at which it is taught, and the level at which it is taught. The pupil in the high school of the future will study the social sciences at a level corresponding to his scholastic achievement in this field. A four-part

program is contemplated in which the first part will be an honors course for the academically gifted; the second part will be a course for normal or average academically inclined students; the third part will be a course for slow, nonacademically oriented pupils; and the fourth part will be a course for underachieving, reluctant, or problem students.

Social Science Curriculum

The social science curriculum is that segment of the liberal arts program in the high school that must concentrate on the improvement of the processes of citizenship, particularly in the domain of political, economic, and social behavior. The social sciences taught in high school reflect the scholarly investigations pursued in the social sciences at a higher level. The social sciences attempt to formulate generalizations or principles concerning the nature of man and his society. If the end of social science instruction is to produce effective citizens who are knowledgeable about and skillfully involved in the life of the social order, then it is the concern of the social sciences to produce the vital formulations upon which these sciences are based.

The social sciences may be described as those organized bodies of knowledge built up from the formal, scholarly, and advanced studies that deal with human beings and their interrelationships. These sciences are concerned with the detailed, systematic, and theoretical study of human relationships. They provide a perspective within which these relationships may be described, classified, and explained.

History, the oldest of the studies of human relationships, may be defined as the study of past human events organized in chronological sequence, including a philosophical explanation of the cause and origin of those events. Cultural anthropology is the study of the customs, folklore, social activities, and organizations resulting from man's reaction to his environment. Geography is the study of man as inhabitant of the earth and of the earth as the home of man. Economics is the study of how man employs finite productive resources to satisfy his infinite material wants. Political science is the study of how man employs the forms of power in the body politic and how people behave with respect to these power functions. Finally, sociology is the study of the forms, institutions, and functions of human groups.

Problems in Social Science Instruction

A major problem of social science instruction today is the gap between the new findings of research in the social sciences and the information and techniques employed in high school teaching. All

students will profit from a narrowing of this gap; the gifted, with their superior capacity to absorb and apply new knowledge, will receive commensurately greater benefit. Certainly, one of the yardsticks by which the effectiveness of social science programs for the gifted can be measured is the degree to which they succeed (1) in incorporating into the high school curriculum the latest advances of research and the techniques of study employed in the social sciences; and (2) in bringing gifted high school students closer to the world of scholarship.

The social sciences have all too often been regarded as "soft" or "easy" subjects of instruction in contrast to "tough" or "solid" subjects like physics, chemistry, and mathematics. Among college students the prestige of the social sciences has been falling while that of the natural sciences has risen. The attitudes of gifted high school students toward the social sciences are not far different from the views of college students. Yet, no reason exists for this misconception to be perpetuated, and no reason exists why the social sciences cannot be made as intellectually invigorating, exciting, and exacting as the natural sciences.

There is nothing intrinsically "soft" or "easy" about problems of social relations. It may require genius to establish and understand the movement of the planets, more skill to fabricate a new missile, but the problems confronting the social scientist are so formidable and perplexing that they lend substance to the charge made by social scientist Miriam L. Goldberg that some brilliant minds discovered that they were discouraged by their inability to fathom human motivations and have retreated to the simpler problems of nuclear physics.

Chapter 2

Characteristics of Teachers and Students

The choice of a teacher of the social sciences for gifted students should be made before a school organizes special courses for these students. There is little point in launching a system of ability grouping if no teacher in the social science department subscribes to the system or is willing to undertake the responsibility of teaching such classes. The kind of curriculum modifications in the social sciences that a school undertakes must to a degree be determined by the extent of its faculty resources. Also vital to a successful program of instruction for the gifted is a knowledge of the characteristics of gifted children.

Characteristics of Teachers

The selection of a teacher for the gifted requires as much attention and judgment as the identification of the gifted students themselves. Not all social science teachers have the special sense of dedication that the teacher of the gifted must possess. Schools that fail to employ the "right" kind of social science teacher for the gifted are as remiss as those that permit student brainpower to be wasted. Schools assuming that all teachers possess the same talent for teaching the gifted err to the same degree as they do when they assume that all students possess the same capacity for learning.

No teacher, however expert, can perform his task without the support of patient and sympathetic supervisors and administrators. Teachers of the gifted require more than usual assistance.

Philosophy of Teaching

The teacher of the gifted in the social sciences should first of all work out his own philosophy of teaching. He must set up his objectives, strategies, and techniques; select his materials thoughtfully; and determine his evaluative procedures. He must take into consideration the nature of the individually gifted child. The student with a measured IQ of 130 or above may not necessarily be endowed with the ability to master social science subjects to the same extent as he may master other subjects.

Several of the social sciences are commonly designated as required subjects in the high school curriculum. The social science teacher has, therefore, extensive experience with the entire spectrum of abilities to be found in the high school student population. It is understandable, therefore, that because of his specialization in the subject matter of the social sciences, the teacher's preoccupation may be with the more able students who show interest in social science content. He may tend to neglect those who do not readily respond to the subject matter. He must, therefore, exercise care not to prejudge the abilities of his students and overlook the student who, because of lack of confidence or because of early experiences that made him dislike the social sciences, may be a hesitant learner.

A study of the characteristics of gifted students shows that not all of them learn at the same rate nor in the same manner. Often, the student who is a perfectionist will not keep up with the rest of the class and may be penalized because he has failed to complete the specified amount of work within the prescribed time limits. Often, the gifted student will not follow a normal pattern of thought but will instead make a sudden breakthrough with an insightful concept or meaningful generalization. The teacher who requires conformity or adherence to static interpretation of events will often dampen the enthusiasm of some of his students and may even discourage a few from any further investigation of the social sciences.

The teacher must be sensitive to the emotional responses of his students. He must recognize signs of nervousness, anxiety, embarrassment, or antagonism and must be quick to take steps to eliminate undesirable reactions of inner tension. He must also sensitize himself to the interplay of personalities in the classroom if he is to develop the relaxed atmosphere essential to spontaneous communication in the language of reflective reasoning in the social science classroom. With full awareness of the human factors involved, the sensitive teacher will adapt his classroom procedures in accordance with his own personality and the personalities of his students.

Professional Preparation

The social science teacher of the gifted at the high school level should himself be academically talented. He must be a scholar of one or more of the social sciences and must have more than a "nodding" acquaintance with the other social science disciplines. He must also have a degree of familiarity with the humanities and with the natural and physical sciences. It is to be preferred that he has been engaged in scholarly investigation in the social sciences so that his experience in research will enable him better to adapt the scholar's process of discovery to the modified discovery program of reflective reasoning

to be employed in social science honors programs. The aim of the teacher is to give his students as firm a grasp of subject matter as he can and to make them as autonomous and self-propelled thinkers as he can – people who will continue to think and to reason on their own after formal schooling has ended.

He must be familiar with the literature of research on the gifted child, and he must maintain his awareness of current knowledge. He should be active in professional organizations, including teachers' associations; national, state, regional, or local social science groups; and the gifted children's association. He ought to attend institutes, workshops, and conferences to help him keep up his professional competence and interest in research. He should obtain publications, read related literature, and keep up his interest in current world affairs.

Special Considerations

The social science teacher has certain needs in working with gifted students. He needs extra time to select and prepare social science materials suitable for classroom inquiry and reflective reasoning. He must arrange to visit other schools with similar programs. He must familiarize himself with the advanced placement program of the College Entrance Examination Board. He must have the support of school administrators who will make available the consultative services of educators, psychologists, and social scientists whenever their professional assistance can help to improve the program of instruction and evaluation.

He must keep informed about the latest research, progress, interpretations, and new materials in his field of scholarly interest by becoming an active member of professional and scholarly societies. These organizations include the American Anthropological Association, the National Council for Geographic Education, the American Historical Association, the American Political Science Association, the American Sociological Association, and the National Council for the Social Studies.

He should participate in meetings of the professional and scholarly associations. He should also be encouraged to pursue further graduate study, to seek to obtain scholarships for foreign study and teaching fellowships abroad, and to encourage interested seniors to do the same.

Personal Characteristics

In some respects the teacher of the gifted has the same behavioral tasks applicable to any successful teacher. Every teacher, for example, must be able to (1) communicate effectively with young

people; (2) plan and prepare lessons and develop instructional materials; (3) explain facts and their relationships leading to the development of concepts and generalizations; (4) reinforce and motivate student efforts; and (5) encourage creativity in students.

The teaching of the gifted, however, requires a certain extra dimension in the teacher. He must have a creative and imaginative approach to his teaching. He must maintain an adult relationship with his students to be demonstrated by his willingness to talk up to rather than down to gifted students. He must be able to accept criticism and be careful not to stifle honest inquiry. He must reflect a genuine love of learning and a scrupulous regard for scholarly truth. He must be able to encourage students to investigate problems on their own and to report their critical inquiry regardless of school and community pressures. He must exhibit an enthusiasm for his subject, for books, and for ideas that will turn dull classroom routine into a time of spontaneity and vitality. He must have a sense of the proportion of things, a basically optimistic yet realistic outlook on life, and a sense of humor. Finally, he must be willing to invest the additional time and energy that education of the gifted invariably demands.

Characteristics of Students

Giftedness is multifaceted; no single criterion provides a valid measure of its presence in any individual. Yet, perhaps more than anything else, the gifted person is a creative person. Traits of the creative mind include (1) sensitive perception of details in the world of nature and in the world of man; (2) awareness and concern about unsolved problems (an important attribute of reflective reasoning); (3) fluency of thought; (4) ability to concentrate, to enter wholeheartedly and personally into an experience; (5) integration, or the ability to perceive structure or a new design in a scene, setting, or situation; (6) ability to analyze and to integrate abstract concepts and generalizations (an ability that is at the heart and core of reflective reasoning); (7) vision to go beyond the facts and through insight discern new implications; and (8) originality and individuality.

General Criteria

The close relationship between general academic talent and success in the social sciences suggests that the general criteria of intellectual giftedness that might be employed to locate students with particular ability in social sciences include (1) facility in verbal and written expression; (2) skill in reading for speed and comprehension; (3)

intellectual curiosity; (4) capacity for generalization and for perceiving relationships; (5) ability to understand and formulate abstract concepts; (6) ability to think logically; (7) retentive memory; (8) capacity for self-direction; and (9) resourcefulness in problem solving.

The gifted student learns rapidly. Because of his speed in learning, he will require less detailed, repeated instruction. He may show an amazing degree of imagination, initiative, originality, resourcefulness, creativity, and inventiveness. He has superior powers of artistic self-expression and may demonstrate surprising skill with any of the several art media.

Because he thinks critically, he knows how to search for causes and draw sound conclusions. He can grasp the meaning of a statement. He can easily be taught to judge whether (1) ambiguity exists in a line of reasoning; (2) certain statements contradict each other; (3) a conclusion follows necessarily from a certain line of argumentation; (4) a statement is specific enough; (5) a statement is actually the application of a certain principle; (6) an observation statement is reliable; (7) an inductive conclusion is warranted; (8) a problem has been identified; (9) a statement is an assumption; (10) a definition is adequate; and (11) a statement by an alleged authority is acceptable.

If permitted, the gifted creative person utilizes his deep mental powers of supposition and imagination. He will be a theorist, a speculator, a maker of hypotheses, and perhaps even a doctrinaire. He will conjecture, surmise, suspect, divine, and theorize. He will propose, propound, venture, suggest, and allude to. He can be said to possess originality, inventiveness, inspiration, and fancy. He is likely to be filled with idealism, romanticism, and utopianism. He will communicate his thoughts, feelings, and beliefs warmly, excitedly, ardently, with verve and sanguinity. His imagination will be lively, fertile, perhaps extravagant and preposterous, certainly enthusiastic, and perhaps even fanatical.

Purpose of Identification

The purpose of any scheme of pupil identification is to permit the school to tailor its program of instruction more intelligently to the special needs and interests of different groups of students. No single technique yet devised has proved infallible or precise in discovering all gifted students. The process of identification should, therefore, be both continuing and flexible, permitting revision in pupil status and classification as additional measuring instruments and assessment data become available.

The earlier giftedness is discovered, the better will the school be able to assist in developing it. General academic ability can be identified in the elementary grades (kindergarten through grade eight). It is certain that interest is apparent in these grades. It is quite likely also, but not certain, that general ability in social sciences can be distinguished at this level. Certainly, by the high school years, specialized abilities in social sciences can be more easily discovered.

Giftedness in Social Sciences

How does one recognize the student in high school who is gifted in the social sciences? A variety of evaluating instruments should be used in attempting to identify such a student. Intelligence tests have already been used for initial identification. Reading comprehension tests are the best predictors of capacity to learn abstract subject matter. Their value in predicting success in academic endeavors has been well established. Achievement and aptitude tests measure material learned in school rather than potential. They disclose the current state of the student's store of knowledge and reveal how well he has already profited from his school and out-of-school environment. Academic progress is cumulative; therefore, achievement tests have useful prognostic value in planning future educational programs of gifted students, but potential ability and academic achievability are only two indicators. Neither necessarily tells us about a third criterion equally if not more important — interest.

Teacher judgment can be a valuable technique for identifying the gifted student. The alert, informed, and interested teacher is in the best position to provide continual and discriminating appraisal of pupil capacity. Skilled teachers can systematically plan how to observe traits of social maturity and sensitivity. Their judgment will be better than results of traditional interest tests. The teacher, however, should not necessarily mistake such traits as neatness, cooperation, diligence, or conformity for signs of giftedness, nor should he miss the signals of talent that may lie hidden within the seemingly bored, inattentive, unruly, and querulous student.

Parental judgment is also pertinent in identifying giftedness, particularly in discovering and reporting activities and capacities that the school environment may not be able to stimulate. Parents can also provide data on student reading and research interests that make for success in the social sciences. Like teachers, parents are not unbiased judges or disinterested observers. Consequently, any judgments and observations must be used with caution.

Cumulative records should provide an essential, systematic device for recording and appraising pupil abilities and progress. When a variety of testing instruments has been validly used and the results

accurately reported – not always the case – the cumulative record can reveal the multidimensional character of the student's abilities.

The capacity to reason reflectively on the problems of man and his world is a major characteristic of giftedness and the chief end of teaching social sciences to the gifted. Reflective reasoning is the development of improved insight by inducing students to utilize their capacities to question, to analyze, and to integrate knowledge reflectively. Reflective reasoning is controlled by an end, the solving of a problem. Its basis is grounded and tested belief.

Skills and Abilities

The intellectual skills and abilities of gifted students useful for social science learnings are listed as follows:

1. Ability to understand nonliteral statements (metaphor, symbolism, irony, exaggeration)
2. Ability to interpret various types of social data
3. Skill in predicting the continuation of trends
4. Ability to predict the probable effect of a change in a factor in a stable social situation
5. Ability to recognize unstated assumptions
6. Ability to check the consistency of hypotheses with given information and assumptions
7. Ability to recognize the general techniques used in persuasive materials such as advertising and propaganda
8. Skill in writing illustrated by the organization of ideas and statements
9. Ability to formulate appropriate hypotheses based on an analysis of factors involved and to modify such hypotheses in the light of new factors and considerations
10. Ability to propose ways of testing hypotheses
11. Ability to indicate logical fallacies in arguments
12. Ability to compare major theories, generalizations, and facts about particular cultures

Chapter 3

Development of Higher Intellectual Skills

Since the time of Socrates, the maieutic function of education has been crucial though neglected. Maieutics is the learning process ascribed to Socrates by which he sought to elicit and clarify the ideas of others by interrogation and insistence on close and logical reasoning. This form of intellectual midwifery, as the derivation of the word suggests, most certainly should comprise the heart of any social science program, especially for the academically gifted. What this means today is that while the student is studying the social sciences, he should be mastering the inquiry-conceptual tools and skills that will equip him for social understanding throughout his life. Today, the maieutic function of education can be considered to be an inquiry-conceptual process of reflective reasoning.

Although reflective reasoning should be stressed in social science programs for the gifted, the fundamental objective to be kept in sight is the furtherance of the student's understanding of himself, his fellow man, and their society as well as the development of his ability to cope with the realities of the world of today and tomorrow. To accomplish this task, the inquirer must center on settings that contribute most to the development of these intellectual skills, even to the extent that this search enters into areas of controversy and into negative as well as positive aspects of our own society and of other societies.

Classroom Inquiry

It is important at this point to clarify the difference between the general process of research and discovery practiced by the scholars in the social sciences and the process of reflective reasoning to be put to use in high school honors courses in the social sciences for the academically gifted. The term *inquiry* as used here means a "modified" discovery approach.

The reasoning of the social scientist to a great degree involves a process that might be called "divergent" thinking. Divergent thinking is similar to the scholar's use of supposition, imagination, and

intuition in the early stages of discovery to ask and answer significant questions by selecting relevant information. The scholar has no guarantee that he will succeed in going where his curiosity leads him. Only laboriously will his hypotheses take shape. When the convergent elements in his reasoning outweigh the divergent elements, he begins to fashion his conclusions. In the publication of his research, the scholar eliminates much of the intuitive and divergent thinking, especially those portions of it which proved irrelevant to his findings.

Scholarly discovery as previously described would be wasteful, inefficient, and very difficult to provide in the social science classroom. Inquiry, which is a modified discovery method, is different in that (1) the raw data presented to the student are selected so that he will not have to deal with irrelevant information in the time allotted for a particular unit of learning; and (2) the student is provided with some of the basic conceptual tools that scholars have developed with which to reason through the material presented to him. Classroom inquiry tends, therefore, to be more convergent than does scholarly discovery.

Inquiry-Conceptual Program

An inquiry-conceptual program of reflective reasoning for honors classes for the gifted in high school social sciences should be composed of (1) the reasoning processes whose mastery is a principal objective of the program; (2) concepts and generalizations drawn from the social sciences to be used as tools for understanding man in society; and (3) settings, which are the phenomena, times, and places that provide the context of the study unit.

Inquiry processes of reasoning consist of (1) analytic reasoning; (2) integrative reasoning; and (3) decision making or policy reasoning. Concepts and generalizations are drawn from the social sciences. A concept, which may be defined as an idea that comprehends the essential attributes of a class or logical species, is an intellectual tool to be used in inquiry. A generalization, which is a general inference or proposition, is also a statement of relationships among conceptualized patterns of behavior, either analytic or integrative. A setting may be selected to help the student answer the human identity questions Who am I? or Who are we? Setting may also be selected to meet developmental needs of students for certain kinds of understandings that may vary in terms of age, experience, and background. Settings may also be selected to provide certain kinds of information considered necessary, such as geographical knowledge of the world and data about the structure and function of American government.

Finally, settings may be selected to provide knowledge needed as a foundation for later advanced learning.

Analytic Processes

In analytic reasoning the social scientist seeks to find the most useful concepts for inquiry and to define them precisely. The main task of the scholar is selective abstraction. He observes selectively; and in order to do so, intellectual tools or concepts are necessary. Words that carry conceptual meanings for social scientists are carefully defined. Thus, the word *culture* is defined by the anthropologist to mean all that which is nonbiological and socially transmitted in a society, including artistic, social, ideological, and religious patterns of behavior as well as techniques for mastering the environment. The sociologist defines *society* as a group of human beings cooperating in the pursuit of several of their major interests, invariably including self-maintenance and self-perpetuation. And the economist defines the word *market* to mean the area within which buyers and sellers are in communication with one another and within which exchanges take place. Thus, *culture* to the anthropologist, *society* to the sociologist, and *market* to the economist have precise meanings useful as intellectual tools in the observation of social phenomena.

The definition of analytic concepts must be of such clarity and precision that other observers of the same or similar phenomena using the concept so defined will be able to observe the same results. When a scholar has observed and classified certain patterns of behavior, naming these patterns with analytic concepts, further inquiry proceeds by comparing the likenesses and differences among the categories of behavior observed. This process is called contrastive analysis.

Generalizations result from contrastive analysis and pertain to relationships between analytic concepts. Inferences and propositions made from generalizations are hypotheses and theories in the form of logical deductions. Hypothesizing and theorizing put the results of inquiry to further use. This process involves the assumption that patterns of behavior in reality will conform to the logical relationship of a generalization. Overgeneralization may occur when an investigator loses sight of the type of phenomena from which he has derived a generalization and tries to apply it to dissimilar phenomena.

Integrative Processes

Integrative reasoning is the second of the two thought processes social scientists use for investigating social phenomena. Scholars

applying integrative reasoning bring together conceptualizations from cultural knowledge and from analytic investigations of other social scientists. Thought in integrative reasoning examines only a limited class of phenomena, but it does so by employing a wide variety of contributions from analytical thought and cultural knowledge. Values derived from an integrative view of man in society need not to be considered along with a closely analyzed view of the institutions through which these values can be put into effect.

Integrative concepts and generalizations are more culturally determined than analytic concepts. When observations are made in the integrative mode of reasoning, an attempt is made to include all known and observable facts and features of the event under consideration. This procedure is in contrast to the purposeful selectivity of observation in the analytic mode of reasoning. Classification in the integrative mode proceeds by the development of integrative concepts that label unique classes of social phenomena that concern the peoples being observed. For example, the word *caste* may be used as an integrative concept describing a class of behavior observable in Hindu Indian society. If, however, the term is to be used as an analytic concept, the definition of the word would have to be changed in such a way that the concept could be applied to similar phenomena anywhere in the world.

In the integrative mode of reasoning, comparison is made of similarities and differences among observed events, not of identities, as is contrastive analysis in the analytic mode. Integrative inquiry deals with unique events that are not identical but only similar to a greater or lesser degree. A second kind of integrative mode comparison is the discovery of a relationship of the observed events with one's own experience for the purpose of seeking an answer to the identity questions Who am I? or Who are we?

Holistic integration is the process of reasoning that is analogous to generalization in the analytic mode of inquiry. Holistic integration involves a consideration of the relationships between wholes and parts in cultural or historical terms, or the two together. Cultural integration may focus on one or more institutions, schools of thought, or social processes that characterize a particular society. Historical integration assesses the relationships that exist over time in a specific cultural setting, seeking to identify the causes of change in major aspects of a culture and to trace the course of change.

Whereas inquiry in the analytic mode of reasoning uses vocabulary that is precise, scientific, and at times mathematical in terms of specifically stated propositions, inquiry in the integrative mode, because of the wider range of information to be conveyed, usually

will use the language of literature and historical narrative. Because integrative reasoning focuses on unique qualities of particular times and places, inferences to different times and places are fraught with the danger of overgeneralization. The hazard of overgeneralization in integrative inquiry is that conclusions from one set of events will be inappropriate when applied to another set of events. This is the so-called "history proves" fallacy.

Policy Mode Processes

The policy mode of reasoning involves the use of understandings gained through analytic and integrative investigation to answer the question What do I, or we, do next? Learning in the policy mode should help gifted students develop the ability to act rationally, effectively, and humanely to attain reasonable and consciously chosen goals. The rationality of decision making depends on the clarity with which the decision maker recognizes the values and the priority of values he assigns to the problem to be solved as well as the clarity with which he defines the problem.

After the relevant values are identified and assigned, rational decisions involve making correct inferences from inquiry in the analytic and integrative modes of thought. Conclusions from analytic investigation provide a compact view of the dimensions of a problem, while the results of integrative inquiry provide a broad grasp of the complexity of a problem. Once the problem has been defined and the germane values and information carefully identified, the rational and humane decision maker proceeds to generate as many trial solutions as are consistent with the relevant values and information.

Using the relevant information, the decision maker then attempts to foresee the consequences of each of the trial solutions. The final process in the policy mode of reasoning is to make a rational and humane decision based on the projected consequences as judged by the relevant information consistent with the relevant values. The decision may then be (1) to act in a certain way; (2) not to act at all; or (3) to decide on a preference that may be acted upon in the future.

The nature of high giftedness and of creativity is such that the first two processes, analytic reasoning and integrative reasoning, provide ideal learning grounds for the "loner" to work independently. Policy mode processes offer excellent opportunities for these individual thinkers to come together, reason, and work as a group.

Chapter 4

Subject-Matter Content and Skills

Social science classes for gifted students include the same content developed for all students. Variability in social science classes involves nuances of content, teaching strategies, and learning procedures with emphasis for the gifted on the inquiry-conceptual program of reflective reasoning as previously described.

Program Themes

The themes for the social science honors program for grades ten through twelve might be arranged as follows: grades ten and eleven – “The Relation of Past and Present”; grade twelve (first semester) – “Decision Making in the United States”; grade twelve (second semester) – elective capstone courses designed to enable the gifted student to probe more deeply into the mode of reflective reasoning of a particular social science discipline or to pursue a subject of interest in greater depth. Each theme can be built around the major elements of the reflective reasoning program, which are (1) modes of inquiry and investigation; (2) selected conceptual tools; and (3) settings.

Program Structure

Honors courses in grades ten and eleven should be devoted to the inquiry process of historical integration in the integrative mode of reflective reasoning. In the process of historical integration, the student draws on the whole range of analytic and integrative processes, reinforcing his command of them as he establishes the interrelations of social phenomena over time. In grade ten the focus should be on major developments in the United States. In grade eleven the focus should shift to major aspects of the development of the Western world, including an indepth study of a major non-Western culture.

In the first semester of grade twelve, analytic and integrative processes of reflective reasoning should be used by gifted students to study decision making in modern American society, concluding with

a study of the citizen's relationship to decision making. The second semester of the senior year for gifted students should be reserved for elective courses in the social sciences. These specialized courses should be designed to meet the individual interests of gifted students and should be taught by teachers with unique competencies in the social sciences.

Grade Ten

The study of United States history by gifted students in grade ten should involve a selection of critical dimensions of American development translated into conceptual tools or themes in terms of (1) how the social structure that the colonists brought from Europe changed in the course of their life in America; (2) how the Americans developed a sense of nationality; (3) how the Americans developed a more democratic political system; (4) how the enslavement of Africans produced tensions and disruption in American life; (5) how discrimination against Negroes has continued to generate tensions in American life; (6) how Americans have coped with growth in business, labor, agriculture, education, and other aspects of life; (7) how Americans have been affected by their relations with the rest of the world; and (8) where, in terms of the major historical themes studied, American society is headed today. Gifted students with a keen interest in war strategy will be intrigued with the interplay of personal and political decisions as discussed in DeWeerd's book, *President Wilson Fights His War*.

Grade Eleven

The study of history in grade eleven should be intended primarily to provide gifted students with an understanding of the development of the modern Western world. The major concern of this honors course should be how national groupings and conflicts have affected the life of man. Inquiry into this problem should involve (1) what makes a state a state; (2) why societies have sought to impose their wills on other societies; (3) why military establishments exist so universally and how they affect the societies of which they are a part; and (4) whether advances in the scope and destructiveness of war have been matched by advances in diplomatic and other peaceful methods for limiting or preventing war.

The course of study in grade eleven should also involve inquiry in depth into a non-Western society to provide gifted students with some perspective outside of Western Judeo-Christian culture. Suggested alternative studies could deal with Indian and China. The fundamental concepts involved in the studies of these two non-Western societies are cultural stability and cultural change. In the

study of India, the major theme to be traced is how India has maintained its cultural unity over such a long period and with such a diversity of peoples. So that this theme can be developed, questions are posed as to (1) how the principal features of traditional Indian culture took shape and persisted; (2) how Hindu India has interacted with its invaders; (3) how traditional Indian culture affected the struggle for independence; and (4) how traditional and modern elements are interacting in present-day India.

The overall conceptual theme for the study of China is the cultural basis for the Confucian sociopolitical system and the durability of the system until its overthrow by the Communists. This conceptual theme may be developed through an inquiry as to (1) how the principal features of traditional Chinese culture took shape and persisted; (2) how Confucian China has interacted with its invaders; (3) how the Chinese people established their modern independent nationality; and (4) how traditional and modern elements are interacting in present-day China.

Grade Twelve

First semester. While the entire social science program is designed to prepare students for their roles as citizens, the central purpose of the honors course for the first semester of the senior year is to develop in gifted students a realistic understanding of decision-making processes and the contribution citizens make to those processes. The course involves the entire spectrum of inquiry reasoning processes and utilizes a variety of settings to illustrate the range of decision making in American society.

So that this fundamental aspect of citizenship can be probed, questions can be used as conceptual tools, such as (1) how citizens influence decisions that affect them; (2) how citizens are influenced in making and accepting policy decisions; (3) how decision makers are influenced by persons with special status and by special interest groups; (4) what range of decisions is possible within organizations and institutions; (5) what effect is brought to bear on social policy decisions because of relationships between organizations and groups; and (6) what human dignity consists of and how it has developed in the United States.

Second semester. The second semester of the senior year should be set aside for a series of honors courses from which students select one course. The purpose of these courses is to enable a gifted student to probe more deeply into the mode of inquiry of a particular social science discipline or to pursue a subject of interest in greater depth. Capstone courses can also serve to draw upon the professional

competencies and subject-matter specializations of the social science faculty of the individual high schools. For these reasons the course offerings at this level would vary greatly.

Subject-Area Skills

Subject-area skills taught in high school honors courses for gifted students in the social sciences will differ radically from those taught in most high school social science courses today. The materials necessary for inquiry-conceptual reasoning for gifted students are substantially different from textbooks that rest on the pedagogic assumption that the student's task is to learn the preselected knowledge and interpretations presented. The textbook will continue to be the most prominent feature and tool in classroom instruction of average and below-average groups. By contrast, however, the new learning materials for the gifted will present carefully structured units of study materials, including exercises with which the gifted student practices the processes of reasoning and with which he, in turn, develops conceptual understandings for himself. Where the textbook usually attempts to cover broad aspects comprehensively, the new materials will deal with fewer selected topics in a more intensive way.

Teaching Strategies

Teaching strategies used in the classroom will depend largely on the nature of the materials. An inquiry-conceptual program of reflective reasoning will emphasize such procedures as questioning, problem solving, simulation, role playing, demonstrating, reading, researching, and lecturing. It is the teacher who must determine what are the most important strategies for a specific unit of work. The teacher's expertise places him in the role of the diagnostician and consultant in the classroom. If he can structure classroom activity to take advantage of the dialogue and other interactive tendencies in the classroom situation so that they appear natural, then much of the artificiality of learning in isolation from life may be reduced to a minimum. The teacher's effectiveness depends in part on his personal qualities and in part on his own training, expertise, and experience. An inquiry-conceptual program of reflective reasoning needs teachers whose own inclination and education have been oriented toward maieutics and inquiry.

Study of History

Much of the high school social science program for the gifted as well as for other groups of students is oriented toward studies in history. Cynics may suggest that most history is guessing and the rest

is prejudice. Although historiography cannot be a science, it is a search for truth that takes on aspects of an art and a philosophy. The past is prologue to the present and a guide to the future.

The historian using integrative thought processes of reflective reasoning brings together conceptualizations from cultural knowledge and from analytic investigations of other social scientists. Through integrative inquiry in historical studies, the gifted student may come to see the relationship between whole and part, and he may also come to understand the conditions that make for cultural stability and cultural change. He may come to see that history as an enterprise has something to say about the nature, conduct, and prospects of man.

History is the recreation of the record of the human heritage. At its best, history is truly integrative inquiry. History is subject to geology, geography, biology, psychology, ethics, religion, economics, government, social idealism, and technology. The lessons to be learned from history involve all these aspects of history and more. The role of historical studies in high school social science classes for the gifted is to assist the student to discover for himself his human heritage. Education is the transmission of civilization to enable the individual to become more intelligent and humane. As his heritage rises, man rises in proportion as he receives it. This lesson is the major one to be learned from historical studies.

Use of Library

An essential ingredient of any successful program in social science instruction for the gifted as well as for all other high school students is a good library that is well staffed and well stocked and is open for student use. A good library serves not only to furnish students with specific social science knowledge but also to strengthen their general cultural background and inspire in them a love of books and reading.

Learning how to use library resources should be a part of education for all students. For the gifted student in social sciences, of course, the library is indispensable to his educational career. Instruction in the techniques of library use should not be an incidental but an integral part of the learning situation of gifted students. Library instruction should be planned with the same care and attention that are given to other phases of classroom instruction.

Chapter 5

Summary and Conclusions

The reader will find the March and April 1968 reports of the California Statewide Social Sciences Study Committee very helpful. The projected design of the new social science framework for California will be influential in planning for the gifted as well as for others.

Summary of Findings

In the common program of liberal studies offered in American comprehensive high schools, the social sciences provide skill and understanding for dealing with life in our times. One of the yardsticks for measuring the effectiveness of high school social science classes for the gifted is the degree to which they succeed in incorporating into the high school curriculum the latest advances of research and techniques of study in the social sciences. The thought processes of social scientists and historians involve reflective reasoning modes of analytic and integrated conceptual inquiry.

Reflective reasoning should be stressed in the high school social science programs for the gifted. An inquiry-conceptual program of reflective reasoning should include (1) the reasoning processes of analytic and integrated modes of thought whose mastery is a principal objective of the program; (2) concepts and generalizations drawn from the social sciences to be used as tools for understanding man in society; and (3) scenes, settings, and situations that are the phenomena, times, and places providing the context of a study unit.

Grades ten and eleven in social science classes for the gifted should be devoted to the inquiry process of historical integration in the integrative mode of reflective reasoning. In the first semester of the senior year, analytic and integrative processes of reflective reasoning should be used by gifted students to study decision making in modern American society. The second semester of the senior year should be reserved for elective courses in the social sciences and history.

The American comprehensive high school presents a common program of liberal arts studies for all. The cultivation of diversity in American secondary education is accomplished by adjusting the

sophistication and detail of what is taught. Teaching strategies for high school social science classes for the gifted should involve an inquiry-conceptual program of reflective reasoning in terms of humanistic and humanitarian interests and ideals.

Particular emphasis needs to be placed on the education of the gifted because, as Thomas Jefferson stated, it is they who are "able to guard the sacred deposit of the rights and liberties of their fellow citizens."

Conclusions Reached

No matter how hard a high school may try to vary its curriculum to accommodate gifted students, all efforts will be in vain unless appropriate changes are made in teaching strategies and learning situations. Methods discussed in this publication as appropriate for gifted students may also prove useful with average students, but on the whole the methods will not apply to the instruction of the latter. In adapting to content for gifted students, the teacher must distinguish elementary, average, and advanced approaches to teaching the social sciences in high school.

The elementary approach to teaching the social sciences at the high school level involves the collation and organization of data in terms of the experiential backgrounds and needs of the students. The average approach centers on the highly traditional use of lecture, textbooks, and recitation. And the advanced approach concerns itself with the honors courses for the mentally gifted.

Wherever possible, high schools should seek (1) to organize, in each curricular area, stream levels that correspond to the ability groupings of the pupil population; and (2) to modify the methods of instruction so that they are relevant to the needs of each group.

Motivation of Underachievers

A critical issue in educational practice is the technique of motivating the underachieving gifted student. Today, bright underachievers are a more serious problem than ever before. Most social science teachers define the underachiever as a pupil with low or average grades who has the intellectual capacity to do superior work. Authorities seem to agree that the junior high school years represent a critical point in the problem of underachievement. On entering the junior high school, the student makes a transition from the elementary school, where in a self-contained classroom one teacher is responsible for instruction in most subjects, to the secondary school, where subject specialists do the teaching.

The social science teacher can carry a great share of the responsibility for motivating the gifted underachiever. To do so

demands a sensitivity to students' needs as well as an awareness of self on the part of the teacher. Constructive rebuilding of students' self-concepts demands as well that the teacher be freed in terms of hours to follow up on recognized difficulties and to plan for them.

The problem of motivating the gifted underachiever is fourfold. It involves (1) the competence and teaching personality of the teacher; (2) the attitude that the student brings to the classroom; (3) the worthwhileness and realism of the instructional content; and (4) the out-of-school environment influencing the student. All these aspects of the problem interact. This publication primarily treats the third aspect of the problem. Content must be made challenging and realistic to the bored, gifted underachiever.

A few gifted underachievers will need diagnosis and treatment. Difficult disciplinary cases should be referred to a counselor or other proper administrative authorities. Most students, however, study the social sciences each year in grades nine through twelve. Hence, the social science teacher has an excellent opportunity, perhaps shared only by the English teacher, to help the underachiever find new motivations and directions in his educational career.

Finally, it must be mentioned that high schools that allow their teachers to provide special learning experiences in the social sciences for gifted minors must be prepared to allow them to develop and make periodical appraisals of student progress toward the distinctive goals established for their education.

Assessment and Appraisal

The process of assessment and appraisal is a continuing one that must be conducted in an ordered pattern. Unsystematic and impressionistic judgments are often superficial, false, or at least misleading. Unless a high school develops a methodical program to measure progress toward goals established for gifted students, the school will scarcely be able to determine the degree to which success has been attained. Although objective evaluation may require the employment of outside specialists and agencies, the most satisfactory schemes of assessment to the school, at least, will enlist the cooperation of the school staff to the widest possible degree.

Any appraisal of the goals of learning in a program of social sciences for gifted minors in high school should include the areas of knowledge, skills, values and attitudes, and participation as follows:

1. Knowledge should be measured in terms of students' depth and precision of understanding and facility in the handling of concepts and ideas rather than mere accretion to their store of factual knowledge.

2. Skills should be measured, including how well students can think and reason abstractly, think critically, and reason reflectively with social science data.
3. Values and attitudes should reflect respect for facts, tolerance of differing points of view, intellectual integrity even in the face of popular opposition, recognition and critical analysis of one's own prejudices, and a respect for the social contributions of persons of lesser mental ability.
4. Participation in group action should reflect a desire to seek the solution of social problems either as an influential leader or as an alert, informed, and cooperative follower.

Educational Outcomes

Today, many educators are attempting to formulate more exact statements of expected educational outcomes. Perhaps the most valuable format for stating outcomes is in terms of the behaviors or performance the learner can exhibit or demonstrate once the objective has been attained. Objectives stated in behavioral or performance terms provide specific guidelines for teaching strategies and evaluative designs. The taxonomies of educational objectives provide a categorization system by which behavioral objectives may be systematized into three domains: the cognitive, the affective, and the psychomotor. Most social science objectives usually fall into the first two.

Statements of behavioral objectives and schema of taxonomic classifications allow teachers to be explicit in developing objectives specific in evaluating learner performance in terms of expected outcomes. The plan also provides an opportunity to ascertain the relative emphasis a curricular area is placing on the acquisition of cognitive and affective matters.

Judgment of Performance

If procedures for placing students into gifted honors programs are adequate, the performance of students in special ability classes should be judged in relation to all students taking comparable courses. Students in these courses can normally expect to earn superior grades almost exclusively. High marks should no more be given *ex fiat* from the school administration than should students grouped in honors classes be graded on the curve. Teachers must be allowed to exercise their own judgment in the grading of students, of course, but any teacher charged with the responsibility of teaching the gifted must understand the nature of giftedness. To place the top 2 percent of students into one class and to grade them as though they were a normal distribution of students is academic ignorance.

Academic knowledge suggests that if a gifted student is not doing gifted work, he should either be motivated to do so (acknowledging that his giftedness lies in other areas) or be freed from unrealistic demands.

Awareness of the unique patterns within any gifted individual should be recognized in social sciences more so than in any other discipline. Our knowledge of giftedness, in the first place, stems from investigations of scholars in the social sciences.

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