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ABSTRACT

The quinmester course described in this guide is intended as an elective for grades 10-12. The student should have considerable background in the social studies and be considering a career in this field. The course emphasizes methods of the social scientist, including research techniques, statistics, historiography, social sampling surveys, case studies, critical analysis of issues, etc. The student does independent work applying the techniques. Some of the goals for the course are that students will: 1) define and identify the basic concepts of history, anthropology, political science, geography, economics, and sociology; 2) formulate generalizations about the purposes of social sciences; 3) list the general steps in social science research; and, 4) apply specific learnings to an individual or group research project dealing with a problem in one or more selected social science disciplines. A wide variety of learning activities and instructional materials characterize the course. The guide provides a close parallel between the behavioral objectives and learning activities. (Related documents are SO 002 708 through SO 002 718, SO 002 768 through SO 002 792, and SO 002 949 through SO 002 970. (Author/AWW)

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AUTHORIZED COURSE OF INSTRUCTION FOR THE



QUINMESTER PROGRAM

DADE COUNTY PUBLIC SCHOOLS

Advanced Techiques in the Social Sciences  
 6425.11  
 6443.07  
 6453.01  
 6416.26  
 6448.22  
 Social Studies

SP 002 964

SOCIAL STUDIES

ADVANCED TECHNIQUES  
IN THE SOCIAL SCIENCES

6425.11  
6443.07  
6453.01  
6416.26  
6448.22

Written by

Margaret E. LaRoe

for the

Division of Instruction  
Dade County Public Schools  
Miami, Florida  
1971

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## INTRODUCTION

This course of study was written as a part of a total effort to revise curriculum to fit the quinmester administrative organization of schools. The materials and information in this guide are meant to be neither all-inclusive nor prescriptive; but rather, an aide to teachers as they plan instructional programs, taking into account student needs and characteristics, available resources, and other factors.

The major intent of this publication is to provide a broad framework of goals and objectives, content, teaching strategies, class activities, and materials all related to a described course of study. Teachers may then accept the model framework in total or draw ideas from it to incorporate into their lessons.

The guide is divided into 1) a broad goals section, 2) a content outline, 3) objectives and learning activities, and 4) materials. The first section provides descriptive and goal-oriented information for the teacher; "indicators of success" refers to suggested prerequisite or corequisite experiences. The content outline illustrates, in general terms, the scope and major subdivisions of the course. The objectives and learning activities section, hopefully, provides a total picture of the concept or main idea and specific behavioral objectives for a set of given learning activities. The materials section of the guide lists resources in four categories: essential textual or other material; alternate classroom materials to use in place of or in addition to the aforementioned; supplementary teacher resources; and supplementary student resources. The appendix may include other material appropriate for a specific course: e.g., pretests, readings, vocabulary, etc.

Anyone having recommendations relating to this publication is urged to write them down and send to : Social Studies Office, Room 306, Lindsey Hopkins, A-1.

James A. Fleming  
Social Studies Consultant

**COURSE DESCRIPTION:** EMPHASIZES METHODS OF THE SOCIAL SCIENTIST, INCLUDING RESEARCH TECHNIQUES, STATISTICS, HISTORIOGRAPHY, SOCIAL SAMPLING SURVEYS, CASE STUDIES, CRITICAL ANALYSIS OF ISSUES, ETC. STUDENT DOES INDEPENDENT WORK APPLYING THE TECHNIQUES.

**GRADE LEVEL:** 10-12

**COURSE STATUS:** Elective

**INDICATORS OF SUCCESS:** The student should have considerable background in the social studies and be considering a career in this field. Although open to all grade levels, it is most appropriate for upper-classmen acquainted with some of the social science disciplines.

**COURSE RATIONALE:** THE AIMS OF THE COURSE ARE, IN THE MOST GENERAL SENSE, TWOFOLD: TO ENGENDER IN STUDENTS A HEALTHY SKEPTICISM FOR THE GENERALIZATIONS MADE EVERY DAY FROM POOR OR INADEQUATE DATA BY CITIZENS, OFFICIALS, THE MEDIA, EVEN TEACHERS; AND TO PROVIDE ACTUAL EXPERIENCE IN THE USE OF THE TOOLS AND TECHNIQUES OF THE SOCIAL SCIENTIST. THE STUDENTS SHOULD BE INTRODUCED TO A METHOD OF INQUIRY BY BEING INVOLVED IN THE RESEARCH PROCESS, COLLECTING AND ANALYZING THEIR OWN DATA.

SOCIAL STUDIES COURSES USUALLY DO NOT ASSUME THAT PUPILS ARE DESIROUS OF BECOMING SOCIAL SCIENTISTS. THIS COURSE, HOWEVER, IS DESIGNED FOR THE STUDENT WHO IS CONSIDERING A CAREER IN THE SOCIAL SCIENCES AND WISHES TO FIND OUT MORE ABOUT THE NATURE AND METHODS OF THE DISCIPLINES. AN INTEREST IN THE SOCIAL SCIENCES IS, THEREFORE, PRE-SUPPOSED.

COURSE GOALS:.

- I. THE STUDENT WILL DEFINE AND IDENTIFY THE BASIC CONCEPTS OF THE FOLLOWING SOCIAL SCIENCE DISCIPLINES: HISTORY, ANTHROPOLOGY, POLITICAL SCIENCE, GEOGRAPHY, ECONOMICS, SOCIOLOGY.
- II. THE STUDENT WILL FORMULATE GENERALIZATIONS ABOUT THE PURPOSES OF THE SOCIAL SCIENCES.
- III. THE STUDENT WILL LOCATE AND DEMONSTRATE THE USE OF STANDARD SOCIAL SCIENCE REFERENCE WORKS.
- IV. THE STUDENT WILL LIST THE GENERAL STEPS IN SOCIAL SCIENCE RESEARCH.
- V. THE STUDENT WILL APPLY SELECTED SOCIAL SCIENCE TOOLS AND TECHNIQUES TO GIVEN PROBLEMS.
- VI. THE STUDENT WILL DESCRIBE THE QUALITIES OF A SOCIAL SCIENTIST.
- VII. THE STUDENT WILL, GIVEN THE ABOVE LEARNINGS, APPLY THEM TO AN INDIVIDUAL OR GROUP RESEARCH PROJECT DEALING WITH A PROBLEM IN ONE OR MORE SELECTED SOCIAL SCIENCE DISCIPLINES.
- VIII. THE STUDENT WILL INFER AND DEFEND WITH EVIDENCE A PRECICITION BASED ON THE ABOVE RESEARCH.

COURSE OUTLINE:

- I. Introduction to the social sciences
  - A. Definition
  - B. Identification of the social sciences
  - C. Concepts in the social sciences
  - D. Purposes of the social sciences
  - E. Social science references
  
- II. Social science research
  - A. The process of rational inquiry
  - B. Tools and techniques
    - 1. An overview
    - 2. Discussion techniques
      - a. Rational examination of issues
      - b. Clarity of expression
      - c. Effective communication
      - d. Strategies of proof
    - 3. Hypothesis testing
      - a. Forming hypotheses
      - b. Predicting
      - c. Data gathering
      - d. Data analysis
      - e. Generalizing
  
- III. Characteristics of a social scientist
  - A. Examples, past and present
  - B. Describing the good social scientist
    - 1. Qualities
    - 2. The importance of skepticism
  
- IV. Applying - Putting it together
  - A. Student research
  - B. Predictions
  - C. Review and evaluation
  
- 4. Selected techniques
  - a. Sampling and probability theory
  - b. Using percentages
  - c. Using chi-square
  - d. Historiography



GOAL: THE STUDENT WILL DEFINE AND IDENTIFY THE BASIC CONCEPTS OF THE FOLLOWING SOCIAL SCIENCE DISCIPLINES: HISTORY, ANTHROPOLOGY, POLITICAL SCIENCE, GEOGRAPHY, ECONOMICS, SOCIOLOGY.

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
<p>SOCIAL SCIENCE</p> <p>NOTE: MULTIPLE CLASSROOM COPIES OF THE MERRILL SOCIAL STUDIES SERIES WILL AID THE DEVELOPMENT OF THE FIRST FOUR GOALS.</p>	<p>A. The student will define "social science."</p>	<ol style="list-style-type: none"> <li>1. On the first day, hold an informal discussion in which the teacher:               <ol style="list-style-type: none"> <li>a. elicits from students their expectations in this course</li> <li>b. explains the rationale for the course</li> <li>c. presents (or distributes in hand-out form) the scope and sequence of the course, possibly adapted from the course outline.</li> </ol> <p>Stress the fact that the course requires responsibility on the part of students as they learn by doing - not by listening, primarily.</p> </li> <li>2. Have students write a definition of social science (either off the tops of their heads the first day or as a written homework assignment). Have several students read their definitions aloud, writing the ideas on the board as they come up. Discuss the group list and arrive at a tentative class definition.</li> <li>3. Suggested questions for discussion:               <ol style="list-style-type: none"> <li>a. What are some of the social sciences? What do they hold in common?</li> <li>b. Is it correct to call this field "science"?</li> <li>c. What is the difference between social science and social studies? Natural science?</li> </ol> </li> <li>4. Prepare (teacher or as a student assignment) transparencies of definitions of social science by prominent current and past scholars. In class discussion, call on students to:</li> </ol>

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
		<p>a. Read them</p> <p>b. Define difficult</p> <p>c. Interpret them</p> <p>d. Compare them</p> <p>e. Assess them.</p> <p>Following the discussion, have each student write his own definition of social science. Or, if activity 2 was done in class, re-examine the class's definition and modify it if necessary.</p> <p>5. Suggested Reading: (teacher or for student report)</p> <p>Chase, <u>The Proper Study of Mankind...</u>, Chapter 1, "Is Social Science Science?"</p> <p>6. Prepare a list of books in the library that deals with the social sciences. Have each student read one from the list as part of his required course work. The evaluation might be a written report, an oral report, or a question on a final examination in which he has to summarize the book.</p> <p>If the teacher is aware of who is reading which book, he can elicit contributions from them as the course progresses. For example, students reading biographies of famous social scientist under goal VI.</p> <p>The list should include: biographies, case studies, important general works.</p> <p>The report format might include:</p>

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
		<p>a. Bibliographic data</p> <p>b. Information about the author (or editor)</p> <p>c. Book summary: type of work, subjects dealt with, appropriate audience, items of interest</p> <p>d. Relationship of the book to this course</p> <p>e. Evaluation of the book, both as a social scientific work and as a work of interest and timeliness.</p> <p>See the Materials Section: Supplemental Resources, for titles. Many books that would be of great interest are available in paperback, and a classroom library would be helpful.</p> <p>7. Refer to the activities and Materials Section of other quinmester courses that are appropriate, for additional activities and resources that may be used throughout this quin.</p> <p>Some which are written or planned are:</p> <p><u>Launchpad: An Introduction to Social Studies</u>  <u>Introduction to Psychology</u>  <u>Introduction to Sociology</u>  <u>Introduction to Anthropology</u>  <u>Introduction to Economics</u>  <u>Dawn: The Birth of Selected Civilizations</u></p> <p>The Materials Section of the above quins will be useful for students embarking on research in any of those areas.</p>

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
<p>NOTE: PSYCHOLOGY IS NOT CONSIDERED A SOCIAL SCIENCE HERE. IT CAN BE TREATED WITH SOCIOLOGY AS A BEHAVIORAL SCIENCE (SOCIAL PSYCHOLOGY) AT THE TEACHER'S DISCRETION. APPROPRIATE MATERIALS ARE SCARCE AND STUDENT RESEARCH IS DIFFICULT IN THIS FIELD. THE BEHAVIORAL SCIENCES ARE TREATED GENERALLY IN THE STATE ADOPTED TEXT, INTRODUCTION TO BEHAVIORAL SCIENCES.</p>	<p>B. The student will identify the social sciences.</p>	<p>1. As a homework assignment have students classify the following list of (Dade County) film titles according to social science area. Do not provide a list of social sciences from which to choose.</p> <p><u>The Age of Discovery</u>  <u>Alaskan Eskimo</u>  <u>Andes: Chile's Barrier</u>  <u>Copper Mining</u>  <u>Pompeii and Vesuvius</u>  <u>The Truman Years</u>  <u>Population Density</u></p> <p><u>Russian Economic Growth</u>  <u>Footsteps to the Moon</u>  <u>Megapolis: City of the Future</u>  <u>The Congress</u>  <u>I Have a Dream: Life of Martin L. King</u>  <u>Justice Under the Law: The Gideon Case</u>  <u>Uptown: A Portrait of the South Bronx</u>  <u>Where is Prejudice?</u></p> <p>2. The following day, divide the class into 3 or 4 groups each to share the results and formulate a classification scheme for the items. (There is still no set "list" of disciplines.) Compare the group results in reports. There will be disagreement, both as to what goes where, and also just what are social science disciplines.</p> <p>Through follow-up discussion, the class should attempt to derive:</p> <ol style="list-style-type: none"> <li>A list of social sciences</li> <li>Some characteristics of the various social sciences</li> <li>Generalizations about the overlap among the disciplines and their reliance on each other. (Pages 2-3 of the Merrill book on Sociology has a good example of how sociology has common interests with other disciplines, and might be read aloud as an example by the teacher.</li> <li>The existence of sub-disciplines within the social sciences, e.g., law as a category under political science, or criminology under sociology.</li> </ol>

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
	<p>C. The student will describe selected social sciences.</p>	<ol style="list-style-type: none"> <li>1. Divide the class into six groups to investigate the 6 disciplines listed in the objective. Each group should prepare a panel discussion to include:               <ol style="list-style-type: none"> <li>a. A definition of the discipline</li> <li>b. A brief history</li> <li>c. The sub-fields</li> <li>d. Tools</li> <li>e. Methods, generally</li> <li>f. Careers available</li> <li>g. Concepts</li> </ol> </li>   <li>2. The above may be approached by having each student prepare a short written report on one or more of the disciplines, to include above information.               <p>For resources, see the Materials Section under Supplemental Student and Teacher Resources. Both general works and works related to individual disciplines are listed there. See also Merrill Social Science Seminar Series (6 paperback books, each devoted to a discipline), listed under Alternate Classroom Materials.</p> </li>   <li>3. To illustrate the concepts as they apply to the disciplines, have the class divided into teams of 6, each member representing a single discipline and each team, therefore, comprising all or most of the disciplines.</li> </ol>

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Give each team a social problem to "solve." Its task is to determine how the various disciplines can apply their techniques and concepts to the problem. Do not allow the "teams" much time - they are not expected to come up with solutions, only suggest how different social scientists might apply their knowledge to a problem.

Suggested problems:

- a. A racial disturbance has erupted in your community.
- b. You are planning a new community in a previously rural area.
- c. One of your nation's allies has just been attacked by another nation. You must advise the president.

d. Utilize an actual current (broad) problem.

4. To introduce the behavioral sciences, show the filmstrip, Introduction to the Behavioral Sciences.

5. The Lesson "The Black and the Immigrant Experiences" (#49) in Sandberg, Introduction to the Behavioral Sciences, deals with the correlation of history, economics, sociology and psychology. Though it stresses the behavioral sciences, it can be adapted as an illustration of the interrelatedness of the social sciences.

It is suggested that the film Black History: Lost, Stolen, or Strayed? be utilized with this lesson.

GOAL: THE STUDENT WILL FORMULATE GENERALIZATION ABOUT THE PURPOSES OF THE SOCIAL SCIENCES.

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
<p>PURPOSES FOR SOCIAL SCIENCES</p>	<p>A. The student will assess the importance of the social sciences.</p>	<ol style="list-style-type: none"> <li>1. Suggested questions for discussion or reports:               <ol style="list-style-type: none"> <li>a. Can social scientists solve social problems alone? (Emphasize the role of engineers, natural scientists, mathematicians, etc. in solving problems affecting society.)</li> <li>b. Are large scale problems like these (e.g., race relations, urban problems, poverty, etc.) better solved individually or in groups?</li> <li>c. If you were President, how would you select your cabinet and advisors? Is this how they are really picked?</li> <li>d. What do you think are the most pressing problems facing our world today? What will be the role of social science in resolving these?</li> <li>e. How did Darwin's theory of evolution affect the development of the social sciences?</li> </ol> </li> <li>2. Have each student write a brief essay on the importance of the social sciences. The essay should consider what the student perceives as the needs of society and from there, how the social scientist can contribute.            Have two or three students work together to compile a list of purposes for the social sciences from the essays. Use the list as a springboard for discussion.</li> <li>3. Have a small group (or groups) or students consider these statements for discussion or debate:               <ol style="list-style-type: none"> <li>a. Social phenomena obey laws which cause social events to follow regular, defined patterns.</li> </ol> </li> </ol>

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
		<p>b. The individual cannot influence social phenomena. He will be overwhelmed by larger social forces if he tries to cause change. (Adapted from the Arab scholar Ibn Khalcun's <u>Principles</u>, written before 1500)</p> <p>c. The social sciences should not be called "sciences" at all. Social behavior is unpredictable - and social scientists cannot demonstrate proof of their theories in a laboratory. History cannot be analyzed as a chemical solution.</p> <p>The above statements may also be placed on transparencies and used as discussion springboards for the total class.</p> <p>4. As homework, have each student try to find the name of at least one social scientist whom he thinks has affected our society or the history of the world greatly, and be prepared to defend his choice in class. (It may be advisable to omit politicians.)</p> <p>Have each student summarize in a paragraph who his choice is and why - then hold a discussion having several students report orally. On the chalk board list the names in one column, their fields in another, and why they were important in another (in abbreviated form).</p> <p>Questions to ask, based on the above information:</p> <p>a. According to our information, does any one branch of the social sciences seem to have more influence than others?</p> <p>b. Does your choice of names reveal any biases on your parts? (Could be that many just completed a psychology course, and might select Freud, for example.)</p>





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- c. Are the most influential people always the most famous? Popular?
  - d. Can we make any generalizations about the role and importance of the social sciences from the reasons listed in the third column?
5. Assign individual students to locate, read and report to the class on one of the following:

Montagu, Man Observed. Chapter 13, "The Role of the Social Sciences."

Time Magazine, Volume 97: March 29, 1971, page 47:  
"Social Science Impact."

Chase, The Proper Study of Mankind.... Chapter 5,  
"Nineteen Questions."

- 6. Having formulated some generalizations about the social sciences and the purposes for them, students might invite a local junior college or university professor of social science to come in and discuss, informally, the students' conclusions and his own ideas on the role and importance of the social sciences. He might also be asked to contribute thoughts on social science research (course goal #4).

- 7. The following statement, quoted in Chase, The Proper Study of Mankind, page 49, by Louis Wirth, might be used as a comparative instrument with the purposes for the social sciences that have been formulated by the students.

"The great unanswered questions of the social sciences are the great unanswered questions of mankind. How can we get peace, freedom, order, prosperity, and progress

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under different conditions of existence? How can we establish the conditions of human well-being that have been attained in some parts of the world, or by certain groups, so that they will apply to other groups, and to other parts of the world? How can we achieve consensus in a mass democracy? How can we get the advantages of a rapidly developing technology without destroying the other values which we cherish?"

GOAL: THE STUDENT WILL LOCATE AND DEMONSTRATE THE USE OF STANDARD SOCIAL SCIENCE REFERENCE WORKS.

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
SOCIAL SCIENCE REFERENCES	The student will locate and demonstrate the use of standard social science references.	<ol style="list-style-type: none"> <li>1. Handout a list of standard social science and useful general references. The list should be compiled with the help of the school librarian, so that references available in the school library can be marked with an asterisk. If a nearby university, junior college or public library will cooperate, it might be useful to take the class there to work with the books if the school library is weak in social science.</li> <li>2. Have each student prepare a brief description, in his notes, of each reference. (Its contents, where it is located, how it might be used, how up-to-date it is.)</li> <li>3. If possible, bring some of the references to class and allow students to examine them first hand in an informal atmosphere.</li> <li>4. For students needing practice in using the library, prepare a list of the references listed on the handout. Working in pairs, students might compete to see who can get the most answers in a class period. The competition will work only if a variety of sources is called for and ample materials are available. It may be necessary to send parts of the class on different days.</li> <li>5. Some time should be spent showing and discussing the social scientist's use of primary sources. Some students in the class might have interesting family letters or documents dating from the Civil War or World War Two, or copies of artifacts which they could bring in and show. Facsimiles of many artifacts and original documents are available at small cost from the Government Printing Office and from some local historical associations.</li> </ol> <p>Discuss the advantages and disadvantages of using secondary and primary sources.</p>

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
		<p>6. Ask students to suggest as many kinds of evidence as they can that are available to a social scientist studying the past. Write the list on the board.</p> <p>Ask students to rank them in order of objectivity or reliability as evidence. Discuss their relative reliability.</p> <p>7. Review briefly the major social science journals. If several are available in the school library, students might be assigned to read any single article in any of the journals mentioned and turn in a written summary of what they read.</p> <p>A partial listing of social science periodicals can be found in the Materials Section.</p>

GOAL: THE STUDENT WILL LIST THE GENERAL STEPS IN SOCIAL SCIENCE RESEARCH.

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
SCIENTIFIC BEHAVIOR	<p>A. The student will differentiate between scientific and unscientific inquiry.</p>	<ol style="list-style-type: none"> <li>1. Present student with a list of methods of explaining phenomena, some scientific and some not (e.g. religion, witchcraft, observation, experiment, folk teachings, reliance on authority...).</li> <p>Discuss the usefulness of the various ways to explain history, human behavior, natural phenomena, leading to a discussion of how one might best go about studying a phenomena that applies to the social sciences. This could lead directly into the next objective, in which the students outline a method of inquiry.</p> <li>2. The first four lessons in Sandberg, <u>Introduction to the Behavioral Sciences</u>, though dealing with a behavioral phenomena (water witches, or dowzers), can be used as an introduction to rational inquiry in all social sciences. Refer to the teacher's guide for detailed lesson plans and hand-outs.</li> <p>Lesson 1 deals with problems of making conclusions on inadequate evidence.            Lesson 2 deals with the fallibility of eyewitness accounts.            Lesson 3 presents an example of scientific inquiry into the same problem.            Lesson 4 compares scientific and non-scientific methods of looking at things.</p> <li>3. Show one of the following films:  <u>Scientific Method</u>  <u>The Scientific Method in Action</u>  <u>Using the Scientific Method</u></li> <li>4. Hold an informal, brief discussion about the validity of astrology, magic, tea-leaf reading, unidentified flying</li> </ol>

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LEARNING ACTIVITIES

STEPS IN INQUIRY

B. The student will list the general steps in a social scientist's method of inquiry.

objects reports, etc. If students believe in any, ask them to explain on what basis or why they believe. If not, ask them to explain why other are believers. Determine that such beliefs are not scientifically based, and though this does not necessarily disprove them, it is something to consider when putting ones life or money on the line due to a daily horoscope.

Students should be able to draw conclusions about what constitutes "rational" inquiry into a topic, and suggest ways one might proceed, scientifically (leading to the next objective).

1. Students may already be familiar with one or more accepted methods of inquiry from experiences in previous social studies classes. If so, then a general discussion and review might suffice. Possibly a brief pre-test should be given to evaluate how well the students understand the inquiry process.

2. Present one or more of the generally accepted methods of inquiry to the class. Using a hypothetical problem, have students suggest examples to illustrate the steps and explain why it is a necessary component of the total process.

3. If necessary, divide the class into two groups: those who have had experience with social studies methods of inquiry and those who are not familiar with the basic mode.

Send the former group to the library or resource center to select and begin one of the following (or other) reports to be presented at a later date:

- a. A comparison of "literary" history and "scientific" history. (See Merril series, Nature and Study of History, by Commager.)

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- b. Preparation of a class demonstration of probability to be presented during the study of hypothesis evaluation. (If available, utilize the Minnesota Mining Transparency Packet, Introduction to Probability. Otherwise a mathematics teacher might be able to help.)
- c. An essay titled, "Why I think \_\_\_\_\_ is (was) a Good Historian." (or sociologist, political scientist, etc.) (This would be read aloud and discussed during the consideration of what makes a good social scientist.)
- d. A survey of American colleges and universities to find out where one might best study various social science fields (based on size of social science departments, noted people employed, reputation for quality of instruction, and considering cost and difficulty of getting admitted. A guidance counselor could assist and provide catalogs, etc.)

The latter group of students (possibly all) may be given hypothetical cases to work on which require a planned, rational mode of inquiry. Ask them to lay out the steps they would go through to reach the desired goals.

Sample case 1: A large school has experienced a very high drop-out rate and you are called in to find out why.

Sample case 2: As a historian, you wish to study the circumstances leading to Lincoln's assassination.

Hand out one or two acceptable "model" methods of inquiry in outline form, and have the students use it to assess their own list of steps. In discussion, compare the results:

- a. What steps did you omit? Do you think yours should have included those?

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
		<p>b. What steps did you include that the model omits? Should the model be changed?</p> <p>c. Are the steps essentially the same in history as they would be in sociology or geography?</p> <p>d. Where would you find your evidence? How can you determine if your information is accurate?</p> <p>4. A student interested in psychology might read and report on Anderson's <u>The Psychology Experiment: An Introduction to the Scientific Method</u>. The contents can be applied to all social sciences.</p>



GOAL: THE STUDENT WILL APPLY SELECTED SOCIAL SCIENCE TOOLS AND TECHNIQUES TO GIVEN PROBLEMS.

FOCUS	OBJECTIVE	LEARNING ACTIVITIES																														
<p>TOOLS OF THE SOCIAL SCIENTISTS</p>	<p>A. The student will describe examples of the tools and techniques used by social scientists.</p>	<ol style="list-style-type: none"> <li>1. Have students (or select students to present reports) read Chapter 3 of <u>Political Science...</u> by Sorauf (Merrill series) "<u>The Tools of the Political Scientist</u>," pages 22-38. The contents refer to political science but apply to social science generally.               <p style="margin-left: 40px;">Includes: gathering data, analyzing data, research strategies (historical, case study, comparative studies, covariate analysis)</p> </li> <li>2. Another reading that presents useful data is Chapter 3 of <u>Sociology...</u> by Rose (Merrill series), "<u>The Methods Employed by Sociologists</u>," pages 22-32.               <p style="margin-left: 40px;">Includes: Obstacles to research, how a sociologist works, behavioral research techniques.</p> </li> <li>3. Have students find and report on examples of actual studies that utilized some of the following techniques and tools:               <table style="margin-left: 40px; width: 100%;"> <tr> <td style="text-align: center;"><u>Techniques</u></td> <td style="text-align: center;"><u>Tools</u></td> </tr> <tr> <td>Interviews</td> <td>Recording devices</td> </tr> <tr> <td>Questionnaires</td> <td>Documents</td> </tr> <tr> <td>Case Studies</td> <td>Newspapers</td> </tr> <tr> <td>Content Analysis</td> <td>Diaries</td> </tr> <tr> <td>Experiments</td> <td>Memoirs</td> </tr> <tr> <td>Observation</td> <td>Letters</td> </tr> <tr> <td>Correlation Analysis</td> <td>Maps</td> </tr> <tr> <td>Historical Analysis</td> <td>Secondary Texts</td> </tr> <tr> <td>Sampling</td> <td>Photography</td> </tr> <tr> <td>Digging</td> <td>Computers</td> </tr> <tr> <td></td> <td>X rays</td> </tr> <tr> <td></td> <td>Statistics</td> </tr> <tr> <td></td> <td>Artifacts</td> </tr> <tr> <td></td> <td>Theoretical models</td> </tr> </table> </li> </ol>	<u>Techniques</u>	<u>Tools</u>	Interviews	Recording devices	Questionnaires	Documents	Case Studies	Newspapers	Content Analysis	Diaries	Experiments	Memoirs	Observation	Letters	Correlation Analysis	Maps	Historical Analysis	Secondary Texts	Sampling	Photography	Digging	Computers		X rays		Statistics		Artifacts		Theoretical models
<u>Techniques</u>	<u>Tools</u>																															
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Content Analysis	Diaries																															
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Digging	Computers																															
	X rays																															
	Statistics																															
	Artifacts																															
	Theoretical models																															

Reports to include:

- a. Definition and description of tool and/or technique
  - b. Disciplines to which it (they) applies
  - c. Summary of an actual study in which it was or is employed.
4. Parts of Malinowski's Argonauts of the Western Pacific (from the first few pages) might be read aloud and discussed, as an example of anthropological field work methods. Or, it may be used as the basis for a student report.
  5. Have students examine and report on the following works, or use as the basis for hand-outs and discussion:
 

Redfield, The Little Community (Summary of various methods used by social scientists in their study of man)

Nadge, Tools of Social Science
  6. Use Lesson 5 in Sandberg, Introduction to the Behavioral Sciences, "How Behavioral Scientists Work." It presents some of the requirements of the scientific method in the behavioral sciences, types of studies (experiments, sampling, case study), and methods of collecting data. The accompanying class handout provides an exercise in applying the above information, and could be adapted by the teacher even without a class set of the textbooks.
  7. Have a student prepare a mini-lesson for the class using the filmstrip (accompanying the Sandberg text and kit, above) "Tests and Inventories." It examines intelligence tests, aptitude tests, and personality tests.

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B. The student will differentiate between rational and emotional examination of issues and practice expressing his views clearly and effectively.

Discuss the advantages and disadvantages of the various tests.

1. Utilize the AEP booklet Taking a Stand as the basis for class examination of discussion techniques, clarification of issues, and strategies of proof.

NOTE: This paperback unit guides students to examine issues rationally and to discuss issues effectively and clearly. It takes approximately a week of class time, though it may be condensed. For example, only one of the two case studies might be utilized.

2. Have members of the class evaluate each other in their discussion techniques. (See pp. 44-47 of Taking a Stand for suggestions.) Students will be able to apply the learned discussion techniques to later class and small group work. The teacher may wish to set up a system by which discussion skills will be re-evaluated periodically throughout the course.

3. If some students have been exposed to this booklet previously and demonstrate awareness of its contents, they might be set up as an evaluation team or a "Creative Evaluation Group" as describe on p. 44 of the booklet, Taking a Stand, or asked to lead some of the following activities.

4. Bring in several "Letters to the Editor" from a local newspaper, all about some controversial current issue. Read them aloud or mimeograph them for distribution.

In discussion, analyze the letters and evaluate the writers as to rationality, clarity of expression, and effectiveness of writing.

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
		<p>Then call on individual members of the class to defend one side or the other of the issue - and have others evaluate their arguments.</p> <p>5. Tape record a speech by a local official, a candidate for office, or a TV news "editorial." Evaluate these for rational or emotional arguments and strategies of proof.</p> <p>Questions for discussion:</p> <ol style="list-style-type: none"> <li>What kind of issue is being discussed? (moral-value issue, definitional issue, factual issue, legal issue)</li> <li>What weaknesses can we find, if any, in the speech? (e.g. repetition, irrelevant statements, unclear statements, lack of evidence, inaccuracies, personal attacks, emotional language, non-sequiturs.)</li> <li>Why do many political speeches have emotional language in them?</li> </ol> <p>6. Lesson 8, "Behavioral Science: A Method of Inquiry" in Sandberg, <u>Introduction to the Behavioral Sciences</u>, provides a series of quotes by presidential candidates which can be used as a springboards to discussion of the "spirit of science," and its importance to daily life in a democracy. Ask: Is a spirit of science a necessary quality of a candidate? Why or why not? Are candidates more "scientific" than they were, say, in the 19th century?</p> <p>7. Lesson 21, "The High School Athelete" in <u>Introduction to the Behavioral Sciences</u> provides a useful exercise in analyzing generalizations based on insufficient data.</p> <p>After students examine this topic and argue (using reasoned arguments ) one side or the other, the teacher may want to</p>



FOCUS	OBJECTIVE	LEARNING ACTIVITIES
<p>HYPOTHESIS TESTING</p> <p>NOTE: TO DO THIS EPISODE COMPLETELY TAKES 2 OR 3 WEEKS. PORTIONS MAY BE OMITTED AND UTILIZED DURING THE LAST PORTIONS OF THE COURSE WHEN STUDENTS ARE PURSUING THEIR OWN RESEARCH.</p>	<p>C. The student will apply selected techniques to evaluate a hypothesis.</p>	<p>utilize Lesson 22 in which acutal scientific tests were tried regarding high-school atheletics.</p> <ol style="list-style-type: none"> <li>1. Utilize the Episodes in Social Inquiry Series booklet, <u>Testing for Truth: A Study of Hypothesis Evaluation.</u></li> </ol> <p>The directions in the <u>Instructor's Guide</u> are complete down to daily lesson plans for those teachers who want to apply the unit in toto.</p> <p>The important components of the unit include the following:</p> <ol style="list-style-type: none"> <li>1. Forming hypotheses</li> <li>2. Making predictions</li> <li>3. Sampling</li> <li>4. Writing, administering and computing the results of questionnaires</li> <li>5. Analyzing data             <ol style="list-style-type: none"> <li>a. Using percentages</li> <li>b. Using the chi-square test</li> </ol> </li> <li>6. Forming conclusions and generalizations</li> </ol> <ol style="list-style-type: none"> <li>2. Use the transparency set, <u>Introduction to Probability</u>, to demonstrate probability.</li> <li>3. Several lessons in Sandberg, <u>Introduction to the Behavioral Sciences</u>, may be used in addition to or instead of the <u>SRSS unit, Testing for Truth.</u></li> </ol>

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
		<p>a. Lessons dealing with writing questionnaires:</p> <p>Lesson 10: "Becoming an American: The Family"  Lesson 29: "Political Activists"  Lesson 52: "Brain Research and Aggression"</p> <p>b. Lesson 17, "How Hopis Grow Up" has students analyze a recording for anthropological, sociological, and psychological data.</p> <p>c. Lesson 30, "The Social Background of Alienation" has students write questions for a structured interview.</p> <p>d. Lesson 12, "What Children Learn from Textbooks" has students do informal content analyses of children's stories, and may be adapted by the teacher from the <u>Teacher's Guide</u> without the student texts.</p> <p>e. Lesson 41, "The Biological Concept of Race" takes data from history and everyday life for analysis of an anthropological selection.</p> <p>4. The unit, <u>Testing for Truth</u>, deals with hypothesis testing in the behavioral sciences. Some time might be spent discussing how a historian tests a hypothesis.</p> <p>Suggested question sequence:</p> <p>a. Suppose you were a historian trying to determine the causes for the Communist takeover of North Vietnam. How would you go about forming a hypothesis?</p> <p>b. Where would you locate information? (Note that data on recent events is often slanted due to censorship,</p>

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
		<p>lack of perspective, withheld documents on all sides of an issue, emotional atmosphere.)</p> <p>c. Would you be able to rely entirely on primary sources?</p> <p>d. What are the advantages (and disadvantages) of using eye-witness accounts?</p> <p>e. How can a historian determine the accuracy of data he collects?</p> <p>f. Should historians make moral judgments in their work? Can they avoid it? Are they making a judgment when they select one topic over another?</p> <p>g. Are historical conclusions necessary or should historians stick to the facts and events? (Is it proper for a historian to conclude that Lincoln was right in delivering the Emancipation Proclamation? That the Kensington Rune stone is a fake? The the Norsemen really "discovered" America?)</p> <p>5. If a class set of Massialas (state adopted text), <u>Looking into History</u>, is available, lessons from it might be used as the basis for examining historiography and historical method.</p> <p>The lessons may be used together as a unit or adapted for individual lessons.</p> <p>The unit includes:</p> <p>Interpreting historical data and artifacts  Judging reliability of evidence  Dating evidence  Analyzing primary and secondary data  Comparing historical interpretations</p>

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If these booklets are not available in multiple copies, the teacher's guide still provides worthwhile considerations for discussion questions, problems to consider, and objectives.



GOAL: THE STUDENT WILL DESCRIBE THE QUALITIES OF A GOOD SOCIAL SCIENTIST.

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
<p>CHARACTERISTICS OF A SOCIAL SCIENTIST</p>	<p>A. The student will examine the contributions of selected past and present social scientists.</p>	<ol style="list-style-type: none"> <li>1. If students were assigned essays or reports on individual social scientist they might be read aloud now and discussed.</li> <li>2. Select one or two noted social scientist and lecture or prepare handouts on their lives and works, with emphasis on their roles as social scientists. (e.g. Thucydides, Freud, Adam Smith, L. H. Morgan, Margaret Mead, Winston Churchill, Ralph Linton, Thomas R. Malthus)</li> <li>3. If a reading list was distributed at the beginning of the course, and if some students selected biographies of social scientists to read, they might be asked to discuss them with the class at this time - the qualities that contributed to their success and their contributions to society and the social sciences.</li> <li>4. Suggested readings and topics for research and reports:             <ul style="list-style-type: none"> <li>Montagu, <u>Man Observed</u>, Chapter 14, "Great Ideas of the Social Sciences."</li> <li>Linton, <u>The Study of Man</u> (Inventory of findings in cultural anthropology)</li> <li>Leighton, Alexander (Work with Japanese Americans during World War II) <u>The Governing of Men.</u></li> <li>Aristotle (the social scientist), "Politics."</li> <li>Machiavelli, "The Prince" and "Discourses."</li> <li>Jean Jacques Rousseau, "The Social Contract."</li> <li>Thomas R. Malthus, "An Essay on the Principles of Population, 1798."</li> </ul> </li> </ol>

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		<p>Benedict, <u>The Races of Mankind</u> (Study in race relations).</p> <p>Heilbroner, <u>The Worldly Philosophers...Great Economic Thinkers.</u></p> <p>Soule, <u>Ideas of the Great Economists.</u></p> <p>Broek, <u>Geography...</u>, Chapter 2, "Development of Geographic Thought." (Merrill Series)</p> <p>Rose, <u>Sociology...</u>, Chapter 4, "Significant Research in Sociology: Past and Present." (Merrill Series)</p> <p>Pelot, <u>The Study of Anthropology</u>, Chapter 2, "The History of Anthropology" and Chapter 4, "Significant Research in Anthropology." (Merrill Series)</p> <p>Sorauf, <u>Political Science...</u>, Chapter 2, "The Growth and Development of Political Science in America." (Merrill Series)</p> <p>Nevins, <u>Gateway to History.</u></p> <p>Huxley, Julian, <u>Man Stands Alone.</u></p> <p>1. Have each student attempt to write down, in order, 3 to 5 qualities he thinks are necessary for a social scientist. This might be a casual assignment at the end of class one day, or a brief in-class activity on a scratch paper.</p> <p>Have the students meet in groups of 4 - 6 for a few minutes to agree on a list of qualities, again in order of importance. Group reports should yield discussion and some kind of a general list. The teacher can make sure the list includes some of the essential requirements of integrity, imagination, hard work, critical intelligence,</p>
<p>B. The student will formulate generalizations about what makes a good social scientist.</p>		



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open-mindedness, and facility of expression.

Each item on the list should be interpreted by the students (not "defined" by the teacher), with examples given.

2. Have each student write an essay or devise a list of criteria for "greatness" in one of the social science disciplines. (e.g. "A great anthropological study would be characterized by ...")

An example, based on history:

Four Criteria for a Historian:

- a. History should be based on knowledge arising from critical study, observation, and reflection.
- b. A great historical work is marked by imaginative and scholarly understanding of the flow of events, institutions, ideas, of men, their motivations and experiences, in the dimension of time.
- c. Great history possesses literary quality.
- d. Great history adds to man's knowledge of himself, not only finite details, but significant focus to the total picture of man.

3. Hold a discussion and/or lecture briefly about the role and importance of skepticism in social science and everyday life.

Questions for discussion:

- a. How can one determine what is accurate?

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
		<p>b. How does ones frame of reference affect his outlook? How might a social scientist try to overcome his bias? Can he, completely?</p> <p>c. Is everything simply interpretation, or can we accept some things as fact? Can one be too skeptical?</p> <p>d. How can statistics be deceiving? (Teacher refer to Huff, <u>How to Lie with Statistics.</u>)</p> <p>e. How might skepticism be implemented into social science research?</p> <ol style="list-style-type: none"> <li>(1) Critically examining every stage of work</li> <li>(2) Systematically evaluating the evidence presented and the source of the data.</li> <li>(3) Endlessly questioning one's own hypotheses</li> <li>(4) Being skeptical of one's own interpretations as well as those of his predecessors</li> <li>(5) Changing hypotheses to fit new evidence - and gracefully rejecting those shown to be false</li> <li>(6) Continually rethinking, rewriting, and revising, recognising that all this is not enough.</li> </ol> <p>4. Have students read Chapter 4, "Some Problems of History," in Commager's <u>The Nature and Study of History</u>. A follow-up discussion would center on the four main topics:</p> <p>Limitations on the Historian (p. 43 ff) . The Trouble with Facts (p. 48ff) Interpretation — and Bias (p. 53ff) Judgment in History (p. 60ff)</p>



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If sufficient copies of the book are not available for all students to read the selection, it would be worthwhile for the teacher to base a class discussion on the contents, reading short segments and discussing examples.

**Example: Question:** Why do you think we have so much history written about Europe and North America and so little about the Non-West?  
**(Answers:** Possible bias on part of historians, language barrier, accessibility to written records.)

5. Having hypothesized about "good" social scientists, have students draw some conclusions, based on examples and readings, about the qualities of a social scientist.

Some food-for-thought questions:

- a. Are the qualities for superior social science any different from other fields? (Science, politics, military, art...)
- b. Do the qualities that we have listed come naturally or are they learned?
- c. Are the qualities we listed any different from, for example, a list we might draw of the qualities of an ideal "citizen?"
- d. Would this list make a good list of qualities for teaching?
- e. If one did possess all or most of these qualities, what do you think would be his values? Can we necessarily determine his values?

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- f. Must a social scientist necessarily believe in our values of freedom or equality to qualify for greatness? (How about Machiavelli?)
- 6. Have an able and interested student read and report on the article, "Obligations of American Social Scientists," by P. Green in The Annals of the American Academy, pp. 13-27, March, 1971.

GOAL: THE STUDENT WILL APPLY SOCIAL SCIENCE TOOLS AND TECHNIQUES TO AN INDIVIDUAL OR GROUP PROJECT DEALING WITH A SELECTED PROBLEM.

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
STUDENT RESEARCH	The student will apply his previous learnings to research a social science problem.	<p>1. Before starting their own research, the class should re-view:</p> <ul style="list-style-type: none"> <li>The disciplines</li> <li>Social science methods</li> <li>Social science tools</li> <li>Standard references</li> <li>Steps in research</li> <li>Qualities of a social scientist</li> </ul> <p>2. Have students choose topics for individual or group research projects. The teacher may provide a list of suggested topics, more as a guideline of how narrow the topics must be than as a list from which to choose.</p> <p>Check the topics to see that:</p> <ul style="list-style-type: none"> <li>a. They are worthy of study.</li> <li>b. They are simple enough to complete in allotted time.</li> <li>c. They are workable in terms of materials available.</li> <li>d. They are suitable for the ability level of the individual students.</li> <li>e. They are clearly defined, involving only one central question.</li> </ul> <p>Discuss topics thoroughly; students should recognize that a topic such as "Teddy Roosevelt" or "Racism in America" is a lifetime study - not a 2 or 3 week project.</p> <p>Group work, rather than individual, is advisable for the following reasons (though in the opinion of the writer should not be mandatory):</p>

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- a. Three or 4 working together can edit each other's biases, catch each other's misleading data or over-generalizations.
- b. If materials are limited, group work will ease the demand for important references.
- c. The teacher can get around to several groups more effectively than to 30 or 40 individuals all going different directions. Further many problems may be solved before he gets there.
- d. Further, team work is one of the important techniques to be learned. Few social scientists can work in isolation today.

With the short time allotted, it is not advisable to get bogged down in proper footnote form, bibliographic form, margins, etc. If desired, a brief and simple guide to desired form might be distributed to those who will complete written papers as part of their project. But in this case, with limited time, the stress should be on the process rather than the product.

3. Have students fill out a form as their work progresses. (A sample is given in the Appendix.) As the teacher moves from group to group the data on such a sheet should provide a quick summary of what the group has completed and if they are applying the previous learnings in the study.
4. The teacher may act as consultant during research. A few minutes each day might be devoted to questions that are of general concern which came up in a particular group, administrative problems, inter-group conflicts (one group might be hogging all the sociology references) and, espec-



ially, reminders about the over all goals. Students might get bogged down in irrelevant or insignificant arguments and details if they are not periodically questioned about what they are doing and why.

5. Periodically the teacher might observe a group (or total class) discussion of data - during the analysis of data - and evaluate the discussion skills of the participants, based on the evaluative instruments designed earlier or in the booklet, Taking a Stand.

Qualified students might also be able to observe and evaluate discussions.

The evaluation should always be discussed afterward so students recognize weaknesses and strengths in their participation.

6. Share the results of the research projects - ample time should be reserved for the whole class to discuss, informally, each project. Deadlines will have to be firm - students will naturally procrastinate and want to excuse themselves from these discussions to finish up their own work.

Topics to include in the discussion:

- a. The process
- b. The results - with conclusions and evidence
- c. Problems encountered
- d. Weaknesses in the study
- e. Significance of the study

GOAL: THE STUDENT WILL INFER AND DEFEND WITH EVIDENCE A PREDICTION BASED ON THE ABOVE RESEARCH.

FOCUS	OBJECTIVE	LEARNING ACTIVITIES
PREDICTING	The student will infer and defend with evidence a prediction based on the above research.	<p>1. Ask each student (or group) to prepare a defensible prediction based on research.</p> <p>Alternative uses of the predictions:</p> <ol style="list-style-type: none"> <li>a. Each student individually may be asked to write an essay as part of an examination. It should be written in class so that essays will be individual efforts, although the work was done as a team. Discuss the completed essays.</li> <li>If time is short, each group might select one essay from their group to be defended in front of the class.</li> <li>b. Have each group prepare a panel discussion in which they defend one (or more) prediction(s) based on their research.</li> <li>c. Include the prediction in the written summary section of the project itself, and discuss it as part of the follow-up discussion under goal VII, Activity #6.</li> </ol> <p>Other students might be able to suggest additional predictions as the reports are shared, or point out contradictions and errors in the thinking of the group.</p> <p>2. Using the written summaries of the research groups, the teacher can prepare separate written questions for each group, calling for inferences, generalizing, and predicting skills. Then each group (or individual) would be given appropriate time to try to answer the questions and defend the answers.</p> <p>Teacher references:</p> <p>Brady, <u>A Rationale for Social Studies</u></p>



FOCUS	OBJECTIVE	LEARNING ACTIVITIES
		<p data-bbox="375 644 422 1421"><u>Sanders, Classroom Questions: What Kinds?</u></p> <p data-bbox="450 368 712 1487">3. Have groups exchange results (summaries). Give the groups time to evaluate each other's reports, then engage them in informal question and answer sessions in which Group A questions the methods, results and predictions of Group B, etc. Encourage healthy, positive skepticism, so that each group will have to defend its work and identify ways it might be improved upon.</p> <p data-bbox="741 329 853 1421">The above technique also provides a forum for reviewing and assessing discussion skills and skill in asking analytical questions.</p>

APPENDIX A  
Sample Progress Sheet)

NAMES: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Statement of Problem: \_\_\_\_\_  
\_\_\_\_\_

I. (To be filled out the first day)

- A. What discipline(s) will apply to this study? \_\_\_\_\_
- B. What standard reference works will be useful? \_\_\_\_\_
- C. What is your hypothesis? \_\_\_\_\_
- D. Is your hypothesis a precise, testable statement? \_\_\_\_\_
- E. On what data or argument is your hypothesis based? (Why did you choose it?) \_\_\_\_\_
- F. What are some logical implications of your hypothesis? (If the hypothesis is valid, then what other predictions might one make from it?) \_\_\_\_\_
- G. What techniques do you intend to use to test your hypothesis? \_\_\_\_\_
- H. What tools will you use? \_\_\_\_\_
- I. Outline the step-by-step procedure (tentative) that you plan to follow in this study, and attach it to this sheet.

J. (Check off as completed. Have completed items handy for your and teacher's reference.)

- A. Bibliography
- B. Data gathering
  - 1. Selecting of relevant data (documents, news accounts, etc.)
  - 2. Preparation and administering of necessary tools (e.g. questionnaires, photographs, etc.), if applicable
- C. Analysis of data
- D. Revised hypothesis (if applicable)  
(Note: Steps B-D may be repeated as a need for evidence arises.)
- E. Stating generalization (with evidence to verify)

K. The Product\*\*

Summary of findings  
Self-evaluation, group evaluation

\*\*The product will depend on nature of project and teacher's criteria. It requires elaboration.

## MATERIALS

I. RECOMMENDED BASIC TEXTUAL MATERIALS -- None. See alternate materials, below.

## II. ALTERNATE CLASSROOM MATERIALS

A. TEXTUAL -- Class set of each recommended.

Sandberg, John H. Introduction to the Behavioral Sciences: An Inquiry Approach. New York: Holt, Rinehart and Winston, Inc., 1969 (State adopted).

Sociological Resources for the Social Studies. Testing for Truth: A Study of Hypothesis Evaluation. Boston: Allyn and Bacon, Inc., 1969 (paperback).

Massialas, Byron and Jack Zevin. Looking into History, World History through Inquiry Series. Chicago: Rand McNally, 1969 (State adopted).

Pearson, Craig, and David G. Sparks, eds. Taking a Stand: A Guide to Clear Discussion of Public Issues. Public Issues Series, Harvard Social Studies Project. Columbus, Ohio: American Education Publications, 1970 (paperback).

Muessig, Raymond and Vincent Rogers, eds. The Charles E. Merrill Social Science Seminar Series. Columbus, Ohio: Charles E. Merrill Books, Inc., 1965. (Individual titles are listed below. Class sets are not needed, though multiple copies of each paperback book are recommended.)

Sorauf, Francis J. Political Science: An Informal Overview.

Pelto, Pertti J. The Study of Anthropology.

Martin, Richard S. and Reuben G. Miller. Economics and its Significance.

Rose, Carolin B. Sociology: The Study of Man in Society.

Broek, Jan O. M. Geography: Its Scope and Spirit.

Commager, Henry Steele. The Nature and Study of History.

B. AUDIO-VISUAL

1. FILMS

Scientific Method

11'

1-00183

Scientific Method in Action  
Using the Scientific Method  
Black History: Lost, Stolen or Strayed?  
" "  
Archaeologists at Work  
Computer Revolution

19'  
11'  
27'  
"

1-10079  
1-00187  
1-31624 (Part 1)  
1-31629 (Part 2)  
1-11036

2. FILMSTRIPS

Introduction to the Behavioral Sciences. Pleasantville, New York: Guidance Associates.  
"Tests and Inventories," Part of the A-V Kit, Introduction to the Behavioral Sciences. New York:  
Holt, Rinehart and Winston, Inc.

3. OTHER

Minnesota Mining and Manufacturing Co. Introduction to Probability. (Transparency Packet) St. Paul,  
Minnesota: Visual Products Division, 3M Company.

III. STUDENT AND TEACHER SUPPLEMENTAL RESOURCES

A. GENERAL REFERENCES

44

- Barzun, Jacques and Henry Graff. The Modern Researcher. New York: Harcourt Brace and World, Inc., 1957.
- Bereelson, Bernard, ed. The Behavioral Sciences Today. New York: Harper and Row, paperback, Torchbook edition.
- Bergamini, David. Mathematics. Life Science Library. New York: Time-Life Books, 1962. (Chapter 6 has a good analysis of probability.)
- Chase, Stuart. The Proper Study of Mankind...An Inquiry into the Science of Human Relations. Revised edition. New York: Harper and Brothers, 1956.
- Goode, William J., and Paul Hatt. Methods in Social Research. New York: McGraw-Hill Book Co., 1952.
- Hunt, Elgin F. and Jules Karlin. Society Today and Tomorrow: Readings in the Social Sciences. New York: MacMillan Co. (Paperback edition)
- Huxley, Julian. Man Stands Alone. New York: Harper and Bros., 1941.
- Kardiner, Abram, and E. Preble. They Studied Man. Mentor Books edition. New York: New American Library of World Literature, Inc., 1963. (Selected scholars' lives and works)

- Linton, Ralph. The Study of Man. New York: Appleton-Century-Crofts, Inc., 1936. (Inventory of findings in cultural anthropology)
- Montagu, Ashley. Man Observed. New York: G. P. Putnam's Sons, 1968. (Includes excellent chapters on the role of the social sciences and great ideas in the social sciences.)
- Nadge, John. The Tools of Social Science. New York: Anchor, 1969. (Paperback)
- Phillips, Bernard S. Social Research: Strategy and Tactics. New York: The MacMillan Co., 1966.
- Redfield, Robert. The Little Community. Chicago: University of Chicago Press, 1955.
- Wedgwood, C. V. Truth and Opinion. New York: The MacMillan Co., 1960.

Periodical Articles:

- "Obligations of American Social Scientists." Annals of the American Academy, March, 1970, pp. 13-27.
- "Social Science Impact." Time, March 29, 1971, p. 47.

B. SPECIALIZED RESOURCES\*

1. Anthropology
  - Ben-dict, Ruth. Patterns of Culture. Boston: Houghton Mifflin Co., 1934.
  - Cover, Lois Brauer. Anthropology for Our Times. New York: Oxford Book Co., 1971. (High school level)
  - Kluckholm, Clyde. Mirror for Man. New York: Farrer Publications, 1960. (Paper)
  - Leakey, L. S. B. Adam's Ancestors. New York: Harper Torchbooks, 1963. (Paper)
  - Linton, Ralph. The Tree of Culture (abridged). New York: Vintage Books, 1959. (Paper)

\*Many of the references listed under (A) General References contain useful bibliographies as well as most of the volumes of the Merrill Series (Listed under Alternate Classroom Materials), pertaining to the various social science fields. The majority of books listed here are on a high reading level.

- Malinowski, Bronislaw. Argonauts of the Western Pacific. New York: E. P. Cutton and Co., Inc., 1961. (Paper) (This is a classic ethnographic work.)
- Oliver, Douglas. Invitation to Anthropology. (American Museum Science Books) Garden City, N.J.: The Natural History Press, 1964.
- Titiev, Mischa. The Science of Man: An Introduction to Anthropology. New York: Holt, Rinehart, and Winston, 1963.
- Introduction to Anthropology. Quimster course to be produces in 1971-72.
- Dawn, The Birth of Selected Civilizations. Quimster course of study, 1971.
2. History \*\*
- Carr, Edward H. What is History? New York: Vintage Books, 1962. (Paper)
- Gooch, G. P. History and Historians in the 19th Century, 2nd edition. New York: David McKay Co, Inc., 1952.
- Koenig, D., ed. Historians and History. Miami: University of Miami Press, 1966.
- Nevins, Allan. The Gateway to History. Garden City, N.J.: Doubleday and Co., 1962.
- Reiner, Gustaaf J. History, Its Purpose and Method. New York: Harper and Row, 1965.
- Saveth, Edward, ed. American History and The Social Sciences. New York: Free Press, 1964. (Relations between history and other disciplines)
- Schevill, Ferdinand. Six Historians, Chicago: University of Chicago Press, 1956.
- Wish, Harvey. The American Historian. New York: Oxford Univ. Press, 1960.
- , ed. American Historian, A Selection. New York: Oxford University Press, 1962.
- \*\*There is an excellent bibliography on Page 95 of Commager's volume in the Merrill Social Science Seminar Series, The Nature and Study of History.
3. Sociology (and social psychology)\*\*\*
- Anderson, Barry F. The Psychology Experiment: An Introduction to the Scientific Method. Belmont, Calif: Brooks/Cole Publ. Co. (Paperback)



Broom Leonard and Phillip Selznick. Sociology. New York: Harroer and Row, 1968. (A Basic Text)

Merton, Robert K. , Leonard Broom and Leonard Cottrell, Jr. (eds.). Sociology Today: Problems and Prospects. New York: Basic Books, Inc., 1959.

Rosch, Arnold M. Sociology. 2nd edition. New York: Alfred A. Knopf, Inc., 1965. (A Basic Text)

Riesman, David , with Glazer and Revel. The Lonely Crowd. Garden City, N.J.: Anchor Books, 1950. (Paperback)

\*\*\*Check the quinmester courses of study in the behavioral studies area for detailed reference lists, especially:

Introduction to Psychology  
Introduction to Sociology  
Understanding Individual Behavior

#### 4. Economics

Alexander, Albert, et al. The Modern Economy in Action. New York: Pitman Publishing Corp. 1968.

Amner, Dean S., ed. Readings and Cases in Economics. Boston: Ginn and Co, 1966. (Paperback)

Heilbroner, Robert L., The Worldly Philosophers: The Lives, Times and Ideas of the Great Economic Thinkers. New York: Simon and Schuster, Inc., 1953.

Soule, George. Ideas of the Great Economists. New York: The Viking Press, Inc., 1952.

Weber, Max. General Economic History. Translated by Frank Knight. New York: Glencoe Free Press, 1950. (Paperback)

Introduction to Economics, A Quinmester course of study. Refer to Materials Section.

#### 5. Geography

A Career in Geography. Joint Committee on Careers of the A.A.G. and N.C.G.F., 1962. Distributed by Denoyer-Geppert Co., 5235 Ravenswood Avenue., Chicago (Pamphlet.)

James, P.E. and C.F. Jones, eds. American Geography: Inventory and Prospect. Syracuse, New York: Syracuse Univ. Press, 1954.

Jones, Emrys. Human Geography. Rev. ed. New York: Viking Press, Inc., 1956. (Paper)

Taylor, Griffith, ed. Geography in the Twentieth Century. New York: Philosophical Library, Inc., 1957 (3rd ed.). (Essays on various aspects of geography)

6. Political Science

Crick, Bernard. The American Science of Politics. Berkeley: University of California Press, 1959.

Easton, David. The Political System. New York: Alfred A. Knopf, Inc., 1953.

Laswell, Harold. The Future of Political Science. New York: Atherton Press, 1963.

Leighton, Alexander. The Governing of Men. Princeton: Princeton University Press, 1945.

Waldo, Dwight. Political Science in the U.S. A. New York: UNFSOO, 1956.

American Government, a quinmester course of study.

Political Theory, Left to Right, a quinmester course of study.

Any state adopted government book.

C. SELECTED PERIODICALS

Daedalus. Journal of the American Academy of Arts and Sciences. (Useful articles, e.g. Spring, '71: "Historian and the World of the 20th Century," Winter '71: "Historical Studies Today")

Sociological Abstracts (Classifies and abstracts important research in sociology)

American Political Science Review

Current History

American Anthropologist

Psychology Today

The Geographical Review (American Geographical Society of N.Y.)

The Journal of Geography (Nat'l Council for Geographic Education)

The Political Science Quarterly (Includes social sciences generally and history)

#### IV. TEACHER BIBLIOGRAPHY

- Blalock, H. M. Social Statistics. New York: McGraw-Hill Book Company, 1960. (For the teacher who needs further information in hypothesis testing section)
- Brady, Marion, and H. L. Brady. A Rationale for Social Studies. Tallahassee: Department of Education, 1971.
- Huff, Darrell. How to Lie with Statistics. New York: W. W. Norton and Co., Inc., 1954. (Humorous illustrations of errors in going beyond data)
- Kaplan, Abraham. The Conduct of Inquiry. San Francisco: Chandler Publishing Co., 1964. (Included purposes, concepts and methods of behavioral and social sciences)
- Organ, Troy W. The Art of Critical Thinking. Boston: Houghton Mifflin Co., 1965. (Includes developing skills of identifying problems, recognizing assumptions, inferring and observing)
- Raths, Louis E., et al. Teaching for Thinking: Theory and Application. Columbus, Ohio: Charles Merrill Publishing Co., 1967. (Contains methods, examples of activities, and teacher guidelines for helping students develop skills of various thinking operations.)
- Sandberg, John H. Teacher's Guide for Introduction to the Behavioral Sciences. New York: Holt, Rinehart and Winston, Inc., 1969.
- Sanders, Norris M. Classroom Questions: What Kinds? New York: Harper and Row, 1966. (Paperback)
- Sociological Resources for the Social Studies. Instructor's Guide for Testing for Truth: A Study of Hypothesis Evaluation. Boston: Allyn and Bacon, Inc., 1969.
- National Academy of Sciences. Report on the Behavioral and Social Sciences. Springfield, Va.: National Technical Information Service, Dept. of Commerce.