

A COMPARATIVE CULTURES APPROACH
TO THE TEACHING OF VOCATIONAL
AND CITIZENSHIP EDUCATION IN
SECONDARY SCHOOLS

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ABSTRACT

A COMPARATIVE CULTURES APPROACH TO THE TEACHING OF VOCATIONAL AND CITIZENSHIP EDUCATION IN SECONDARY SCHOOLS

by Dale L. Brubaker

In this study the effects of two different approaches to the teaching of vocational and citizenship education in ninth grade social studies are evaluated. The study was conducted during the 1964-65 academic year at Pattengill Junior High School, Lansing, Michigan. Two classes were experimental and two classes were control. Control classes received treatment in accordance with traditional procedures. In citizenship education the traditional approach involved a structural study of the three levels of government (local, state, and federal) within the context of American history. In vocational guidance the traditional approach involved the study of particular occupations with self-analysis emphasized to prepare students to make wise vocational choices. The comparative cultures approach consisted of a study of basic social sciences concepts, e.g., culture, and cultural analyses of particular societies varying in technological complexity. Good citizenship was the main goal for both approaches. It was hypothesized that significant attitudinal changes

would occur in the experimental classes but would not occur in the control classes. As a result of the treatment, experimental group students should have been less discriminatory toward minority groups, more tolerant toward nonconformist views and behavior, more libertarian, less authoritarian, less absolutistic, less ethnocentric, less prone to use stereotypes, less apathetic, and more confident in the individual's power to effect change. It was also hypothesized that appreciable gains would occur in the experimental group in regard to self-concept, critical thinking, occupational aspiration and information whereas such gains would not be made in the control group.

The main instruments used were of two types, attitudinal and informational. Attitudinal tests were given before and after the treatment. A single informational instrument was devised to test students on subject matter content. Critical thinking, self-concept, and occupational aspiration instruments were also administered pre and post. Student questionnaires and interviews provided additional data used to evaluate student attitudes.

On the basis of the objective pencil and paper instruments employed, it was generally the case that significant changes did not occur between pre and post tests in either the experimental or control group. The two scales on which significant changes did occur were individual political

potency and civil liberties "A." Both experimental and control groups significantly increased their faith in the individual's power to solve important problems and were more libertarian on the civil liberties "A" scale. In regard to the information test, the control group did nearly as well on the experimental group's information test as the experimental group. Likewise, the experimental group did nearly as well on the control group's information test as the control group.

With respect to interviews and questionnaires, experimental group students related that activities which they participated in were interesting and valuable.

In sum, there is no objective evidence that the experimental approach was more effective than the traditional approach or vice versa according to the instruments employed in this study. The basic hypothesis of the dissertation was not substantiated.

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By

Dale L. Brubaker

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TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
The Problem	3
Orientation to Study	4
Limitations of Study	6
II. REVIEW OF RELATED LITERATURE	9
Citizenship Education	10
Vocational Guidance Education	21
III. PROCEDURE	30
Population and Sample	30
Variables	31
Data and Instrumentation	32
IV. DESCRIPTION OF TREATMENTS	39
The Traditional Approach	39
The Comparative Cultures Approach	51
V. PRESENTATION OF FINDINGS	62
VI. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS . .	79
LITERATURE CITED	83
APPENDIX	89

LIST OF TABLES

Table	Page
1. Number of students in control and experimental groups by class hour and sex at time of pre and post testing	177
2. Experimental and control groups compared as to grade point averages: mean scores given	177
3. Control group versus experimental group as to intelligence quotient scores	178
4. Control group versus experimental group: intelligence quotient scores given by class hours	178
5. Control group versus experimental group as to socio-economic background: occupation of major wage earner in home in which student resided	179
6. Control group versus experimental group as to socio-economic background: occupation of major wage earner in home in which student resided, according to class hours .	179
7. Control group versus experimental group as to reading vocabulary and comprehension scores	180
8. Control group versus experimental group as to reading vocabulary and comprehension scores given by class hours	180
9. Control group versus experimental group: net differences between students' before and after aggregate scores	181

Table	Page
10. Control group versus experimental group: before and after measurement of occupa- tional aspiration, self-concept, critical thinking, social questions I, and social questions II	183
11. Control group versus experimental group according to class hours: before and after measurement of occupational aspiration, self-concept, and social questions I	184
12. Control group versus experimental group according to class hours: before and after measurement of social questions II	185
13. Control group versus experimental group according to class hours: before and after measurement of individual polit- ical potency, group political potency, and ethnocentrism	186
14. Control group versus experimental group: before and after differences as to percent of students improved, the same, or worsened	187
15. Mean scores of control and experimental groups as to information tests "A," "B," and "C"	188
16. Control group versus experimental group: questionnaire results indicating students' rating of activities as to interest	189
17. Control group versus experimental group: questionnaire results indicating students' rating of activities as to value	191

LIST OF APPENDICES

Appendix	Page
A. EVALUATIVE INSTRUMENTS USED	89
B. SCORING PROCEDURES	136
C. TABLES	176

BIOGRAPHICAL SUMMARY

Dale L. Brubaker was born July 16, 1937, in Ann Arbor, Michigan. He graduated from Albion College in 1959 with a major in history. In 1960 he received a Master of Education degree from Michigan State University with a major in social foundations of education.

Mr. Brubaker taught social studies classes, grades nine through twelve, at Okemos High School, Okemos, Michigan from 1961-64. In 1964-65, he held a graduate assistantship in the Social Science Teaching Institute at Michigan State University.

Mr. Brubaker has accepted a social science education position at the University of California, Santa Barbara for the 1965-66 academic year.

CHAPTER I

INTRODUCTION

Secondary school social studies courses in American schools have been primarily history oriented. Social studies teachers usually have a major or minor in history and consider themselves history teachers.¹ Although in recent years the behavioral sciences have made small inroads into the social studies curriculum area, obstacles to such efforts are many including lack of teacher preparation in the behavioral sciences.

Ninth grade civics courses usually emphasize the structural study of local, state, and federal government. The three branches of government are studied within the context of American history so that the Constitution, for example, is seen in light of historical events leading to its adoption. Problems of interpretation and implementation of the Constitution are also studied in historical perspective.

In the case of the ninth grade vocational guidance course, psychological testing and studies of particular

¹Richard Gross and William Badger, "Social Studies," Encyclopedia of Educational Research, Chester Harris, editor (New York: The Macmillan Co., 1960), pp. 1296-1313.

occupations are aimed at helping the student understand himself so that he can make intelligent decisions concerning his future. Members of counseling departments frequently teach these courses so that the orientation to such courses might well be labelled psychological.

The difficulties encountered in acquiring a qualified teacher to teach both a semester of vocational guidance and a semester of civics are many. Counselors may or may not have a background in history and political science whereas teachers of civics are not likely to have a counseling background. Semester vocational guidance courses are frequently taught by counselors having a guidance orientation whereas semester civics courses are taught by teachers with a history orientation. However, compromises are frequently made in the hiring and placement of teachers so that a teacher or counselor might well find himself teaching both civics and guidance thereby slighting the area in which he is ill-prepared. For, although it does not logically follow that the teacher with adequate training in an area will teach that which he has learned, it does logically follow that the teacher without adequate training in an area cannot teach that which he has not learned.

It is only natural then that the ninth grade social studies area frequently becomes the battleground where dissatisfaction and discontent culminate in controversies

between teachers and counselors, teachers and teachers, teachers and administrators, and counselors and administrators. On one point, however, all involved seem to agree: vocational guidance and citizenship education to assist youth in becoming active and participating members of society are responsibilities of the public school system. However, proposed changes are met by many different interest groups. Some people want to retain the status quo, some want to make slight changes, and some want to adopt an entirely different approach. Studies such as this one may serve an important function in gauging which approach best achieves desired outcomes.

The Problem

The problem is simply that very little systematic research has been done to give a clear picture of the effects of different approaches to the teaching of vocational guidance and citizenship education. Objectives, cognitive and affective, for each approach need to be conceptualized and methods to reach such objectives must be evaluated with respect to their effectiveness in reaching these objectives. Demands on the public school teacher are so great that he has little time to conceptualize objectives, let alone evaluate methods in any systematic manner. It is also true that the public school teacher is so bound up in the process of

teaching that an objective analysis of his particular approach is virtually impossible. However, the need for such objective analysis is implicit in the teacher's responsibility to give the student the best education possible. It is the purpose of this study to provide such an analysis.

Orientation to Study

The present study has grown out of a controversy between two groups advocating different approaches to the teaching of vocational guidance and citizenship education--the kind of controversy alluded to in the beginning of this chapter. A small but articulate minority wants to abandon the commonly used approach to ninth grade social studies in favor of a comparative cultures approach which is oriented in the behavioral sciences; the majority group wants to retain the status quo with some minor revisions.

Previous work related to this study came from a 1963-64 experiment at Pattengill Junior High School, Lansing, Michigan. Three ninth grade social studies classes were introduced to the nature of language as a tool of analysis, the function of concepts, behavioral science concepts, and the technique of cultural analysis by means of presentation of cultural profiles of the Hopi and Eskimo cultures. In turn, student groups carried out cultural analyses of societies varying in degree of technological complexity - Semang,

Eskimo, Iroquois, Japanese - culminating with American culture.

During the first semester the emphasis was on self-understanding. The major concepts studied included culture, group, role, status, personality, and socialization. Within this context, the required interest and aptitude testing and senior high school planning were carried out. During the second semester the dimensions of social organization were explored with particular emphasis on the economic and political structure and problems of American culture as illuminated by the perspective acquired by previous cultural analyses.

The 1963-64 program was launched to get some sense of possible merit or lack of merit in this new kind of approach to the teaching of vocational and citizenship education.

The majority of teachers of ninth grade social studies in the Lansing School System follow an approach similar to the one described in the early part of this chapter.

The broad objective of this thesis is to report the development of what is thought to be a more effective instructional program to teach vocational and citizenship education in the public schools. Such a program should provide students with knowledge of vocational and citizenship roles, appropriate attitudes involving participation in these roles,

and a social science framework for the analysis and further understanding of such roles in a changing society.

A specific objective of this thesis is to evaluate the effectiveness of the traditional² way of teaching vocational and citizenship education as compared to the pilot course which will be explained in detail in the procedure section of the thesis. The major hypothesis of this thesis is that the new course will achieve the objectives indicated more effectively than the usual course of one semester of vocational guidance and one semester of civics.

To date no other study has had the precise objectives of this study although a number of studies have developed parallel and related issues. Such studies are reviewed in the following chapter.

Limitations of the Study

An exploratory study such as this lends itself to criticism from many quarters. A discussion of some of the limitations of the study should clarify some of the points of contention.

²Traditional as used here refers to traditional approaches used in citizenship and vocational education. In citizenship education the traditional approach involves a structural study of the three levels of government (local, state, and federal) within the context of American history. In vocational guidance the traditional approach involves the study of particular occupations with self-analysis emphasized to help students make wise vocational choices.

To tighten the experimental design it was necessary for the same teacher to teach both experimental and control groups. A major criticism of such an approach is that the teacher's biases constituted a significant factor which gave the experimental group an unfair advantage. The teacher obviously felt that the experimental treatment was better for the students than the treatment received in the control group. The major check on the teacher was classroom observation by the researcher. Everything from the teacher's patience in class to bulletin board space was carefully noted. However, it still seems valid to assume that the teacher's prejudices influenced the two treatments to some extent. This is one good reason why follow up studies are needed.

A time limitation was also significant, for the present study was limited to one academic year, 1964-65. Other major studies attempted to evaluate students for longer periods of time.

It was also necessary to limit the scope of this study to treatment given in four social studies classes, two control classes and two experimental classes. Cocurricular and extracurricular activities were not included in the evaluation. In short, the present study did not focus on the entire school system as did some of the studies discussed in the following chapter.

An important limitation in bringing in an investigator or evaluator from outside the school system is that the evaluator frequently does not get the basic and important reasons for the actions of school personnel. The innovator, for example, may decide that it is better not to tell the whole story about what he plans to do, or he may by tacit consent agree with the opposition on some dubious points so that his program is at least given a chance to be tried out in the school system.

On the surface, agreement between factions is apparent to the investigator whereas in fact disagreement exists. This was the case in the present study in regard to specific objectives for the two approaches, experimental and control. There was agreement in regard to the general objective, good citizenship. However, although there appeared to be agreement as to specific objectives for the two approaches, there was in fact disagreement. Therefore, this study is limited by the fact that the specific objectives for the experimental approach have not been conceptualized and expressed in any sophisticated manner.

The relationship between attitudinal and behavioral change is crucial but beyond the limited scope of this study. The main problem is that behavioral change appears to be more difficult to gauge than attitudinal change alone.

CHAPTER II

REVIEW OF RELATED LITERATURE

Our fathers and our fathers' fathers know what we're talking about when we discuss civics courses, for somewhere along the road of formal education they have taken a civics course. They would probably be able to give us a rather good approximation of the content of civics courses today, starting with the general framework of the three branches of government.

Such would not be the case with vocational guidance education for this field is relatively new with many school systems doing virtually nothing in this area today.

The reader will find a good deal of prescriptive literature in both citizenship education and vocational guidance education while at the same time finding little systematic evaluation of the effects of particular programs in these two areas. In both areas, but especially vocational guidance education, objective evaluation procedures are in their infancy.

Citizenship Education

In 1916 the Committee on Social Studies made the following recommendations with regard to a sequence of course offerings in secondary schools:

Grade Nine . . .	Community Civics
Grade Ten . . .	European (or World) History
Grade Eleven . .	American History
Grade Twelve . .	American Social, Economic and Political Problems. ¹

Thus, civics has been the model course offering for the ninth grade for approximately fifty years.² In the State of

¹National Education Association, Commission on the Reorganization of Secondary Education. The Social Studies in Secondary Education, U.S. Bureau of Education, Bulletin 1916, No. 28 (Washington, D.C.: Government Printing Office, 1916), pp. 1-63 as cited in Erling N. Hunt, "Changing Perspectives in the Social Studies," High School Social Studies Perspectives (Boston: Houghton Mifflin Company, 1962), p. 14.

²The following facts give some indication of civics as a required course plus time devoted to content areas in civics courses. In a random sample of 207 public schools, 74 per cent required civics for graduation whereas in a random sample of 188 public schools, 78 per cent required American government for graduation. Of the sample (N=207) 93 per cent taught two or more weeks of national government; 92 per cent taught two or more weeks of state government; and 93 per cent taught two or more weeks of citizenship and political action. Corresponding figures for the American government course (N=188) are: 97 per cent taught two or more weeks of national government; 93 per cent taught two or more weeks of state government; and 93 per cent taught two or more weeks of local government. S. B. Anderson, D. F. Ahrens, R. Russell and D. A. Trismen, Social Studies in Secondary Schools: A Survey of Courses and Practices (Princeton: Educational Testing Service, 1964), pp. 1-20. See also: Emlyn Jones, "Social Studies Requirements in an

Michigan, the two high school curriculum areas in social studies required by law are civics (one semester) and the Constitution of the United States and the State of Michigan.³

The course title, civics, should not be interpreted to mean that there is general agreement as to what should be taught in this subject area. The course actually includes a variety of topics ". . . ranging from government to vocations and boy-girl relationships."⁴

Age of Science and Mathematics," Social Education, January, 1963, pp. 17 and 18; Willis D. Moreland, "Curriculum Trends in the Social Studies," Social Education, February, 1962, pp. 73-76 and 102; Bertram A. Masia, "Profile of the Current Secondary Social Studies Curriculum in North Central Association Schools," North Central Association, 1963, pp. 1-12; Jack Sjostrom, "An Appraisal of the Curriculum Status, Trends, and Techniques Used in Social Studies Curriculum Revision in Selected North Central Accredited High Schools," Unpublished Doctoral Thesis, University of Colorado, 1964; What High School Pupils Study. Office of Education, U. S. Department of Health, Education, and Welfare. Bulletin No. 10, 1962; and Frederick R. Smith, "The Social Studies Curriculum," Current Research in Social Studies, Bulletin of the School of Education, Indiana University, Vol. 40, No. 2, March, 1964, pp. 13-30.

³Act 205 was passed in 1931. A civics course is not required for students who have enlisted or been inducted into military service. State of Michigan General School Laws (Lansing, Speaker Hines and Thomas, 1960), p. 334. See also: "Application for Approval for Collection of Tuition for Non-resident High School Students," Form No. TA-1, State of Michigan Department of Public Instruction, Lansing, Michigan, September, 1964.

⁴Richard Gross and William Badger, Encyclopedia of Educational Research, op. cit., p. 1301. See also: Anderson, Ahrens, Russell and Trisman, op. cit. In the latter study a random sample of 80 public schools with a grade twelve size of 200 or more was used. The following was discovered: 68 per cent of the schools teach civics as a separate course and

In surveying the literature on citizenship education one realizes that "it is doubtful if any one word - with the possible exception of sin - has been talked about more than citizenship."⁵ Objectives, other than "good" citizenship, are limitless and often contradictory. They are frequently pious hopes and platitudes.⁶ Most of the literature is prescriptive with little or no attention given to any kind of systematic evaluation. There is, however, substantial agreement that such evaluation is necessary and that appropriate behavioral change is the most reliable proof of an effective citizenship education program. Likewise it is generally felt that appropriate behavioral change depends on corresponding attitudinal change which in turn is dependent on the acquisition of appropriate information or knowledge.

19 per cent teach guidance, adjustment, orientation, counseling, vocational guidance as a separate course. In a 1963 random sample of 388 public schools, 62 per cent taught civics as a separate course whereas 26 per cent taught civics as a combination course. Eighteen per cent taught guidance, adjustment, orientation, counseling, vocational guidance as a separate course whereas 40 per cent taught the course as a combination course.

⁵William J. Flynn, "Citizenship Growth Through Youth Activities in Youth-Serving Organizations," Education for Democratic Citizenship, National Council for the Social Studies 22nd Yearbook, 1951, p. 125.

⁶Lee J. Cronbach, "Evaluation for Course Improvement," New Curricula, edited by R. Heath (New York: Harper and Rowe, 1964), p. 235.

Disagreement as to the objectives or goals of citizenship education represents but one area of contention. There is a good deal of controversy as to the kinds of evaluative instruments appropriate to most validly judge citizenship education programs. Even greater disagreement concerns those interested in citizenship education in regard to whom should do the evaluating.

The relationship between attitudinal change and behavioral change is crucial to all of the studies. It is, of course, hoped that change in appropriate attitudes will result in change in corresponding behavior. However, it would be naive to assume that all changes in attitudes would result in corresponding changes in behavior. All that can be safely assumed is that attitudinal change increases the possibility for corresponding change in behavior.⁷ The

⁷George Stern, "Measuring Noncognitive Variables in Research on Teaching," Handbook of Research on Teaching, N. L. Gage, editor (Chicago: Rand McNally, 1963), p. 404. A distinction between actual attitudinal change and superficial change, which occurs because one feels that the situation demands such change, may be helpful. See: Jacob Getzel, "The Question-Answer Process: A Conceptualization and Some Derived Hypotheses for Empirical Examination," Public Opinion Quarterly, 18, 1954, pp. 80-91; and Leon Festinger, "Social Psychology and Group Processes," Annual Review of Psychology, 6, 1955, pp. 187-216. Festinger's thesis is that "... public compliance without private acceptance occurs under conditions of threat of punishment for noncompliance." S. B. Sells and D. K. Trites, "Attitudes," Encyclopedia of Educational Research, op. cit., p. 104. It must be noted that individual-situation interaction analysis with respect to attitudinal change has produced controversial and frequently

extreme difficulties in evaluating behavioral changes after exposure to a particular citizenship program are recognized in all of the major studies.⁸ Efforts to evaluate such changes over a long period of time have been quite futile. Some studies weigh what they consider to be tangible evidence, e.g., the breakage of school windows and street lights. Other studies use more subtle methods.

A school may use the following channels with respect to citizenship education: classroom instruction; cocurricular and extracurricular activities; and community groups and activities.⁹ The scope of evaluation is determined by the channel or channels focused on in a particular citizenship education program. The Detroit Citizenship Education Study,

contradictory experimental evidence. Contrast, for example, Festinger's thesis with the following statement by W. B. Brookover: "Apparently the students like the friendly teachers better, but they learn more when taught by the more authoritarian ones." W. B. Brookover, A Sociology of Education (New York: American Book Company, 1955), p. 300. The writer is in agreement with Brookover who feels that "from the limited data available we cannot make valid generalizations concerning the response of students to the various roles of the teacher in the classroom." Ibid., p. 305. See also the Second Edition, 1964, p. 425. Sells and Trites appear to have reached a similar conclusion in recommending the taxonomy of situational variables. Sells and Trites, op. cit., p. 104.

⁸See, for example, Stanley Dimond, Schools and the Development of Good Citizens (Detroit: Wayne University Press, 1953), p. 177.

⁹Edith Pence and Stephen Smith, "What Are the Best Ways to Evaluate Citizenship Education?" Bulletin of the National Association of Secondary-School Principals, 37, April, 1953, pp. 134-138.

for example, devoted itself to an examination of the total functioning of eight school buildings from 1945-50.¹⁰ Four elementary, two intermediate, and two high schools were chosen.

The scope of evaluation is also determined by the length of time during which evaluation takes place. The Detroit Citizenship Study was a five year project; the Syracuse Citizenship Education Conferences began in 1924 and are still being carried on as is also the case with the Columbia University Citizenship Education project which was established in 1949. The latter is primarily a service rather than a research enterprise.¹¹

Different studies aim their treatments at different kinds of students. The Detroit Study, the Columbia University Study, the Kansas Study, and the Stanford Social Education Study were designed to deal with heterogeneous groups. The Syracuse Study is aimed at a select group, those two or four seniors in cooperating high schools as elected by their fellow students.

¹⁰Dimond, op. cit., p. 172.

¹¹Erling M. Hunt, "Recent Program for Improving Citizenship Education," Education for Democratic Citizenship, op. cit., p. 120.

Evidence as to attitudinal changes invoked by citizenship education programs is sparse and discouraging. The Kansas Study of Education for Citizenship illustrates a comprehensive type of evaluation. The following instruments were employed:

Social Beliefs (4.31) Progressive Education Association. Made available by the University of Chicago.

Examination in Civics (Civilian Form) United States Armed Forces Institute. Cooperative Test Service.

Examination in Problems of Democracy (Civilian Form) United States Armed Forces Institute. Cooperative Test Service.

Cooperative Community Affairs Test (Form R) Cooperative Test Service.

Watson-Glaser Test of Critical Thinking: Battery I. Tests 1, 2, 3, 4; Battery II. Tests 6 and 8. World Book Company.

Interest and Activity Checklist. The Kansas Study for Citizenship.

The following implications for citizenship education resulted from the evaluation instruments employed:

1. There was a growth in knowledge about government and about the communities in which pupils lived.
2. Progress in acquiring skill in critical thinking did not seem to be very great.
3. High school pupils are likely to retain attitudes, good or bad, which they have when entering high school. Attitudes change, usually in a desirable direction, if students are uncertain at the time of entering school.

4. Many high school pupils had not acquired the habit of keeping informed on public issues. It seemed safe to predict that as citizens they would likely form opinions and vote on public issues without adequate information.
5. Most of the high school pupils were acquiring the habit of participating in social groups and activities.¹²

The Kansas Study is especially crucial in that the generally accepted relationship between knowledge and attitudes is not confirmed. Knowledge about government and the communities in which the pupils lived did not produce corresponding attitudinal changes in a desirable direction unless students were uncertain with respect to attitudes tested at the time of entering school.

The evaluation program of the Detroit Citizenship Study tried to answer two questions: (1) Did the procedures employed by the Study bring about changes in the citizenship education programs of the participating schools? (2) Did the changes result in a better quality of citizenship of boys and girls? The answers to these questions are most revealing:

The evidence is clear that the procedures employed did bring changes in the philosophy, organization, methods, and materials of the

¹²E. G. Wheeler and O. F. Showalter, An Evaluation of Citizenship Education in the High School (Manhattan, Kansas: Kansas State College Press, 1950), p. 36 as cited in H. H. Cummings, "Evaluation of Citizenship Education," Education for Democratic Citizenship, op. cit., p. 105.

schools. The answer to the second question is that we think the changes improved the citizenship of the boys and girls, but adequate objective evidence does not exist.¹³

The Columbia University Citizenship Project cites improvement in students' attitudes toward politics and politicians and interest in public affairs.¹⁴ The most valuable instrument employed was the Student Terminal Appraisal. The Columbia University evaluation staff asked some of the following questions of students:

1. What did you yourself do in connection with this practice?
2. How did you benefit from this practice?
3. What weaknesses did you find in the laboratory practice method of study?
4. Tell me about some opinions or attitudes that you have now which you did not have before doing this practice.¹⁵

Citizen education projects which consider evaluation an important phase of their operations must commit themselves in answering the important question, "Who should do the evaluating?"

¹³See Stanley Dimond, op. cit., pp. 174-175. See p. 183 which points out the lack of attitudinal change.

¹⁴Stanley Dimond, "Explorations in Citizenship Education," Educating for American Citizenship, National Association of School Administrators 32nd Yearbook, 1954, p. 380.

¹⁵William S. Vincent et al., Building Better Programs in Citizenship (New York: Teachers College, Columbia University, 1958), p. 135.

One answer to this question is given by G. Weston:

Evaluation (of a school's program or any of its activities) is to be done by the school and particularly by the group of people who are working with the activity.¹⁶

Teachers played a large part in the Detroit Study in evaluating students' reactions to various treatments. Observations of such reactions were then categorized.

Another point of view is held by L. J. Cronbach:

. . . I do not agree that the experienced history or mathematics teacher who tries out a course gives the best possible judgment on its effectiveness. Scholars have too often deluded themselves about their effectiveness as teachers - particularly, have too often accepted parroting of words as evidence of insight - for their unaided judgment to be criticized.¹⁷

A study by J. W. Gates substantiates Cronbach's claim. Gates found that employers consistently rated seniors higher than teachers rated them as to citizenship, which leads one to reason that a difference of standards, evaluative skill, motivation, or reward exists. He concludes that "some of the qualities which make for a satisfactory employee might as easily make a student a problem in a classroom situation."¹⁸

¹⁶G. Weston et al., Democratic Citizenship and Development of Children (Detroit: Wayne University Press, 1949) as cited in ASSA Yearbook, op. cit., p. 343.

¹⁷L. J. Cronbach, op. cit., p. 239.

¹⁸John Wesley Gates, The Civic Competence of High School Seniors (Chicago: University of Chicago Press, 1945), p. 125.

This study suggests that "good" citizenship in school may not be "good" citizenship at all in the world of work.

Another study by T. J. Mahan expounds the same thesis.

Students' concepts of the characteristics of good citizenship do not conform with those of representative adult citizens. Children leave school with the expectation of encountering very different duties and responsibilities than those reported by adult representative citizens as most important.¹⁹

Some projects have all evaluation done by an outside evaluation team. The main problem, however, in bringing in an evaluation team from outside the school system is communication between the two parties.

The total anti-evaluation line is all too frequently a rationalization of the anxiety provoked by the presence of an external judge . . . whereas . . . the opposite extreme is represented by the self-perceived toughminded operationalist evaluation. . . .²⁰

The enormous costs involved in providing an adequate program of systematic evaluation of a program act as another barrier. This is one of the reasons why evaluation of citizenship programs is still in the infancy stage. As H. H. Cummings has remarked, "Except for the mastery of content,

¹⁹Thomas Jefferson Mahan, An Analysis of the Characteristics of Citizenship (New York: Columbia University, 1928), p. 43.

²⁰Michael Scriven, The Methodology of Evaluation. Paper of the Evaluation Project of the Social Science Education Consortium supported by the United States Office of Education, 1965, p. 7.

faith rather than continuous evaluation is used to judge the effectiveness of the program."²¹

Vocational Guidance Education

Vocational education may be defined as ". . . education designed to develop skills, abilities, understandings, attitudes, work habits, and appreciations needed by workers to enter and make progress in employment on a useful and productive basis."²² Vocational guidance education should help students develop the qualities cited in the above definition of vocational education. The term work as used in the definition of vocational education may range from manual tasks to highly abstract intellectual activities.

To assume that the schools have a corner on the teaching of vocational education is pure fallacy, for business, industry, labor, religious organizations, agriculture, and other groups also guide people in thinking about vocations and help such people develop the qualities necessary to obtain positions.

However, studies in the area of vocational education recognize the unique opportunities open to the schools in

²¹Howard H. Cummings, "Evaluation of Citizenship Education," Education for Democratic Citizenship, op. cit., p. 106.

²²Ralph C. Wenrich, Encyclopedia of Educational Research, op. cit., p. 1555.

providing education ". . . prior to employment for the purpose of preparing a person to enter employment."²³ Other services in vocational guidance education, e.g., in-service education, are not relevant to the present study.

Most of the literature concerning vocational guidance education cites the special challenge and responsibility for such education in a democracy. The heterogeneous nature of American schools provides school personnel with a multifaceted task. This task is of special significance to teachers of ninth grade classes in vocational guidance for some students in these classes are future drop-outs just biding their time.

The need for vocational guidance is clear. D. C. Doane in research on vocational guidance education found special concern among high-school students as to vocational choice and placement. He also discovered a ". . . significant tendency for boys, as their age increased, to become increasingly concerned about problems of preparation for employment."²⁴

A fact commonly emphasized in relevant literature is that vocational guidance education at the secondary level

²³Ibid.

²⁴Donald C. Doane, The Needs of Youth (New York: Wenrich Teachers College, 1942) as cited in Encyclopedia of Educational Research, op. cit., p. 1556.

should be but one exposure to such guidance. Throughout the individual's life he will need vocational guidance.²⁵ Two trends have accelerated the need for greater emphasis on vocational guidance: a larger percentage of youth seeking more years of education; and the increasing complexity of our social and political organizations as a result of technological developments in business, industry, and agriculture.²⁶ The former trend has caused junior colleges and technical institutes to provide vocational guidance programs, whereas the latter trend makes it impossible for a single organization, such as the public schools, to have an adequate knowledge of vocational possibilities. The latter trend is also especially significant with respect to teachers' attitudes and understandings in courses dealing with occupational planning and guidance.

What then is a good vocational guidance program? Ralph Wenrich says it is a program ". . . which helps youth discover their special interests, aptitudes, and limitations, provides opportunities for exploring the world of work, assists students in finding suitable training opportunities . . . finally helping . . . them in making the transition

²⁵See, for example, Robert J. Havighurst, Human Development and Education (New York: Longmans, 1953).

²⁶Wenrich, op. cit., p. 1559.

from school to job. . . ."27

Research concerning personnel involved in guidance in general and vocational guidance in particular gives one little hope for excessive optimism. Since most of this research has been carried on by people in the guidance field rather than by outsiders, such criticism is tantamount to self-criticism. One reason for this self-criticism is ". . . the alacrity with which schools have instituted such services without waiting for fully qualified persons to become available."28 C. W. Grant, Director of the Graduate Guidance Program at Syracuse University, investigated nine secondary schools in central New York to determine seniors' reactions to counselors, other school personnel, and non-school people as to help in the following areas: (1) educational planning; (2) vocational planning; (3) the personal-emotional area.29

He discovered the following:

1. The counselor is not seen by students as being an effective or at least an acceptable source of help in the broad area of personal-emotional problems.30

²⁷Ibid., p. 1562.

²⁸T. Ernest Newland, "Psychological Services--Elementary and Secondary," Encyclopedia of Educational Research, op. cit., p. 1073.

²⁹Claude W. Grant, "How Students Perceive the Counselor's Role," Personnel and Guidance Journal, March, 1954, pp. 386-388.

³⁰Ibid., p. 388.

2. The students polled perceived the counselor . . . as being most able to make acceptable contributions to them in the vocational and educational planning area.³¹

Other school personnel played a minor role in the latter area whereas non-school people were important in helping in this area.

Generally, however, "statements of the desirable personal characteristics of individuals who are to render psychological services in the schools have been based on opinion more often than research findings."³² Robert Travers concurs by saying that ". . . the chief evidence of the effectiveness of guidance is the subjective evidence which the counselor accumulates as a result of his experience with clients."³³ Wishful thinking plays a primary role in evaluation of guidance according to Robert Travers. "Objective evaluations . . . are disappointingly limited in number and scope."³⁴

Research indicates that materials used in vocational guidance, e.g., films and pamphlets, are less than satisfactory. Materials presently used emphasize the functional

³¹Ibid.

³²Newland, op. cit., p. 1071.

³³R. M. W. Travers, "A Critical Review of Techniques for Evaluating Guidance," Educational and Psychological Measurement, No. 9, 1949, p. 223.

³⁴Newland, op. cit., p. 1072; see also, William C. Cottle, "The Evaluation of Guidance Services," Review of Educational Research, No. 27, 1959, pp. 229-235.

aspects of the work day rather than looking at style of life and the twenty-four-hour-day. "Samler indicates that the need is to balance this picture of economic man with a portrayal of Psychological and Sociological Man."³⁵ Elizabeth Drews agrees with Samler saying that for many people vocational choice is a process rather than an event.³⁶ Although her work has mainly dealt with gifted students, many of the ideas she presents are relevant to the general field of vocational guidance education. Her research has been especially important in demonstrating the inadequacy of much of the media used in vocational guidance.

If students relied only upon social studies texts and career pamphlets they would find themselves always five years (a very long time in an Atomic Age) behind the times and usually with a tunnel vision rather than a multiple alternative view.³⁷

We then come to the crucial question: "How do we know whether or not a particular vocational guidance program is successful?" The student's satisfaction, success on the job as gauged by employers' reports, number of achievements, number of forced shifts, wages earned, and the counselor's

³⁵Elizabeth Drews and Douglas Knowlton, "Style of Life Career Films," Paper in the writer's possession, 1965, p. 2; see also Drews and Knowlton, "The Career Film Comes to Life," Audiovisual Instruction, January, 1963, pp. 29-32.

³⁶Ibid.

³⁷Ibid., p. 14.

opinion have all been used to evaluate vocational guidance programs.³⁸ All methods of evaluation in this field have serious weaknesses - weaknesses deserving of the attention of educational research.

Summary

Citizenship evaluation programs are quite varied as to personnel involved in the evaluation, the scope of the evaluation, subjects to be treated, and instruments or procedures which determine the effectiveness of a particular program.

The Detroit Citizenship Education Study (1945-50) was unique in its reliance on teachers' observations as a major evaluation procedure. The Kansas, Columbia University, and Stanford Studies primarily relied on evaluation experts not involved in public school teaching.

The Detroit Study concerned itself with the total functioning of school systems whereas most of the other projects worked within the social studies area. All studies emphasized the need for long term programs for effective changes to be made.

³⁸For a discussion of these techniques see E. G. Williamson and E. S. Bordin, "The Evaluation of Vocational and Educational Counseling: A Critique of the Methodology of Experiments," Educational and Psychological Measurement, January, 1941, pp. 5-24.

The Syracuse Project was unique in dealing with a select group, those two or four seniors in cooperating high schools as elected by their fellow students. All other projects dealt with heterogeneous groups.

Behavioral changes in the appropriate direction are considered the ultimate goal of all of the projects. However, most studies recognize the difficulties which presently exist in evaluating behavior in citizenship terms. Studies indicate an increase in information as gauged by objective instruments after exposure to various treatments, but similar advances in attitudinal change were not recorded via objective tests. Behavioral changes were not noted except by the gathering of subjective opinions.

That there is a need for and special challenge to vocational guidance education in a democracy is recognized in all of the relevant studies. Such education is not seen as a terminal secondary level need but as a life long need.

There is little objective evidence as to the desirable counselor characteristics necessary to good vocational guidance. However, in a major study by C. W. Grant, it was discovered that counselors were not considered effective by seniors in the area of personal-emotional problems but made more acceptable contributions in vocational and educational planning.

Research indicates that materials used in vocational guidance, e.g., pamphlets and films, are less than adequate.

Present methods of evaluating the effectiveness or lack of effectiveness of a particular vocational guidance program are not satisfactory.

CHAPTER III

PROCEDURE

As a result of exploratory work done during the 1963-64 school year, the groundwork was established for a systematic implementation on a trial basis of a new course using relevant social science concepts within a comparative cultures framework. This pilot program was carried out during the 1964-65 school year.

Population and Sample

The sample selected was drawn from the total population of ninth grade students in the school where the study was conducted, all of whom were required to take a full year of social studies--one semester of vocational guidance and one semester of civics. One hundred and four students were randomly drawn from this population by the data processing procedure presently employed by the school, and each student was randomly assigned to one of four classes, as equal in size as possible. These four classes have been compared with respect to psychological and socio-economic indexes to verify inter-group comparability.¹

¹See Appendix C.

Two of these classes were treated as experimental groups and subjected to the experimental program. The other two were control groups and exposed to the traditional instructional techniques. The choice as to which groups were to be experimental and which were to be control was randomly made.

Variables

The variables evaluated were of two main types, informational and attitudinal, to determine if the experimental groups differed from the control groups. On an informational level, a single instrument concerned with core information was developed. On an attitudinal level, adapted scales from previous studies dealing with such dimensions as occupational aspiration, self-concept, authoritarianism, stereotypy, anomie, absolutism, tolerance, and ethnocentrism were used.²

The "treatment" or independent variable of this study was the instructional approach employed. With experimental groups the comparative cultures approach was used. With control groups the traditional instructional pattern based upon teaching practices employed throughout the school system for a number of years was used. Instruction was by the same teacher.

²See Appendix A.

Measures were taken both before and after the different instructional experiences. Designed to tap the dependent variables of the program, i.e., students' understanding of the society of which they are a part and of their opportunities, rights and responsibilities as they prepare for the world of work and for their roles as responsible citizens, these measures have provided data indicative of the effects of the independent variable.

Data and Instrumentation

Attitudinal, critical thinking, and informational instruments administered to experimental and control groups have provided data used in this study. The measurement of attitudes and critical thinking occurred before and after the application of the different instructional approaches.

Measurement of informational content was made at the end of the 1964-65 school year and consisted of a single instrument containing core information.³ The results of this test were categorized⁴ and are discussed in the chapter entitled "Analysis of Findings."⁵

Attitudinal measurements employed consisted of instruments previously used in other studies appropriately

³See Appendix A.

⁴See Appendix C.

⁵See Chapter V.

adapted to the population of the study.⁶ The attitudinal instruments used in this study were compiled by Herbert M. Hyman, Charles R. Wright, and Terence K. Hopkins. In 1955 these evaluation experts were faculty members in the Bureau of Applied Social Research at Columbia University. Adopting an eclectic approach, they assumed the task of building appropriate instruments to evaluate a particular social action program, the Encampment for Citizenship.⁷ From 1955-59, the evaluation experts analyzed instruments and procedures to see if they stood the test of time and repeated application. Those instruments deemed appropriate were used in the present study.

Social Questions I⁸ provided scores on authoritarianism, democracy, political-economic conservatism, and stereotypy. A six point continuum from "I agree a little" to "I disagree very much" was used. Social Questions II⁹ produced scores on the Constitution, civil rights, action-apathy, anomie, civil liberties, absolutism, tolerance, individual

⁶See Appendix A.

⁷The Encampment for Citizenship brings together each summer about a hundred persons from many parts of the United States and exposes them to experiences designed to increase skills in democratic living and inculcate values necessary for such living. See Herbert Hyman, Charles Wright, Terence Hopkins, Application of Methods of Evaluation-University of California Publications in Culture and Society (Berkeley: University of California Press, 1962).

⁸See Appendix C.

⁹See Appendix C.

political potency, group political potency, and ethnocentrism. The first seven scales were on a four point continuum from "a great deal" to "hardly anything." The ethnocentrism scale was on a three point continuum from "thoroughly democratic" to "thoroughly undemocratic."

It is in deciding whether or not significant changes have occurred between pre and post measurement that controversies occur. The investigator is predominantly in agreement with the thesis of Professors Hyman, Wright, and Hopkins. "Effectiveness is represented in our studies as net change on a series of variables after exposure to the program."¹⁰ The Columbia University researchers were aware of criticism concerning such an approach by those who support the use of tests of significance.

No such tests are presented in the text, and this may appear a strange departure from conventional research practice. It should be noted, however, that tests of significance in social research have recently become the subject of much controversy, and that responsible opinion has been marshalled against their uncritical use.¹¹

Therefore, judgment in appraising effectiveness is clearly on the researcher. In this case judgment is based on the experience of the Columbia University researchers and

¹⁰Hyman, Wright, and Hopkins, op. cit., p. 69.

¹¹Ibid.

comparisons between experimental and control groups. In sum, the main criterion for judgment as to significance of change in this study is the net differences between students' aggregate scores at two different times on a series of variables, e.g., ethnocentrism.

To supplement the technique of evaluation mentioned above, mean scores of experimental and control groups were also compared.¹² Percentages as to students improved, the same, and worsened on each variable were also given as supplementary evidence.¹³

The tests labelled General in pre and post tables concern occupational aspiration, self-concept, and critical thinking. Haller's Occupational Aspiration Scale was used with raw scores converted to T-scores.¹⁴ The Self-Concept scale was devised by the Michigan State University Bureau of Educational Research.¹⁵ The Michigan State University Critical Thinking Test was also used pre and post.¹⁶

Grade point averages of experimental and control classes were recorded in the following manner: mean scores of total seventh and eighth grade grade point averages in the four main subjects (English, mathematics, science, and

¹²See Appendix C.

¹³See Appendix C, Table 14.

¹⁴See Appendix B.

¹⁵See Appendix B.

¹⁶See Appendix B.

social studies) for the experimental group and the control group were compared.¹⁷

Questionnaires and interviews were used to supplement other instruments. A five step program was followed to acquire needed information.

Early in the year Lansing teachers of Ninth Grade Social Studies who had a minimum of five years in teaching the course were interviewed. They were asked open-ended questions to acquaint the interviewer with the Ninth Grade Social Studies course and its effectiveness as perceived by the teachers being interviewed. The results of these interviews may be found in the section of Chapter IV entitled "The Traditional Approach."

On the basis of the interviews mentioned above, a pilot questionnaire¹⁸ was administered to both experimental and control groups to get their reactions to ideas held by teachers employing the traditional approach. Other items were also included. Although some items were acceptable, the instrument as a whole was considered quite defective.

Therefore, a check list was administered to both experimental and control groups so that students could rate activities engaged in as to their interest and value as perceived by them. The results of this study are categorized

¹⁷See Appendix C, Table 2.

¹⁸See Appendix A.

in Tables 16 and 17, Appendix C.¹⁹

A random sample of ten students from the control group and ten students from the experimental group was made and these students were interviewed individually to get at information not acquired in previous instruments. Results are discussed in the Chapter on "Analysis of Findings."²⁰

Finally, small group interviews were conducted for reactions to ideas acquired in individual interviews. These interviews were taped and are discussed in the Chapter on "Analysis of Findings."²¹

Summary

Two experimental and two control classes were established via random sampling with inter-group comparability established by psychological and socio-economic indexes. The experimental classes received the comparative cultures treatment whereas the other two classes were taught traditionally by the teacher. Teaching of both groups was done by the same teacher.

Informational and attitudinal variables were evaluated with attitudinal scales used before and after. Attitudinal scales were adopted relying on the long experience

¹⁹See Appendix C.

²⁰See Chapter V.

²¹See Chapter V.

in using such scales by evaluation experts at Columbia University. These scales tested the following variables: authoritarianism; democracy; political-economic conservatism; stereotypy; constitution; civil rights; action-apathy; anomie; civil liberties; absolutism; tolerance; individual and group political potency; and ethnocentrism.

Occupational aspiration, critical thinking and self-concept instruments were also administered before and after. Questionnaires were given to students with interviews with teachers and students also held.

CHAPTER IV

DESCRIPTION OF TREATMENTS

This chapter is designed to give the reader a flavor of what actually went on in the experimental and control groups. A day by day account is impossible to give; however, a discussion of the main activities engaged in and resources used to carry out such activities acts as a representative description which may be of value to the reader.

The Traditional Approach

Unlike the comparative cultures approach, the traditional approach was based on the division of subject matter into two separate semester long courses. During the first semester vocational education or guidance was taught with citizenship education or civics taught during the second semester. At Pattengill the same teachers have the same students for both semester courses.¹ Because the traditional approach calls for a semester of guidance and a semester of

¹More specialization exists at two of the other junior high schools in Lansing in regard to ninth grade social studies. The team teaching approach is used so that a team teaches either guidance or civics with new students each semester.

civics the semester courses will be discussed separately.

One of the teachers interviewed was quite proud of the fact that Lansing has been recognized as one of the nation's leaders in public school vocational guidance for the last fifteen years.² All but one of the teachers interviewed felt that a counseling background and orientation should be necessary to qualify for teaching vocational education. The majority of the teachers interviewed also felt that a minimum of three years experience in the Lansing Public School System was a necessary qualification. All but one of the teachers interviewed felt that the vocational course as it is presently being taught by most teachers is an excellent course. They advocated minor revisions only. One teacher felt that there was something drastically wrong with the course. She felt for one thing that it was too long and could be taught in six weeks. She favored moving to the comparative cultures approach used in the two Pattengill classes.³

²Only those teachers were interviewed who had at least five years experience in teaching ninth grade social studies. The average number of years taught was eight. All of the teachers interviewed were counselors at one time except one. This teacher had a strong behavioral science background in college.

³This teacher's background was in the behavioral sciences, i.e., in sociology and anthropology.

According to the curriculum guide there are four main areas to be covered in the guidance course: self-analysis; occupations; educational planning; and economics (the American system of free enterprise).⁴ It is also suggested that current events be covered one day a week.

Self-analysis is aided by aptitude, achievement, and personality testing plus the study of the student's own school record. Students fill out a pupil profile sheet which summarizes important data about themselves.

The second main part of the guidance course is a survey of occupations. Educational planning is closely linked to the study of occupations. Students are expected to consider in a serious and intelligent way their educational and vocational plans and also develop a wholesome appreciation for the world of work.⁵

The final unit, the American system of free enterprise, is given a suggested time allotment of five weeks.⁶ It was discovered via interviews that the large majority of teachers spend very little, if any, time on this unit. Most teachers interviewed felt that such a subject had little relationship to the basic part of the course, guidance.

⁴Curriculum Guide, Junior High School Social Studies, Lansing Public Schools, Lansing, Michigan, 1962, p. 60.

⁵Ibid., p. 57.

⁶Ibid., p. 60.

One teacher introduces the course with the statement that this course is "guidance with a little economics." The teachers felt that economics had implications throughout the course but should not be tagged on the end of the course as is suggested in the curriculum guide.⁷

The following list of expected learning experiences and activities is indicative of teachers' expectations and methods employed to realize such expectations.

Learning Experiences for
Developing Fundamental Skills

Absorbing facts to use in logical reasoning
Critical thinking
Construction of a bibliography
Developing attitudes toward and an understanding
of taking standardized tests
Interviewing
Listening skills
Oral and written expression
Outlining
Participating in panel discussions
Planning and its importance
Reading for understanding
Reading of graphs
Research
Socialized discussion
Spelling
Understanding of percentile ranking
Use of community resources
Use of library resources
Vocabulary building.

⁷Ibid.

Typical Activities

Proper motivation for standardized tests
 Taking standardized tests
 Keeping a student file on standardized tests and educational plans
 Constructing a profile sheet
 Writing an autobiography
 Planning a senior high school tentative program
 Teacher-student planning
 Teacher-parent conferences
 Survey of field of work
 Career days using resource persons
 Interviews
 Panel discussions
 Preparation of a research paper
 Group dynamics--Interviewing Conduct on the Job
 Writing letters of application
 Films
 Bulletin boards
 Development of a file of vocational and educational materials
 Maps, charts, and graphs
 Radio and television
 Study of current events: Use of the newspaper; Current affairs paper; Periodicals
 Wide reading, making special use of school library facilities
 Class discussion and drill
 Oral reports
 Notebook activity: Class notes; Current events; Film summaries; Outlines; Vocabulary.⁸

The textbook used in the course is Citizenship in Action by Painter and Bixler.⁹ The book was adopted by the Lansing School System in 1960. All of the teachers interviewed except one felt the reading level was proper for the

⁸Ibid., p. 57.

⁹Fred B. Painter and Harold H. Bixler, Citizenship in Action (New York: Charles Scribner's Sons, 1958).

students. One teacher felt the text was too difficult for many students. None of the teachers interviewed felt the content of the book was satisfactory. All felt that some chapters were good but the book was not comprehensive enough. All criticized the book for being out of date. The edition of the text used talks about the forty-eight states and speaks of Dwight Eisenhower as the President of the United States. It is also interesting to note that no pictures in the book are of American Negroes. Supplementary materials chosen by individual teachers are used much more than the text. Only the six guidance chapters are used by the majority of the teachers interviewed.

It was discovered that most teachers use very few audio visual materials, for such materials are considered inadequate or hard to get. Field trips in the guidance course are virtually non-existent, but individual interviews between students and employers are used to some extent. Bulletin boards are used a good deal at all schools. Supplementary materials available to students were in all teachers' rooms.

Radio and television were rarely used and current events were discussed sporadically, depending on the teacher's background and interest in a particular event. For example, one teacher had taken a course from a professor who was an expert on Viet Nam and therefore devoted a good deal of time to current events in Viet Nam.

It should be noted that there has heretofore been no systematic research as to the effects of the traditional approach on the students previously exposed to such an approach. However, it is only natural that those teachers employing such an approach assume that the course contributes certain significant things to the student.

The majority of teachers interviewed felt that the most important thing the students learned to do during the course was to write a research paper on a particular occupational area. "The skills learned will be of immeasurable value to them [the students] as they are assigned similar tasks in the senior high school."¹⁰ As one teacher said, "even the poor students carry note cards around with them"; thus, it is generally felt by those employing the traditional approach that the writing of a term paper gives the student good intellectual discipline. As a matter of fact, most of the teachers interviewed felt that this was the distinctive characteristic of the traditional course as contrasted to the comparative cultures approach employed at Pattengill. Most teachers employing the traditional course readily admitted that the experimental course might be more interesting to the students, but these teachers felt that the traditional approach would be of far greater value to the students.

¹⁰Curriculum Guide, op. cit., p. 54.

Teachers also felt the course helped students understand themselves as individuals. The pupil profile sheet was considered most helpful in accomplishing such a self-understanding. Another significant contribution cited by most teachers was the ability to make decisions concerning high school. The student learned to plan his high school schedule, according to these teachers. Students also learned because of the guidance course to think about careers. As one teacher said, "students learn to shop for careers, not buy a career." Most teachers employing the traditional approach felt that the class established a close teacher-parent relationship which was helpful to the student in planning his future. Parent-teacher conferences, where all the information was available, e.g., pupil profile sheets, on a student were considered especially beneficial by the teachers interviewed. All of these contributions were cited by teachers interviewed in answer to the question, "What do you consider to be the main contribution or contributions this class makes to the students you have in class?"

Civics was taught during the second semester in the control classes at Pattengill. The main aim of the course was to prepare the students of Lansing to become active and informed members of our democratic society.¹¹ It was

¹¹Curriculum Guide, op. cit., p. 108. This is likewise the main aim of the experimental classes.

assumed that the course properly taught would act as a catalyst to create in the student the desire to be an active citizen and accept the responsibilities of self-government.

If one looks at the curriculum guides of most schools, he sees that a unit of civics is taught at the seventh grade level, a semester or year of civics is taught at the ninth grade level, and a semester or year of civics is taught at the twelfth grade level.¹² The criticism commonly levied is that there is a great deal of duplication of material taught. According to the Lansing Junior High Curriculum Guide such criticism does not hold for Lansing.

Since the subject American Government, required of all students in the 12th grade in Lansing senior high schools, deals with a detailed description of the machinery and services of government, especially on the state and national levels, it is felt that grade 9 Community Civics should stress the community, its government, history, and problems.¹³

The following time schedule outline is recommended:

<u>Units of Study</u>	<u>Suggested Time Allotment</u>
Introduction to "Government of the People"	One Day
Unit I. Local Communities	Approximately 8 Weeks
Introduction	Approximately 1 Week
Ingham County	Approximately 2 Weeks

¹²See footnote 2, Chapter II for research on this subject.

¹³Curriculum Guide, op. cit., p. 108.

<u>Units of Study</u>	<u>Suggested Time Allotment</u>
Township	Approximately 3 Weeks
Lansing	Approximately 2 Weeks
Municipal Government	
Public Schools	
Live Issues	
Unit II. The Elective Process . . .	Approximately 2 Weeks
Unit III. State Government	Approximately 3 Weeks
Unit IV. Federal Government	Approximately 3 Weeks
Unit V. Taxation	Approximately 1 Week
Unit VI. Live Issues of State and Nation	Approximately 1 Week
Conclusion	One Day
Review and Examination	Approximately 1 Week ¹⁴

It was discovered via interviews and classroom observation that in fact, teachers rarely follow the recommended time schedule. Some teachers spent very little time on community government and instead emphasized "pet" units, e.g., six to eight weeks on communism. These teachers found materials on local government inadequate.

It was also discovered that county and township government were virtually neglected. As one teacher remarked, "there is nothing left of Lansing Township because of annexation." County government was seen as of little importance because of its dwindling power.

¹⁴Ibid., p. 115.

The elective process and taxation were frequently given little attention. One teacher felt that such topics were a waste of time for ninth grade students. Inadequate background study in economics on the part of the teachers was cited as one reason for the slighting of the unit on taxation.

There were four subjects covered at all schools : city government, federal government, state government, and so-called live issues of state and nation (current events). The last three areas are also taught in American government.

To cover the subject areas recommended, the following learning experiences and typical activities are given in the curriculum guide:

Learning Experiences for
Developing Fundamental Skills

- Absorbing facts to use in logical reasoning
- Critical thinking
- Listening skills
- Note taking
- Oral and written expression
- Outlining
- Panel discussion participation
- Reading for understanding
- Research
- Socialized discussion
- Spelling
- Use of community resources
- Use of library resources
- Vocabulary building

Typical Activities

Class discussion
 Drill
 Notebook: Class notes; Current events; Film
 summaries; Outlines; Vocabulary
 Individual written and oral reports
 Teacher-student planning
 Community surveys (Typical outline, Text: Page 74)
 Panel discussions
 Debates
 Group dynamics: Mock elections; Trials; Council
 meetings; Socio-dramas, etc.
 Field trips
 Resource persons
 Films
 Radio and television
 Bulletin boards
 Maps and charts
 Development of a file of civic materials for class-
 room use
 Study of current events: Use of newspaper; Current
 affairs paper; Periodicals; Radio and television
 Evaluation: Unit test; Marking of various projects;
 Citizenship participation; Student self-
 evaluation.¹⁵

¹⁵Ibid., p. 110.

The Comparative Cultures Approach

The basic approach employed in the experimental classes at Pattengill Junior High School was anthropological.¹⁶ The comparative cultures approach was used only after the students were introduced to key basic social science terms, e.g., culture. The first culture studied was that of the Hopi Indians. The teacher interested the students by showing a movie, Hopi Indian. With the study of Eskimo culture the movie Nanook of the North was used.

After interest was stimulated, the students were guided to materials which gave the students more background. All of the students read about the Hopi Indians in a paperback entitled Four Ways of Being Human, by Gene Lisitzky. Appropriate television programs were recommended by the teacher when such programs were available. Magazines

¹⁶The comparative cultures approach was first used by the anthropologist, E. G. Taylor, who presented a paper, "On a Method of Investigating the Development of Institutions; Applied to Laws of Marriage and Descent," at the Royal Anthropological Institute of Great Britain. John W. M. Whiting, "The Cross-Cultural Method," in Handbook of Social Psychology, Gardner Lindzey, editor (Cambridge, Massachusetts: L. Addison-Wesley Publishing Co., 1954), Vol. I, p. 523.

Although the comparative cultures method has been used by university anthropologists since 1889, its use in other academic disciplines at the university level can be described as limited. The use of the comparative cultures approach in public schools in any systematic manner has been virtually non-existent. One can therefore see the innovative nature of the experimental ninth grade social studies course at Pattengill Junior High School.

with relevant information were also recommended. Students were urged to understand that there is no definitive source on a particular culture. Each Friday the students had time to work at tables in class on a project concerning the particular culture being studied. They then shared their findings with other students.

When the teacher felt that the students were fairly well-acquainted with the first culture, she gave them the following summary sheet to complete individually:

CULTURE

I. GEOGRAPHICAL ENVIRONMENT

- A. Location:
- B. Climate:
- C. Condition of Soil:
- D. Terrain
- E. Precipitation:
- F. Other Important Factors:

II. ECONOMY (How are the material needs met)

- A. Food:
- B. Clothing:
- C. Shelter:
- D. Tools and Weapons:
- E. Division of Work: (Inside and outside family)
- F. Is there specialization in production? If so, how is it exchanged between producers and consumers?

- G. Is there lack of or abundance of wealth?
What effects does this have on the over-all culture?

III. FAMILY ORGANIZATION

- A. What practices regulate marriage which establishes the family unit? (Who may marry and what is involved in the ceremony?)
- B. Who makes up the family unit?
- C. How are family groups related to each other?
- D. Who is head of the household?
- E. What practices regulate divorce?
- F. When is a child in the family considered an adult?

IV. LANGUAGE

- A. How do they communicate with each other?
- B. What means of communication is used other than the spoken word? For example, drums, smoke signals, newspaper, etc.
- C. Is there a special vocabulary in their language for those things most important in the culture? For example, the Eskimoes have many words for snow.

V. RELIGION

- A. How do they explain the origin of man?
- B. How do they explain death and life after death if any?
- C. What are the basic or most important rituals used in religious practices?
- D. Does the geography affect their religion in any way?
- E. What are some of the major or most important beliefs in their religion?
- F. What religious ceremonies are used to recognize the important stages of life?

VI. RULES FOR LIVING TOGETHER - CODE OF CONDUCT

- A. What are the rules of conduct between various members of the family?
- B. What are the things that give people prestige in the society?
- C. Are some groups more important than others? If so, which are the most important groups?
- D. Do they have a government to organize who the leaders will be and how members of the society will be controlled? If no government, how are leaders chosen and how are people controlled?
- E. Is religion involved in the code of conduct? If so, how?

VII. AESTHETICS (Artistic Expression)

- A. What means are used for personal expression - dance, decoration of body, clothing, utensils, music, etc.
- B. Does religion have any effect on the artistic expression? If so, how?
- C. Do the various means of aesthetic expression serve any purpose other than pleasure?
- D. If you like show illustrations of art forms.

Note: Please include any other information you would like concerning the culture.

Many students had trouble filling out the summary sheet the first time. However, in following this same procedure for other cultures throughout the year the students became much more proficient. The point to be made is that the comparative cultures method was not used to any great extent until the students first had a good understanding of the particular culture they were studying.

When the teacher discussed a culture, e.g., the Eskimos, she made frequent comparisons with American culture. As more cultures were studied the comparisons became much more diverse. The students had learned to use social science concepts, e.g., culture, groups, status, and role, cross-culturally. The following summary of a class period gives one an idea how such concepts were explored.

Teacher: Do all cultures provide for differences in status for their members?

Students: Yes. We can't think of any exception.

Teacher: Different societies determine what will determine status and what will give its members prestige. One's status dictates the role he is supposed to play. Isn't it true that you are expected to play a certain role as a member of your family?

Students: Yes.

Teacher: What is the role and how does it differ according to whether or not you are a boy or girl?

Girl: As a girl I am expected to help my mom with the dishes.

Boy: I'm expected to help my dad with work around the yard.

Teacher: True. And in your homes certain people have more prestige than others. For example, who in your home has the most prestige?

Student: My dad (one boy said, his mother).

Teacher: In our school we all play certain roles and these roles give us certain status and prestige. The teacher, the custodian, the principal, and you students have certain status because of the roles we play. There is a hierarchy of prestige. My status is higher

than that of the custodian and the principal's status is higher than mine. What happens when we step out of our roles? What would happen, for example, if I acted in the role of the principal and told other teachers how they should act?

Student: You would be fired.

Student: There would be a lot of conflict.

Teacher: True. We are expected to stay within our roles. This leads me to the next question. What determines status in our society? What gives one prestige?

Student: Money.

Teacher: What else gives one prestige?

Student: Education.

Teacher: What determines status and gives prestige to the Eskimo man?

Student: To be a good hunter.

Student: To be a good fisherman.

Teacher: What determines status and gives prestige to the Eskimo woman?

Student: To have her teeth worn down. This means that she chews her husbands boots well so that they are soft and keep out the water.

Teacher: What do we think in the United States if a woman has wrinkled hands?

Student: Dishpan hands.

Teacher: What do we think in the United States if a woman looks old?

Student: It's bad. Women use dye to keep their hair dark. In the United States it is better to be young than old.

Teacher: I believe that you now understand how status and role are related and how prestige is greater in some roles than in others. An important idea that I want you to write down is that prestige is based on what is valued in a culture and different cultures value different things.

Throughout the academic year, the teacher and students explored the advantages and disadvantages or problems in using the comparative cultures approach.

The teacher tried to make the students aware of the fact that the knowledge they acquired was not definitive but a starting point from which they could study more extensively in the future, in many cases in a particular college discipline.

Students also learned that the comparative cultures scholar should always be precise and discuss that which is abstracted in relation to the context from which it has been abstracted. For example, the students were discussing whistling as a form of behavior practiced at American football games and at Spanish bullfights. Whistling at a football game in the United States is complimentary whereas at a bullfight it is a form of denunciation. To use the comparative cultures approach students learned that one must first know what a particular act, e.g., whistling, means in a particular context and then relate the act to the context from which it came in communicating about this behavior to other people.

The teacher and her students were faced with the problem of deciding which accounts of behavior were most reliable. It might well be argued that a secondary school student is not capable of making such difficult decisions. One might further argue that students have not been allowed to make such intellectual decisions previously and therefore are not prepared to make such decisions now. It is precisely at this point that the teacher must have the sensitivity of an artist and help students learn to be discriminate and make wise decisions. "In a society of free man, the proper aim of education is to prepare the individual to make wise decisions."¹⁷ The teacher must also have an excellent subject matter background so that he can recommend certain sources which the student might use. The teacher also needs the spirit of the learner and must be a serious scholar himself. Such a spirit is contagious.

The good teacher encourages the formulation of hypotheses and attempts to test them.¹⁸ This stimulates student interest for students are naturally inquisitive about people in other cultures who live in ways quite different from their own.

¹⁷Paul Woodring, A Fourth of a Nation (New York: McGraw-Hill, 1957), p. 111.

¹⁸Victor Barnouw, Culture and Personality (Homewood, Illinois: The Dorsey Press, 1963), p. 525.

When the students become inquisitive they learn to search through the various social science disciplines for answers. In short, the comparative cultures approach may act as a catalyst whetting the intellectual appetites of the students.

It was designed to give the students a wider perspective thus hopefully making them less provincial.¹⁹ In watching a movie on the Eskimo way of life many questions were raised comparing their way of life to the American way of life. One boy said, "Why is it that Americans are so odour conscious?" Another student asked, "Does the cold weather make the Eskimo more industrious?" Students learned that that which is different is not necessarily laughable. At the first of the year many of the students in the ninth grade experimental classes snickered when members of an African society were lightly clad in a movie the students watched. With time it was observed that differences in dress habits were accepted without snickering. The students had reached a more objective vantage point and learned to be at least tolerant if not appreciative of the idiosyncrasies of people in other cultures as well as their own idiosyncrasies.

¹⁹See Chapter V for the results of such widening experiences.

Experimental group students learned to identify the differences between cultures as well as the similarities. Rather than being bound to a single culture, the student's findings related to human behavior in general.²⁰ Students learned that all men have certain needs in common, e.g., food, although they meet these needs in different ways. They also found that the species homo sapiens is unique from other forms of life because of similarities which all men have in common. For example, man has learned to symbolate via language.²¹ In this he is distinct from other forms of life.

In summary, the comparative cultures approach served ". . . as a useful supplement to the intensive study of particular cultures."²²

Summary

The traditional approach to the teaching of Ninth Grade Social Studies consists of a semester of vocational guidance education and a semester of citizenship education. The majority of the teachers teaching the course feel that it is basically a good course but needs some minor revisions.

²⁰Whiting, op. cit., p. 524.

²¹Leslie A. White, "Culturological vs. Psychological Interpretations of Human Behavior," The Bobbs-Merrill Reprint Series in the Social Sciences, Number 309.

²²Barnouw, op. cit., p. 358.

During the first semester self-analysis and occupational and educational planning are taught. Economics and current events are given little attention. Scholarly research, planning for the future, and better understanding of one's self are the basic aims of the course.

Civics, which is taught during the second semester, is aimed at helping the student become an active participating citizen of our democratic society. The three branches of government are studied with some duplication of Eighth Grade American History. Much of the material will also be taught once again in twelfth grade government classes.

The comparative cultures approach is basically anthropological. After learning to use certain key social science terms, e.g., culture, particular cultures were studied. The Semang, Eskimo, Navaho, Iroquois, Japanese, and American cultures were studied.

The major concepts applied to each culture were group, status, role, personality, and socialization. Within this context, the required interest and aptitude testing and senior high school planning were carried out. During the second semester the dimensions of social organization were explored with particular emphasis on the economic and political structure and problems of American culture.

CHAPTER V

PRESENTATION OF FINDINGS

It should be noted that there was overt agreement among those who teach ninth grade social studies in Lansing as to the main objectives of citizenship and vocational education. All agreed, for example, that good citizenship was the main goal. The main disagreement concerned the approach one should use to reach the objectives. The control group was governed by the idea that the traditional approach best realized the objectives. The experimental group was based on the idea that the comparative cultures approach best realized the objectives. The instruments used in this study should have given us an indication as to which approach was most valid.

It was assumed that the data processing procedures would give us a random sample whereby experimental and control groups would start out on an equal or nearly equal footing. To see whether or not this was really the case each student's previous junior high grade point average in the four major subjects was examined.¹ Reading vocabulary and

¹See Table 2.

comprehension scores were also studied.² The most recent intelligence quotient scores were likewise considered.³ Attitudinal pre test scores were another indicator as to whether or not experimental and control groups started out on an equal footing.⁴

It was discovered that the experimental and control groups began the year on a nearly equal level.⁵ There was no significant difference between experimental and control groups as to total seventh and eighth grade grade point averages or total seventh and eighth grade grade point averages in social studies. Likewise, there was no significant difference in the two groups as to reading, critical thinking, intelligence quotient, socio-economic background, and attitudinal test scores. Thus, the validity of the random sampling method employed was substantiated.

There were four conclusions which were possible:

1. Significant differences between pre and post tests occurred in the experimental group but did not occur in the control group
2. Significant differences between pre and post tests occurred in the control group but did not occur in the experimental group

²See Tables 7 and 8.

³See Tables 3 and 4.

⁴See Tables 9 through 14.

⁵See Appendix C.

3. Significant differences occurred between pre and post tests in both the experimental and control groups
4. Significant differences did not occur between pre and post tests in either the experimental or control group.

On the basis of the objective paper and pencil instruments employed in this study,⁶ the fourth conclusion most accurately describes the results obtained. For the most part, significant changes did not occur between pre and post tests in either the experimental group or the control group.

General Tests

It was hypothesized that the experimental group would change significantly as a result of the treatment, thereby having better scores on the following tests: occupational aspiration; self-concept; critical thinking; and information. Such a change did not occur according to the instruments used.

The occupational aspiration instrument had a theoretical low of twenty (lowest occupational aspiration) and a theoretical high of eighty (highest occupational aspiration).

⁶See Appendix A.

Pre-test mean scores were 49.10 in the control group and 48.84 in the experimental group. Corresponding post test scores were 49.88 and 50.42. Mean score changes were $+.78$ in the control group and $+1.58$ in the experimental group. In light of the sixty point scale employed, the change was not significant.

The self-concept scale ranged from eight (lowest self-concept) to forty (highest self-concept). A positive change of $.62$, from 28.02 to 28.64, was effected in the control group. A positive change of $.24$, 26.11 to 26.35, occurred in the experimental group. The change in mean scores was not significant.

A theoretical low of zero and a high of fifty-two were possible on the critical thinking test employed. Pre test mean scores were low: 18 in the control group and 17.76 in the experimental group. Corresponding post test scores were 20.59 and 17.23. Mean score changes were $+2.59$ in the control group and $-.53$ in the experimental group--still insignificant.

An information test was given to see how each group scored on information supposedly learned in the other group as well as information supposedly learned in its own group. Results indicate that each group did nearly as well on information given to the other group as it did on information given to its own group. The control group had a mean score

of 38.76 on information based on the traditional approach whereas the experimental group had a score of 24.09 on the same test. The experimental group had a mean score of 38.38 on information based on the experimental approach whereas the control group had a score of 36.58 on the same test. Each test had a possible maximum score of 50.

Changes in Salient Social Attitudes and Opinions

The tolerance scale (from one, greatest tolerance, to five, least tolerance) was designed to measure students' attitudes toward nonconformist views and behavior. Net aggregate change in the experimental group was -7 (more tolerant) with absolutely no change in the control group. Mean score changes were -.09 (2.23 to 2.14) in the control group and +.04 (2.33 to 2.37) in the experimental group. Changes which occurred were insignificant thus failing to substantiate the hypothesis that the experimental group would demonstrate more tolerance than the control group as a result of the treatment.

It was hypothesized that the experimental group would gain appreciably in the area of civil rights and civil liberties. Such a gain would have meant that they would have been less discriminatory and more libertarian than control group students as a result of the treatment. Three scales were used: civil rights (zero, least discriminatory,

to ten, most discriminatory); civil liberties "A" (zero, most libertarian, to twelve, least libertarian); and civil liberties "B" (zero, most libertarian, to ten, least libertarian). Less discrimination occurred in both experimental and control groups. Net aggregate differences of -6 and -38 occurred in control and experimental groups respectively. When coupled with the mean score changes (-.21 in the control group and -.36 in the experimental group), changes were relatively minor. With the civil liberties "A" scale, both experimental and control groups improved significantly. The control group's net aggregate change was -40 (222 to 182) whereas the experimental group's change was also -40 (317 to 277). No significant change occurred on the basis of the civil liberties "B" scale. A net aggregate change of -9 (more libertarian) was effected in the control group whereas +9 (less libertarian) was the result in the experimental group.

The democracy scale ranged from fifteen (most democratic) to 105 (least democratic). It was hypothesized that the experimental group, although exposed to the comparative cultures treatment, would become more democratic and less authoritarian. A net aggregate change of -17 (2903 to 2886) occurred in the control group with a change of -99 (3442 to 3343) occurring in the experimental group. Mean score changes were +.23 (control) and -2. (experimental). The experimental group's gain on the democracy scale was offset

by its loss on the authoritarianism scale (eleven, least authoritarian, to seventy-seven, most authoritarian). A net aggregate change of +437 (2539 to 2976) occurred in the experimental group with a +8 (2515 to 2523) result in the control group. Mean scores give us a somewhat different picture. Both groups gained in authoritarianism: .44 in the control group and .81 in the experimental group. Change was therefore very minor. Likewise, both groups demonstrated insignificant change on the absolutism scale. There was a net aggregate change of +28 (more absolutistic) for the control group and +9 for the experimental group. Corresponding mean scores were +.75 and +.32. The absolutism scale ran from zero, least absolutistic, to twelve, most absolutistic. In light of the possible point spread in the scales used, changes on the basis of the democracy, authoritarianism, and absolutism scales were relatively minor. The Constitution scale (zero, pro Constitution, to fourteen, anti-Constitution) results substantiate the claim made in the previous sentence. Mean score changes (control, .06 and experimental, .38) were slight as well as net aggregate changes (control, +4 and experimental, +14).

The experimental group, it was hypothesized, would be appreciably less ethnocentric as a result of the treatment than the control group. The hypothesis was not substantiated by results on the ethnocentrism scale (zero, least

ethnocentric, to nine, most ethnocentric). A net aggregate gain of -26 (184 to 158) occurred in the experimental group whereas a gain of -12 (133 to 121) occurred in the control group. Mean score changes were $-.35$ in the control group and $-.45$ in the experimental group. A small but relatively minor change occurred in the experimental group.

The two groups changed their scores little in regard to political-economic conservatism. A low score of ten, least conservative, to a high score of twenty, most conservative, provided the range of possible scores. The control group's net aggregate change was -68 (1796 to 1728); the experimental group's change was -28 (2267 to 2239). Mean score changes were -1.55 in the control group and $-.25$ in the experimental group. It was hypothesized that the experimental group would become less conservative in the political-economic area as a result of the treatment.

Because of the comparative cultures approach, the experimental group should have used stereotypes less. On the stereotypy scale (nine, least use of stereotypy, to sixty-three, greatest use of stereotypy), the control group had a mean score change of $-.15$ whereas the experimental group's change was $+.14$. Net aggregate changes were -2 (1368 to 1366) in the control group and -23 (1678 to 1655) in the experimental group. No significant change occurred in either group on the basis of this scale.

Changes in Action Orientation

It was hypothesized that the treatment given the experimental group would make the students less apathetic and more prone to carry out ideas acquired. The resulting scores ran from a theoretical low of zero (least apathetic) to a theoretical high of ten (most apathetic). A net aggregate change of +18 (230 to 248) occurred in the control group; a change of +5 (295 to 300) occurred in the experimental group. Mean score changes were +.34 in the control group and +.10 in the experimental group. In short, no significant change occurred in either group.

The only major change on the basis of the scales employed in this study occurred in regard to individual political potency. Both control and experimental groups gained with respect to students' faith in the individual's power to resolve important problems. Net aggregate changes were +100 (177 to 277) in the control group and +62 (218 to 280) in the experimental group. The scale ran from zero, minimum potency, to ten, maximum potency. Mean score changes were +2.28 in the control group and +1.18 in the experimental group. A similar change did not result with respect to the group political potency scale (zero, minimum potency, to ten, maximum potency). The control group had a net aggregate change of +7 (320 to 327) whereas the experimental group had a change of -2 (371 to 369).

One might suspect that the change on the individual political potency scale would mean a corresponding change on the anomie scale (zero, least anomie, to sixteen, most anomie). Such was not the case. As was hypothesized, no significant change occurred on this variable. The control group's net aggregate score decreased from 209 to 191 (-18) whereas the experimental group's score decreased from 275 to 259 (-16). Mean score changes were $-.70$ in the control group and $-.15$ in the experimental group.

Supplementary Findings

Questionnaires and interviews were used to supplement objective pencil and paper tests. The following procedure was employed:

1. Interviews were held with Lansing teachers of Ninth Grade Social Studies who had a minimum of five years of teaching the course to get their impressions of the traditional and experimental approaches, and an interview was held with the teacher who employed the experimental approach to get her impressions.
2. A pilot questionnaire was administered to both experimental and control groups. Although some items were acceptable the instrument was considered to be quite defective on the whole.
3. A check sheet was administered to both experimental and control groups whereby students rated activities as to interest and value.
4. A random sample of ten students from the control group and ten from the experimental group was made and these students were interviewed individually.

5. Small group interviews were conducted for reactions to major ideas acquired in individual interviews. These student interviews were taped.

As a result of the procedure discussed above, the following opinions are available: opinions of teachers who have taught Ninth Grade Social Studies for a minimum of five years; opinions of an innovator, the teacher who employed the experimental approach; and opinions of the students.

The results are summarized as follows:

1. Teachers who have taught Ninth Grade Social Studies for a minimum of five years felt that the traditional approach was much more valuable to the students than the experimental approach even though they surmised that students might well have considered the traditional approach less interesting.
2. The teacher who employed the experimental approach at Pattengill Junior High School felt that such an approach was both more interesting and more valuable to the students than the traditional approach.
3. Students in the experimental group felt that the activities in which they participated were more interesting and more valuable than did control group students in reacting to similar activity categories.⁷

In regard to student opinions, those activities which they perceived to be interesting were also perceived to be valuable.

⁷See Appendix C, Tables 16 and 17.

The control group felt that filling out the pupil profile sheet was more interesting and valuable than did the experimental group. Individual and group interviews substantiated this. A good deal more time and energy were exerted in this activity in the control group than in the experimental group. Control group students referred to a particular unit in which they studied personality; experimental group students saw the whole year's course as an introspective venture.

The experimental group found the following activities more interesting and valuable than the control group: class discussions; reading assigned materials; watching films; field trips; and current events study. Interviews revealed similar results. Students in the experimental group felt that they could speak in class at any time and did so freely. The outdated textbook and career pamphlets used in the control classes were considered to be boring and of little value by the students. The opposite was the case in the experimental classes. The book, Four Ways of Being Human, was interesting and valuable according to experimental group students. Fewer films and poorer films were shown in the control classes whereas in the experimental classes films were up-to-date and very interesting. This seems to substantiate Elizabeth Drews' claim that current films

and pamphlets in occupational guidance are quite inadequate.⁸ The Cranbrook field trip which the experimental group took was better received than the Oldsmobile field trip taken by the control group students.

Significant differences of student opinion as to interest and value of activities did not occur concerning the following activities: individual projects; writing papers; making decisions concerning high school; learning to understand one's self; and group projects. Role playing and listening to tapes were activities done only in the experimental classes.

In sum, students in the experimental classes perceived activities participated in to be more interesting and more valuable than control group students found their activities to be. All of the teachers interviewed thought that experimental class students would perceive class activities to be more interesting than students exposed to the traditional approach. The teacher employing the experimental approach surmised that students in the experimental classes would rate activities higher as to their value than would students in the control classes. This was supported in the findings. Teachers who employed the traditional approach made no judgment as to students' preceptions of activities

⁸Elizabeth Drews and Douglas Knowlton, "Style of Life Career Films," paper in the writer's possession, 1965, p. 2.

as to value.

If one assumes that students perform better because they consider that which they are doing to be interesting and valuable, there is still the question of whether or not the activity engaged in is worth performing. There is little objective evidence that students are good judges of teaching procedures or classroom activities.⁹ Likewise, there is little evidence that the fact that students rate activities high as to interest and value means that they are learning more than students who rate such activities lower.¹⁰

Interpretation of Findings

The crucial question is, "Why didn't the changes hypothesized occur?" The following answers were considered:

1. The instruments used were inappropriate, thus failing accurately to measure what teachers expressed as desired outcomes for both traditional and experimental approaches.
2. The treatment was inappropriate for the sample. The students exposed to the comparative cultures approach were of the wrong age level or the heterogeneous nature of the sample lowered the treatment's effectiveness.

⁹See John Withall and W. W. Lewis, "Social Interaction in the Classroom," Handbook of Research on Teaching, N. L. Gage, editor (Chicago: Rand McNally and Co., 1963), p. 690; and W. B. Brookover, "Person-to-Person Interaction Between Teachers and Pupils and Teaching Effectiveness," Journal of Educational Research, 34, April, 1953, pp. 272-287.

¹⁰Ibid.

3. The teacher did an ineffective job in using both the traditional and experimental approaches.
4. Materials used in the experimental and control groups were inappropriate.
5. A particular class in the experimental group, i.e., first or third hour, pulled down the scores of the other class.
6. The treatment was limited by temporal considerations. The treatment only consisted of one hour a day, five days a week, for one academic year.
7. A basic assumption of the researcher was that the manipulation of substantive content or knowledge would probably lead to a corresponding change in attitudes which would likely invoke a corresponding change in behavior. The results of the study fail to substantiate this basic assumption. The assumption may be fundamentally unsound.

Let us examine each of the foregoing possibilities.

An immediate inclination is that instruments used were inappropriate to measure effects of both the comparative cultures approach and the traditional approach. When questioned about the tests, students who received the two treatments said that the critical thinking test was too difficult for them. These students said that the other instruments used had a vocabulary appropriate for them. It is quite possible that new instruments will have to be developed to measure accurately what teachers express as desired outcomes for both approaches. This will mean that goals or objectives for each approach will have to be conceptualized in a much more sophisticated manner.

Whether or not the treatment was appropriate for the sample is an open question which will be answered only with replication of both treatments on different samples.

The teacher's performance in using the comparative cultures approach and the traditional approach is open to question. It is possible that in trying to use the traditional approach in the best possible way she did not perform at her best in either group.

It would be informative to find out how the use of different materials affects students in both experimental and control classes.

Mean scores were recorded by class to see whether or not a particular class was quite different in terms of the treatment's effects. Table 13 demonstrates that a particular class, i.e., first or third hour, did not pull down the scores of the other class.

A possible limitation of the comparative cultures treatment was that the treatment consisted only of one hour a day, five days a week, for one academic year. This limitation was not imposed on the "Encampment for Citizenship" from which the scales used in this study were taken. It was the thesis of the Encampment evaluation team that the formal education program without the community living afforded by the camp experience would not provide for sufficiently strong

dynamic to produce appropriate attitudinal changes.¹¹

The exact relationship, if any, between substantive content or knowledge, attitudes, and behavior is as yet unsubstantiated in research. It was a basic assumption of this dissertation that appropriate knowledge would probably change attitudes which would likely invoke behavioral change. At first glance, the results of this study seem to reveal that such an assumption is unsound. However, there are other factors to consider. Perhaps the substantive content was not appropriate for the sample. Perhaps the instruments used were invalid thereby not expressing the true relationship between substantive content and attitudinal change. All that can validly be said is that the relationship between knowledge, attitudes, and behavior provides a vast area deserving of sophisticated research.

¹¹Herbert Hyman, Charles Wright, and Terence Hopkins, Application of Methods of Evaluation - University of California Publications in Culture and Society (Berkeley: University of California Press, 1962), p. 170.

CHAPTER VI

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary and Conclusions

In this study the effects of two different approaches to the teaching of vocational and citizenship education in Ninth Grade Social Studies are evaluated. The study was conducted during the 1964-65 academic year at Pattengill Junior High School, Lansing, Michigan. Two classes were experimental and two classes were control. Control classes received treatment in accordance with traditional procedures. In citizenship education the traditional approach involved a structural study of the three levels of government (local, state, and federal) within the context of American history. In vocational guidance the traditional approach involved the study of particular occupations with self-analysis emphasized to prepare students to make wise vocational choices. The comparative cultures approach consisted of a study of basic social sciences concepts, e.g., culture, and cultural analyses of particular societies varying in technological complexity. Good citizenship was the main goal for both approaches. It was hypothesized that significant attitudinal changes would occur in the experimental classes but would not occur

in the control classes. As a result of the treatment, experimental group students should have been less discriminatory toward minority groups, more tolerant toward nonconformist views and behavior, more libertarian, less authoritarian, less absolutistic, less ethnocentric, less prone to use stereotypes, less apathetic, and more confident in the individual's power to effect change. It was also hypothesized that appreciable gains would occur in the experimental group in regard to self-concept, critical thinking, occupational aspiration and information whereas such gains would not be made in the control group.

The main instruments used were of two types, attitudinal and informational. Attitudinal tests were given before and after the treatment. A single informational instrument was devised to test students on subject matter content. Critical thinking, self-concept, and occupational aspiration instruments were also administered pre and post. Student questionnaires and interviews provided additional data used to evaluate student attitudes.

On the basis of the objective pencil and paper instruments employed, it was generally the case that significant changes did not occur between pre and post tests in either the experimental or control group. The two scales on which significant changes did occur were individual political potency and civil liberties "A." Both experimental and

control groups significantly increased their faith in the individual's power to solve important problems and were more libertarian on the civil liberties "A" scale. In regard to the information test, the control group did nearly as well on the experimental group's information test as the experimental group. Likewise, the experimental group did nearly as well on the control group's information test as the control group.

With respect to interviews and questionnaires, experimental group students related that activities which they participated in were interesting and valuable.

In sum, there is no objective evidence that the experimental approach was more effective than the traditional approach or vice versa according to the instruments employed in this study.

Recommended Research

The effects of the comparative cultures approach as applied to different population samples open many new vistas for future research. The following questions have been raised as a result of the exploration done in this thesis, and may be suitable lines of inquiry for further research.

1. How would a different age group, e.g., high school seniors, respond to the comparative cultures treatment? Perhaps students in this study's sample were too young to profit from the treatment.
2. How would a select group of ninth grade students respond to the comparative cultures treatment? Select in this case could mean students with

high reading scores or high grade point averages.

3. How would students respond if exposed to the comparative cultures approach for a longer period of time, e.g., four years? In this way learning would be reinforced each year.
4. How would students respond if given a comprehensive exposure to the comparative cultures treatment? For example, if other courses in the curriculum, e.g., English, used a similar approach or if seminars and other extra-curricular activities were employed?
5. How would students respond to the comparative cultures approach as employed by different teachers? For example, if two different teachers within a school system used the comparative cultures approach?
6. A fundamental assumption underlying both approaches was that the manipulation of substantive content would probably invoke corresponding changes in attitudes which would probably invoke corresponding changes in behavior. How would students respond if this underlying assumption was declared fundamentally unsound and other relationships between content, attitudes, and behavior were established? For example, one might assume that the teacher's personality is the key to attitudinal change or that students must behave in a certain situation so that attitudes change. The two approaches could then be structured on the basis of one of these underlying assumptions at a time.
7. How effective would different instruments be in measuring students' responses to the two treatments' goals or objectives as stated by teachers? Such instruments would probably have to be newly constructed.

It is hoped that this dissertation will provide orientation for research which will help answer previously mentioned questions and postulates. The Social Science Teaching

Institute at Michigan State University is committed to research for the 1965-66 academic year which will complement the present study. A research grant from the United States Office of Health, Education, and Welfare will provide necessary funds.

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APPENDIX A

EVALUATIVE INSTRUMENTS USED

OCCUPATIONAL ASPIRATION SCALE

1. This set of eight questions concerns jobs.
2. Read EACH QUESTION carefully. They are not always the same.
3. YOU ARE TO CHECK ONE JOB IN EACH QUESTION. MAKE SURE IT IS THE BEST ANSWER YOU CAN GIVE TO THE QUESTION.
4. Answer every question. Do not omit any.
5. If you do not know what one of the jobs is, just ignore it.
6. On the next page there are two practice questions. Let's try them.

Name: _____
 Last First Middle

School: _____

Teacher: _____

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO

To the teacher: All questions, including the occupations, are to be read aloud.

Practice Question A. Of the jobs listed in this question, which is the BEST ONE you are REALLY SURE YOU CAN GET when your SCHOOLING IS OVER?

- A.1 _____ watchmaker
- A.2 _____ senator
- A.3 _____ public relations man
- A.4 _____ ditch digger
- A.5 _____ news-stand operator
- A.6 _____ beautician
- A.7 _____ fireman
- A.8 _____ boxer
- A.9 _____ secretary
- A.10 _____ movie star

Practice Question B. Of the jobs listed in this question, which ONE would you choose to have when you are 30 YEARS OLD, if you were FREE TO HAVE ANY of them you wished?

- B.1 _____ file clerk
- B.2 _____ steeple jack
- B.3 _____ floor walker in a store
- B.4 _____ ambassador to a foreign country
- B.5 _____ grocery clerk
- B.6 _____ wrestler
- B.7 _____ nurse
- B.8 _____ T.V. sports announcer
- B.9 _____ forest ranger
- B.10 _____ music teacher

Question 1. Of the jobs listed in this question, which is the BEST ONE you are REALLY SURE YOU CAN GET when your SCHOOLING IS OVER?

- 1.1 _____ welfare worker for a city government
- 1.2 _____ United States representative in Congress
- 1.3 _____ United States Supreme Court Justice
- 1.4 _____ sociologist
- 1.5 _____ filling station attendant
- 1.6 _____ night watchman
- 1.7 _____ policeman
- 1.8 _____ corporal in the Army
- 1.9 _____ County agricultural agent
- 1.10 _____ lawyer

Question 2. Of the jobs listed in this question, which ONE would you choose if you were FREE TO CHOOSE ANY of them you wish when your SCHOOLING IS OVER?

- 2.1 _____ singer in a night club
- 2.2 _____ member of the board of directors of a large corporation
- 2.3 _____ railroad conductor
- 2.4 _____ railroad engineer
- 2.5 _____ undertaker
- 2.6 _____ physician (doctor)
- 2.7 _____ clothes presser in a laundry
- 2.8 _____ banker
- 2.9 _____ accountant for a large business
- 2.10 _____ machine operator in a factory

GO ON TO THE NEXT PAGE

Question 3. Of the jobs listed in this question which is the BEST ONE you are REALLY SURE YOU CAN GET when your SCHOOLING IS OVER?

- 3.1 _____ dock worker
- 3.2 _____ owner-operator of a lunch stand
- 3.3 _____ public school teacher
- 3.4 _____ trained machinist
- 3.5 _____ scientist
- 3.6 _____ lumberjack
- 3.7 _____ playground director
- 3.8 _____ shoeshiner
- 3.9 _____ owner of a factory that employs about 100 people
- 3.10 _____ dentist

Question 4. Of the jobs listed in this question, which ONE would you choose if you were FREE TO CHOOSE ANY of them you wished when your SCHOOLING IS OVER?

- 4.1 _____ restaurant waiter
- 4.2 _____ electrician
- 4.3 _____ truck driver
- 4.4 _____ chemist
- 4.5 _____ street sweeper
- 4.6 _____ college professor
- 4.7 _____ local official of a labor union
- 4.8 _____ building contractor
- 4.9 _____ traveling salesman for a wholesale concern
- 4.10 _____ artist who paints pictures that are exhibited in galleries

GO ON TO THE NEXT PAGE

Question 5. Of the jobs listed in this question, which is the BEST ONE you are REALLY SURE YOU CAN HAVE by the time you are 30 YEARS OLD?

- 5.1 _____ farm hand
- 5.2 _____ mail carrier
- 5.3 _____ County judge
- 5.4 _____ biologist
- 5.5 _____ barber
- 5.6 _____ official of an international labor union
- 5.7 _____ soda fountain clerk
- 5.8 _____ reporter for a daily newspaper
- 5.9 _____ State governor
- 5.10 _____ nuclear physicist

Question 6. Of the jobs listed in this question, which ONE would you choose to have when you are 30 YEARS OLD, if you were FREE TO HAVE ANY of them you wished?

- 6.1 _____ janitor
- 6.2 _____ head of a department in state government
- 6.3 _____ cabinet member in the federal government
- 6.4 _____ musician in a symphony orchestra
- 6.5 _____ carpenter
- 6.6 _____ clerk in a store
- 6.7 _____ coal miner
- 6.8 _____ psychologist
- 6.9 _____ manager of a small store in a city
- 6.10 _____ radio announcer

GO ON TO THE NEXT PAGE

Question 7. Of the jobs listed in this question, which is the BEST ONE you are REALLY SURE YOU CAN HAVE by the time you are 30 YEARS OLD?

- 7.1 _____ mayor of a large city
- 7.2 _____ milk route man
- 7.3 _____ captain in the army
- 7.4 _____ garbage collector
- 7.5 _____ garage mechanic
- 7.6 _____ insurance agent
- 7.7 _____ architect
- 7.8 _____ owner-operator of a printing shop
- 7.9 _____ airline pilot
- 7.10 _____ railroad section hand

Question 8. Of the jobs listed in this question, which ONE would you choose to have when you are 30 YEARS OLD, if you were FREE TO HAVE ANY of them you wished?

- 8.1 _____ civil engineer
- 8.2 _____ author of novels
- 8.3 _____ diplomat in the United States Foreign Service
- 8.4 _____ taxi driver
- 8.5 _____ newspaper columnist
- 8.6 _____ share cropper (one who owns no livestock or farm machinery, and does not manage the farm)
- 8.7 _____ plumber
- 8.8 _____ bookkeeper
- 8.9 _____ streetcar motorman or city bus driver
- 8.10 _____ Minister or Priest

Place an "X" in front of the statement which best answers each question. For each question mark only ONE answer. Answer every question.

1. How do you rate yourself in school ability compared with your close friends?

_____ a. I am the best
_____ b. I am average
_____ c. I am below average
_____ d. I am the poorest

2. How do you rate yourself in school ability compared with those in your class at school?

_____ a. I am among the best
_____ b. I am above average
_____ c. I am average
_____ d. I am below average
_____ e. I am among the poorest

3. Where do you think you would rank in your high school graduating class?

_____ a. among the best
_____ b. above average
_____ c. average
_____ d. below average
_____ e. among the poorest

GO ON TO THE NEXT PAGE

4. Do you think you have the ability to complete college?

- _____ a. yes, definitely
- _____ b. yes, probably
- _____ c. not sure either way
- _____ d. probably not
- _____ e. no

5. Where do you think you would rank in your class in college?

- _____ a. among the best
- _____ b. above average
- _____ c. average
- _____ d. below average
- _____ e. among the poorest

6. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think it is that you could complete such advanced work?

- _____ a. very likely
- _____ b. somewhat likely
- _____ c. not sure either way
- _____ d. unlikely
- _____ e. most unlikely

GO ON TO THE NEXT PAGE

7. Forget for a moment how others grade your work. In your opinion how good do you think your work is?
- _____ a. my work is excellent
 - _____ b. my work is good
 - _____ c. my work is average
 - _____ d. my work is below average
 - _____ e. my work is much below average
8. What kind of grades do you think you are capable of getting?
- _____ a. mostly A's
 - _____ b. mostly B's
 - _____ c. mostly C's
 - _____ d. mostly D's
 - _____ e. mostly E's
9. What occupation do you now think you want to enter?
- _____
10. What area within this occupation do you want to specialize in?
- _____

PLEASE CHECK YOUR PAPER TO SEE IF YOU HAVE ANSWERED
ALL THE QUESTIONS

Cooperative Study of Evaluation in General Education
of the
American Council on Education

A TEST OF CRITICAL THINKING

Form G

Read these directions before beginning the test.

Improvement of your ability to think critically and effectively is one of the aims of general education. This test is designed to provide a measure of your competence in dealing with a variety of problems, all of which require some kind of critical thinking. The test does not cover all aspects of critical thinking, but it does involve several important types of thinking.

Within the test you will find directions for groups of items. Read these directions carefully so that, before you answer an item, you know just what is being asked.

You are expected to complete the test within 50 minutes.

Your score will be the number of items you answer correctly.

You may, in some cases, come across words which are not familiar to you. If you do, don't worry about it. The unfamiliarity of such words will not prevent your answering the items.

Your answers to the items are to be recorded on a separate answer sheet. Fill in the blank spaces on the side of your answer sheet (your name, the date, etc.). For Name of Test, write Critical Thinking. For Part, write Form G.

Mark only the ONE BEST ANSWER to each item.

Do not make any marks on this test booklet. Use scratch paper if necessary.

Items 1 through 6 refer to the following story and conclusion:

In a radio broadcast the following story was told: "The people in a little mining town in Pennsylvania get all their water without purification from a clear, swift-running mountain stream. In a cabin on the bank of the stream about half a mile above the town, a worker was very sick with typhoid fever during the first part of December. During his illness his waste materials were thrown on the snow. About the middle of March the snow melted rapidly and ran into the stream. Approximately two weeks later typhoid fever broke out in the town. Many of the people became sick and 114 died."

Conclusion: The speaker then said that this story showed how the sickness of this man caused widespread illness and the death of over one hundred people.

Items 1 through 6 are statements which might appear in a discussion of this conclusion. Assuming that the story as told was true, mark each statement according to the following scale:

1. The statement argues for the conclusion.
 2. The statement argues against the conclusion.
 3. The statement argues neither for nor against the conclusion.
1. Typhoid fever organisms have been known to survive for several months at temperatures near the freezing point.
 2. Good doctors should be available when an epidemic hits a small town.
 3. There may have been other sources of contamination along the stream.
 4. Typhoid organisms are usually killed if subjected to temperatures near the freezing point for a period of several months.
 5. Sickness and death usually result in a great economic loss to a small town.
 6. There may have been other sources of typhoid fever germs in the town, such as milk or food contaminated by some other person.

* * * * *

Not long ago Dr. Smithson of the Observatory stated at a public gathering:

IF OXYGEN IS RARE ON MARS, MARS HAS NO ANIMAL LIFE

Some people, who were discussing this statement afterward, made the comments given in items 7 through 10. Mark each of these comments according to the following scale:

1. That means just the same thing Smithson said.
 2. No! That can't be true if Smithson is right.
 3. You can't tell from what Smithson said whether it is true or not.
-
7. Oxygen is rare on Mars; Mars has no animal life.
 8. Either there isn't any animal life on Mars, or oxygen is not rare there.
 9. If Mars has no animal life, oxygen is rare there.
 10. Either there is animal life there, or oxygen is rare on Mars.

* * * * *

Select the one best answer to the following items (11-16).

11. A stock breeder plans to ship 50 horses, 50 cows, 50 goats, 50 sheep, and 50 pigs to a new location. In order to make a fairly accurate estimate of the total weight of his animals, which of the following would be most useful to him?
 1. The total weight of 50 animals from his stock, selected at random.
 2. The average weight of 50 animals from his stock, selected at random.
 3. The total weight of one horse, one goat, one cow, one pig, and one sheep, each selected at random.
 4. The combined average weights of 5 pigs, 5 sheep, 5 goats, 5 horses, and 5 cows, all selected at random.
 5. The average weight of the first 125 animals to enter the barn.

12. "There are women Eskimos. How do I know? Because everyone knows some men are not adult Eskimos, and this means some adult Eskimos are not men. That's how I know there are women Eskimos." This argument is
 1. acceptable reasoning, because the conclusion is true.
 2. faulty reasoning, because it is not true that if they are not men they would have to be women.
 3. acceptable reasoning, because "some men are not adult Eskimos" does mean "some adult Eskimos are not men" and it is true that if they are not men they would have to be women.
 4. faulty reasoning, because we can believe "some men are not adult Eskimos" without believing also that "some adult Eskimos are not men."
 5. acceptable reasoning, because the conclusion, regardless of its truth, certainly follows from the reasons given.

13. Suppose it is known that all Russians are required to vote and that no Bulgarians are Russians. One should conclude that
 1. it is certain that Bulgarians are required to vote.
 2. it is probable but not certain that Bulgarians are required to vote.
 3. it is certain that Bulgarians are not required to vote.
 4. it is probable but not certain that Bulgarians are not required to vote.
 5. the evidence does not justify any conclusion regarding Bulgarians and requirements that they vote.

14. Assume that we know it to be true that if diplomatic relations with Zadonia have been broken, then our Ambassador to Zadonia will return to the United States. If we also know that our Ambassador to Zadonia is now on his way back to the United States, then we
 1. can be certain that diplomatic relations with Zadonia have been broken.
 2. can be certain that diplomatic relations with Zadonia have not been broken.
 3. can be sure that there is a high probability that diplomatic relations with Zadonia have been broken.
 4. can be sure that there is a high probability that diplomatic relations with Zadonia have not been broken.
 5. cannot tell from the given information whether diplomatic relations with Zadonia have or have not been broken.

15. Assume that all great business men began with small salaries. I am beginning with a small salary, and so I can conclude
1. nothing.
 2. that I am not a great business man.
 3. that I shall become a great business man.
 4. that I ought to be a great business man.
 5. that my salary will grow larger.
16. In Mark Twain's Huckleberry Finn, Huck makes this argument: "Jim said bees wouldn't sting idiots; but I didn't believe that, because I had tried them lots of times myself, and they wouldn't sting me." Which of the following statements most nearly expresses what Huck is trying to prove?
1. Bees won't sting me.
 2. I am an idiot.
 3. I am not an idiot.
 4. Bees will sting idiots.
 5. Bees will not sting idiots.
- * * * * *
- Items 17 through 21 concern definitions of problems. Each item is a brief description of a situation, followed by five possible statements of the problem involved. Select from the five statements the one which
- a. faces the problem, and
 - b. is broadest and most inclusive.
- The statement you select need not be the wisest one or the one you would personally accept. You are to select only on the basis of whether the statement faces the problem and is broad and more inclusive than the other statements.
17. The Kemp family wishes to repaint its living room walls. Their problem is
1. What color and kind of paint will best fit the family's use of the room and budget of time and money.
 2. What color goes best with the rugs and curtains.
 3. How best to time the painting in relation to the baby's sleep, Jane's birthday party, and other events scheduled for the house.

4. What kind of paint -- water or oil base, etc. -- is cheaper in the long run, immediate area covered and washability and durability all considered.
 5. Whether they should use wallpaper since it will be cheaper and more colorful.
18. "Where are you going to settle?" one graduate asked another. Which of the following responses shows the best perception of the problem.
1. "Albany. That's where my best job offer is."
 2. "We're not going to settle right away. First we'll see a bit of the world and then maybe look for a job."
 3. "Somewhere in the Southwest. We prefer the country and people, and the wife's asthma isn't so bad there."
 4. "I can make a living anywhere, so we'll probably live near Washington, D. C. It's interesting to be near the center of political activities."
 5. "Millie likes the mountains, and I like the seashore; the best jobs are in the Midwest; so we've decided to cross that bridge when we come to it."
19. A third-year student is considering whether to borrow money to finish college or to drop out and work before continuing. Which of the following best reflects his problem?
1. "Why not give up getting a degree? With your manual skills and the wages of skilled labor today, together with the risks of borrowing, you'd be secure and save lots of time and expense by starting in now while the demand is high."
 2. "I don't know. Does your vocational choice reflect your best judgment of your interests, abilities, and needs?"
 3. "What is the real question here? Is it which way is least expensive? Or is it a choice between vocations, or draft and marriage versus education, or the best way to prepare for your vocation, or some of these against others?"
 4. "It's a bad business getting in debt. What if you get sick or meet accidental death? Or what if you want to cut loose and have a big adventure of some kind?"
 5. "The year out would be good preparation for your vocation, wouldn't it? And with all the advantages in terms of avoiding debt and worry, I'd think you have your answer."

20. A number of cases of typhoid fever appeared in widely scattered parts of a city. The problem of the City Board of Health was:

1. To trace the causes of the individual cases to the same or different sources and to base preventive steps on the outcome of the investigation.
2. To determine whether each patient had typhoid fever and to get the doctors' records on all typhoid patients.
3. To find and inoculate the carrier with whom all the cases could have come in contact.
4. To find a means of investigating the local dairy more thoroughly.
5. To search for means of transmission other than milk or water or human carriers, and to take whatever preventive steps would then seem wisest.

21. A mechanic is repairing an automobile motor and needs to remove a bolt which is relatively inaccessible. His problem is:

1. To get a wrench which will fit the bolt and get it out with the least work.
2. To remove the part of the motor that is in the way of a direct simple access to the bolt and then take the bolt out.
3. To find out why manufacturers make motors with such inaccessible bolts and to try to get them to remedy this difficulty.
4. To use a wrench with which he can reach and turn the bolt without dropping it and without removing other parts.
5. To use the method which will get the bolt out with the least time, effort, and risk added to his job.

* * * * *

Items 22 through 31 refer to the following newspaper advertisement:

"Wanna buy a duct? If you're planning to install a warm air heating system, ask your contractor about the advantages of Blake Aluminum for duct-work. Many have already found it saves money because it's easier for workmen to handle, gives more long-run satisfaction because it never rusts, never needs painting, is always neat. Aluminum's natural insulation prevents excessive heat loss; sound is deadened too. Approved for FHA financing."

In this advertisement the writer makes a number of claims for his product. He also takes for granted a number of ideas about it, about prospective buyers of heating systems, etc. Mark each of the statements 22 through 31, according to this scale:

1. The writer states this, although maybe not in just these words.
 2. The writer does not state this, but he does state something which shows that he took it for granted.
 3. The writer does not state this, nor does it have any relation to his argument.
 4. The writer does not state this, and it would weaken his argument if he did state it.
-
22. Installation expense is a significant item in considering the cost of heating equipment.
 23. Some people are thinking of installing warm-air heating systems.
 24. Aluminum ducts cost more than galvanized iron ducts.
 25. Brick houses take a different shape of heating duct than do frame houses.
 26. Blake Aluminum ducts do save money for the buyer.
 27. Delivery on orders for aluminum products is slow at present.
 28. FHA approval for a building product is an asset.
 29. Blake Aluminum ducts may not be the best aluminum ducts on the market today.
 30. A house in which sound is deadened is usually preferred to a house in which sound is not deadened.
 31. Ordinary galvanized ducts don't need to be painted anyway.

* * * * *

In items 32 through 34 each item gives part of an argument, followed by five sentences. One of the five sentences completes the argument in such a way as to justify the conclusion. Select this one sentence in each case.

32. He is very pompous, so I know he will not stand your criticism.

1. Some people cannot stand criticism.
2. Some pompous people cannot stand criticism.
3. Some people who cannot stand criticism are pompous.
4. All people who cannot stand criticism are pompous.
5. No pompous people can stand criticism.

33. It has been argued that Russia does not want peace because she is promoting revolutions in other countries.

1. All nations which want peace promote revolutions in other countries.
2. No nation which wants peace promotes revolutions in other countries.
3. All nations which do not want peace promote revolutions in other countries.
4. Not all nations which want peace promote revolutions in other countries.
5. Most nations which want peace do not promote revolutions in other countries.

34. Russelson is not an American. It follows, therefore, that he is not truly democratic.

1. Americans are truly democratic.
2. All Americans are truly democratic.
3. Only Americans are truly democratic.
4. Some Americans are truly democratic.
5. Some non-Americans are not truly democratic.

* * * * *

In items 35 through 37 each item is an argument which involves an unstated assumption. For each argument, select from the list the assumption which is left unstated.

Assumptions:

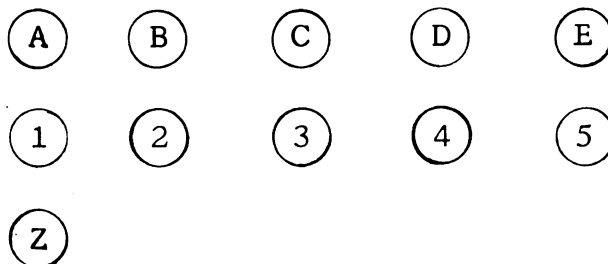
1. Luxuries are never good for you.
2. Some habit-forming things are good for you.
3. Habit-forming things are never good for you.
4. Some things which are good for you are luxuries.
5. Some luxuries are habit-forming.

35. You must agree that some habit-forming things are not good for you, for you admit some of them are luxuries.
36. Since luxuries are never good for you, it follows that some habit-forming things are not luxuries.
37. Some luxuries are not habit-forming. This is certain because nothing which is habit-forming is ever good for you.

* * * * *

Items 38 through 46 form a sequence based on a developing situation. In answering an item, consider only the information given in it and in the preceding items. Do not consider information presented in later items. (The correct choice in one item may appear to be incorrect if you consider information presented in later items.)

You find yourself stranded late at night in the deserted waiting room of a Balkonian airport. You are hungry. You find a large vending machine about which you know nothing. It has no display windows or pictures, and the directions are written in the Balkonian language, which you cannot understand at all. Beside the machine is a waste basket containing a few discarded food wrappers and beverage cups. On the front of the machine you find a coin slot the size of a Balkonian dollar, a delivery chute, and a panel of buttons arranged as follows:



You must depend upon your own ingenuity to operate the machine.

38. You insert a Balkonian dollar in the coin slot, but nothing happens. On the basis of the little information you now have about the machine, which of the following explanations of the machine's failure to operate would most likely be true? (NOTE: In answering, do not consider information presented in later items.)

1. You did not insert the right kind of coin.
 2. You must push one or more of the buttons to make the machine operate.
 3. You must push the button marked (Z) to make the machine operate.
 4. The machine is out of order.
 5. The machine is empty.
29. You push the button marked (A) and nothing happens; then you push the (Z) button and still nothing happens. Finally you push the (1) button, and the machine promptly delivers a package of peppermint chewing gum and three Balkonian quarters. On the basis of the little information given you up to and including this item (do not consider later items), which is the most likely explanation of the machine's behavior?
1. The machine will not operate unless the (A) button is pushed.
 2. The machine will not operate unless the (Z) button is pushed.
 3. You must push a numbered button to make the machine operate.
 4. The order in which the buttons are pushed determines whether the machine will operate.
 5. The machine contains only chewing gum.
40. Since the gum does not satisfy your hunger, you insert another dollar, push, in order, buttons (B) (1) (Z) and get a package of Elephant cigarettes, but no change. At this point which of the following is the most likely explanation of the machine's behavior? (NOTE: the choice you should mark is the one for which you now have the most evidence; the correct choice here may not prove to be the true explanation later.)
1. The numbered buttons determine the type of product (gum, cigarettes, etc.) delivered.
 2. The (A) button causes change to be returned.
 3. Buttons (A) (B) (C) (D) (E) determine the type of product delivered.
 4. The (Z) button causes change to be returned.
 5. The machine contains only gum and cigarettes.

41. You are still hungry. Again you insert a dollar and push, in order, only buttons (B) and (2) and you get a package of Lion cigarettes (a different brand) and no change. For which of the following explanations do you have the most evidence at this point?

1. The machine contains only cigarettes and gum.
2. The (Z) button must be pushed to secure change.
3. Pushing or not pushing the (Z) button determines the particular brand or flavor of product dispensed.
4. The numbered buttons determine the particular brand or flavor of product dispensed.
5. The buttons (A) (B) (C) (D) (E) determine the particular brand or flavor of product dispensed.

42. You are still hungry. You push, in order, the buttons marked (A) (2) (Z) and you get a package of wintergreen chewing gum (a different flavor) and three Balkonian quarters in change. The evidence now in hand points most strongly to the theory that

1. different brands or flavors of products are delivered purely by chance.
2. the numbered buttons determine the brand or flavor of product delivered.
3. the order in which the buttons are pressed determines whether or not change is returned.
4. change is returned only when the (A) button is pushed.
5. the (Z) button must be pressed in order to get change.

The results you have obtained so far are summarized below. A dollar was inserted each time.

Buttons Pushed

(A)	(Z)	(1)	1 pkg. peppermint gum and 3 quarters
(B)	(1)	(Z)	1 pkg. Elephant cigarettes, but no change
(B)	(2)		1 pkg. Lion cigarettes, but no change
(A)	(2)	(Z)	1 pkg. wintergreen chewing gum and 3 quarters

43. Still hungry, you try again. You push, in order, buttons (C) (3) (Z). The machine promptly delivers a cup of steaming, unsweetened black coffee and two quarters. On the basis of this information, the best explanation of the machine's operation is:

1. You get change according to the price of the product, not according to the buttons you push.
 2. You must push the (Z) button to get change.
 3. You must push the (A) button to get change.
 4. You must push the (3) button to get coffee.
 5. You must push the (Z) button to make the machine operate.
44. You push buttons (D) and (5) and get a ham sandwich but no change. Which one of the following explanations is most likely?
1. The machine contains only one variety of sandwich.
 2. You do not get a sandwich if you push the (Z) button.
 3. You must buy coffee before you can get a sandwich.
 4. You must push the (D) button to get a sandwich.
 5. You must push the (5) button to get a sandwich.
45. One sandwich is not enough. You try buttons (Z) (D) (5) and get another ham sandwich and one quarter in change. The evidence you now have points clearly to which of the following explanations of how change is delivered?
1. Change is returned automatically by the machine according to the price of the product; the buttons have nothing to do with it.
 2. Change is returned according to the price of the product, but only when the (Z) button is pushed.
 3. The order in which the buttons are pushed determines the change.
 4. You must push one of the odd-numbered buttons to get change.
 5. You must push buttons (A) or (B) to get change.
46. You have now tried all of the lettered buttons except (E). Which of the following products, according to the evidence now on hand, is most likely to be controlled by this button?
1. Handkerchiefs
 2. Pocket-size books
 3. Coffee with cream
 4. Candy
 5. A third brand of cigarettes

Upon entering the Air Force, an enlistee was given a series of tests in which he was to press the correct keys in succeeding rows of keys with as few mistakes as possible. Whenever he pressed the correct key, a buzzer would sound. He was told that on the first few rows of each test he would have to proceed mainly by guessing, but that he would be able to detect a scheme or plan which would indicate which keys were likely to be correct in the succeeding rows.

Your problem in items 47 through 52 is to choose correct keys, as the enlistee had to do. You will be given some of the information which he had to find by guessing.

In his first test, the enlistee was given the following rows of keys, and he found that the keys in parentheses were the correct ones in the first three rows.

Row 1.	A	(B)	C						
Row 2.	A	B	(C)	D	E				
Row 3.	A	B	C	(D)	E	F	G		
Row 4.	A	B	C	D	E	F	G		
Row 5.	A	B	C	D	E	F	G	H	I

Noticing that in each row the middle key was the correct one, he pressed D in Row 4, but the buzzer did not sound. Then he noticed that another scheme might account for his results in the first three rows: that in each succeeding row the correct key was one step farther from the left end of the row. Applying this scheme, he pressed E in Row 4, but again his choice was incorrect.

47. There is still another scheme which will explain the correct keys in the first three rows. According to this scheme, which key would be correct in Row 4?

1. A
2. B
3. C
4. F
5. G

48. If your choice in Row 4 is correct, then which key should be pressed in Row 5?

1. A
2. C
3. D
4. E
5. I

The enlistee's second test included the following five rows, and he found that the keys in parentheses were correct in the first three rows.

Row 1.	(A)	B	C						
Row 2.	A	(B)	C	D	E				
Row 3.	A	B	(C)	D	E	F	G		
Row 4.	A	B	C	D	E	F	G		
Row 5.	A	B	C	D	E	F	G	H	I

He tried D in Row 4, but found it incorrect.

49. Which of the following keys might be the correct one in Row 4?

1. A
2. B
3. E
4. F
5. G

50. If your choice in item 49 is correct, which key should be pressed in Row 5?

1. A
2. B
3. C
4. D
5. E

51. Which of the following keys might also be the correct one in Row 4?

1. A
2. C
3. E
4. F
5. G

52. If your choice in item 51 is correct, which key should be pressed in Row 5.

1. A
2. C
3. D
4. E
5. G

SOCIAL QUESTIONS I

This is a section of what people think about a number of social questions. The best answer to each statement below is your personal opinion. We have tried to cover many different points of view. You may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others. Whether you agree or disagree with any statement, you can be sure that many other people feel the same way you do.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one. Write in +1, +2, or +3; or -1, -2, -3, depending on how you feel in each case.

+ 1: I AGREE A LITTLE	- 1: I DISAGREE A LITTLE
+ 2: I AGREE PRETTY MUCH	- 2: I DISAGREE PRETTY MUCH
+ 3: I AGREE VERY MUCH	- 3: I DISAGREE VERY MUCH

- _____ 1. Human nature being what it is, there will always be war and conflict.
- _____ 2. Obedience and respect for authority are the most important virtues children should learn.
- _____ 3. Generally speaking, Negroes are born with more musical talent than white people.
- _____ 4. It is up to the government to make sure that everyone has a secure job and a good standard of living.
- _____ 5. No weakness or difficulty can hold us back if we have enough will power.
- _____ 6. Farmers are more self-sufficient than city people.
- _____ 7. Science has its place, but there are many important things that can never possibly be understood by the human mind.
- _____ 8. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.
- _____ 9. City people are less friendly than small-town people.

- _____ 10. The government should own and operate all public utilities (railroads, gas, electricity, etc.).
- _____ 11. Usually it is not feasible for all members of a group to take an equal interest and share in the activities of the group.
- _____ 12. City people are more radical than country people.
- _____ 13. Almost any job that can be done by a committee can be done better by having one individual responsible for it.
- _____ 14. Most labor union officials are the sons of immigrants.
- _____ 15. Men like Henry Ford or J. P. Morgan, who overcame all competition on the road to success, are models for all young men to admire and imitate.
- _____ 16. In case of disagreement within a group the judgment of the leader should be final.
- _____ 17. Most of the Mexicans in Lansing came from poor farm families in Mexico.
- _____ 18. The only way to eliminate poverty is to make certain basic changes in our political and economic system.
- _____ 19. You can recognize a New Yorker by his aggressive manner.
- _____ 20. The best way to judge any technique for dealing with other people is in terms of how efficiently it will get the job done.
- _____ 21. What this country needs most, more than laws and political programs, is a few courageous, tireless, devoted leaders in whom the people put their faith.
- _____ 22. There are often occasions when an individual who is a part of a working group should do what he thinks is right regardless of what the group has decided to do.
- _____ 23. Southerners are generally lazy.

- _____ 24. In a new tax program it is essential not to reduce the income taxes on corporations and wealthy individuals.
- _____ 25. In most practical situations, the more experienced members of a group should assume responsibility for the group discussion.
- _____ 26. In general, full economic security is bad; most men wouldn't work if they didn't need money for eating and living.
- _____ 27. Most Midwesterners are isolationists.
- _____ 28. Sometimes one can be too open-minded about the possible solutions to a problem that faces a group.
- _____ 29. There should be some upper limit, such as \$25,000 per year, on how much any individual can earn.
- _____ 30. In a group that really wants to get something done, the leader should exercise friendly but firm authority.
- _____ 31. The true American way of life is disappearing so fast that force may be necessary to preserve it.
- _____ 32. Discipline should be the responsibility of the leader of a group.
- _____ 33. It is sometimes necessary to use autocratic methods to obtain democratic objectives.
- _____ 34. Most of the present attempts to curb and limit unions would in the long run do more harm than good.
- _____ 35. It is essential for learning or effective work that our teachers or bosses outline in detail what is to be done and exactly how to go about it.
- _____ 36. It is not always practical to try to be consistent with one's ideals in every day behavior.
- _____ 37. The businessman and manufacturer are probably more important to society than the artist and the professor.

- _____ 38. Fighting to put one's ideals into practice is a luxury that only a few can afford.
- _____ 39. Generally there comes a time when democratic group methods must be abandoned in order to solve practical problems.
- _____ 40. Some leisure is necessary but it is good hard work that makes life interesting and worthwhile.
- _____ 41. In a democratic group, regardless of how one feels, he should not withdraw his support from the group.
- _____ 42. When you come right down to it, it's human nature never to do anything without an eye to one's own profit.
- _____ 43. Sometimes it is necessary to ignore the views of a few people in order to reach a decision in a group.
- _____ 44. I would like to see a child of mine go into politics.
- _____ 45. Generally speaking, the less government we have the better off we will be.
- _____ 46. When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things.

SOCIAL QUESTIONS II

	<u>Agree</u>	<u>Disagree</u>	<u>?</u>
47. The general public is not really qualified to vote on today's complex issues	A	D	?
48. Only trained and competent people should be permitted to run for public office.	A	D	?
49. People of different races should not dance together	A	D	?
50. Most people cannot be trusted	A	D	?
51. Allowing just anyone--including uneducated people--to serve on a jury is a poor idea	A	D	?
52. Swimming pools should admit people of all races and nationalities to swim in the same pool	A	D	?
53. Since 1890 people's ideas of morality have changed a lot, but there are still some absolute guides to conduct.	A	D	?
54. Decisions to protect the government may have to be made even at the expense of one person.	A	D	?
55. People who talk politics without knowing what they are talking about should be kept quiet	A	D	?
56. There should be laws against marriage between persons of different races . .	A	D	?
57. Nobody cares whether you vote or not except the politicians	A	D	?
58. Unrestricted freedom of speech leads to mass confusion.	A	D	?

	<u>Agree</u>	<u>Disagree</u>	<u>?</u>
59. Pressure groups are useful and important features of representative government.	A	D	?
60. Hotels are right in refusing to admit people of certain races or nationalities.	A	D	?
61. Sending letters to Congressmen has little influence upon legislation. . .	A	D	?
62. Nobody cares whether you attend church or not except the clergy. . . .	A	D	?
63. If a person is uncertain how to vote, it is better if he does not vote . . .	A	D	?
64. Whether a democracy or a dictatorship, every nation has a right to its own kind of government	A	D	?
65. Pupils of all races and nationalities should attend school together everywhere in this country.	A	D	?
66. People talk a lot about being decent to Negroes and other minority groups, but when it comes right down to it most people don't really care how you treat these groups	A	D	?
67. In passing laws about issues like price controls and taxation, Congress should pay more attention to what the experts say than to what the public says, when they differ	A	D	?
68. The average citizen is justified in remaining apart from dirty politics that may exist in his community. . . .	A	D	?
69. Democracy depends fundamentally on the existence of free business enterprise	A	D	?
70. Cheating on income tax is nobody's business but the government's.	A	D	?

	<u>Agree</u>	<u>Disagree</u>	<u>?</u>
71. Whatever serves the interest of the government best is generally right . .	A	D	?
72. What really made Dr. Salk work so hard on the polio vaccine was the thought of the money or fame he would get	A	D	?
73. Certain groups should not be allowed to hold public meetings even though they gather peaceably and only make speeches	A	D	?
74. A person who wants to make a speech in my community against churches and religion should be allowed to speak. .	A	D	?
75. Dr. Salk made his name with his discovery of the polio vaccine and the hope of publicity was what really led him to experiment in the first place.	A	D	?
76. In some criminal cases, a trial by jury is an unnecessary expense and shouldn't be given	A	D	?
77. Persons who refuse to testify against themselves (that is, give evidence that would show that they are guilty of criminal acts) should either be made to talk or severely punished. . .	A	D	?
78. Some of the petitions which have been circulated should not be allowed by the government	A	D	?
79. Slum housing is the cause of most juvenile delinquency	A	D	?
80. In some cases, the police should be allowed to search a person or his home even though they do not have a warrant.	A	D	?

	<u>Agree</u>	<u>Disagree</u>	<u>?</u>
81. A book favoring government ownership of all the railroads and big industries should be removed from the public library if someone in the community suggests this.	A	D	?
82. Lack of education is the cause of most race prejudice.	A	D	?
83. Newspapers and magazines should be allowed to print anything they want except military secrets.	A	D	?
84. Biased news coverage is mainly due to the pressures of advertisers	A	D	?
85. If a person is accused of a crime he should always have the right to know who is accusing him.	A	D	?
86. I would stop buying the soap advertised on a radio program which had an admitted Communist as the singer, if someone suggested this to me.	A	D	?
87. An admitted Communist should be put in jail.	A	D	?
88. Popular taste would be raised tremendously if the producers of radio and television had some decent programming	A	D	?
89. In some criminal cases, a trial by jury is an unnecessary expense and shouldn't be given	A	D	?
90. A book against churches and religion should be removed from the public library if someone in the community suggests this.	A	D	?
91. Class distinctions would disappear if economic opportunities were made more equal.	A	D	?

	<u>Agree</u>	<u>Disagree</u>	<u>?</u>
92. A community-wide mass media (radio, TV, newspaper) campaign could really sell the public on the goals of the UN	A	D	?
93. A person who wants to make a speech in my community favoring government ownership of the railroads and big industries should be allowed to speak.	A	D	?
94. The right of some working groups to call a strike should be abolished, as it is a threat to democracy and not in the general interest of society.	A	D	?

INDIVIDUAL POLITICAL POTENCY TEST

In general, do you think that the individual citizen can do a great deal, only a moderate amount, or hardly anything at all about the following matters?

	A great deal	A moderate amount	Hardly anything
95. Prevention of war	_____	_____	_____
96. Reduction of corruption in national government	_____	_____	_____
97. Reduction of corruption in local government	_____	_____	_____
98. Improvement of housing. . .	_____	_____	_____
99. Improvement of race relations	_____	_____	_____

GROUP POLITICAL POTENCY TEST

How about groups of people or clubs? Can they do a great deal, only a moderate amount, or hardly anything at all about these matters?

	A great deal	A moderate amount	Hardly anything
100. Prevention of war	_____	_____	_____
101. Reduction of corruption in national government	_____	_____	_____
102. Reduction of corruption in local government	_____	_____	_____
103. Improvement of housing. . .	_____	_____	_____
104. Improvement of race relations	_____	_____	_____

ETHNOCENTRIC IMAGE OF DEMOCRACY TEST

In some democracies there are certain customs or laws which you personally might or might not regard as democratic. Look over the following list and check whether each practice appears thoroughly democratic, somewhat undemocratic but tolerable in a democracy, or thoroughly undemocratic in your personal opinion:

THIS PRACTICE SEEMS TO ME

	Thoroughly democratic	Undemocratic but tolerable	Thoroughly undemocratic
105. In Australia, every citizen is required by law to vote	_____	_____	_____
106. Until recently, in Sweden, most babies were automatically registered as members of the Lutheran church, the state religion	_____	_____	_____
107. Until recently, in Sweden, the amount of alcohol that a person could buy each month was regulated by law	_____	_____	_____
108. In France you must pay for a license in order to have a radio set in your home .	_____	_____	_____
109. In the United States all children must be vaccinated against smallpox	_____	_____	_____
110. In Great Britain, under the law, doctors no longer collect their fees from patients but bill the government	_____	_____	_____
111. In Norway, any Jesuit is prohibited by law from entering the country.	_____	_____	_____
112. In Japan, all school children wear uniforms	_____	_____	_____
113. In the United States, one may legally have only one husband or wife at a time	_____	_____	_____

True or False
Information Test A

1. One of the basic problems in economics is deciding what to produce, for man's wants are greater than the resources to provide them.
2. Some people say that the population explosion has hindered economic development in many countries.
3. Working conditions in factories have improved little since the beginning of the 20th century.
4. The American Federation of Labor is a trade union.
5. Economics is the study of production, distribution, and consumption of goods and services.
6. Intrastate commerce is trade between states.
7. Wildcat strikes are usually approved by union officials.
8. The condition of your hair is part of your physical personality.
9. Your family background has had some effect on your personality.
10. Health is a factor in your physical personality.
11. Self-confidence is a common enemy of your personality.
12. A common enemy of your personality is interest in others.
13. You received a grade on the way you performed on the standardized tests.
14. One goal of the standardized testing program is to select one job for you for the rest of your life.
15. It is easier to develop aptitudes than interests.
16. It is not necessary to have a Social Security card to get a job until you pass the age of sixteen.
17. Your attitude has a great deal to do with the success of your job interview.

18. Today in the United States we have an abundance of part-time employment for young people in the age group fifteen to eighteen.
19. All students must take subjects within one of four courses of study offered in Lansing Schools.
20. The four courses of study in the Lansing Schools are: College Preparatory, Business Education, Industrial, and General Academic.
21. Aptitude tells you how much you have learned in a given field.
22. The school day at the senior high school consists of eight periods.
23. Personality is inherited.
24. When going for a job interview, call the employer by his first name, be sure to dress neatly, and be polite.
25. Some subjects require prerequisite courses.

True or False
Information Test B

1. A voter in the City of Lansing need not be a citizen of the United States.
2. A voter in the City of Lansing must have lived in Lansing for six months.
3. A voter in the City of Lansing must be registered before he can vote.
4. There are council-at-large positions in Lansing.
5. To run as a ward councilman, you must live in the ward in which you run.
6. To be a candidate for mayor in Lansing you must be at least 45 years old.
7. The mayor acts as the legislative branch of our city government.
8. The city-council normally holds its meetings on Wednesday night.
9. The Australian Ballot is used only in England and her colonies.
10. There are fifteen council positions in Lansing.
11. The councilmen represent the executive branch of government in the City of Lansing.
12. The executive branch of government in Lansing is represented by the municipal judges.
13. Lansing has recently elected a new mayor.
14. One must pay a poll tax to vote in Lansing.
15. Lansing has no pressure groups which try to influence city government.
16. The three branches of government are executive, legislative, and judiciary.

17. A voter in Lansing must have his registration form on file with the city clerk.
18. Lansing is well-known as a shipping and port city.
19. Lansing is well-known as a manufacturing city.
20. Most people in Lansing are more interested in city politics than federal politics.
21. The policies of the Lansing Public Schools are formed by the school principals.
22. Lansing uses an open primary election.
23. Vice Presidents are elected in an open election by people throughout the United States.
24. The township level of government is becoming less important.
25. Lansing Township has grown a great deal in land area in the last few years.

True or False
Information Test C

Directions: In the space mark A if the sentence is more true than false and B if the sentence is more false than true mark B.

1. Social studies includes only the study of history.
2. A concept classifies things according to what those things have in common.
3. Social science is concerned with asking and finding out why people do what they do.
4. It is easier to understand a culture if you use a small, less complex group of people to study.
5. Every society is marked off into different kinds of statuses or positions.
6. In our society there are some persons who have no role to play.
7. Children need other people in growing up to develop qualities that we distinguish as human.
8. All of us live our lives within groups from the moment we are born to the moment we die.
9. The family is the most important group for passing on the culture.
10. We know that there is more than one way of being human.
11. Some societies do not distinguish between high and low status.
12. Statuses and roles help us to live with other people because we understand what our relations to others will be.
13. To understand a role you need to know what is expected of you.
14. It is unnecessary to concern yourself with the norm of a role.

15. All of culture is learned.
16. More of the culture is learned in the family than at school.
17. Groups and process of communication are interdependent.
18. Jazz music tells us a folk story.
19. We tend to see only those things we have words for.
20. Some things can be both a sign and a symbol at the same time.
21. Folk music is highly theoretical and hard to understand.
22. Because we have more words to describe "car" than the Hopi's do, we must be more intelligent.
23. The ability to realize how old you are shows that language reflects age.
24. The music of India and Japan does not sound as good as our music because our music is better developed.
25. Because we believe strongly in monogamy in our culture we have laws covering bigamy.
26. In cultures having clans, it is found that the clan members are very close to each other and interact with fellow clan members regularly.
27. All societies recognize divorce, but no society approves of it.
28. The term "brother" or "sister" in our culture may mean something quite different in another culture.
29. The family group is made up of many roles and statuses and helps us to learn how to live with other people.
30. The socialization process does not begin until the child goes to school.
31. Man is distinguished as a human being because he can use signs.
32. Man is distinguished as a human being because he has grasping abilities with his hands.

33. Man is distinguished as a human being because he walks in an upright position.
34. Man is distinguished as a human being because of his ability to communicate in a highly sophisticated manner.
35. Helen Keller has given man knowledge about the communication process.
36. All people have the same kind of art.
37. To say that art is universal means that all people search for beauty.
38. All men are like all other men in some respects.
39. It is the nature of a group to distinguish itself from non-members.
40. The concept culture may be defined as the total way of life of a group of people.
41. Ethnocentrism may apply to a small group of people or a nation.
42. People who try to keep Orientals from entering the United States are not usually ethnocentric.
43. Ethnocentrism may be revealed in art.
44. Drums may be used as a method of communication.
45. Language does not reflect culture.
46. One can predict behavior in the physical sciences but cannot do so in the social sciences.
47. Man can communicate in silent ways.
48. Your self-concept is determined to a large extent by what you think other people think about you.
49. Concepts are used to classify objects, experiences, attitudes, and ideas.
50. Anthropologists and archaeologists study the history of people.

Instr

1.

2.

3.

4.

5.

QUESTIONNAIRE - NINTH GRADE SOCIAL STUDIES

Instructions: Fill out the questionnaire by checking the appropriate box. This questionnaire will not be seen by your teacher or teachers. Do not sign your name to the questionnaire.

1. Do you feel that filling out the pupil profile sheet was

☐

boring

☐

interesting

2. Do you feel that filling out the pupil profile sheet was

☐

of value to you

☐

not of value to you

3. Is your textbook, Citizenship in Action,

☐

too difficult
to read

☐

too easy
to read

☐

about right
to read

4. Is your textbook, Citizenship in Action,

☐

interesting

☐

boring

5. Is your textbook, Citizenship in Action,

☐

up to date

☐

out of date

6. Is this course

☐

not at all
interesting

☐

not
interesting

☐

interesting

☐

very
interesting

7. Do you think that in the future this course will be

☐

not useful

☐

useful

☐

don't know

8. Do you feel that this course has given you good
intellectual discipline?

☐

yes

☐

no

9. Do you feel that this course has been

☐

interesting

☐

boring

10. What activities this semester in this class do you feel
were most helpful to you.

QUESTIONNAIRE - NINTH GRADE SOCIAL STUDIES

Instructions: Please mark an X in the space which you feel should be marked. This questionnaire will not be seen by your teacher. Do not sign your name to the questionnaire.

Rate the following activities as to their degree of interest to you:

ACTIVITY (9th Grade Soc. Stud.)	Not At All Interesting	Not Interesting	Interesting	Very Interesting	Not Done In Our Class
Filling Out Pupil Profile Sheet					
Class Discussions					
Reading Assigned Materials					
Watching Films					
Field Trip(s)					
Individual Projects					
Current Events					
Writing Papers					
Thinking About Careers					
Making Decisions Con- cerning High School					
Learning to Understand Myself					
Group Projects					
Role Playing					
Listening to Tapes					

QUESTIONNAIRE - NINTH GRADE SOCIAL STUDIES

Instructions: Please mark an X in the space which you feel should be marked. This questionnaire will not be seen by your teacher. Do not sign your name to the questionnaire.

Rate the following as to what you think their degree of value has been to you:

ACTIVITY (9th Grade Social Studies)	Of No Value	Of Little Value	Of Value	Of Great Value	Not Done In Our Class
Filling Out Pupil Profile Sheet					
Class Discussions					
Reading Assigned Materials					
Watching Films					
Field Trip(s)					
Individual Projects					
Current Events					
Writing Papers					
Thinking About Careers					
Making Decisions Concerning High School					
Learning to Understand Myself					
Group Projects					
Role Playing					
Listening to Tapes					

APPENDIX B

SCORING PROCEDURES

Michigan State University
Critical Thinking Test

There are five alternatives for each question, and only one alternative may be checked. Tests were machine graded.

The resulting sum ran from a theoretical low of 0 (lowest number of correct answers) to a theoretical high of 52 (highest number of correct answers).

Occupational Aspiration Scale

All eight questions are scored the same. There are ten alternatives for each question, and only one alternative may be checked. The scores for each alternative are as follows:

Alternative	Score
1	7
2	4
3	8
4	2
5	9
6	0
7	6
8	3
9	5
10	1

The total score is the sum of the scores for each of the eight questions. T-scores ran from a theoretical low of 20 (lowest occupational aspiration) to 80 (highest occupational aspiration).

Normalized Data for O.A.S. Raw Scores

The normalized data for the O.A.S. scores were computed by the method given by Edwards.* The data entitled "observed Z" represents equivalent scores having a mean of zero and a standard deviation of 1.0. However, the form of the "observed Z" distribution is the same as that for the raw scores.

*A. L. Edwards, Statistical Methods for the Behavioral Sciences (New York: Rinehart and Company, Inc., 1954).

The cumulative frequencies below a given raw score plus one-half of the frequencies of that score were converted to cumulative percentages (or proportions of total N). These cumulative percentages were used to find the Z score value corresponding to the point in a theoretical normal distribution by referring to a table of the unit normal curve. These normalized Z scores also have a mean of zero and a way as to normalize the distribution. Also, the cumulative percentages were converted to equivalent T-scores by means of a table of T-scores. Essentially, a T-score equals a normal Z score multiplied by 10 and the product added to 50. Hence, the T-scores have a mean of 50 and a standard deviation of 10.0. Standard scores enable us to compare measurements from various distributions of comparable form since we have reduced the measurements of each distribution to a common scale.

Raw Scores:	Mean = 36.2	
	S.D. = 12.99	
		N = 441
T-Scores:	Mean = 50.0	
	S.D. = 10.0	

CONVERSION SCALE FOR OCCUPATIONAL ASPIRATION TEST
-Raw Scores To T-Scores-

	score	f	Observed Z	cf	cp	Normal Z	T-Scores
(1)	2	1	-2.63	0.5	.0011	-3.07	20
(2)	10	2	-2.02	2.0	.0045	-2.61	23
(3)	13	3	-1.79	4.5	.0102	-2.32	27
(4)	14	2	-1.71	7.0	.0159	-2.15	28
(5)	16	6	-1.56	11.0	.0250	-1.96	30
(6)	17	8	-1.48	18.0	.0409	-1.74	33
(7)	18	3	-1.40	23.5	.0533	-1.61	34
(8)	19	7	-1.32	28.5	.0647	-1.52	35
(9)	20	8	-1.25	36.0	.0817	-1.39	36
(10)	21	11	-1.17	45.5	.1033	-1.26	38
(11)	22	8	-1.09	55.0	.1248	-1.15	38
(12)	23	15	-1.02	66.5	.1510	-1.03	40
(13)	24	12	-0.94	80.0	.1816	-0.91	41
(14)	25	12	-0.86	92.0	.2088	-0.81	42
(15)	26	10	-0.78	103.0	.2338	-0.73	43
(16)	27	15	-0.71	115.5	.2622	-0.64	44
(17)	28	13	-0.63	129.5	.2940	-0.54	45
(18)	29	22	-0.55	147.0	.3337	-0.43	46
(19)	30	17	-0.48	166.5	.3780	-0.31	47
(20)	31	13	-0.40	181.5	.4120	-0.22	48
(21)	32	10	-0.32	193.0	.4381	-0.16	48
(22)	33	8	-0.25	202.0	.4585	-0.10	49
(23)	34	11	-0.17	211.5	.4801	-0.05	50
(24)	35	16	-0.09	225.0	.5108	0.03	50
(25)	36	8	-0.02	237.0	.5380	0.10	51
(26)	37	12	0.06	247.0	.5607	0.15	52
(27)	38	8	0.14	257.0	.5834	0.21	52
(28)	39	9	0.22	265.5	.6027	0.26	53
(29)	40	13	0.29	276.5	.6276	0.33	53
(30)	41	10	0.37	288.0	.6538	0.40	54
(31)	42	8	0.45	297.0	.6742	0.45	55
(32)	43	9	0.52	305.5	.6935	0.51	55
(33)	44	13	0.60	316.5	.7184	0.58	56
(34)	45	5	0.68	325.5	.7389	0.64	56
(35)	46	7	0.75	331.5	.7525	0.68	57
(36)	47	9	0.83	339.5	.7707	0.74	57
(37)	48	10	0.91	349.5	.7934	0.82	58
(38)	49	8	0.99	358.0	.8127	0.89	59
(39)	50	4	1.06	364.0	.8263	0.94	59
(40)	51	11	1.14	371.5	.8433	1.01	60

(41)
(42)
(43)
(44)
(45)
(46)
(47)
(48)
(49)
(50)
(51)
(52)
(53)
(54)
(55)

	Raw score	f	Observed Z	cf	cp	Normal Z	T-scores
(41)	52	9	1.22	381.5	.8660	1.11	61
(42)	53	4	1.29	388.0	.8808	1.18	62
(43)	54	5	1.37	392.5	.8910	1.23	62
(44)	55	5	1.45	397.5	.9023	1.29	63
(45)	56	8	1.52	404.0	.9171	1.39	64
(46)	57	9	1.60	412.5	.9364	1.53	65
(47)	58	4	1.68	419.0	.9511	1.66	67
(48)	59	3	1.76	422.5	.9591	1.74	67
(49)	60	7	1.83	427.5	.9704	1.89	69
(50)	61	5	1.91	433.5	.9840	2.15	71
(51)	62	1	1.99	436.5	.9908	2.36	74
(52)	63	1	2.06	437.5	.9931	2.46	75
(53)	64	2	2.14	439.0	.9965	2.70	78
(54)	65	1	2.22	440.5	.9999	3.70	80

Self-Concept Scale

All eight questions are scored the same. There are five alternatives for each question, and only one alternative may be checked. The scores for each alternative are as follows:

Alternative	Score
1	5
2	4
3	3
4	2
5	1

The total score is the sum of the scores for each of the eight questions. Scores run from a theoretical low of 8 (lowest self-concept level) to a theoretical high of 40 (highest self-concept level).

Authoritarianism Score

This score is the sum of the scores of the eleven items below. Subjects responded to these items on a 6-point scale as follows:

+ 1: I Agree A Little	- 1: I Disagree A Little
+ 2: I Agree Pretty Much	- 2: I Disagree Pretty Much
+ 3: I Agree Very Much	- 3: I Disagree Very Much

The sign of the response to the starred item (*) was reversed. The number 4 was then added to each response to avoid negative values. (Occasional unanswered items were scored as 4.) Whenever the respondent had written in two numbers, the first was used. When large blocks of questions had been left unanswered, the score was called YY (unascertainable).

The resulting sum ran from a theoretical low of 11 (least authoritarian) to a theoretical high of 77 (most authoritarian).

Human nature being what it is, there will always be war and conflict

Obedience and respect for authority are the most important virtues children should learn.

No weakness or difficulty can hold us back if we have enough will power.

Science has its place, but there are many important things that can never possibly be understood by the human mind.

Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

What this country needs most, more than laws and political programs, is a few courageous, tireless, devoted leaders in whom the people can put their faith.

It is essential for learning or effective work that our teachers or bosses outline in detail what is to be done and exactly how to go about it.

Some leisure is necessary, but it is good, hard work that makes life interesting and worthwhile.

When you come right down to it, it's human nature never to do anything without an eye to one's own profit.

*Generally speaking, the less government we have the better off we will be.

When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things.

Democracy Score

This score is the sum of the scores of the fifteen items below. The response categories and the scoring are identical to those described for the authoritarianism score. The sign of the response to the starred item (*) was reversed.

Here the resulting sum ran from a theoretical low of 15 (most democratic) to a theoretical high of 105 (least democratic).

Usually it is not feasible for all members of a group to take an equal interest and share in the activities of the group.

Almost any job that can be done by a committee can be done better by having one individual responsible for it.

In case of disagreement within a group the judgment of the leader should be final.

The best criterion for judging any technique for dealing with other people is in terms of how efficiently it will get the job done.

There are often occasions when an individual who is part of a working group should do what he thinks is right regardless of what the group has decided to do.

In most practical situations, the more experienced members of a group should assume responsibility for the group discussion.

Sometimes one can be too open-minded about the possible solutions to a problem that faces a group.

In a group that really wants to get something done, the leader should exercise friendly but firm authority.

Discipline should be the responsibility of the leader of a group.

It is sometimes necessary to use autocratic methods to obtain democratic objectives.

It is not always feasible to try to be consistent with one's ideals in everyday behavior.

Fighting to put one's ideals into practice is a luxury that only a few can afford.

Generally there comes a time when democratic group methods must be abandoned in order to solve practical problems.

*In a democratic group regardless of how one feels, he should not withdraw his support from the group.

Sometimes it is necessary to ignore the views of a few people in order to reach a decision in a group.

Political-Economic Conservatism Score

This score is the sum of the scores of the ten items below. The response categories and scoring are identical to those described for the authoritarianism score. The signs of responses to the starred item (*) were reversed.

The resulting sum ran from a theoretical low of 10 (least conservative) to a theoretical high of 70 (most conservative).

*It is up to the government to make sure that everyone has a secure job and a good standard of living.

*The government should own and operate all public utilities (railroad, gas, electricity, etc.).

Men like Henry Ford or J. P. Morgan, who overcame all competition on the road to success, are models for all young men to admire and imitate.

*The only way to eliminate poverty is to make certain basic changes in our political and economic system.

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*In a new tax program it is essential not to reduce the income taxes on corporations and wealthy individuals.

In general, full economic security is bad; most men wouldn't work if they didn't need money for eating and living.

*There should be some upper limit, such as \$25,000 per year, on how much any individual can earn.

The true American way of life is disappearing so fast that force may be necessary to preserve it.

*Most of the present attempts to curb and limit unions would in the long run do more harm than good.

The businessman and the manufacturer are probably more important to society than the artist and the professor.

Stereotypy Score

This score is the sum of the scores of the nine items below. The response categories and scoring are identical to those described for the authoritarianism score.

The resulting sum ran from a theoretical low of 9 (least use of stereotype) to a theoretical high of 63 (greatest use of stereotype).

Generally speaking, Negroes are born with more musical talent than white people.

Farmers are more self-sufficient than city people.

City people are less friendly than small-town people.

City people are more radical than country people.

Most labor union officials are the sons of immigrants.

Most of the Puerto Ricans in New York City came from poor farm families on the island.

You can recognize a New Yorker by his aggressive manner.

Southerners are generally lazy.

Most Midwesterners are isolationists.

SOCIAL QUESTIONS II:

Constitution Score

The score is the sum of weights assigned as indicated to responses to the seven items below. When large blocks of questions were left unanswered, the score was called Y (unascertainable). A score of 10 or higher was called X.

The resulting sum ran from a theoretical low of 0 (pro-Constitution) to a theoretical high of 14 (anti-Constitution).

	Agree	Disagree	?	No answer
The general public is not rally qualified to vote on today's complex issues.	2	0	1	1
Allowing just anyone--including uneducated people--to serve on a jury is a poor idea	2	0	1	1
Decisions to protect the govern- ment may have to be made even at the expense of one person. .	2	0	1	1
Unrestricted freedom of speech leads to mass hysteria.	2	0	1	1
In passing laws about issues like price controls and taxation, Congress should pay more atten- tion to what the experts say than to what the public says when they differ.	2	0	1	1

	Agree	Disagree	?	No answer
Democracy depends fundamentally on the existence of free business enterprise	2	0	1	1
Whatever serves the interest of the government best is generally right	2	0	1	1

Civil Rights Score

This score is the sum of weights assigned as indicated to responses to the five items below. When large blocks of questions were left unanswered, the score was called Y (unascertainable). A score of 10 was called X.

The resulting score ran from a theoretical low of 0 (least discriminatory) to a theoretical high of 10 (most discriminatory).

	Agree	Disagree	?	No answer
People of different races should not dance together.	2	0	1	1
Swimming pools should admit people of all races and nationalities to swim in the same pool.	0	2	1	1
There should be laws against mar- riage between persons of dif- ferent races.	2	0	1	1
Hotels are right to refuse to admit people of certain races or nationalities.	2	0	1	1
Pupils of all races and national- ities should attend school to- gether everywhere in this country	0	2	1	1

Action-Apathy Score

This score is the sum of weights assigned as indicated to responses to the items below.

The resulting score ran from a theoretical low of 0 (least apathetic) to a theoretical high of 10 (most apathetic).

	Agree	Disagree	?	No answer
Sending letters to congressmen has little influence on legislation.	2	0	1	1
If a person is uncertain how to vote, it is better if he does not vote	2	0	1	1
The average citizen is justified in remaining aloof from dirty politics that may exist in his community.	2	0	1	1
Pressure groups are useful and important features of representative government. . .	2	0	1	1
Whether a democracy or a dictator- ship, every nation has a right to its own kind of government	2	0	1	1

Anomie Score

This score is the sum of weights assigned as indicated to responses to the eight items below. When large blocks of questions were left unanswered, the score was called Y (unascertainable). A score of 10 or higher was called X.

The resulting score ran from a theoretical low of 0 (least anomie) to a theoretical high of 16 (most anomie).

	Agree	Disagree	?	No answer
Most people cannot be trusted. . .	2	0	1	1
Since 1890 people's ideas of morality have changed a lot, but there are still some absolute guides to conduct . .	0	2	1	1
Nobody cares whether you vote or not except the politicians . .	2	0	1	1
Nobody cares whether you attend church or not except the clergy	2	0	1	1
People talk a lot about being decent to Negroes and other minority groups, but when it comes right down to it, most people don't really care how you treat these groups	2	0	1	1
Cheating on income taxes is no- body's business but the government's	2	0	1	1
What really made Dr. Salk work so hard on the polio vaccine was the thought of the money or fame he would get.	2	0	1	1
Kinsey made his name with his report on sexual behavior, and the hope of publicity was what really led him to study sex in the first place.	2	0	1	1

Civil Liberties "A" Score

This score is the sum of weights assigned as indicated to responses to the six items below. When large blocks of questions were left unanswered, the score was called Y. A score of 10 or higher was called X.

The resulting score ran from a theoretical low of 0 (most libertarian) to a theoretical high of 12 (least libertarian).

	Agree	Disagree	?	No answer
Only trained and competent people should be permitted to run for public office.	2	0	1	1
People who talk politics without knowing what they are talking about should be kept quiet . .	2	0	1	1
Certain groups should not be allowed to hold public meet- ings even though they gather peaceably and only make speeches	2	0	1	1
In some criminal cases, a trial by jury is an unnecessary expense and shouldn't be given	2	0	1	1
Persons who refuse to testify against themselves (that is, give evidence that would show that they are guilty of crim- inal acts) should either be made to talk or be severely punished	2	0	1	1
Some of the petitions which have been circulated should not be allowed by the government .	2	0	1	1

Civil Liberties "B" Score

This score is the sum of weights assigned as indicated to responses to the five items below. When large blocks of questions were left unanswered, the score was called Y. A score of 10 was called X.

The resulting score ran from a theoretical low of 0 (most libertarian) to a theoretical high of 10 (least libertarian).

	Agree	Disagree	?	No answer
In some cases the police should be allowed to search a person or his home even though they do not have a warrant. .	2	0	1	1
Newspapers and magazines should be allowed to print anything they want except military secrets.	0	2	1	1
If a person is accused of a crime he should always have the right to know who is accusing him	0	2	1	1
In some criminal cases, a trial by jury is an unnecessary expense and shouldn't be given	2	0	1	1
The right of some working groups to call a strike should be abolished, as it is a threat to democracy and not in the general interest of society .	2	0	1	1

Absolutism Score

This score is the sum of weights assigned as indicated to responses to the six items below. When large blocks of questions were left unanswered, the score was called Y. A score of 10 or higher was called X.

The resulting score ran from a theoretical low of 0 (least absolutistic) to a theoretical high of 12 (most absolutistic).

	Agree	Disagree	?	No answer
Slum housing is the cause of most juvenile delinquency. . .	2	0	1	1
Lack of education is the cause of most race prejudice	2	0	1	1
Biased news coverage is mainly due to the pressure of adver- tisers	2	0	1	1
Popular taste would be raised tremendously if the pro- ducers of radio and tele- vision had some decent programming.	2	0	1	1
Class distinctions would dis- appear if economic opportuni- ties were made more equal. . .	2	0	1	1
A community-wide mass-media cam- paign could really sell the public on the goals of the UN	2	0	1	1

Tolerance Scale

To obtain this score, weights were assigned as indicated to responses to the six items below. Their sums were transformed as follows:

15, 14, 11, 10	1
13, 12, 9, 8	2
7, 6, 5, 3, 2	3
4, 1	4
0	5

If there were more than three "no" answers, responses were scored anyway and double-punched with X. If there was no answer to the entire scale, the score was called Y. A final score of 1 indicated greatest tolerance, and of 5, least tolerance

	Agree	Disagree	?	No answer
A person who wants to make a speech in my community against churches and religion should be allowed to speak	1	0	0	0
A book favoring government owner- ship of all the railroads and big industries should be re- moved from the public library if someone in the community suggests this.	0	4	0	0
I would stop buying the soap advertised on a radio program that had an admitted Communist as the singer if someone sug- gested this to me.	0	4	0	0
An admitted Communist should be put in jail.	0	1	0	0

	Agree	Disagree	?	No answer
A book against churches and religion should be removed from the public library if someone in the community suggests this.	0	1	0	0
A person who wants to make a speech in my community favoring government ownership of the railroads and big industries should be allowed to speak.	4	0	0	0

Individual Political Potency Score

This score is the sum of weights assigned to responses to the question below. The answer "A great deal" is given the weight of 2, "A moderate amount" is weighted as 1, and "Hardly anything" as 0.

The resulting sum ran from a theoretical low of 0 (minimum potency) to a theoretical high of 10 (maximum potency).

If the whole question was omitted, the score was not computed. Unanswered parts of the question were scored 0.

In general, do you think that the individual citizen can do a great deal, only a moderate amount, or hardly anything at all about the following matters?

	A great deal	A mod. amount	Hardly anything
Prevention of war	2	1	0
Reduction of corruption in national government	2	1	0

	A great deal	A mod. amount	Hardly anything
Reduction of corruption in local government	2	1	0
Improvement of housing	2	1	0
Improvement of race relations. . .	2	1	0

Group Political Potency Score

This score is the sum of weights assigned to responses to the question below. The answer "A great deal" is given the weight of 2, "A moderate amount" is weighted as 1, and "Hardly anything" as 0.

The resulting sum ran from a theoretical low of 0 (minimum potency) to a theoretical high of 10 (maximum potency).

If the whole question was omitted, the score was not computed. Unanswered parts of the question were scored 0.

How about groups of people, or clubs? Can they do a great deal, only a moderate amount, or hardly anything at all about these matters?

	A great deal	A mod. amount	Hardly anything
Prevention of war.	2	1	0
Reduction of corruption in national government.	2	1	0
Reduction of corruption in local government	2	1	0
Improvement of housing	2	1	0
Improvement of race relations. . .	2	1	0

Ethnocentric Image of Democracy Score

This score is the sum of the weights assigned to responses to the question below.

The resulting sum ran from a theoretical low of 0 (least ethnocentric) to a theoretical high of 9 (most ethnocentric).

If the whole question was omitted, the score was not computed.

In some democracies there are certain customs or laws which you personally might or might not regard as democratic. Look over the following list and check whether each practice appears thoroughly democratic, somewhat undemocratic but tolerable in a democracy, or thoroughly undemocratic but tolerable in a democracy, or thoroughly undemocratic in your personal opinion:

This practice seems to me
 Thor. Undem.but Thor.
 Dem. tolerable Undem.

In Australia, every citizen is required by law to vote. . . .	0	0	1
Until recently, in Sweden, most babies were automatically registered as members of the Lutheran Church, the state religion.	0	0	1
Until recently, in Sweden, the amount of alcohol that a per- son could buy each month was regulated by law.	0	0	1
In France, you must pay for a license in order to have a radio set in your home.	0	0	1
In the United States, all children must be vaccinated against smallpox.	0	0	1

This practice seems to me
 Thor. Undem. but Thor.
 Dem. tolerable Undem.

In Great Britain, under the law, doctors no longer collect their fees from patients but bill the government.	0	0	1
In Norway, any Jesuit is prohib- ited by law from entering the country.	0	0	1
In Japan, all school children wear uniforms.	0	0	1
In the United States, one may legally have only one husband or wife at a time.	0	0	1

Socio-Economic Index and Equivalent NORC Prestige Score for Occupations in the Detailed Classification of the Bureau of the Census: 1950

By: Dr. Otis Dudley Duncan, Associate Director
Population Research and Training Center
University of Chicago
November 1959

(See end of table for explanation of "Notes")

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
<u>Professional, technical, and kindred workers</u>			
Accountants and auditors	78	80	a
Actors and actresses	60	74	
Airplane pilots and navigators	79	81	a
Architects	90	86	a
Artists and art teachers	67	76	b
Athletes	52	71	
Authors	76	80	a
Chemists	79	81	a
Chiropractors	75	79	
Clergymen	52	71	a
College presidents, professors, and instructors (n.e.c.)	84	83	a
Dancers and dancing teachers	45	69	
Dentists	96	93	a
Designers	73	79	
Dietitians and nutritionists	39	67	d
Draftsmen	67	76	
Editors and reporters	82	82	a
Engineers, technical	85	83	c
Aeronautical	87	85	
Chemical	90	87	
Civil	84	83	a
Electrical	84	83	
Industrial	86	84	
Mechanical	82	83	
Metallurgical, and metallurgists	82	82	
Mining	85	83	
Not elsewhere classified	87	85	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Entertainers (n.e.c.).	31	64	
Farm and home management advisors.	83	83	b
Foresters and conservationists . .	48	70	
Funeral directors and embalmers. .	59	74	a
Lawyers and judges	93	89	a
Librarians	60	74	
Musicians and music teachers . . .	52	71	b
Natural scientists (n.e.c.). . . .	80	81	b
Nurses, professional	46	70	
Nurses, student professional . . .	51	71	d
Optometrists	79	81	
Osteopaths	96	93	
Personnel and labor relations workers.	84	83	
Pharmacists.	82	82	
Photographers.	50	71	
Physicians and surgeons.	92	89	a
Radio operators.	69	77	
Recreation and group workers . . .	67	76	b
Religious workers.	56	72	
Social and welfare workers, except group	64	75	a
Social scientists.	81	82	b
Sports instructors and officials .	64	75	
Surveyors	48	70	
Teachers (n.e.c.).	72	78	a
Technicians, medical and dental. .	48	70	
Technicians, testing	53	72	
Technicians (n.e.c.)	62	74	
Therapists and healers (n.e.c.). .	58	73	
Veterinarians.	78	81	
Professional, technical, and kindred workers (n.e.c.)	65	75	
<u>Farmers and farm managers</u>			
Farmers (owners and tenants) . . .	14	53	b
Farm managers.	36	66	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
<u>Managers, officials, and proprietors, exc. farm</u>			
Buyers and department heads, store .	72	78	
Buyers and shippers, farm prod. . .	33	65	
Conductors, railroad	58	73	a
Credit men	74	79	
Floormen and floor managers, store .	50	71	
Inspectors, public administration. .	63	75	c
Federal public adm. and postal service.	72	78	
State public administration. . . .	54	72	
Local public administration. . . .	56	72	
Managers and superintendents, bldg .	32	65	
Officers, pilots, pursers, and engineers, ship.	54	72	
Officials & adm. (n.e.c.), public administration	66	76	c
Federal public adm. and postal service.	84	83	
State public administration. . . .	66	76	
Local public administration. . . .	54	72	
Officials, lodge, society, union, etc.	58	73	b
Postmasters.	60	74	
Purchasing agents and buyers (n.e.c.)	77	80	
Managers, officials, and proprietors (n.e.c.) salaried	68	77	c
Construction	60	74	
Manufacturing.	79	81	
Transportation	71	78	
Telecommunications, and utilities and sanitary services.	76	80	
Wholesale trade.	70	77	
Retail trade	56	72	c
Food and dairy prod. stores, and milk retailing	50	70	
General merchandise & five & ten cent stores.	68	77	
Apparel and accessories stores .	69	77	
Furniture, home furn., & equipment stores	68	77	
Motor vehicles and accessories retailing.	65	75	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Gasoline service stations. . . .	31	65	
Eating and drinking places . . .	39	68	
Hardware, farm implement, and bldg. material retail.	64	75	
Other retail trade	59	74	
Banking and other finance.	85	84	
Insurance and real estate.	84	83	
Business services	80	81	
Automobile repair services and garages.	47	70	
Miscellaneous repair services. . .	53	71	
Personal services.	50	71	
All other industries (incl. not reported).	62	74	
Manager, officials, & propr's (n.e.c.) self employed	48	70	c
Construction	51	71	a
Manufacturing.	61	74	a
Transportation	43	69	
Telecommunications, and utilities and sanitary services.	44	69	
Wholesale trade.	59	74	
Retail trade	43	69	a, c
Food & dairy prod. stores, and milk retailing	33	65	
General merchandise and five & ten cent stores.	47	70	
Apparel & accessories stores . .	65	75	
Furniture, home furn., and equipment stores	59	73	
Motor vehicles and acc. retail .	70	77	
Gasoline service stations. . . .	33	65	
Eating and drinking places . . .	37	67	b
Hardware, farm implement, & bldg. material retail	61	74	
Other retail trade	49	70	
Banking and other finance.	85	84	
Insurance and real estate.	76	80	
Business services.	67	76	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Automobile repair services and garages.	36	66	
Miscellaneous repair services. . .	34	65	
Personal services.	41	68	
All other industries (incl. not reported).	49	70	
<u>Clerical and kindred workers</u>			
Agents (n.e.c.).	68	77	
Attendants and assistants, library .	44	69	d
Attendants, physician's and dentist's office	38	67	d
Baggagemen, transportation	25	61	
Bank tellers	52	71	
Bookkeepers.	51	71	a
Cashiers	44	69	
Collectors, bill and account	39	68	
Dispatchers and starters, vehicle. .	40	68	
Express messengers and railway mail clerks.	67	76	
Mail carriers.	53	71	a
Messengers and office boys	28	63	
Office machine operators	45	69	
Shipping and receiving clerks. . . .	22	60	
Stenographers, typists, and secretaries.	61	74	
Telegraph messengers	22	59	
Telegraph operators.	47	70	
Telephone operators.	45	69	
Ticket, station, and express agents.	60	74	
Clerical and kindred workers (n.e.c.)	44	69	
<u>Sales Workers</u>			
Advertising agents and salesmen. . .	66	76	
Auctioneers.	40	68	
Demonstrators.	35	66	
Hucksters and peddlers	8	46	
Insurance agents and brokers	66	76	a
Newsboys	27	63	
Real estate agents and brokers . . .	62	74	
Stock and bond salesmen.	73	79	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Salesmen and sales clerks (n.e.c.) .	47	70	c
Manufacturing.	65	75	
Wholesale trade.	61	74	b
Retail trade	39	67	a
Other industries (incl. not reported).	50	71	
<u>Craftsmen, foremen, and kindred workers</u>			
Bakers	22	60	
Blacksmiths.	16	55	
Boilermakers	33	65	
Bookbinders.	39	67	
Brickmasons, stonemasons, and tile setters.	27	62	
Cabinetmakers.	23	60	
Carpenters	19	58	a
Cement and concrete finishers. . . .	19	58	
Compositors and typesetters.	52	71	
Cranemen, derrickmen, and hoistmen .	21	59	
Decorators and window dressers . . .	40	68	
Electricians	44	69	a
Electrotypers and stereotypers . . .	55	72	
Engravers, except photoengravers . .	47	70	
Excavating, grading, and road machinery operators.	24	61	
Foremen (n.e.c.)	49	70	c
Construction	40	68	
Manufacturing	53	71	c
Metal industries	54	72	
Machinery, including electrical. . .	60	74	
Transportation equipment	66	76	
Other durable goods.	41	68	
Textiles, textile products, and apparel.	39	68	
Other nondurable goods (incl. not specified mfg.).	53	72	
Railroads and railway express serv. .	36	66	
Transportation, except railroad. . .	45	69	
Telecommunications, and utilities and sanitary services. . .	56	73	
Other industries (incl. not reported).	44	69	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Forgemen and hammermen	23	60	
Furriers	39	67	
Glaziers	26	62	
Heat treaters, annealers, and temperers.	22	60	
Inspectors, scalers, and graders, log & lumber	23	60	
Inspectors (n.e.c.).	41	68	c
Construction	46	70	
Railroads and railway express serv.	41	68	
Transport, exc. r.r., communication, & other public util.	45	69	
Other industries (incl. not reported).	38	67	
Jewelers, watchmakers, goldsmiths, and silversmiths	36	66	
Job setters, metal	28	63	
Linemen and servicemen, telegraph, telephone, and power	49	70	
Locomotive engineers	58	73	a
Locomotive firemen	45	69	
Loom fixers.	10	49	
Machinists	33	65	a
Mechanics and repairmen.	25	61	c
Airplane	48	70	
Automobile	19	58	a
Office machine	36	66	
Radio and television	36	66	
Railroad and car shop	23	60	
Not elsewhere classified	27	62	
Millers, grain, flour, feed, etc..	19	58	
Millwrights.	31	65	
Molders, metal	12	51	
Motion picture projectionists.	43	69	
Opticians, and lens grinders and polishers.	39	67	
Painters, construction and maintenance.	16	56	
Paperhangers	10	48	
Pattern and model makers, except paper.	44	69	
photoengravers and lithographers	64	75	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Piano and organ tuners and repairmen.	38	67	a
Plasterers	25	61	
Plumbers and pipe fitters.	34	66	
Pressmen and plate printers, printing	49	70	
Rollers and roll hands, metal . . .	22	60	
Roofers and slaters.	15	54	
Shoemakers and repairs, except factory.	12	51	
Stationary engineers	47	70	
Stone cutters and stone carvers. . .	25	61	
Structural metal workers	34	66	
Tailors and tailoresses.	23	60	
Tinsmiths, coppersmiths, and sheet metal workers.	33	65	
Toolmakers, and die makers and setters.	50	71	
Upholsterers	22	60	
Craftsmen and kindred workers (n.e.c.)	32	65	
Members of the armed forces.	18	56	
<u>Operatives and kindred workers</u>			
Apprentices.	35	66	c
Auto mechanics	25	61	
Bricklayers and masons	32	65	
Carpenters	31	64	
Electricians	37	67	
Machinists and toolmakers.	41	68	
Mechanics, except auto	34	66	
Plumbers and pipe fitters.	33	65	
Building trades (n.e.c.)	29	63	
Metalworking trades (n.e.c.) . . .	33	65	
Printing trades.	40	68	
Other specified trades	31	64	
Trade not specified.	39	67	
Asbestos and insulation workers. . .	32	65	
Attendants, auto serv. & parking . .	19	58	
Blasters and powdermen	11	50	
Boatmen, canalmen, and lock keepers.	24	61	
Brakemen, railroad	42	69	
Bus drivers.	24	61	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Chainmen, rodmen, and axmen, surveying.	25	61	
Conductors, bus and street railway.	30	64	
Deliverymen and routemen	32	65	
Dressmakers and seamstresses, except factory	23	60	
Dyers.	12	51	
Filers, grinders, and polishers, metal.	22	59	
Fruit, nut, & veg. graders and packers, exc. factory.	10	48	
Furnacemen, smeltermen, and pourers.	18	57	
Heaters, metal	29	64	
Laundry and dry cleaning operatives.	15	54	b
Meat cutters, except slaughter and packing house.	29	63	
Milliners.	46	70	d
Mine operatives and laborers (n.e.c.)	10	49	c
Coal mining.	2	25	a
Crude petroleum and natural gas extraction	38	67	
Mining and quarrying, except fuel.	12	51	
Motormen, mine, factory, logging camp, etc.	3	28	
Motormen, street, subway, and elevated railway	34	65	
Oilers and greasers, except auto	15	54	
Painters, except const. & maint.	18	57	
Photographic process workers	42	68	
Power station operators.	50	71	
Sailors and deck hands	16	55	
Sawyers.	5	39	
Spinners, textile.	5	39	
Stationary firemen	17	56	
Switchmen, railroad.	44	69	
Taxicab drivers and chauffeurs	10	49	a
Truck and tractor drivers.	15	54	a
Weavers, textile	6	42	
Welders and flame-cutters.	24	61	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Operatives & kindred workers (n.e.c.)	18	57	c
Manufacturing.	17	56	a, c
Durable goods			
Sawmills, planing mills, & misc. wood products.	7	44	c
Sawmills, planing mills and mill work.	7	44	
Miscellaneous wood products.	9	46	
Furniture and fixtures	9	48	
Stone, clay, and glass prod.	17	56	c
Glass and glass prod.. . . .	23	60	
Cement, & concrete, gypsum, and plaster products	10	48	
Structural clay products	10	48	
Pottery and related prod.. . . .	21	59	
Misc. nonmetallic mineral and stone products	15	54	
Metal industries	16	55	c
Primary metal indus.	15	54	
Blast furnaces steel works and rolling mills.	17	56	
Other primary iron and steel industries	12	51	
Primary nonferrous ind.. . . .	15	54	
Fabricated metal ind. (incl. not spec. metal)	16	55	
Fabricated steel prod.	16	55	
Fabricated nonferrous metal products	15	54	
Not specified metal ind.	14	53	d
Machinery, except electrical	22	60	c
Agricultural mach. & tractors.	21	59	
Office & store mach. and devices	31	64	
Electrical machinery, equipment, and supplies	26	62	
Transportation equipment	23	60	c
Motor vehicles and motor vehicle equipment.	21	59	
Aircraft and parts	34	65	
Ship & boat bldg. & repair.. . . .	16	55	
Railroad & misc. transportation equipment	23	60	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Professional & photographic equip., & watches.	29	63	c
Professional equipment and supplies	23	60	
Photographic equipment and supplies	40	68	
Watches, clocks, & clock-work-operated devices. . .	28	63	
Miscellaneous manufacturing industries	16	55	
Nondurable goods			
Food and kindred products. . .	16	55	c
Meat products.	16	55	
Dairy products	22	59	
Canning & preserving fruits, vegetables & sea foods . .	9	47	
Grain-mill products.	14	53	
Bakery products.	15	54	
Confectionery & related prod. .	12	51	
Beverage industries.	19	58	
Misc. food preparations and kindred products	11	50	
Not specified food ind. . .	19	57	
Tobacco manufactures	2	26	
Textile mill products	6	42	c
Knitting mills	21	59	
Dyeing & finishing textiles, exc. knit goods.	8	45	
Carpets, rugs, and other floor coverings.	14	53	
Yarn, thread, & fabric mills	2	26	
Miscellaneous textile mill products	10	49	
Apparel and other fabricated textile products	21	59	c
Apparel and accessories. . .	22	60	
Miscellaneous fabricated textile products	17	56	
Paper and allied products. . .	19	57	c
Pulp, paper, & paperboard mills.	19	58	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Paperboard containers and boxes.	17	56	
Miscellaneous paper and pulp products.	19	58	
Printing, publishing and allied industries.	31	64	
Chemicals and allied products.	20	59	
Synthetic fibers	9	47	
Drugs and medicines.	26	62	
Paints, varnishes, and related products	15	54	
Miscellaneous chemicals and allied products.	23	60	
Petroleum and coal products.	51	71	c
Petroleum refining	56	72	
Miscellaneous petroleum and coal products.	14	53	
Rubber products.	22	60	
Leather and leather products	16	55	c
Leather: tanned, curried, and finished	10	49	
Footwear, except rubber,	9	47	
Leather products, except footwear	14	53	
Not specified manufacturing industries	16	55	
Nonmanufacturing industries (incl. not reported).	18	57	c
Construction	18	57	
Railroads and railway express service	15	54	
Transportation, except railroad.	23	60	
Telecommunications, & utilities and sanitary services.	21	59	
Wholesale and retail trade	17	56	
Business and repair services	19	57	
Personal services.	11	50	
Public administration.	17	56	
All other industries (incl. not reported).	20	59	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
<u>Private household workers</u>			
Housekeepers, private household. . .	19	58	c
Living in.	10	49	d
Living out	21	59	
Laundresses, private household . . .	12	51	d
Living in.	..	..	d
Living out	12	51	d
Private household workers (n.e.c.) .	7	44	c
Living in.	12	51	
Living out	6	42	
<u>Service workers, except private household</u>			
Attendants, hospital and other institution.	13	52	
Attendants, professional and personal service (n.e.c.).	26	62	
Attendants, recreation and amusement	19	58	
Barbers, beauticians, & manicurists.	17	56	a
Bartenders	19	58	a
Boarding and lodging house keepers .	30	64	
Bootblacks	8	46	a
Charwomen and cleaners	10	48	
Cooks, except private household. . .	15	54	a
Counter and fountain workers	17	56	a
Elevator operators	10	48	
Firemen, fire protection	37	67	
Guards, watchmen, and doorkeepers. .	18	57	a
Housekeepers and stewards, except private household.	31	65	
Janitors and sextons	9	47	a
Marshals and constables.	21	59	
Midwives	37	67	d
Policemen and detectives	39	68	c
Government	40	68	a
Private.	36	66	
Porters.	4	36	
Practical nurses	22	59	
Sheriffs and bailiffs.	34	66	
Ushers, recreation and amusement . .	25	61	
Waiters and waitresses	16	55	a
Watchmen (crossing) and bridge tenders.	17	56	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Service workers, except private household (n.e.c.)	11	50	
<u>Farm Laborers and foremen</u>			
Farm foremen	20	59	
Farm laborers, wage workers.	6	42	b
Farm laborers, unpaid family workers	17	56	
Farm service laborers, self-employed	22	60	
<u>Laborers, except farm and mine</u>			
Fishermen and oystermen.	10	49	b
Garage laborers, and car washers and greasers	8	46	
Gardeners, except farm, and grounds-keepers.	11	50	
Longshoremen and stevedores.	11	50	b
Lumbermen, raftsmen, and wood choppers	4	36	b
Teamsters.	8	46	
Laborers (n.e.c.)			
Manufacturing.	8	45	c
Durable goods			
Sawmills, planing mills, & misc. wood products.	3	33	c
Sawmills, planing mills, and mill work.	3	34	
Misc. wood products.	2	23	
Furniture and fixtures	5	40	
Stone, clay, & glass prod.	7	43	c
Glass & glass products	14	53	
Cement, & concrete, gypsum, and plaster products	5	39	
Structural clay products	5	39	
Pottery & related products	7	44	
Misc. nonmetallic mineral and stone products	5	38	
Metal industries	7	44	c
Primary metal industries	7	44	c
Blast furnaces, steel works, and rolling mills	9	46	
Other primary iron and steel industries	4	37	
Primary nonferrous ind.	6	42	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Fabricated metal ind. (incl. not spec. metal)	7	44	c
Fabricated steel products.	7	44	
Fabricated nonferrous metal products	10	49	
Not specified metal ind.	9	46	d
Machinery, except electrical	11	50	c
Agricultural machinery and tractors	14	53	
Office and store machines and devices.	17	56	d
Miscellaneous machinery.	10	48	
Electrical machinery, equipment, and supplies	14	53	
Transportation equipment	11	49	c
Motor vehicles and motor vehicle equipment.	13	52	
Aircraft and parts	15	54	
Ship and boat bldg. & repairing	2	28	
Railroad and miscellaneous transportation equipment	8	45	
Professional and photographic equipment, and watches	11	50	
Professional equipment and supplies	10	49	d
Photographic equipment and supplies	16	55	d
Watches, clocks, and clock-work-operated devices.	..	..	d
Miscellaneous manufacturing ind.	12	50	
Nondurable goods			
Food and kindred products.	9	47	c
Meat products.	8	45	
Dairy products	13	52	
Canning & preserving fruits, vegetables, and sea foods.	6	42	
Grain-mill products.	6	42	
Bakery products.	10	48	
Confectionery and related prod.. . . .	10	48	
Beverage industries.	16	55	
Misc. food preparations and kindred products	5	40	
Not specified food industries.	14	53	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Tobacco manufactures	0	20	f
Textile mill products.	3	33	c
Knitting mills	4	36	d
Dyeing and finishing textiles, exc. knit goods.	9	46	d
Carpets, rugs, and other floor coverings.	14	53	
Yarn, thread, and fabric mills .	1	22	
Miscellaneous textile mill prod.	6	41	d
Apparel and other fabricated textile products	9	47	c
Apparel and accessories.	11	49	
Miscellaneous fabricated textile products	6	42	d
Paper and allied products.	7	43	c
Pulp, paper, and paperboard mills.	6	41	
Paperboard containers and boxes.	10	48	
Miscellaneous paper & pulp prod.	8	45	
Printing, publishing, and allied industries	23	60	
Chemicals and allied products. . .	8	45	c
Synthetic fibers	4	37	
Drugs and medicines.	22	60	d
Paints, varnishes, and related products	8	46	
Miscellaneous chemicals and allied products.	8	45	
Petroleum and coal products. . . .	22	60	c
Petroleum refining	26	62	
Misc. petroleum & coal products.	3	28	
Rubber products.	12	51	
Leather and leather products . . .	6	43	c
Leather: tanned, curried, and finished	2	28	
Footwear, except rubber.	10	49	
Leather prod., except footwear .	12	51	d
Not specified manufacturing ind. . .	8	45	

Occupations, by major occupation group	Socio-econ. index	Equiv. NORC prestige score	Notes
Nonmanufacturing industries (incl. not reported).	7	44	b, c
Construction	7	43	
Railroads & railway express serv..	3	34	
Transportation, except railroad. .	9	47	
Telecommunications, and utilities and sanitary services.	6	43	
Wholesale and retail trade	12	51	
Business and repair services . . .	9	47	
Personal services.	5	39	
Public administration.	7	43	
All other industries (incl. not reported).	6	41	
Occupation not reported.	19	57	

Explanation of Notes:

- a. One of 45 occupations used in deriving socio-economic index from predictors of NORC prestige ratings.
- b. One of 16 occupations poorly or partially matched to NORC titles.
- c. Occupation omitted from statistical analysis of 425 detailed occupations, because it is a grouping of specific titles listed below it.
- d. Occupation omitted from statistical analysis of 425 detailed occupations because census data are based on fewer than 100 sample cases (corresponding to an estimated population of fewer than 3,000 males).
- e. Occupation omitted from statistical analysis. The census data do not pertain to current members of the armed forces, but to currently unemployed civilians whose last occupational experience was in the armed forces. The data for this occupation do not, therefore, describe soldiers, sailors, and related occupations.
- f. The computed value of the socio-economic index for this occupation was -3. To avoid the inconvenience of having an index value with a negative sign, this index value was arbitrarily changed to zero, which remains the lowest value in the table.

APPENDIX C

TABLES

Table 1. Number of students in control and experimental groups by class hour and sex at time of pre and post testing

Group	Before			After		
	Male	Female	Total	Male	Female	Total
Control						
2nd Hour	11	12	23	9	9	18
6th Hour	9	16	25	8	16	24
Total	20	28	48	17	25	42
Experimental						
1st Hour	15	12	27	14	10	24
3rd Hour	18	10	28	18	10	28
Total	33	22	55	32	20	52

Table 2. Experimental and control groups compared as to grade point averages: mean scores given

<u>Experimental Classes</u>	<u>1st Hour</u>	<u>3rd Hour</u>	<u>Total</u>
7th & 8th Grade	N = 26	N = 28	N = 54
Total G.P.A.*	1.9	2.0	1.95
7th & 8th Grade	N = 26	N = 28	N = 54
Soc. Stud. G.P.A.	1.81	1.88	1.84
<u>Control Classes</u>	<u>2nd Hour</u>	<u>6th Hour</u>	<u>Total</u>
7th & 8th Grade	N = 24	N = 23	N = 47
Total G.P.A.*	2.39	2.0	2.2
7th & 8th Grade	N = 24	N = 23	N = 47
Soc. Stud. G.P.A.	2.31	1.86	2.08

*Subjects included in the computations were English, mathematics, science, and social studies. The mean scores which are given are based on a 4 point scale with 4 points for an A, 3 points for a B, 2 points for a C, and 1 point for a D.

Table 3. Control group versus experimental group as to intelligence quotient scores*

Item	Control Group N = 47 $\bar{X}$	Experimental Group N = 55 $\bar{X}$
Intelligence Quotient Score	108.23	100.85

*The most recent California Mental Maturity test was used for each student. In most cases this was taken during their sixth grade year, 1960-61.

Table 4. Control group versus experimental group: intelligence quotient scores given by class hours*

Item	Control Group		Experimental Group	
	2nd Hour N = 23 $\bar{X}$	6th Hour N = 24 $\bar{X}$	1st Hour N = 27 $\bar{X}$	3rd Hour N = 28 $\bar{X}$
Intelligence Quotient Score	108.35	108.13	102.89	98.89

*The most recent California Mental Maturity test was used for each student. In most cases this was taken during their sixth grade year, 1960-61.

Table 5. Control group versus experimental group as to socio-economic background: occupation of major wage earner in home in which student resided*

Item	Control Group N = 47 $\bar{X}$	Experimental Group N = 55 $\bar{X}$
Duncan Socio-Economic Index	35.74	27.51
Equivalent NORC Prestige Score . . .	65.64	58.96

*See Appendix B, pp. 159-175 for conversion table used.

Table 6. Control group versus experimental group as to socio-economic background: occupation of major wage earner in home in which student resided, according to class hours*

Item	Control Group		Experimental Group	
	2nd Hour N = 23 $\bar{X}$	6th Hour N = 24 $\bar{X}$	1st Hour N = 27 $\bar{X}$	3rd Hour N = 28 $\bar{X}$
Duncan Socio-Economic Index	38.78	32.83	24.96	29.96
Equivalent NORC Prestige Score . .	69.91	61.54	58.00	59.89

*See Appendix B, pp. 159-175 for conversion table used.

Table 7. Control group versus experimental group as to reading vocabulary and comprehension scores*

Item	Control Group N = 47 $\bar{X}$	Experimental Group N = 55 $\bar{X}$
Reading Vocabulary	9.04	8.11
Reading Comprehension	9.35	8.70

*The California Reading Test was given to the students in October, 1964. At that time the students should have reached a reading vocabulary and comprehension level of 9.2.

Table 8. Control group versus experimental group as to reading vocabulary and comprehension scores given by class hours*

Item	Control Group		Experimental Group	
	2nd Hour N = 23 $\bar{X}$	6th Hour N = 24 $\bar{X}$	1st Hour N = 27 $\bar{X}$	3rd Hour N = 28 $\bar{X}$
Reading Vocabulary	8.9	9.17	8.05	8.16
Reading Comprehension	9.39	9.31	8.48	8.92

*The California Reading Test was given to the students in October, 1964. At that time the students should have reached a reading vocabulary and comprehension level of 9.2.

Table 9. Control group versus experimental group: net differences between students' before and after aggregate scores

	Before	After	Change	Direction of Change
<u>Social Questions I</u>				
Authoritarianism				
Control Group (N=42)	2515	2523	+8	More authoritarian
Exp. Group (N=52)	2539	2976	+437	More authoritarian
Democracy				
Control Group (N=42)	2903	2886	-17	More democratic
Exp. Group (N=52)	3442	3443	-99	More democratic
Stereotypy				
Control Group (N=42)	1368	1366	-2	Less use of stereo.
Exp. Group (N=52)	1678	1655	-23	Less use of stereo.
Political-Economic Conservatism				
Control Group (N=42)	1796	1728	-68	Less conservative
Exp. Group (N=52)	2267	2239	-28	Less conservative
<u>Social Questions II</u>				
Constitution				
Control Group (N=42)	304	308	+4	Less pro-Constitution
Exp. Group (N=52)	387	401	+14	Less pro-Constitution
Civil Rights				
Control Group (N=42)	83	77	-6	Less Discrimination
Exp. Group (N=52)	163	125	-38	Less Discrimination
Action Apathy				
Control Group (N=42)	230	248	+18	More apathetic
Exp. Group (N=52)	295	300	+5	More apathetic
Civil Liberties "A"				
Control Group (N=42)	222	182	-40	More libertarian
Exp. Group (N=52)	317	277	-40	More libertarian

Table 9--Continued

Score	Before	After	Change	Direction of Change
Civil Liberties "B"				
Control Group (N=42)	146	137	-9	More libertarian
Exp. Group (N=52)	180	189	+9	Less libertarian
Anomie				
Control Group (N=42)	209	191	-18	Less anomie
Exp. Group (N=52)	275	259	-16	Less anomie
Absolutism				
Control Group (N=42)	282	310	+28	More absolutistic
Exp. Group (N=52)	353	362	+9	More absolutistic
Tolerance				
Control Group (N=42)	90	90	-0	No change
Exp. Group (N=52)	130	123	-7	More tolerant
Individual Political Potency				
Control Group (N=42)	177	277	+100	More potency
Exp. Group (N=52)	218	280	+62	More potency
Group Political Potency				
Control Group (N=42)	320	327	+7	More potency
Exp. Group (N=52)	371	369	-2	Less potency
Ethnocentric Image of Democracy				
Control Group (N=42)	133	121	-12	Less ethnocentric
Exp. Group (N=52)	184	158	-26	Less ethnocentric

Table 10. Control group versus experimental group: before and after measurement of Occupational Aspiration, Self-Concept, Critical Thinking, Social Questions I, and Social Questions II

Scale	Control Group			Experimental Group		
	Before N = 48 $\bar{X}$	After N = 42 $\bar{X}$	Change	Before N = 55 $\bar{X}$	After N = 52 $\bar{X}$	Change
<u>General</u>						
Occupational Asp.*	49.10	49.88	+ .78	48.84	50.42	+1.58
Self-Concept	28.02	28.64	+ .62	26.11	26.35	+ .24
Critical Thinking	18.00	20.59	+2.59	17.76	17.23	- .53
<u>Social Questions I</u>						
Authoritarianism	59.63	60.07	+ .44	56.42	57.23	+ .81
Democracy	68.48	68.71	+ .23	66.29	64.29	-2.00
Stereotypy	32.67	32.52	- .15	31.69	31.83	+ .14
Political-Economic Conservatism	42.69	41.14	-1.55	43.31	43.06	- .25
<u>Social Questions II</u>						
Constitution	7.27	7.33	+ .06	7.33	7.71	+ .38
Civil Rights	2.04	1.83	- .21	2.76	2.40	- .36
Action Apathy	5.56	5.90	+ .34	5.67	5.66	+ .10
Civil Liberties "A"	5.27	4.33	- .94	5.98	5.33	- .65
Civil Liberties "B"	3.60	3.26	- .34	3.46	3.63	+ .17
Anomie	5.24	4.55	- .70	5.13	4.98	- .15
Absolutism	6.63	7.38	+ .75	6.64	6.96	+ .32
Tolerance	2.23	2.14	- .09	2.33	2.37	+ .04
Individual Political Potency	4.32	6.60	+2.28	4.20	5.38	+1.18
Group Political Potency	7.60	7.79	+ .19	7.09	7.10	+ .01
Ethnocentric Image of Democracy	3.23	2.88	- .35	3.49	3.04	- .45

*T-Scores as converted from raw scores. See pp. 140 and 141.

Table 11. Control group versus experimental group according to class hours: before and after measurement of Occupational Aspirations, Self-Concept and Social Questions I

Scale	Control	Group	Experimental Group	
	Second Hour Pre N = 23 Post N = 18 $\bar{X}$	Sixth Hour Pre N = 25 Post N = 24 $\bar{X}$	First Hour Pre N = 27 Post N = 24 $\bar{X}$	Third Hour Pre N = 28 Post N = 28 $\bar{X}$
<u>General</u>				
Occupational Asp.*				
Before	48.83	49.36	49.59	48.11
After	50.44	48.71	50.79	50.11
Change	+1.61	- .65	+1.20	+2.00
Self-Concept				
Before	28.70	27.40	25.44	26.75
After	29.50	28.00	26.29	26.39
Change	+ .80	+ .60	+ .85	- .36
Critical Thinking				
Before	19.17	16.16	16.70	18.79
After	22.35	19.23	15.21	19.25
Change	+3.18	+2.07	-1.49	+ .46
<u>Social Questions I</u>				
Authoritarianism				
Before	58.61	60.56	57.70	55.18
After	59.89	60.21	59.96	54.89
Change	+1.28	- .35	+2.26	- .29
Democracy				
Before	68.22	68.72	67.15	65.46
After	66.94	70.04	62.33	65.96
Change	-1.28	+1.32	-4.82	+ .50
Stereotypy				
Before	31.78	33.44	32.74	30.68
After	30.89	33.75	32.92	30.89
Change	- .89	+ .31	+ .18	+ .21
Pol.-Econ. Cons.				
Before	43.35	42.08	44.15	42.46
After	42.89	39.83	43.63	42.57
Change	- .46	-2.25	- .52	+ .11

*T-Scores as converted from raw scores. See pp. 140 and 141.

Table 12. Control group versus experimental group according to class hours: before and after measurement of Social Questions II

Scale	Control Group		Experimental Group	
	Second Hour Pre N = 23 Post N = 18 $\bar{X}$	Sixth Hour Pre N = 25 Post N = 24 $\bar{X}$	First Hour Pre N = 27 Post N = 24 $\bar{X}$	Third Hour Pre N = 28 Post N = 28 $\bar{X}$
Social Questions II				
Constitution				
Before	7.26	7.28	7.81	6.86
After	7.06	7.54	7.63	7.79
Change	-.20	+.26	-.18	+.93
Civil Rights				
Before	2.26	1.76	2.67	2.86
After	1.72	1.92	2.17	2.61
Change	-.54	+.16	-.50	-.25
Action Apathy				
Before	5.30	3.80	5.63	5.71
After	5.33	6.33	6.33	5.46
Change	+.03	+2.53	+.70	-.25
Civil Liberties "A"				
Before	5.52	5.04	6.33	5.64
After	3.94	4.63	5.33	5.32
Change	-1.58	-.41	-1.00	-.32
Civil Liberties "B"				
Before	4.08	3.16	3.33	3.57
After	3.00	3.46	4.04	3.29
Change	-1.08	+.30	+.71	-.28
Anomie				
Before	5.48	5.04	4.96	5.28
After	3.72	5.17	4.63	5.29
Change	-1.76	+.13	-.33	+.01
Absolutism				
Before	6.96	6.32	6.74	6.54
After	7.39	7.38	7.38	6.61
Change	+.43	+1.06	+.64	+.70
Tolerance				
Before	2.22	2.24	2.56	2.11
After	2.17	2.13	2.46	2.29
Change	-.05	-.11	-.10	-.18

Table 13. Control group versus experimental group according to class hours: before and after measurement of Individual Political Potency, Group Political Potency and Ethnocentrism

Scale	Control Group		Experimental Group	
	Second Hour Pre N = 23 Post N = 18 $\bar{X}$	Sixth Hour Pre N = 25 Post N = 24 $\bar{X}$	First Hour Pre N = 27 Post N = 24 $\bar{X}$	Third Hour Pre N = 28 Post N = 28 $\bar{X}$
Individual Political Potency				
Before	3.87	4.72	4.70	3.79
After	6.67	6.54	5.79	5.04
Change	+2.80	+1.82	+1.09	+1.25
Group Political Potency				
Before	7.61	7.60	7.11	7.07
After	8.17	7.50	7.54	6.71
Change	+.56	-.10	+.43	-.36
Ethnocentric Image of Democracy				
Before	3.22	3.24	3.11	3.86
After	2.72	3.00	3.08	3.00
Change	-.50	-.24	-.03	-.86

Table 14. Control group versus experimental group: before and after differences as to percent of students improved, the same, or worsened

Scale	Control Group			Experimental Group		
	Improv.	Same	Worsen.	Improv.	Same	Worsen.
<u>General</u>						
Occupational Asp.	100.00			100.00		
Self-Concept	47.62	11.91	40.47	51.92	11.54	36.54
Critical Think.	37.50	8.33	41.67	45.45	11.91	43.64
<u>Social Questions I</u>						
Authoritarianism	57.14	4.76	38.10	51.92	00.00	48.08
Democracy	45.24	2.38	52.38	59.61	1.92	38.46
Stereotypy	40.48	7.14	52.38	48.08	5.77	46.15
Pol.-Economic Conservatism	59.53	9.52	30.95	50.00	3.85	46.15
<u>Social Questions II</u>						
Constitution	42.86	23.81	35.72	40.38	15.38	44.23
Civil Rights	38.10	42.86	19.05	42.31	26.92	30.77
Action Apathy	33.33	14.29	52.38	38.46	17.31	44.23
Civil Liberties "A"	59.53	14.29	26.19	51.92	15.38	32.69
Civil Liberties "B"	47.62	16.67	35.72	30.77	26.92	42.31
Anomie	47.62	14.29	38.10	48.08	15.38	36.54
Absolutism	33.33	9.52	57.14	48.08	11.54	40.38
Tolerance	33.33	23.81	42.86	30.77	30.77	38.46
Individual Political Potency	71.43	14.29	14.29	63.46	11.54	25.00
Group Political Potency	45.24	30.95	38.10	38.46	25.00	36.54
Ethnocentric Image of Democracy	40.48	33.33	26.19	42.31	30.77	26.92

Table 15. Mean scores of control and experimental groups as to Information Tests "A," "B," and "C"*

	Information Test Based on Traditional Approach			Information Test "C" Based on Experimental Approach
	Vocational Education Test "A"	Citizenship Education Test "B"	Total	
Control Group (N = 42)	20.08	18.68	38.76	36.58
Experimental Group (N = 52)	16.91	17.18	34.09	38.38

*Maximum score possible on Information Test "A" was 25; maximum score possible on Information Test "B" was 25; maximum score possible on Information Test "C" was 50.

Table 16. Control group versus experimental group: questionnaire results indicating students' rating of activities as to interest

Activity	Not At All Interesting (%)	Not Interesting (%)	Interesting (%)	Very Interesting (%)	Not Done In Our Class (%)
Filling Out Pupil Profile Sheet					
Exp. Group (N = 54)	3.70	35.19	51.85	5.56	3.70
Control G. (N = 47)	0.00	19.15	65.96	14.89	0.00
Class Discussions					
Exp. Group (N = 54)	1.85	00.00	57.51	40.74	0.00
Control G. (N = 47)	2.13	14.89	68.09	12.77	2.13
Reading Assigned Materials					
Exp. Group (N = 54)	7.41	25.93	61.11	5.56	0.00
Control G. (N = 47)	10.64	57.45	29.79	2.13	0.00
Watching Films					
Exp. Group (N = 54)	0.00	1.85	33.33	62.96	1.85
Control G. (N = 47)	0.00	4.26	63.84	31.91	0.00
Field Trip(s)					
Exp. Group (N = 54)	0.00	0.00	9.26	88.89	1.85
Control G. (N = 47)	0.00	0.00	14.89	68.08	17.02
Individual Projects					
Exp. Group (N = 54)	7.41	12.96	59.24	20.37	0.00
Control G. (N = 47)	2.13	21.28	53.19	19.15	4.26
Current Events					
Exp. Group (N = 54)	3.70	18.52	50.00	12.96	14.81
Control G. (N = 47)	2.13	40.43	31.91	21.28	4.26

Table 16--Continued

Activity	Not At All Interesting (%)	Not Interesting (%)	Interesting (%)	Very Interesting (%)	Not Done In Our Class (%)
Writing Papers Exp. Group (N = 54) Control G. (N = 47)	14.81 6.38	40.74 42.55	37.04 42.55	3.70 8.51	3.70 0.00
Thinking about Careers Exp. Group (N = 54) Control G. (N = 47)	1.85 2.13	5.56 4.26	46.30 38.30	42.59 55.32	3.70 0.00
Making Decisions Concerning High School Exp. Group (N = 54) Control G. (N = 47)	1.85 0.00	11.11 2.13	48.15 53.19	38.89 44.68	0.00 0.00
Learning to Understand Myself Exp. Group (N = 54) Control G. (N = 47)	3.70 2.13	9.26 14.89	37.04 59.57	44.44 21.28	5.56 2.13
Group Projects Exp. Group (N = 54) Control G. (N = 47)	5.56 2.13	14.81 12.77	53.70 61.70	22.22 23.40	3.70 0.00
Role Playing Exp. Group (N = 54) Control G. (N = 47)	7.41 0.00	20.37 10.64	38.89 27.66	33.33 10.64	0.00 51.06
Listening to Tapes Exp. Group (N = 54) Control G. (N = 47)	12.96 4.26	25.93 6.38	53.70 10.64	5.56 10.64	1.85 68.09

Table 17. Control group versus experimental group: questionnaire results indicating students' rating of activities as to value

Activity	Of No Value (%)	Of Little Value (%)	Of Value (%)	Of Great Value (%)	Not Done In Our Class (%)
Filling Out Pupil Profile Sheet					
Exp. Group (N = 54)	3.70	31.48	48.15	12.96	3.70
Control G. (N = 47)	2.13	17.02	46.81	34.04	0.00
Class Discussions					
Exp. Group (N = 54)	0.00	3.70	48.15	48.15	0.00
Control G. (N = 47)	0.00	8.51	65.96	25.53	0.00
Reading Assigned Materials					
Exp. Group (N = 54)	3.70	16.67	64.82	14.81	0.00
Control G. (N = 47)	4.26	27.66	57.45	10.64	0.00
Watching Films					
Exp. Group (N = 54)	1.85	5.56	42.59	50.00	0.00
Control G. (N = 47)	0.00	10.64	63.84	25.53	0.00
Field Trip(s)					
Exp. Group (N = 54)	0.00	1.85	24.08	72.22	1.85
Control G. (N = 47)	0.00	4.26	19.15	55.32	21.28
Individual Projects					
Exp. Group (N = 54)	5.56	14.81	50.00	22.78	1.85
Control G. (N = 47)	2.13	17.02	46.81	29.79	4.26
Current Events					
Exp. Group (N = 54)	5.56	16.67	42.59	24.08	11.11
Control G. (N = 47)	2.13	34.04	38.30	17.02	8.51

Table 17--Continued

Activity	Of No Value (%)	Of Little Value (%)	Of Value (%)	Of Great Value (%)	Not Done In Our Class (%)
Writing Papers Exp. Group (N = 54) Control G. (N = 47)	11.11 4.26	29.63 34.04	46.30 44.68	11.11 14.89	1.85 2.13
Thinking About Careers Exp. Group (N = 54) Control G. (N = 47)	3.70 0.00	5.56 8.51	37.04 42.55	51.85 48.94	1.85 0.00
Making Decisions Con- cerning High School Exp. Group (N = 54) Control G. (N = 47)	1.85 0.00	3.70 4.26	38.89 25.53	53.70 70.21	1.85 0.00
Learning to Understand Myself Exp. Group (N = 54) Control G. (N = 47)	1.85 2.13	7.41 10.64	38.89 42.55	50.00 44.68	1.85 0.00
Group Projects Exp. Group (N = 54) Control G. (N = 47)	5.56 4.26	7.41 21.28	61.11 57.45	22.22 17.02	3.70 0.00
Role Playing Exp. Group (N = 54) Control G. (N = 47)	5.56 4.26	22.22 27.66	40.74 8.51	27.78 8.51	3.70 51.06
Listening to Tapes Exp. Group (N = 54) Control G. (N = 47)	7.41 8.51	25.93 23.40	53.70 10.64	9.26 8.51	3.70 48.94