DOCUMENT RESUME

ED 057 408 24 CG 006 964

AUTHOR DeVries, David L.; And Others
TITLE The Effects on Students of Working in Cooperative Groups: An Exploratory Study.
INSTITUTION Johns Hopkins Univ., Baltimore, Md. Center for the Study of Social Organization of Schools.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
REPORT NO R-120
BUREAU NO BR-6-1610
PUB DATE Dec 71
GRANT OEG-2-7-061610-0207
NOTE 53p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Behavioral Science Research; *Classroom Environment; Educational Methods; *Group Activities; High School Students; *Interpersonal Competence; Student Motivation; *Teaching Methods

ABSTRACT

This study asks whether placing students in small, cooperative work groups results in redirecting student norms, climate and student interaction. Using a post-test only design, students in classes which daily used cooperative groups for the entire academic year were compared with comparable students from classes which used the lecture-discussion method. As to student norms, the cooperative groups students experience more peer pressure for involvement, and they assign greater importance to their peers' expectations. The climate in the cooperative groups classes is perceived as being less "relaxed." The cooperative groups students, however, do appear to be less "alienated" from the class. The cooperative groups students interact more frequently with their classmates, although this does not generalize to outside the class. They also view themselves as having lower levels of interpersonal competence. If a student filled a leadership position in the cooperative groups treatment he was much more likely to be affected by the treatment. The implications of the findings are explored for both the theory and practice of cooperative groups in the classroom. (Author)

REPORT NO. 120

DECEMBER, 1971

# THE EFFECTS ON STUDENTS OF WORKING IN COOPERATIVE GROUPS: AN EXPLORATORY STUDY

DAVID L. DEVRIES, DONALD MUSE, ELIZABETH H. WELLS

The Johns Hopkins University

## STAFF

John L. Holland, Director

James M.McPartland, Assistant Director

Virginia Bailey

Thelma Baldwin

Zahava D. Blum

Judith P. Clark

James S. Coleman

David DeVries

Keith Edwards

Gail Fennessey

James Fennessey

Jean Finnegan

Eilen Greenberger

Rubie Harris

Edward J. Harsch

Robert J. Hogan

John H. Hollifield

Nancy L. Karweit

Steven Kidder

Hao-Mei Kuo

Samuel Livingston

Edward L. McDill

Rebecca J. Muraro

Jeanne O'Connor

Peter H. Rossi

Leslie Schnuelle

Aage B. Sørensen

Julian C. Stanley

Diana F. Ward

Phyllis K. Wilson

# THE EFFECTS ON STUDENTS OF WORKING IN COOPERATIVE GROUPS: AN EXPLORATORY STUDY

GRANT NO. OEG-2-7-061610-0207

PROJECT NO. 61610-04-06

David L. DeVries
Donald Muse
Elizabeth H. Wells

REPORT NO. 120

December, 1971

Published by the Center for Social Organization of Schools, supported in part as a research and development center by funds from the United States Office of Education, Department of Health, Education, and Welfare. The opinions expressed in this publication do not necessarily reflect the position or policy of the Office of Education, and no official endorsement by the Office of Education should be inferred.

The Johns Hopkins University

Baltimore, Maryland

## INTRODUCTORY STATEMENT

The Center for Social Organization of Schools has two primary objectives: to develop a scientific knowledge of how schools affect their students, and to use this knowledge to develop better school practices and organization.

The Center works through five programs to achieve its objectives. The Academic Games program has developed simulation games for use in the classroom. It is evaluating the effects of games on student learning and studying how games can improve interpersonal relations in the schools. The Social Accounts program is examining how a student's education affects his actual occupational attainment, and how education results in different vocational outcomes for blacks and whites. The Talents and Competencies program is studying the effects of educational experience on a wide range of human talents, competencies, and personal dispositions in order to formulate--and research--important educational goals other than traditional academic achievement. The School Organization program is currently concerned with the effects of student participation in social and educational decision-making, the structure of competition and cooperation, formal reward systems, effects of school quality, and the development of information systems for secondary schools. The Careers and Curricula program bases its work upon a theory of career development. It has developed a self-administered vocational guidance device to promote vocational development and to foster satisfying curricular decisions for high school, college, and adult populations.

This report, prepared by the School Organization program, examines the effects on students of working in small, cooperative groups. The report is part of the program's work with the structure of competition and cooperation.

## ABSTRACT

This study asks whether placing students in small, cooperative work groups results in redirecting student norms, climate and student interaction. Using a post-test only design, students in classes which daily used cooperative groups for the entire academic year were compared with comparable students from classes which used the lecture-discussion method. As to student norms, the cooperative groups students experience more peer pressure for involvement, and they assign greater importance to their peers' expectations. The climate in the cooperative groups classes is perceived as being less "relaxed." However, the cooperative groups students do appear to be less "alienated" from the class. The cooperative groups students interact more frequently with their classmates, although this does not generalize to outside the class. They also view themselves as having lower levels of interpersonal competence. If a student filled a leadership position in the cooperative groups treatment he was much more likely to be affected by the treatment. The implications of the findings are explored for both the theory and practice of cooperative groups in the classroom.

## Acknowledgments

The authors are grateful for the support of the following individuals at various stages. Rubie J. Harris and James McPartland gave valuable assistance during the collection and preparation of the data. The comments on earlier drafts of Carol DeVries, Keith Edwards, John L. Holland, and John H. Hollifield proved to be most helpful. Llyod Soughers, principal of Melbourne High School, Daniel Scheuerer and Frances Cooper facilitated greatly the work of the project staff.

## INTRODUCTION

Student apathy toward academic performance is a difficult problem faced by many secondary schools. The students value activities that are performed outside of school, or if in the school, are tangential to the school's main objectives. The lack of concern by students about their own academic performance may be due to the general value climate of their peers. Coleman (1961), in a classic study of high school student norms, suggests that excelling in athletics (for boys) and in dating (for girls) is a much stronger predictor of group acceptance than is doing well academically. McDill, Rigsby & Meyers (1969), in a subsequent study of 20 high schools, find that students view both "leadership in activities" and "athletics" as more important for prestige among other students than either "grades" or "knowing a great deal about intellectual matters."

What reason is there to believe that the values of a student's peers are likely to influence his behavior? Many empirical studies have examined the effects of peer values on the behavior of individuals in various organizational contexts. In industrial organizations, for example, Roethlisberger & Dickson's (1939) Hawthorne studies were the first of a large body of studies showing that workers are strongly influenced by the expectations of their coworkers. These studies demonstrate that strong and quite uniform expectations exist among the workers as to desirable work rate. If an individual exceeds the work rate, he is termed a "rate buster" and is subject to various sanctions from his coworkers. Such sanctions could include social ostracism, ridicule, or even physical abuse.

Waller's (1932) early observations of student behavior have led him to conclude that the student peer group has a large impact on the student. Waller feels the peer group is so important that some students are willing to suffer humiliation from the teacher if, by doing so, they gain respect from their peers. Since Waller, many studies of the education process have examined the effects of a student's peers. Boocock (1966) has written a valuable review of such studies. The abovementioned study of McDill, et al. (1969) also found that if a student attends a school in which the student reward system postively reinforces academic achievement, he is more likely to receive a higher score on a mathematics test (controlling for several student background factors).

Previous research suggests, then, that student peer norms are critical predictors of students' academic performance, but that these norms are usually not directed toward a high level of academic achievement. We need to find some way to redirect the norms, so that peer values work for academic performance rather than against it.

In his studies of high schools, Coleman (1959) suggests that student norms can be redirected by restructuring the reward contingencies in high school for academic performance. Coleman finds that the reward and task structures of interscholastic athletics are effective in capturing the attention and energy of a large portion of the high school population. Thus he proposes establishing small cooperative work groups which compete with each other. According to Coleman, students would then have a group with which they could identify and a clearly defined group goal that they could strive for in unison.

Bronfenbrenner (1970) independently comes to conclusions similar to those of Coleman. Bronfenbrenner, in several cross-cultural studies of the education process, notes much greater student peer pressure for involvement in the school tasks in cultures which tend to use small cooperative groups in schools than in cultures which pit individual students against each other.

Relevant evidence for the effectiveness of cooperative groups is also available from several studies which note the differential effects of cooperation and competition on group processes and productivity. Two studies (Deutsch, 1949; Grossack, 1954) suggest that in cooperative structures the members of a group are more likely to exert (and to accept) pressures for high achievement on the task. Both Deutsch and Grossack observed that involvement in cooperative groups resulted in more frequent and positive interaction among the subjects as well as more friendliness in the group, leading to more "cohesive" behavior. Ajzen (1971), in an experimental study of cooperation-competition, suggests that the normative messages sent from a group member's peers are likely to have a greater impact on his behavior if he is in a cooperative structure. In short, the studies suggest that if an individual works in a small cooperative group, he is more likely to receive more pressure for involvement from his peers, take their messages more seriously, to interact more frequently with them, and to be more positive toward them, than if he is competing with his peers.

Present Study

This study is an exploratory attempt to test for possible differences in peer climate in classes where students work in cooperative groups. The group processes of classes using small, cooperative groups are to be

compared with those using the traditional competitive structure in which each student competes with his classmates.

Prior studies have suggested three types of student process variables that are differentially sensitive to the cooperative-competitive dimension: interpersonal normative pressures (expectations of both student peers and the teacher); interpersonal interaction (both amount and nature of communication among students); and interpersonal affect (the degree to which students like each other). These three process variables most likely mediate the effect of cooperative groups on such student outcome variables as cognitive learning.

Thus, this study asks whether the cooperative group structure in a classroom results in different levels of interpersonal pressure, interpersonal interaction, and interpersonal affect than does the competitive structure. If so, do the differences result in redirecting peer values so that the peer group gives increased reinforcement to academic performance?

## METHOD

### Design

This study examines the effect on students of cooperative small grouping (experimental group) as compared with that of an individual, competitive structure (control). The study uses a post-test only design. The data were collected during the last week of regular classes of the academic year. Three classes (approximately 50 students in each) were sampled in the cooperative group treatment, all of which were taught by the same teacher. Three classes were also used in the control group (30 students in each class). The three control classes were taught by one teacher, but not the same one

who taught the experimental classes. The six classes were all sections of a basic and required American History course.

The assignment of students to each of the six classes was nonrandom. A feature of the high school where the study was conducted is student selection of course sections. The possibility that vastly different students selected themselves into the experimental as compared with the control classes is considered subsequently.

The experimenters obtained the data using both questionnaires and personal interviews. The data were obtained in a fifty-minute class period. The class began with the teacher establishing order, introducing the experimenters, and asking for the students' cooperation in meeting the experimenters' requests. As the questionnaires were being handed out, an experimenter read some instructions (see Appendix A) to the students. Appendix B contains a copy of the questionnaire completed by the experimental group students. The control students filled out a questionnaire similar to that in Appendix B, except that pages thirteen through fifteen were omitted.

Because most students completed the questionnaire within thirty minutes, they were available for a brief personal interview. A small group of students was selected from each of the experimental group classes and met with one of the experimenters. The conversations were taped and are used in the analyses.

Sample

The respondents all attended Melbourne High School, Melbourne, Florida. The student body is predominantly white, middle class, and college oriented.

The school has a structured spiral of phases in which students assign themselves to one of five levels. The students in the study are predominantly from the third level. Students at this level, in comparison to the whole school population, are average in academic ability and motivation. The experimental group consists of 144 respondents whereas the control contains 81 students. The majority of the students are in their tenth year of schooling.

In light of the nonrandom basis for assignment (actually a self-selection) to the treatment groups, it is appropriate to ask whether the cooperative groups respondents are different from their control counterparts on any of several background variables. Consequently, t - tests (or where appropriate $X^2$) were conducted comparing the mean level occupied on each of several student and familial variables by the experimental and control subjects. Table 1 contains the means and standard deviations or percentage

Table 1

distributions for each of the student background variables. The table reveals that the two treatment groups do not differ significantly on the following variables: age, sex, race, grade level, involvement in school, college plans, prior achievement in social studies, or in level of education attained by their parents.

It appears then, that the experimental respondents are highly comparable to those in the control treatment. This might suggest that the selection of the experimental classes was under the control of factors other than student interest or motivation. This could be due in part to the fact that the majority of the students pre-registered for the course while they were still in junior high school. Since the course is required, and since

Table 1

Comparisons of Cooperative Groups and Control Conditions on Individual Background Variables

| STUDENT CHARACTERISTICS | COOPERATIVE GROUPS CONDITION | CONTROL CONDITION | STATISTICAL SIGNIFICANCE |
|---|---|---|---|
| Age | M = 16.0<br>S.D. = .86 | M = 16.2<br>S.D. = .94 | n. s. |
| Sex (% Male) | 54% | 44% | n. s. |
| Race (% White) | 88% | 92% | n. s. |
| Year in School | 10th = 62%<br>11th = 33%<br>12th = 37% | 10th = 58%<br>11th = 34%<br>12th = 7% | n. s. |
| Involvement School | M = 3.15<br>S.D. = .95 | M = 3.14<br>S.D. = 1.0 | n. s. |
| College Plans (% Yes) | 40% | 49% | n. s. |
| Social Studies Achieve. (1970) | M = 47.9<br>S.D. = 26.8 | M = 43.8<br>S.D. = 22.1 | n. s. |
| FAMILIAL CHARACTERISTICS | | | |
| Parental Education | M = 9.9<br>S.D. = 3.4 | M = 9.6<br>S.D. = 3.3 | n. s. |
| | N = 144 | N = 81 | |

the students were not likely to know the teachers offering the course, they may have selected the particular class on the basis of whether or not it fit into their schedule.

Treatment

Each of the three experimental classes uses small groups for the entire academic year. During the first six weeks of class, the teacher teaches the students various group and "Inquiry" (cf. Fenton, 1966) skills. After the first six weeks of instruction, the classes are divided into small groups of seven-to-nine students and operate within the following structure:

(1) Each group has a leader or moderator who chooses the members of the group, leads the group interaction and presents the group product to the total class. Each group also has an evaluator who records the major findings of the group.

(2) The groups are assigned daily tasks to be completed within the period. The groups are granted approximately thirty minutes for group deliberation, with the final fifteen minutes allocated to group reporting to the entire class. The tasks are frequently issue oriented, although they vary, depending on the particular unit being studied.

(3) The individual student's course grade is based on both his work in the groups and his performance on tests taken individually (the two types of work are weighted equally). The group work grade is assigned weekly by the group leader, in consultation with his group (see Appendix C for evaluation form). Each student is evaluated by his group leader and other fellow group members. If the group assigns itself an unjustifiably high grade, the teacher consults with the group.[1]

[1] If the reader is interested, several good texts exist which review various types of small group structures in the classroom. Quillen & Hanna (1961), Bany & Johnson (1964), Kaye & Rogers (1968), and Leypoldt (1967) all give thorough treatment to small group techniques. A valuable summary of the potential uses of small groups, Learning in The Small Group (1971), has recently been published by IDEA.

In the control classes the teacher used primarily the straight lecturing method. If class discussion occurred, it would be initiated and directed by the teacher. The control classes used almost exclusively the textbook History of the Free People (Bragdon & McCutcheon, 1967).[1] Frequent tests (one every two weeks) were administered by the teacher, with the final grade depending almost completely on individual test performance.

## RESULTS

Differences between the experimental and control groups are examined on three dimensions of classroom processes: the normative pressures for involvement emanating from student peers as well as the teacher; the interpersonal interaction among the students both in and out of the classroom; and the group affect or climate in the classroom. Group differences on each of these variables are measured by either t - tests or Chi-Square analyses. Before dealing with the substantive analyses a brief description is given of the treatment effects of the small group classes.

### Treatment Effects

Of initial interest is whether placing the students in cooperative work groups actually involved the students to any significant degree. For example, did the experimental students perceive their involvement in the groups as being important and/or relevant to their course grade?

Several questions on the questionnaire assessed the importance assigned to the small groups by the experimental students. These questions

---

[1] The same text was used in the experimental condition, but only as one of many reference sources.

are contained on pages 13 and 14 of the questionnaire (see Appendix B). The cooperative group students report working with, on the average, 20 different students during the course of the academic year. They also report spending, on the average, twenty minutes per day in actual group work. Over 70% of the students have presented the findings of their work group to the whole class. The students view their own performance in the groups as influencing their class grade "quite a bit." The average student in the experimental group reports a favorable attitude toward working in small groups. The results suggest that the small group treatment consumes considerable student effort and is viewed as being important.

Interpersonal Normative Pressures

The question of interest in this section is whether, as prior literature suggests, the students in the cooperative groups treatment are subject to greater pressures from their peers for involvement. To answer this, we need to recognize the distinction made frequently (cf. Katz & Kahn, 1966) between interpersonal norms as they are actually sent and as they are received by the individual group member. That is, a group-at-large might expect high involvement of a member, but the member, for various reasons, might not perceive such expectations, much less act on them.

Consequently, the questionnaire contained two types of questions concerning peer norms. As the direct measure of peer norms we asked each student to indicate the level of task involvement he wanted from his classmates. As a measure of perceived peer pressures, each student was asked to indicate the level of involvement he felt his classmates expected of him.

The two types of peer expectation measures (actual and perceived) were obtained separately for each of four behavioral dimensions: work hard in the course, do course assignments, speak up in class, and work with others in the class. For each item the respondent indicated the level of involvement expected by placing a check on a seven-point scale ranging from "very active" (+7) to "don't care" (+4) to "very inactive" (+1). A summary scale was formed by summing the responses across the four behavioral dimensions. The resulting coefficient alpha's for both the Actual Peer Expectation scale ($\alpha$ = .69) and the Perceived Peer Expectation scale ($\alpha$ = .66) indicate a high level of internal consistency within both of the scales.

Do the student's perceptions of his peers' expectations coincide with their actual expectations? The zero-order correlation coefficient between the two scales ($r = .58$, $N = 301$, $p < .001$) indicates that the two variables are empirically distinct. Subsequent analyses of the two sets of expectations suggest that the average student (in both experimental and control conditions) tends to perceive the pressures toward involvement from his peers as being less than his peers report they are. This difference in expectations (between reported and actual) may be due to several factors: the student may use only a subset of his classmates as a reference group, a student's peers may not communicate clearly their expectations, or the student may have a distorted perception of what his peers want from him.

Table 2 shows that the cooperative groups condition creates greater peer pressure than does the control condition. The table contains means, standard deviations, and t-ratios which test for differences between the two treatments. The t-ratios testing for differences between treatment

groups for both actual and perceived peer expectations are statistically significant ($t = 2.17$, $p < .05$; $t = 2.60$, $p < .02$), and in the expected direction.

---

Table 2

---

A third measure of interpersonal normative forces -- teacher expectations -- is included in Table 2. The students were asked (for each of the abovementioned 4 behavioral dimensions) what level of involvement their teacher in the course expected of them. The Perceived Teacher Expectations scale was formed by summing the responses to each of the four behavioral dimensions ($\alpha = .66$). Table 2 shows a significant difference ($t = 7.06$; $p < .001$) between the two treatment conditions, with the experimental students feeling greater pressure from their teacher. Could the previously noted increased peer pressure in the cooperative group condition be caused in part by greater teacher pressure? An examination of the correlation coefficients between perceived peer and teacher expectations for each of the four behavioral dimensions reveals coefficients of .16, .08, .27, and .35, with the average $r = .21$. Thus the greater peer expectations for the experimental group are unlikely to be due to the higher teacher expectations.

Another possible effect of involving students in cooperative groups is that the expectations of their peers become more important. That is, the peer group's expectations for academic performance may become more salient for the cooperative group students. To test for this possibility, the respondents were asked: "How important is it to you that you do what your 'American Civilization' classmates want you to do?" The students responded by checking one of seven levels ranging from "very important

Table 2

Means, Standard Deviations, and t - Tests
Comparing Cooperative Groups With
Control on Expectation Variables

| | | Actual Peer Expectations | Perceived Peer Expectations | Perceived Teacher Expectations | N |
|---|---|---|---|---|---|
| Cooperative Groups Condition | Mean | 20.08 | 19.09 | 25.08 | 144 |
| | St.Dev. | 4.38 | 4.14 | 2.62 | |
| Control Condition | Mean | 18.72 | 17.56 | 22.12 | 81 |
| | St.Dev. | 4.71 | 4.35 | 3.59 | |
| t - ratio | | 2.17 | 2.60 | 7.06 | |
| stat. signif. | | $p < .05$ | $p < .02$ | $p < .001$ | |

that I do what they want," to "it doesn't matter," to ". . . very important that I do not do what they want."

As a crude test of whether the experimental condition resulted in greater salience of the peer group norms, the students were divided into two groups: those who indicated that it was important (very, quite, or slightly) that they do what their classmates want, and those who either didn't care or did not want to fulfill their classmates' expectations. In the cooperative groups condition, only 29% indicated they didn't care, whereas nearly a half (47%) of the control condition students indicated they didn't care. This difference between treatment conditions is statistically significant ($X^2 = 7.13$; df = 1; $p < .01$). A significantly larger percentage of students in the cooperative groups treatment expressed some level of concern over meeting the academic expectations of their classmates than in the control condition.

Interpersonal Interaction

A question of particular concern to social studies' educators (cf. Quillen & Hanna, 1961) is whether involvement in cooperative groups changes the interpersonal styles of the students. Not only do the educators look for obvious differences in task-oriented interpersonal relations within the classroom, but they also expect differences in interpersonal relations in nontask areas, and perhaps a generalization to relationships outside the class (Fenton, 1966).

Of interest first is discovering whether the cooperative groups students perceived themselves as working more with other students in their class. All respondents were asked "How often have you worked with other students

during your 'American Civilization' class?" The response dimension consists of four levels of frequency ranging from "Very often" to "Not at all." Although the question is almost a measure of the effectiveness or extent of the cooperative groups treatment, it is also important in the present context. As a measure of the extent of interpersonal interaction among the students, a difference on the variable is almost a prerequisite for change on some of the less direct, i.e., nontask-oriented, measures of interpersonal relations.

The cooperative groups students report working more often with other students. The difference between the means for the two treatment groups is statistically significant (mean for cooperative groups = 3.36, s.d. = .83; mean for control = 2.65, s.d. = .97; $t = 5.76$, $p < .001$).

Given that the cooperative groups condition allows for more interaction (task-oriented) among the students, does this generalize to closer interpersonal relations outside the class setting? To answer this question, the students were asked: "How many students in your 'American Civilization' class have you had conversations with outside of class within the past month?" The students were provided with a ten point scale of frequency ranging from "None" to "Nine or more." An examination of the means for the two treatment groups reveals almost identical levels (Cooperative groups mean = 5.73, s.d. = 2.9, N = 144; Control mean = 5.94, s.d. = 2.8, N = 81).

Data from another questionnaire item also support the assertion that although the students in the cooperative groups condition interact more often with each other in class, this interaction does not generalize to

outside the classroom. In an open-ended item the students were asked to list the names of students in the school that they ". . . most often go around with." For each student we calculated the absolute number of students he reported as going around with who were in the same "American Civilization" class he was in. A comparison reveals almost identical means for the two treatment groups. (Cooperative groups mean = .82, s.d. = 1.1, N = 126; Control mean = 1.0, s.d. = 1.1, N = 81). Data from the interviews with the cooperative groups students also suggest similar conclusions. When asked if being in the small groups ". . . enlarges your friendship circle," one student replied "No. It only enlarges your number of acquaintances. I mean even people I've been in small groups with before, half of them I've forgotten their names."

This lack of generalization of interaction may be due in part to the size of the work groups, which ranged from 7 to 9 members. If smaller groups were available, the students would have had more of an opportunity to at least learn each other's names. It may also be that the task-oriented nature of the groups left little time for developing friendships.

Another facet of interpersonal relations measured in the present study is the level of competence in interpersonal relations. Competence is the learned ability to interact effectively with others (Holland & Baird, 1968). In that the cooperative groups treatment involved students in work groups over a nine-month period, it is reasonable to ask whether the experimental students report being more "effective" in their interpersonal interactions.

To test for this possibility a thirteen-item Interpersonal Competence scale was included on the questionnaire (questions #111 - 123). The thirteen items originate from a 20-item scale developed by Holland & Baird (1968). The student was asked to answer "true" or "false" to each of the thirteen items. Examples of the items are: "If I want to, I can be a very persuasive person," and "I have a reputation for being able to deal with difficult people." The responses of the students across the thirteen items showed a reasonable level of consistency ($\alpha$ = .54).

By summing across the thirteen items, an Interpersonal Competence score was formed. An examination of the mean Interpersonal Competence scores for the two treatment groups reveals a statistically significant difference (Cooperative groups mean = 19.4, s.d. = 2.67, N = 144; Control mean = 20.6, s.d. = 2.17, N = 81; $t$ = 3.44, $p < .01$). The difference, however, is in the opposite direction of that expected; that is, the control group scored significantly higher.

Why should the cooperative groups students see themselves as being less interpersonally competent? An examination of group differences for each of the thirteen items is informative. The largest differences between the two groups occurred for the two items one might expect to be most sensitive to the cooperative groups treatment: "I have unusual skills for making groups, clubs, or organizations work effectively (% False: 79 for Experimental, 65 for Control)," and "I find it easy to talk with all kinds of people (% False: 38 for Experimental, 19 for Control)." It might be that the cooperative group experiences served as reality tests for the students. The cooperative group experiences may have provided the first opportunity for these students to actually determine the level of their interpersonal skills. The test was, in addition, a severe one.

For example, a leader of the small groups was not only asked to maintain basic order in the group, but in addition, was required to force a group conaenaus on important issues. The fact that only 20% of the cooperative groups students (versus 35% of control) report having ". . . unusual skills for making groups . . . work effectively," may reflect a more realistic self-estimate of interpersonal skills.

Another question concerns the comparison of level of reported interpersonal competence of the students in the cooperative groups condition who served in a leaderahip capacity with those who were not leaders. If the small group leadership experience is a stringent test of their competence, then the leadera, as a group, might have lower interpersonal competence than the nonleaders. A comparison of the two means (Leaders' mean = 19.8, s.d. = 2.9; Nonleaders' mean = 18.95, s.d. = 2.32; t = 1.88, df = 139, n.s.) reveals no overall aignificant difference. An analysis of the individual items is again of interest. The one item which differentiates the two groups best ($t = 4.87$, $df = 139$, $p < .001$) is: "I have unusual skills for making groups . . . function effectively." Only 23% of the leaders claim they have unuaual skills at leading groups, whereas 56% of the nonleaders make such a claim. This comparison reinforces the earlier statement stressing the importance of group experience as a source of feedback to the student about his actual interpersonal competence.

A final comparison of leaders with nonleaders suggests that leaders are able to evaluate their own interpersonal competence in more task-relevant domains. All respondents were asked to indicate how ". . . far out from the center of things at the school are you?" The nonleaders' interperaonal competence score correlated .484 ($N = 58$; $p < .01$) with their

"center of things" score, whereas a correlation coefficient of only .02 (N = 79, n.s.) was obtained for the leaders. That is, the nonleader students -- who were not likely to have had the experience of leading task oriented groups -- viewed their own interpersonal competence in light of their success within their informal peer groups. The students who had been leaders were able, however, to discriminate between being at the center of things socially and being able to move a group toward the solution of a task.

Interpersonal Affect

Deutsch (1949), Grossack (1954), and others cite data which suggest that involving students in cooperative work groups should result in greater group cohesiveness. The small group students should identify more with other students, feel more positive about them, and in general feel more positive about the class. The present study examines treatment group differences on several measures of group cohesiveness.

One item on the questionnaire should reflect the degree of general alienation from the class. The respondents were asked: "How often . . . have you stayed away from your 'American Civilization' class just because you didn't want to come?" The response scale contained ten levels ranging from "zero" to "nine days or more." As the first row in Table 3 shows, the students in the cooperative groups report staying away significantly

---

Table 3

---

less often than do the control students ($t = 2.23$, $p < .05$). Subsequent analyses of the response distributions to the item reveal that 63% of the cooperative groups students, in contrast to 46% of the control students, report "Never" staying away from class because they didn't want to come.

Table 3

Means, Standard Deviations, and t - tests for Several Measures of Interpersonal Affect

| Measure | | Cooperative Groups Coudition | Control Condition | t - ratio |
|---|---|---|---|---|
| Student Alienation | M | 1.35 | 2.15 | 2.23* |
| | s.d. | 2.37 | 2.89 | |
| Group Atmosphere | | | | |
| Factor I | M | 53.98 | 53.73 | .15 |
| | s.d. | 11.05 | 13.39 | |
| Factor II | M | 3.33 | 2.70 | 2.59* |
| | s.d. | 1.80 | 1.64 | |
| | | N = 144 | N = 81 | |

* $p < .05$

As a general measure of affect toward the course, the results from the item suggest that the students in cooperative groups are more positive toward the course. It is possible that the cooperative groups students, operating in seven-to-nine member groups, realized that their absence would be noticed and that their contribution to the group solution would be missed. In contrast, each Control student was only one of thirty students, and had no active day-to-day role in the class.

As a measure of group atmosphere, the respondents were asked to rate their American Civilization class on 12 seven-point bipolar adjective scales ( see items 33-44 in Appendix B). Each scale was scored +1 to +7. The twelve adjective scales measure all three of the semantic dimensions found by Osgood, Suci & Tannenbaum (1957), and have been used extensively in small group studies (cf. Fiedler, 1967). A Principal Axis Factor Analysis was performed in the present study, and two orthogonal factors emerged. The first factor consists of eleven of the twelve adjective scales. The second factor consists of only one scale: tense - relaxed.

The importance of the one-item second factor for the present study becomes apparent when one examines the means (cf. Table 3) of the two treatment groups for both factors. For Factor I, the means of the two groups are nearly identical. An examination of the means suggests that, on the average, both groups see their class as being "slightly" accepting, friendly, enthusiastic, satisfying, etc. However, Factor II differentiates the two treatment groups significantly ($t = 2.59$, $p < .05$), with the respondents in the cooperative groups condition viewing the class as less relaxed than the control respondents (very relaxed = +1, very tense = +7).

Why should the cooperative groups respondents experience their class differently only on the tense - relaxed dimension, and why whould the dimension stand out as a unique factor within the group atmosphere scale? Perhaps the increased pressure exerted on them by both their peers and teacher make the class more tense. Not only do their peers expect more of them, but meeting their peers' expectations seems to be important for more students in the cooperative groups treatment. Finally, as suggested in the prior section, the students who served as leaders tested some of their skills under highly demanding circumstances. As one student stated in response to the question "Is it easy to be a leader?": "No, you have to get up in front of the class, all the responsibility is put on yourself, and if your group does not come through, then you have to."

Moderating Variables

The interviews with the cooperative groups students suggested that a portion of them were only peripherally involved in the treatment. It might be that for students to benefit from the cooperative group experience, they have to play a central role in the process. To test for this possibility, analyses have been conducted which compare the 57% of cooperative groups students who were group moderators (leaders) with the 43% who never were.[1] The data from the comparisons suggest that the leadership role requires of its occupant at least a minimal level of involvement. For example, the leaders report significantly higher levels of Perceived Peer, Teacher and Self Expectations than do the nonleaders.

---

[1]Several comparisons of background characteristics of leaders vs. nonleaders were conducted. The two groups did not differ on age, sex, college plans, and fathers education. However, the leaders scored significantly higher ($t = 2.70$, $df = 139$, $p < .01$) on a standardized social studies achievement test given to them the year before entering the course.

Table 4 contains the means, standard deviations, and t-ratios comparing the leaders with the nonleaders for each of the four behavioral dimensions of the normative climate (work hard in the course, do course assignments, speak up in class, and work with others in the class). All three measures

---

Table 4

---

of normative forces indicate greater perceived pressure by leaders. Additional analyses revealed that leaders report being significantly more involved on three of the four behavioral dimensions. There seems little doubt that the role of the group moderator carries with it strong demands for involvement, no matter who occupies the role. Placing students in the leadership role appears to be one way to maximize the effectiveness of cooperative group experiences.

## Discussion

The present study has obvious limitations and the results should, therefore, be viewed as tentative. The study design allows for confounding of treatment with the teacher, student, and other effects. The obtained relationships, however, are important enough to warrant further examination within more rigorous experimental designs.

The results do suggest that student peer group norms can be directed toward greater task involvement within high school classes. In addition, the peer group norms of high school students can, by involvement in cooperative groups, be made more salient, that is, meeting peer group expectations becomes more important within the classroom setting. In short, it may be possible to both redirect peer group norms, and at the same time make them have greater impact on the individual student.

Table 4

Comparison of Normative Pressures on Leaders and Nonleaders in the Cooperative Groups Treatment

| | | Leaders | Nonleaders | t-ratio |
|---|---|---|---|---|
| Perceived Peer Expectations | M | 20.1 | 17.9 | 3.22* |
| | s.d. | 4.05 | 3.92 | |
| Perceived Teacher Expectations | M | 25.7 | 24.25 | 3.33* |
| | s.d. | 2.14 | 3.00 | |
| Self Expectations | M | 22.49 | 20.47 | 4.13* |
| | s.d. | 3.62 | 3.77 | |

* $p < .001$

Even though students in cooperative groups have much greater contact with each other, the increased interaction does not necessarily result in greater cohesion. In fact, the increased pressure for involvement on the task may make students become task-oriented and sacrifice personal relationships for the sake of solving the group problem. Add to this the possible experience of discovering distinct limitations in one's interpersonal competencies, and it is not surprising that group cohesiveness among the cooperative groups is not uniformly higher than among the control respondents. The question is whether group cohesiveness is as important here as is increased peer pressure for academic involvement. It may be that the benefits of small cooperative groups do not lie in making interpersonal interaction less difficult but - in the classroom anyway - in making individuals more motivated for and capable of involvement, however challenging that involvement may be.

Why should the small group structure foster higher peer norms? It is possible that small groups create a strong reward interdependence among the students. That is, the grade received by a cooperative groups student is based not only on his own level of performance but that of his fellow group members as well. It is to his advantage that he motivate the others to work. As noted earlier, the leaders receive the greatest amount of peer pressure, in part because the fate of their fellow group members is particularly tied to the performance of the leader in front of the whole class. Such reward interdependence is not likely to exist in the competitively-structured classroom.

The tentative results of this study also suggest that small group involvement might provide a means for the teacher to transfer socialization

functions to the students themselves. Small groups create an atmosphere in which students can positively reinforce each other for involvement in the academic task, as well as provide sanctions to disruptive or irrelevant behavior. Small groups also appear to contain roles, e.g., group moderator, which, in and by themselves, demand a high level of involvement, regardless of which student fills the role. Finally, the data suggest that small group experiences provide an important, and perhaps unique, reality test for a set of interpersonal skills not typically developed in secondary schools.

## REFERENCES


Ajzen, I. Attitudinal vs. Normative Messages: an investigation of the differential effects of persuasive communications on behavior. Sociometry, 1971, 34, 263-280.

Bany, Mary A. & Johnson, Lois S. Classroom group behavior. New York: McMillan Company, 1964.

Boocock, Sarane S. Toward a sociology of learning: a selective review of existing research. Sociology of Education, 1966, 39.

Bragdon & McCutcheon, History of the Free People, 1967.

Bronfenbrenner, U. Two worlds of childhood, New York: Russell Sage Foundation, 1970.

Coleman, J.S. Academic achievement and the structure of competition, Harvard Education Review, 1959, 29, 339-351.

Coleman, J.S. The adolescent society, New York: Free Press of Glencoe, 1961.

Deutsch, M. An experimental study of the effects of co-operation and competition upon group process, Human Relations, 1949, 2, 199-231.

Fenton, E. Teaching the new social studies in secondary schools, New York: Holt, Rinchart and Winston, 1966.

Fiedler, F.E. A theory of leadership effectiveness. New York: McGraw Hill, 1967.

Grossack, M.M. Some effects of cooperation and competition upon small group behavior, Journal of Abnormal and Social Psychology, 1954, 49, 341-348.

Holland, J.L., & Baird, L.L. An interpersonal competency scale. Educational and Psychological Measurement, 1968, 28, 503-510.

Kaye, G. & Rogers, I. Group work in secondary schools. London: Oxford University Press, 1968.

Leypoldt, Martha M. Forty ways to teach in groups. Valley Forge, Penna. Judson Press, 1967.

McDill, E.L., Rigsby, L.C. & Meyers, E.D., Jr. Educational climates of high schools: Their effects and sources, American Journal of Sociology, 1969, 74, 567-586.

Osgood, C.E., Suci, G.J., & Tannenbaum, P.H. The measurement of meaning, Urbana, Illinois: University of Illinois Press, 1957

Quillen, I.J. & Hanna, L.A. Education for social competence, Chicago: Scott, Foresman, 1961.

Roethlisberger, F.J. & Dickson, W.J. Management and the worker, Cambridge, Mass.: Harvard University Press, 1939.

Waller, W. The sociology of teaching, New York: Wiley, 1932.

## Appendix A

### VERBAL INSTRUCTIONS--STUDENT ATTITUDE QUESTIONNAIRE

I'm _____from Johns Hopkins University. We are interested in finding out how students feel about their American History class. Consequently we would like you to fill out the questionnaire which is inside the envelope, which each of you should have.

The first page of the questionnaire gives the instructions, but let me stress several points. First, it is most important that you answer the way <u>you</u> feel about your course rather than the way you think you are <u>supposed</u> to feel. We hope you will be completely honest with us. Unless you are honest, the study may well be meaningless. Secondly, as you go through the questionnaire, you may begin to feel that we are asking the same question over and over. But each question is distinct so answer carefully each question as you go through the questionnaire.

Finally, as the first page of the questionnaire states, your responses will be kept anonymous. Neither your teacher nor anyone else connected with your high school will see your answers.

When you are finished, please raise your hand and we will collect the questionnaire from you. Are there any questions?

Appendix B

STUDY OF STUDENT ATTITUDES

Conducted by

The Johns Hopkins University

This is an opinion questionnaire which is part of a study being carried out by The Johns Hopkins University. It will be given to a sample of high school students to learn what they think about their American Civilization courses. We think you will find the questions interesting. Your help in answering the questionnaire may provide ideas for changes in school practices.

Since some of the information in the questionnaire is personal, all your answers will be completely confidential. No one in your school and no one who knows you will ever see the answers. While we hope you will answer all the questions, you are free to omit any questions you feel are too personal. When you are finished, put the questionnaire in the envelope and seal it. Then give it to the research worker, who will take the questionnaire directly to the University for statistical tabulation.

Remember: This is <u>not</u> a test. It is an opinion questionnaire. There are no right or wrong answers. We want to find out what <u>you</u> think, so please complete the questionnaire by yourself. Try to go through the questionnaire quickly, without spending too much time on any single question.

Name _____
(Last) (First) (Middle)

6. What year are you in? (Check one)

____1. 9th year
____2. 10th year
____3. 11th year
____4. 12th year

7. Are you male or female? (Check one)

____1. Male
____2. Female

8. Which of the following best describes you? (Check one)

____1. Caucasion, White
____2. Negro, Black
____3. Spanish American
____4. American Indian
____5. Oriental
____6. Other (write in: _____)

9-10.
How old are you?

I am _____years old.

11-14.
How many brothers or sisters do you have? (Write in the number)

I have_____older brothers.
I have_____younger brothers.
I have_____older sisters.
I have_____younger sisters.

15. What is the religion of your family? (Optional) (Check one)

____1. Protestant
____2. Catholic
____3. Jewish
____4. Greek or Russian Orthodox
____5. Other (Write in:_____)
____6. Prefer not to answer

PLEASE ANSWER THE NEXT TWO QUESTIONS ABOUT YOUR PARENTS, THINKING OF THE PEOPLE WHO NOW SERVE AS YOUR FATHER AND MOTHER.

16. How far in school did your father go? (Check one)

____1. None, or some grade school.
____2. Completed grade school.
____3. Some high school, but did not graduate.
____4. Graduated from high school.
____5. Technical or business school after high school.
____6. Some college but less than 4 years.
____7. Graduated from a 4 year college.
____8. Attended graduate or professional school, after college.

17. How far in school did your mother go? (Check one)

____1. None, or some grade school.
____2. Completed grade school.
____3. Some high school, but did not graduate.
____4. Graduated from high school.
____5. Technical, nursing, or business school after high school.
____6. Some college but less than 4 years.
____7. Graduated from a 4 year college.
____8. Attended graduate or professional school, after college.

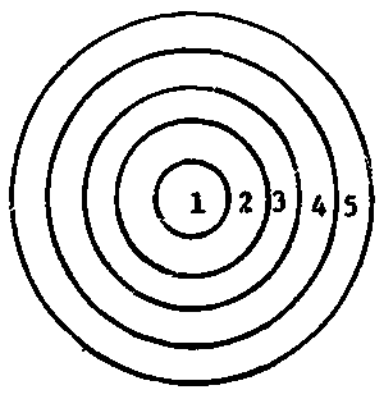
18. Are you planning to go to a junior college or take some advanced technical training?

____1. No, never
____2. Yes, but not right after high school.
____3. Yes, as a full-time student right after high school.
____4. Yes, as a part-time student.
____5. Undecided

19. Are you planning to go to a four year college? (Check one)

____1. No, never
____2. Yes, but not right after high school.
____3. Yes, as a full-time student right after high school.
____4. Yes, as a part-time student.
____5. Undecided

20. Suppose the circle below represented the things that go on here at school. How far out from the center of things are you? (Place a check where you think you are.)




21. How actively or hard do your "American Civilization" classmates want you to work in this class? (Check one)

____1. Very active (want me to work very hard)
____2. Quite active
____3. Slightly active
____4. They don't care how active I am
____5. Slightly inactive
____6. Quite inactive
____7. Very inactive

22. How actively or hard does your "American Civilization" teacher want you to work in his or her class? (Check one)

____1. Very active (wants me to work very hard)
____2. Quite active
____3. Slightly active
____4. He or she doesn't care
____5. Slightly inactive
____6. Quite inactive
____7. Very inactive

23. How actively or hard do you yourself want to work in your "American Civilization" class? (Check one)

____1. Very active (want to work very hard)
____2. Quite active
____3. Slightly active
____4. I don't care
____5. Slightly inactive
____6. Quite inactive
____7. Very inactive

24. How actively or hard do you want your "American Civilization" classmates to work in this class? (Check one)

____1. Very active (want them to work very hard)
____2. Quite active
____3. Slightly active
____4. I don't care
____5. Slightly inactive
____6. Quite inactive
____7. Very inactive

25. How many of the students in your "American Civilization" class do you think of as your close friends? (Check one)

____0. None
____1. One
____2. Two
____3. Three
____4. Four
____5. Five
____6. Six
____7. Seven
____8. Eight
____9. Nine or more

26. How close do you feel to the students in your "American Civilization" class? (Check one)

____1. Very close
____2. Quite close
____3. Slightly close
____4. Neutral
____5. Slightly distant
____6. Quite distant
____7. Very distant

27. How often do your "American Civilization" classmates want you to do your assignments in the course? (Check one)

____1. They want me to do all of them.
____2. They want me to do most of them.
____3. They want me to do some of them.
____4. They don't care if I do them or not.
____5. They would rather I did not do some of them.
____6. They would rather I did not do most of them.
____7. They would rather I did not do any of them.

28. How often does your "American Civilization" teacher want you to do your daily assignments in the course? (Check one)

____1. He or she wants me to do all of them.
____2. He or she wants me to do most of them.
____3. He or she wants me to do some of them.
____4. He or she doesn't care if I do them or not.
____5. He or she would rather I did not do some of them.
____6. He or she would rather I did not do most of them.
____7. He or she would rather I did not do any of them.

29. How often do you <u>yourself</u> want to do your "American Civilization" assignments? (Check one)

____1. I want to do all of them.
____2. I want to do most of them.
____3. I want to do some of them.
____4. I don't care if I do them or not.
____5. I would rather not do some of them.
____6. I would rather not do most of them.
____7. I would rather not do any of them.

30. How often do <u>you</u> want your "American Civilization" classmates to do their daily assignments in the course? (Check one)

____1. I want them to do all of the assignments.
____2. I want them to do most of the assignments.
____3. I want them to do some of the assignments.
____4. I don't care if they do the assignments or not.
____5. I would rather they did not do some of the assignments.
____6. I would rather they did not do most of the assignments.
____7. I would rather they did not do any of the assignments.

31. How often during this semester have you stayed away from your "American Civilization" class just because you didn't want to come? (Check one)

____0. Never
____1. One day
____2. Two days
____3. Three days
____4. Four days
____5. Five days
____6. Six days
____7. Seven days
____8. Eight days
____9. Nine days or more

32. How hard have you worked in your "American Civilization" class during this semester? (Check one)

____1. I have worked very hard.
____2. I have worked quite hard.
____3. I have worked slightly hard.
____4. I have neither worked hard or been lazy.
____5. I have been slightly lazy.
____6. I have been quite lazy.
____7. I have been very lazy.

33-44. We would like you to describe the atmosphere of your "American Civilization" class, as you have experienced it. Below are pairs of words which are opposite in meaning. You are asked to describe your class by placing an "X" in one of the spaces on the line between the two words.

Each of the seven spaces represents how well the adjective fits the class you are describing. For example, if the words were "happy-sad," the spaces would mean:

| Happy: | | | | | | | :Sad |
|---|---|---|---|---|---|---|---|
| Very Happy | Quite Happy | Slightly Happy | Neither Happy nor Sad | Slightly Sad | Quite Sad | Very Sad | |

If the two words were "happy-sad," and you felt your class has been "slightly happy," you would place an "X" as follows:

| Happy: | | | | | | | :Sad |
|---|---|---|---|---|---|---|---|
| | | X | | | | | |

Please place an "X" in each of the following scales.

My American Civilization class is:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| rejecting: | | | | | | | :accepting |
| friendly: | | | | | | | :unfriendly |
| unenthusiastic: | | | | | | | :enthusiastic |
| satisfying: | | | | | | | :unsatisfying |
| cold: | | | | | | | :warm |
| productive: | | | | | | | :unproductive |
| hostile: | | | | | | | :supportive |
| cooperative: | | | | | | | :uncooperative |
| unsuccessful: | | | | | | | :successful |
| interesting: | | | | | | | :boring |
| tense: | | | | | | | :relaxed |
| passive: | | | | | | | :active |

45-60. For the next items please place one "X" on the line between every pair of words. Each answer should reflect your own feelings.

Working hard in your "American Civilization" class is:

good:____:____:____:____:____:____:____:bad

foolish:____:____:____:____:____:____:____:wise

beneficial:____:____:____:____:____:____:____:harmful

punishing:____:____:____:____:____:____:____:rewarding

Speaking up in your "American Civilization" class is:

good:____:____:____:____:____:____:____:bad

foolish:____:____:____:____:____:____:____:wise

beneficial:____:____:____:____:____:____:____:harmful

punishing:____:____:____:____:____:____:____:rewarding

Doing the daily assignments in your "American Civilization" class is:

good:____:____:____:____:____:____:____:bad

foolish:____:____:____:____:____:____:____:wise

beneficial:____:____:____:____:____:____:____:harmful

punishing:____:____:____:____:____:____:____:rewarding

Working with other students in your "American Civilization" class is:

good:____:____:____:____:____:____:____:bad

foolish:____:____:____:____:____:____:____:wise

beneficial:____:____:____:____:____:____:____:harmful

punishing:____:____:____:____:____:____:____:rewarding

61. How important is it to you that you do what your "American Civilization" classmates want you to do? (Check one)

____1. It is very important that I do what they want.
____2. It is quite important that I do what they want.
____3. It is slightly important that I do what they want.
____4. It doesn't matter to me what they want.
____5. It is slightly important to me that I do not do what they want.
____6. It is quite important to me that I do not do what they want.
____7. It is very important to me that I do not do what they want.

62. How important is it to you that you do what your "American Civilization" teacher wants you to do? (Check one)

____1. It is very important to me that I do what he or she wants.
____2. It is quite important that I do what he or she wants.
____3. It is slightly important to me that I do what he or she wants.
____4. It doesn't matter to me what he or she wants.
____5. It is slightly important to me that I do not do what he or she wants.
____6. It is quite important to me that I do not do what he or she wants.
____7. It is very important to me that I do not do what he or she wants.

63. How important is it to you that you do in your "American Civilization" class what you want to do? (Check one)

____1. It is very important that I do what I want.
____2. It is quite important that I do what I want.
____3. It is slightly important that I do what I want.
____4. It doesn't matter to me.
____5. It is slightly important that I not do what I want.
____6. It is quite important that I not do what I want.
____7. It is very important that I do not do what I want.

64. How important is it to you that your "American Civilization" classmates do what you want them to do? (Check one)

____1. It is very important that they do what I want.
____2. It is quite important that they do what I want.
____3. It is slightly important that they do what I want.
____4. It doesn't matter to me whether or not they do what I want.
____5. It is slightly important that they do not do what I want.
____6. It is quite important that they do not do what I want.
____7. It is very important that they do not do what I want.

65. Has being in your "American Civilization" class changed your ability to get along with others? (Check one)

____1. Helped me very much in getting along with others.
____2. Helped me quite a bit in getting along with others.
____3. Helped me slightly in getting along with others.
____4. Didn't help me at all in getting along with others.
____5. Hindered me slightly in getting along with others.
____6. Hindered me quite a bit in getting along with others.
____7. Hindered me very much in getting along with others.

66. How often do your "American Civilization" classmates want you to speak up in class? (Check one)

____1. They want me to speak up very often.
____2. They want me to speak up often.
____3. They want me to speak up sometimes.
____4. They want me to speak up only rarely.
____5. They don't want me to speak up at all.
____6. They don't care if I speak up or not.

67. How often does your "American Civilization" teacher want you to speak up in class? (Check one)

____1. He or she wants me to speak up very often.
____2. He or she wants me to speak up often.
____3. He or she wants me to speak up sometimes.
____4. He or she wants me to speak up only rarely.
____5. He or she doesn't want me to speak up at all.
____6. He or she doesn't care if I speak up or not.

68. How often do you yourself want to speak up in your "American Civilization" class? (Check one)

____1. I want to speak up very often.
____2. I want to speak up often.
____3. I want to speak up sometimes.
____4. I want to speak up only rarely.
____5. I don't want to up at all.
____6. I don't care if I speak up or not.

69. How often do you want your "American Civilization" classmates to speak up in class? (Check one)

____1. I want them to speak up very often.
____2. I want them to speak up often.
____3. I want them to speak up sometimes.
____4. I want them to speak up only rarely.
____5. I don't want them to speak up at all.
____6. I don't care if they speak up or not.

70. How many nights per week during the last month have you watched the national news on T.V.? (Check one)

____1. None
____2. One night a week
____3. Two nights a week
____4. Three nights a week
____5. Four nights a week
____6. Five or more nights a week

71. Within the past six months how many books have you read on your own that are related to the topics covered in your "American Civilization" course? (Check one)

____0. None
____1. One book
____2. Two books
____3. Three books
____4. Four books
____5. Five books
____6. Six or more books

72. During the last month how many times have you read the national or local news sections of your newspaper? (Check one)

____1. None
____2. One night a week
____3. Two nights a week
____4. Three nigh a week
____5. Four nights a week
____6. Five or more nights a week

73. Within the past six months how often have you read such magazines as Time, Newsweek, Life or Look? (Check one)

____1. Every day
____2. Almost every day
____3. Once every two or three days
____4. Once a week
____5. Once every other week.
____6. Almost never
____7. Never

74. How often do your "American Civilization" classmates want you to work with other students in your class? (Check one)

____1. They want me to work with others very often.
____2. They want me to work with others often.
____3. They want me to work with others sometimes.
____4. They want me to work with others only rarely.
____5. They don't want me to work with others at all.
____6. They don't care if I work with others or not.

75. How often does your "American Civilization" teacher want you to work with other students in your class? (Check one)

____1. He or she wants me to work with others very often.
____2. He or she wants me to work with others often.
____3. He or she wants me to work with others sometimes.
____4. He or she wants me to work with others only rarely.
____5. He or she doesn't want me to work with others at all.
____6. He or she doesn't care if I work with others or not.

76. How often do you yourself want to work with other students in your "American Civilization" class? (Check one)

____1. I want to work with others very often.
____2. I want to work with others often.
____3. I want to work with others sometimes.
____4. I want to work with others only rarely.
____5. I don't want to work with others at all.
____6. I don't care if I work with others or not.

77. How often do you want your "American Civilization" classmates to work with others in class? (Check one)

____1. I want them to work with others very often.
____2. I want them to work with others often.
____3. I want them to work with others sometimes.
____4. I want them to work with others only rarely.
____5. I don't want them to work with others at all.
____6. I don't care if they work with others or not.

78. How often have you completed your "American Civilization" assignments during this semester? (Check one)

____0. Always
____1. I did not complete 1.
____2. I did not complete 2.
____3. I did not complete 3.
____4. I did not complete 4.
____5. I did not complete 5.
____6. I did not complete 6.
____7. I did not complete 7.
____8. I did not complete 8.
____9. I did not complete 9 or more.

79. How often have you spoken up in your "American Civilization" class? (Check one)

____1. Very often
____2. Often
____3. Sometimes
____4. Only rarely
____5. Not at all

106. How often have you worked with other students during your "American Civilization" class? (Check one)

___1. Very often
___2. Often
___3. Sometimes
___4. Only rarely
___5. Not at all

107. In your "American Civilization" class, as compared to your other classes, how important is <u>doing well in class</u> for getting other students to like you? (Check one)

___1. Much more important
___2. Somewhat more important
___3. About the same
___4. Somewhat less important
___5. Much less important

108. How many students in your "American Civilization" class have you had conversations with outside of class within the <u>past month</u>? (Check one)

___0. None
___1. One
___2. Two
___3. Three
___4. Four
___5. Five
___6. Six
___7. Seven
___8. Eight
___9. Nine or more

109. During this semester have you ever talked about the subjects which came up in your "American Civilization" class with others outside of class? (Check one)

___0. No, never
___1. One time
___2. Two times
___3. Three times
___4. Four times
___5. Five times
___6. Six times
___7. Seven times
___8. Eight times
___9. Nine or more times

110. On the average, how much time during the current year have you spent doing <u>homework</u> outside school? (Check one)

___0. None, or almost none.
___1. Less than 1 hour a day.
___2. About 1 hour a day.
___3. About 2 hours a day.
___4. About 3 hours a day.
___5. Four or more hours a day.

111-123. Below is a list of skills which individuals may or may not have. Please answer every item.

If a statement is TRUE or mostly TRUE for you, circle T.

If a statement is FALSE or mostly FALSE for you, circle F.

Try to circle a T or F for all statements.

1. I have a reputation for being able to deal with difficult people. T F
2. My friends regard me as a person with good practical judgment. T F
3. I find it easy to play many roles--student, leader, follower, church goer, athlete, traveler, etc. T F
4. People seek me out to tell me about their troubles. T F
5. I think I have unusual skill for assessing the motivation of other students. T F
6. I have unusual skills for making groups, clubs, or organizations function effectively. T F
7. If I want to, I can be a very persuasive person. T F
8. I have a clear picture of what I am like as a person. T F
9. I know what I want to do with my life. T F
10. My friends think that I am shrewd and insightful about other people. T F
11. I would enjoy being an actor (actress). T F
12. I find it easy to talk with all kinds of people. T F
13. I believe I have good practical judgment. T F

124. How many different students in your "American Civilization" class have you worked with in groups in the class during this current school year?

I have worked with _____different students.

125. On an average day how many minutes do you spend working directly with other students in your "American Civilization" class? (Check one)

____1. 0 to 5 minutes
____2. 6 to 10 minutes
____3. 11 to 15 minutes
____4. 16 to 20 minutes
____5. 21 to 25 minutes
____6. 26 to 30 minutes
____7. 31 to 35 minutes
____8. 36 or more minutes

126. On the average, how much did you contribute to the findings of the groups you worked in in your "American Civilization" class? (Check one)

____1. I contributed everything.
____2. I contributed very much.
____3. I contributed quite a bit.
____4. I contributed slightly.
____5. I did not contribute anything.

127. How much does your performance in the work groups influence your "American Civilization" semester grade? (Check one)

____1. Very much
____2. Quite a bit
____3. Slightly
____4. Not at all

128-129. During the whole year have you ever presented your work group's findings to your whole "American Civilization" class? (Check one)

____1. No
____2. Yes

If you answered "yes," approximately how often have you presented the group's findings? (Check one)

____1. 1 or 2 times
____2. 3 or 4 times
____3. 5 or 6 times
____4. 7 or 8 times
____5. 9 or 10 times
____6. 11 to 20 times
____7. 21 to 30 times
____8. 31 to 40 times
____9. 41 or more times

130. How much does the performance of the <u>other</u> students in your work groups influence your "American Civilization" semester grade? (Check one)

____1. Very much
____2. Quite a bit
____3. Slightly
____4. Not at all

131-132.

During the whole year have you ever served as a group evaluator in your "American Civilization" class? (Check one)

____1. No
____2. Yes

If you answered "yes," how often have you served as group evaluator? (Check one)

____1. One week or less
____2. 2 weeks
____3. 3 weeks
____4. 4 weeks
____5. 5 to 6 weeks
____6. 7 to 8 weeks
____7. 9 to 10 weeks
____8. 11 to 20 weeks
____9. 21 or more weeks

133. How much does <u>your</u> performance in the work groups influence the "American Civilization" semester grades of the other students in your group? (Check one)

____1. Very much
____2. Quite a bit
____3. Slightly
____4. Not at all

134-135.

During the whole year have you ever served as a work group leader (moderator) in your "American Civilization" class?

____1. No
____2. Yes

If you answered "yes," how many weeks (during the whole year) were you the leader or moderator of the groups in which you worked? (Check one)

____1. One week or less
____2. 2 to 3 weeks
____3. 4 to 5 weeks
____4. 6 to 7 weeks
____5. 8 to 9 weeks
____6. 10 to 11 weeks
____7. 12 to 13 weeks
____8. 14 to 20 weeks
____9. 21 or more weeks

136. If you were a leader or moderator of one of the work groups in your "American Civilization" class, when was the first time you had this position? (Check one)

____1. Early in the first semester
____2. Middle of the first semester
____3. Late in the first semester
____4. Early in the second semester
____5. Middle of the second semester
____6. Late in the second semester
____7. I was never a moderator

137-140. In general, how do you feel about your working in the small groups in your "American Civilization" class? Please place an "X" on <u>every</u> line.

<u>Working in small groups in my "American Civilization" class is:</u>

good:____:____:____:____:____:____:____:bad

foolish:____:____:____:____:____:____:____:wise

beneficial:____:____:____:____:____:____:____:harmful

punishing:____:____:____:____:____:____:____:rewarding

141-144. In general, how do you feel about being a group leader or moderator of the small groups in your "American Civilization" class? Please place an "X" on every line.

<u>Being a group moderator in my "American Civilization" class is:</u>

good:____:____:____:____:____:____:____:bad

foolish:____:____:____:____:____:____:____:wise

beneficial:____:____:____:____:____:____:____:harmful

punishing:____:____:____:____:____:____:____:rewarding

145-148. In general, how do you feel about being a group evaluator of the small groups in your "American Civilization" class? Please place an "X" on every line.

<u>Being a group evaluator in my "American Civilization" class is:</u>

good:____:____:____:____:____:____:____:bad

foolish:____:____:____:____:____:____:____:wise

beneficial:____:____:____:____:____:____:____:harmful

punishing:____:____:____:____:____:____:____:rewarding

149. What students in this school do you most often go around with? Write both first and last names.

150. What does it take to get a good grade in your "American Civilization" class?

Thank you very much for your help!

Appendix C

SMALL GROUP EVALUATION FORM

MODERATOR:_____ GROUP LETTER:_____

EVALUATOR:_____ PERIOD:_____

During the last few minutes of the period the moderator of each group will direct the completion of this evaluation form and turn it in to the directing teacher. (Usually at the end of each week.) All members of the group should participate in the evaluation. However, the Moderator is responsible for grades given. If there are complaints by a group member, he should contact the directing teacher immediately. A meeting between the Moderator, Evaluator group member and teacher will aid clarification.

GROUP MEMBERS (Identify role only if applies to group style.) RATING

MODERATOR:_____ ( )

EVALUATOR:_____ ( )

G. MEMBER:_____ROLE:_____ ( )

G. MEMBER:_____ROLE:_____ ( )

G. MEMBER:_____ROLE:_____ ( )

G. MEMBER:_____ROLE:_____ ( )

G. MEMBER:_____ROLE:_____ ( )

G. MEMBER:_____ROLE:_____ ( )

. . . . . .

RATING:

(1) Plays role properly, enthusiastic, knowledgeable about issue, listens
(2) Plays role, but not completely involved or as well informed, listens
(3) Participates, role confused, listens but mind set
(4) Fails to fully participate, distracts, mind set
(5) No contribution to the group

ASK THESE QUESTIONS ABOUT YOURSELVES

1. Did I understand and attempt to achieve the requested goals about the issue?
2. Did I play the assigned role without displaying my own mind set?
3. Was I well informed about the issue? Did I listen to the other group members' ideas?
4. How can I improve upon being more effective in my group?
5. AFTER DOING SELF EVALUATION WITH FELLOW GROUP MEMBERS. EVALUATE EACH OTHER. (The Group Evaluator records the total group decision on this form.)