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## ABSTRACT

The purpose of this study was to investigate the effectiveness of a five-week program in affective education with emphasis on facilitating the integration of a large proportion of new students into a school. Specifically, the program was designed to: (1) reduce intergroup prejudice by modifying in a positive direction attitudes toward self and others, and (2) help new students adapt to their new school. The program was implemented through the combined efforts of teachers and counselors. Three major components served as vehicles to achieve the goal. Discussion groups focused on: (1) clarifying myths underlying prejudice by examining the characteristics, values, and contributions of the minority groups; (2) the processes of value system development; and, (3) the consequences to minority and majority groups of failing to resolve intergroup conflict. Communications groups provided planned opportunities to grow in self awareness and in the understanding, attitudes, and skills needed to relate positively to persons from different ethnic, social, and cultural backgrounds. The developmental, individualized reading program emphasized individual successes in reading as well as successes as a learner.

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# ffective education to facilitate integration

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**P. K. YONGE  
LABORATORY  
SCHOOL**

COLLEGE OF EDUCATION  
UNIVERSITY OF FLORIDA  
GAINESVILLE, FLORIDA 32601

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AFFECTIVE EDUCATION  
TO FACILITATE INTEGRATION

Dr. James Northrop, Project Director

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Dr. James Northrop who served as director of the program for two summers and prepared the guide for communications group;

Mrs. Hellen Guttinger who developed and implemented the individualized, developmental reading laboratory;

Mrs. Ruth Duncan who prepared the original proposal for the study, the guide book for discussion groups, and the final research monograph for dissemination;

Mr. Donald McFayden who led the discussion groups;

Dr. Vynce Hines and Sandra Damico who collected, analyzed, and reported the findings.

## PREFACE

Three years ago the role of P. K. Yonge Laboratory School was changed. Whereas the primary mission of the school previously had been to provide services in teacher education, a shift in focus assigned priority to research and development. In order to validate the School's research and development for use in the public schools of the State, the distribution of the student population needed to be made representative of the State's school-age population.

In order to meet this need, admissions policies were modified to admit only black children and children from lower economic groups until a proportionate representation from these groups was obtained. Admission of large numbers of children from these groups placed the School in a strategic position to initiate its research and development program by attacking one of the most critical problems of American public education--the problem of the constructive integration of children from different ethnic, social, and cultural backgrounds as they come together in schools.

The challenge is presented succinctly by Stephen Steinberg, research sociologist at the Survey Research Center, University of California at Berkeley in the February, 1971, issue of Today's Education.

To the extent that open-mindedness, tolerance, and respect for civil liberties increase with greater education, the schools are succeeding in their educational functions. To the extent that students leave schools with prejudiced attitudes toward the nation's minorities, with little patience for social and intellectual diversity, and with little understanding or respect for the democratic process, the schools are failing. . . . Schools are practically the only institutions in our society equipped to counteract prejudices in our children.

To avoid this responsibility would indicate not just a moral failure, but an educational failure as well. (19, p. 17)

The theme for the 1970 ASCD Conference was "A Man for Tomorrow's World." Sam Proctor addressed those assembled about "Education for A

Genuine Community."

We have had all sorts of goals for education: the growth of the whole child, academic excellence, citizenship participation, and global awareness, but our times call for an added dimension. We want education to prepare us to live in a society of variety and make it work, to live among people with widely differing starting points and find joy in seeing them all moving forward at their optimum pace, to find happiness and fulfillment not in power--in dominion--in self-destruction, greed and materialism--but in helping others to find value in their lives. We want education to define a new goal for us that is more satisfying than race and class strife, and more decent than self-indulgence. . . . The man for the new age must be a participant in genuine community. (11, p. 6)

This monograph describes an experimental program in which results indicate that after participation, ninth grade students from divergent backgrounds, many of them new to the school, had more positive feelings about themselves and others and were more accepting of others and more accepted by them. Furthermore, they tended to have better attitudes toward the School, to be more open to change, and to make better academic progress than those who did not participate.

It is hoped that this report will be of practical benefit to faculties of other schools as they face similar problems and challenges and that it will provide some stimulus to conduct investigations of other approaches to this important problem.

J. B. Hodges, Director  
P. K. Yonge Laboratory School  
Professor of Education  
University of Florida

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A PROGRAM IN AFFECTIVE EDUCATION TO FACILITATE INTEGRATION  
OF NEW STUDENTS INTO A SCHOOL

The introduction of a large number of new students into a school often creates behavior problems which interrupt learning and perpetuate a hostile environment. Human potential is dissipated in feelings of mistrust, suppression, and inadequacy. This problem has become increasingly significant, particularly at the junior and senior high levels, with the integration of large numbers of black students into previously all white schools.

The Study

The purpose of this study was to investigate the effectiveness of a five week program in affective education with emphasis on facilitating the integration of a large proportion of new students into a school. Specifically, the program was designed to 1) reduce intergroup prejudice by modifying in a positive direction attitudes toward self and others, and 2) help new students adapt to their new school.

The program was implemented through the combined efforts of teachers and counselors. Three major components served as vehicles to achieve the goals. Discussion groups focused on 1) clarifying myths underlying prejudice by examining the characteristics, values, and contributions of the minority groups; 2) the processes of value system development; and 3) the consequences to minority and majority groups of failing to resolve intergroup conflict. Communications groups provided planned opportunities to grow in self awareness and in the understandings, attitudes, and skills needed to relate positively to

persons from different ethnic, social, and cultural backgrounds. The developmental, individualized reading program emphasized individual successes in reading as well as successes as a learner.

#### Did It Work?

The study sought answers to three questions.

1. Are attitudes toward the school of new students any different as a result of participating in the five week program?

Those who participated in the summer program not only had more positive attitudes toward school but were more open to change than those new students who did not participate.

2. Are new students more accepting of themselves and other students after participating in the program? Is there any difference in the way they are accepted by other students, old and new, who did not participate?

Those who participated were more accepting of themselves and other students. They were also accepted into established groups with less difficulty than those who did not participate.

3. Is there any improvement in the self concept of those who participated?

There was no significant improvement in the self concepts of the whites, but there was in the blacks.

#### Why This Approach?

Conflicts which arise as a result of intergroup prejudice have not been resolved by legislation, busing, making rules, or adding deans. A single approach such as sensitivity groups or changing curriculum content sometimes intensifies the problem.

In accepting the challenge to reduce intergroup conflicts and to help new students adapt, it was decided that perhaps curriculum content and group guidance activities combined might provide the necessary

stimulus for positive change. To tackle problems and issues intelligently, students need facts. To deal with emotional aspects, they need planned opportunities to discuss their own feelings and to clarify their own values as well as to hear feelings and values of others expressed. Consequently, communications group activities, planned under the direction of counselors, were included.

Since how we feel about others is closely allied with how we feel about ourselves, the entire program focused primarily on improving self-concept. Thus, getting knowledge was not dependent on being able to read well. Rather, films, filmstrips, records, and discussion groups were used extensively as vehicles for learning. Success was thus attainable for all students.

Reading, however, is still the primary means to academic achievement. Hence, reading improvement was an important aspect of the program. Moreover, it was felt that positive reinforcement through a developmental, individualized approach, insuring immediate progress, would serve to enhance the self-concept. At the same time, new students were introduced to a major service in the school, housed in the library, which would continue to be available to them throughout their years of attendance, thus providing something to hang on to as they moved into the regular school year.

This study demonstrates that intergroup conflicts are reduced and new students adapt more readily to a new school when curriculum content is combined with opportunities for development of increased awareness of self and others and improvement of the concept of self as a learner are directed toward those ends.

## How Was It Done?

### The Pupils:

This program was developed in two stages. During the summer of 1970, an initial experimental program was conducted and evaluated using twenty-five students. See Appendix VIII for details. Based upon evaluations and teacher feedback the operational model was constructed and implemented using twenty-nine students during the summer of 1971.

Of the twenty-nine students participating, nineteen were white and ten were black. Nineteen were entering P. K. Yonge for the first time, including nine of the ten black students. All new students entering the ninth grade were invited to participate; "old" students were selected on the recommendations of teachers on the basis of potential benefit from the program or effectiveness as helpers. The remaining sixty-two students enrolled in the ninth grade in 1971-1972 acted as the control group.

### The Staff:

The staff was composed of four people. A social studies teacher led the discussion groups. A teacher-counselor conducted the reading laboratory. A counselor and graduate student in counseling practicum led the communications groups.

### The Place:

A classroom large enough to contain all student participants and equipped for the total group to view films and filmstrips was used. One additional classroom was used for follow-up discussion for half the group while the other half was in the reading laboratory, located in the library. Communications groups of from six to eight members met in

smaller areas or conference rooms which provided some degree of privacy.

The Program:

During the five weeks, a typical weekly schedule included activities in discussion groups, communications groups, reading laboratory, film presentations in large groups, field trips to churches, and a refreshment break. (See Appendix I.) The major components are described briefly on the following pages.

Discussion Groups:

The discussion groups consisted of approximately fifteen students or one-half the typical class. The major aims for students participating in the group sessions were: to develop skill in observing likenesses and differences; to understand the nature and degrees of prejudice; to identify some consequences of intergroup conflict because of ethnic, social, or cultural differences; to recognize contributions of the many minority groups to our American heritage; and to view critically and verbalize accurately.

Instructional procedures were based on the premise that suspicion, distrust, and uneasiness are outcomes of ignorance. Further, when collected individuals experiencing distaste, distrust, and uneasiness are provided with a safe environment in which to examine a problem mutual to all members, they not only generate some possible solutions but identify strengths and become more humane in their attitudes toward differences and limitations. Hence, materials and field trips to churches, representing major religious differences in the community, were

were selected because of their potential for providing information about minority groups and for examining the problem of intergroup conflict. Although audio-visuals were used as the main vehicle to initiate and stimulate discussion, an assortment of poems, essays, short stories, and a novelette were shared in the classroom to enhance and reinforce concepts. Never was learning dependent upon being able to read. See Appendix VI for a complete list of the goals and a sample discussion plan.

#### Communications Groups:

One large group was divided into sub-groups of eight to ten students for the communications group experiences. The general objectives of the communications groups were to promote increased self-awareness and sense of well being and to improve interpersonal relationships.

The general purpose and nature of the experience were presented and discussed to satisfy student curiosity and to help both the leader and the participants in reaching some understanding of what the experience was to be. Ground rules for the communications sessions were established and discussed, and the role of the leader as facilitator was clarified. Activities consisted of exercises in discovering and identifying feelings in self and others, focused feedback, group puzzles, and exercises designed to increase trust and cooperation.

During the latter half of the program, each small group was combined with another for several sessions. Then the group pairing was changed for several sessions. This procedure afforded students an opportunity to move from a base of relative security in their small group to begin

interacting in a more personal way with a new group of students.

See Appendix VII for the goals and sample activities.

Developmental, Individualized Reading Laboratory:

This component was implemented by a teacher-counselor and high school student assistants who had previously completed the program.

Prior to beginning the reading laboratory experiences, students were tested with the Diagnostic Reading Test (Triggs), Upper Level-Form A. Then the teacher-counselor scheduled individual conferences to provide an opportunity for each student to look at himself realistically as a reader through an interpretation of his reading test scores. Using this information, students were assisted in setting their own goals and in planning an individualized program to meet the goals. They were encouraged to assume responsibility for their own growth in the reading laboratory.

Upon completion of four weeks (12 one-hour sessions) students were given a posttest using the Diagnostic Reading Test (Triggs) Form C, the GHD Reading Attitude Scale, and an open ended student evaluation form. These were followed by individual student conferences in which the student and teacher-counselor evaluated the student's gains in reading and success in assuming responsibility for his own improvement.

A complete description of the reading program at the School may be found in "An Experiment in Developmental, Individualized Reading: An Alternative to Performance Contracting," Research Monograph, Volume I, #1, P. K. Yonge Laboratory School, College of Education, University of Florida, 1972. The publication is available on request.

### What Do The Data Show?

#### Experimental Design:

The twenty-nine experimental students, ten of whom were black, took three pretests and received treatment during the summer, 1971. Nineteen were entering P. K. Yonge for the first time, including nine of the ten black students. The remaining sixty-one students, "new" and "old", enrolling in the ninth grade for the 1971-1972 session acted as the control group. In the fall these took the three tests when administered to the experimental group as posttests.

	Summer, 1971		Fall, 1971
Experimental	$X_1$	0	$X_2$
Control			$X_2$

$X_1$  stands for pretest;  $X_2$  stands for posttest; 0 stands for treatment. Analysis of data included an examination of the differences between  $X_1$  and  $X_2$  for the experimental group and a comparison between  $X_2$  and  $X_2$  for experimental and control groups. Identification on tests included sex and race in addition to indication of whether a student had participated in the summer program or not. It was possible then to compare ratings of black to black, black to white, white to white, female to female, female to male, experimental to experimental, experimental to control, and control to control.

#### Instrumentation and Results:

Three instruments were used to gather data on the 1971 model: the Battle Student Attitude Scale, the Ohio Social Acceptance Scale, and the Florida Key Inferred Learner Self-Concept.



Battle Student Attitude Scale

This instrument is designed to measure attitudes toward self, other pupils, and school. (See Appendix III.) The possible range of scores is from zero to 150. Zero would indicate total rejection, whereas 150 would indicate total acceptance. Reliability approximated .85.

The instrument was administered to participants during the first week of the summer program and to all ninth grade students, experimental and control, in November, 1971.

A t test was applied to the difference in means in order to determine statistical significance. When determined by a t test, statistically significant differences are those which probably occurred as the result of treatment. It is assumed, therefore, that these differences occurred as the result of the treatment rather than by chance.

Table I presents score results.

Table I

Battle Student Attitude Scale

Item Nos.	Self 1-15	Other Students 16-25	Teacher 26-45	Whole School 46-50	Totals 1-50
<u>Experimental</u>					
Black Pre	30.875	21.375	39.762	11.24	103.26
Post	32.125	21.375	40.875	11.114	105.50
White Pre	35.475	24.352	50.646	12.118	122.59
Post	36.412	23.412	48.941	12.848	121.59
<u>Control</u>					
Black Post	31.40	19.30	43.00	10.70	104.40
White Post	35.04	22.86	48.06	12.54	118.50

The summary of results which follows indicate that all changes were in a positive direction, but only one comparison was statistically significant; i.e., item #2.

1. Experimental and control blacks had similar attitudes toward school on the post measure with an apparent total difference favoring the experimental group. White students in the experimental group dropped one point from pre to posttest but still remained 3.09 points above the control whites.

2. Both experimental and control white students had statistically significant higher total attitude scores than did either the experimental or control blacks.

3. There was a 2.24 change from pre to posttest for the experimental blacks, but this gain was not statistically significant.

4. A comparison of posttest scores of experimental and control black students shows the experimental group to have a slightly higher attitude score on all subfactors (self, other students, whole school, and total) except attitude toward the teachers. None of these differences are statistically significant.

5. A comparison between posttest scores of experimental and control white students shows those in the experimental group to have slightly higher scores on all five test subfactors; i.e., self, other students, teachers, whole school, and total. None of these differences, however, is statistically significant.

### The Ohio Social Acceptance Scale

The Ohio Social Acceptance Scale (See Appendix IV) gives each student a chance to rate every other pupil on a five point scale ranging from number one "best friend" to number five, "person one does not wish to know". The lower the score, then, the more positive the direction. Ratings are done anonymously on a class roll with each student being instructed to mark a "3" after his own name. Pupils then read the descriptions which go with each number and proceed to assign numbers to each person in the class. A space is provided on the roll for indicating sex, race, and other variables of interest. It is thus possible to see how boys rate boys, how boys rate girls, how girls rate each other, how they rate boys, how new students rate new students, how they rate old students, how old students rate each other, how they rate new students, how blacks rate blacks (new and old), how blacks rate whites (new and old), how whites rate whites (new and old), and how whites rate blacks (new and old).

A mean rating of near two points would mean that others are viewed as "My other friends." A mean rating of close to three would indicate that "I do not know this person very well."

Data were collected using the Ohio Social Acceptance Scale mid way in the summer program and again on all the ninth grade students, experimental and control, in November, 1971.

Detailed data are presented in Table II.

Table II

Ohio Social Acceptance Scale  
Means ( $\bar{x}$ ) and t Scores

A t test was used to determine levels of significance. Levels of significance are indicated by an asterisk:

<u>All ninth grade by experimental black</u> ( $\bar{x} = 2.520$ ) to all ninth grade by control black ( $\bar{x} = 2.795$ )	t = 6.045***
<u>All ninth grade by total experimental</u> ( $\bar{x} = 2.895$ ) to all ninth grade by total control ( $\bar{x} = 3.026$ )	t = 1.886
<u>Experimental black by experimental black</u> ( $\bar{x} = 1.850$ ) to experimental black by control black ( $\bar{x} = 2.304$ )	t = 2.313*
Control black by experimental black ( $\bar{x} = 1.860$ ) <u>to control black by control black</u> ( $\bar{x} = 2.114$ )	t = 1.475
Experimental black by control black ( $\bar{x} = 2.304$ ) <u>to control black by control black</u> ( $\bar{x} = 2.114$ )	t = .8085
<u>Experimental black by experimental black</u> ( $\bar{x} = 1.850$ ) to control black by control black ( $\bar{x} = 2.114$ )	t = 1.680
<u>Experimental black by total experimental</u> ( $\bar{x} = 2.701$ ) to control black by total experimental ( $\bar{x} = 2.822$ )	t = .8269
<u>Experimental black by total control</u> ( $\bar{x} = 2.867$ ) to control black by total control ( $\bar{x} = 3.015$ )	t = .978
<u>Experimental black by all white</u> ( $\bar{x} = 2.983$ ) to control black by all white ( $\bar{x} = 3.181$ )	t = 1.140
Experimental black by all white ( $\bar{x} = 2.983$ ) <u>to control black by all black</u> ( $\bar{x} = 2.008$ )	t = .662
Experimental black by all white ( $\bar{x} = 2.983$ ) <u>to experimental black by all black</u> ( $\bar{x} = 2.114$ )	t = 4.775***
Control black by all white ( $\bar{x} = 3.181$ ) <u>to control black by all black</u> ( $\bar{x} = 2.008$ )	t = 7.779***
<u>Experimental black by males</u> ( $\bar{x} = 2.705$ ) to control black by males ( $\bar{x} = 2.903$ )	t = 1.350
<u>Experimental black by females</u> ( $\bar{x} = 2.944$ ) to control black by females ( $\bar{x} = 3.023$ )	t = .493
<u>Experimental black by experimental white</u> ( $\bar{x} = 3.029$ ) to control black by experimental white ( $\bar{x} = 3.192$ )	t = .793

Table II (con't)

<u>Experimental black by experimental white</u> ( $\bar{x}$ = 2.968)	
to control black by control white ( $\bar{x}$ = 3.177)	t = 1.215
<u>All white by experimental black</u> ( $\bar{x}$ = 2.691)	
to all white by control black ( $\bar{x}$ = 3.239)	t = 7.876***
<u>All white by total experimental</u> ( $\bar{x}$ = 2.820)	
to all white by total control ( $\bar{x}$ = 2.881)	t = 1.309

\* .05

\*\*\* .001

A summary of results follows:

1. There were a number of significant differences obtained with this instrument. Nine of eleven comparisons between experimental blacks and control blacks favored the experimental blacks. Using the sign test, this result is statistically significant at the .01 level.
2. At least as important as how black students are accepted is how they accept others. The black students in the summer program accepted all white students with a mean of 2.691. The acceptance of all whites by control blacks was 3.239. The difference, .548, favoring the summer blacks, had a "t" of 7.8763, significant beyond the .0001 level.
3. Four comparisons, including the one mentioned above, are significant at the .001 level and one at the .05 level. Other differences significant at the .001 level include (a) the way the experimental black students view all other ninth graders, (b) the way the experimental blacks are seen by all black students compared to the way they are viewed by the white students in the class, and (c) ~~the way the control blacks are seen by all blacks compared to the way they are seen by~~ the white students. Significant at the .05 level is the way the control

blacks view them.

4. Two differences, important because they are not significant, are the ways in which the control blacks view themselves and the experimental blacks and the ways in which experimental blacks view themselves and the other black students. These nondifferences indicate that the summer experience did not isolate those black students who participated from the rest of the black students in the class nor did it cause them to view the other black students differently from themselves.

#### Florida Key Inferred Learner Self-Concept

This instrument calls for rating of students by teachers on eighteen items. The five degree scale ranges from zero, "never" to five, "very often." A higher score indicates a move in a positive direction. (See Appendix V.)

Examination of data provides comparisons between students who participated in the summer program and those who did not, females and males, summer whites and nonsummer whites, and summer blacks and nonsummer blacks.

Ratings were made on experimental students by the teachers in the summer program mid way through the summer, 1971. All ninth grade teachers participated in rating all ninth graders (experimental and control) in October, 1971.

Total scale means were computed for each student and placed in rank order from high to low. The data were then placed in four tables providing for comparisons. (See Tables III-VI.) A chi square was run on the data contained in the three Tables III, IV, and V. Fischer's

Exact Probability Test was used on Table VI because of the small numbers.

Summary Tables III-VI

Florida Key  
Inferred Learner Self-Concept

Table III

Summer versus Nonsummer Students

Score	Summer	Non Summer	Total
Above Median	16	33	49
Below Median	11	34	45
Total	27	67	94

$x^2 = .9408$  n.s.

Table IV

Summer Whites versus Nonsummer Whites

Score	Summer White	Nonsummer White	Total
Above Median	12	32	44
Below Median	10	23	33
Total	22	55	77

$x^2 = .9408$  n.s.

Table V

Females versus Males

Score	Female	Male	Total
Above Median	30	19	49
Below Median	16	29	45
Total	46	48	94

Table VI

Summer Blacks versus Nonsummer Blacks

Score	Summer Blacks	Nonsummer Blacks	Total
Above Median	4	1	5
Below Median	1	11	12
Total	5	12	17

Fischer's = .00986,  $p < .01$

A summary of results follows:

1. There were no statistically significant differences between all summer students and all nonsummer students or between summer white and nonsummer whites.
2. A statistically significant difference at the .02 level was found between females and males, favoring the females, regardless of whether or not they had participated in the summer program. This intriguing finding is being explored in other research underway at the P. K. Yonge Laboratory School but has little relation to this program.
3. Table VI compares those black students who participated in the summer program to those who did not. It reveals a statistically significant difference at the .01 level in favor of those black students who did participate. It can thus be inferred that participation in the summer program was positively related to the self-concept as learner of those black students who participated.



## How Can Other Schools Incorporate This Program?

### Staff:

Two regular classroom teachers of social studies and/or English skilled in stimulating student discussion can incorporate this program or develop a similar one as an orientation unit during the first eight or nine weeks of school. The reading component can be directed by a person with an understanding of counseling as well as the developmental approach to reading improvement.

It would be advisable for the school's counselor to be an active member of the team. However, if this is impossible then a classroom teacher skilled in working with groups could be used with some assistance from a counselor. A handbook has been prepared for use by a classroom teacher where no assistance is available. One additional person with skills to assist communications groups would be helpful.

### The Place:

The only special place needed, in addition to regular classrooms, is a reading laboratory with a minimum of twelve wired carrels. The library is an excellent location for the laboratory.

### The Schedule:

The experimental model was conducted for three hours per school day for five weeks during the summer, 1971. Since the objectives of the program are interdisciplinary, it would seem most feasible to schedule at least a two period block of time for English or language arts with social studies. This, of course, would mean the time for

implementation would need to be extended since approximately seventy-five total hours are minimum. (See Appendix I for the schedule used in the study.)

Equipment and Materials:

As previously emphasized, materials for discussion groups were selected to provide concentrated focus on the problem. Others may be equally effective; however, it is important that audio-visuals serve as the primary vehicle for learning.

Filmstrips used in the study were selected from the following:

<u>The Fundamentals of Thinking - F151</u> Complete set of 9 captioned color filmstrips with teacher's manual	48.50
Eygate House - 146-1 Archer Avenue Jamaica, New York 11435	
<u>Exploring the Myths of Prejudice</u> <u>Minorities Have Made America Great</u>	34.20
Part I	79.80
Part II	79.80
<u>Growing Up Black</u>	57.00
<u>They Have Overcome</u>	68.40
<u>The American Indian: A Study in Depth</u>	79.80
<u>Our Living Bill of Rights</u> Part I	79.80
Available from Warren Schloat Productions, Inc. Pleasantville, New York 10570	

The same results might have been obtained without the use of these films; however, these did serve to mirror the problems dramatically, and students' reactions to the quality were rewarding.

The following films were used:

Bad Day at Black Rock stars Spencer Tracy and Robert Bryan.  
The Japanese-American is the subject.  
81 minutes - Rent \$35.00

Something of Value stars Rock Hudson, Dana Wynter, and Sidney Portier.  
African Mau-Mau is the subject.  
113 minutes - Rent \$30.00

Trial stars Glenn Ford, Dorothy McGuire, and John Hodiak. Mexican-American is the subject.

105 minutes - Rent \$20.00

The World, The Flesh, and The Devil, stars Harry Belafonte, Inger Stevens, and Mel Ferrer. American Negroes and White is the subject.

95 minutes - Rent \$30.00

Light in the Forest stars James MacArthur, Carol Lynley, Fess Parker. American Indians and early settlers is the subject.

93 minutes - Rent \$30.00

Films are available from Films Incorporated, 277 Pharr Road N.E., Atlanta, Georgia, 30305, phone 237-0341: Area Code (404).

Mr. Jack Strouss, Jr. is representative for Florida and the southeast.

A complete list of materials needed in the reading laboratory is found in Appendix II. Costs and sources are also included.

#### Staff Development and Workshops:

If sufficient interest in planning similar programs is indicated by other schools or school systems, P.K. Yonge Laboratory School is in a position to offer drive-in conferences or workshops as a service to the public schools of Florida. Simply contact Dr. J. B. Hodges, Director P.K. Yonge Laboratory School, University of Florida, Gainesville, 32601, in order that he may determine if the level of interest warrants planning one or more of such conferences.

#### Field Testing:

Much additional data are needed. Consequently, a proposal is being developed which will provide for testing the program described in this monograph in a variety of schools in the state of Florida and at grade levels seven through nine.

If interested in exploring the possibilities of cooperating as a field testing site, please contact Dr. J. B. Hodges.

Appendix I

Typical Cycle Schedule--Repeated Five Times

Day 1                      Day 2                      Day 3                      Day 4                      Day 5

Hour					
1	Discussion A**B** Reading CD**	Class Group*** Movie	Discussion AB Reading CD	Discussion AB Reading CD	Class Group Field Trip
2	Reading AB Communications C* Communications D*		Reading AB Communications C Communications D	Reading AB Communications C Communications D	
3	Communications A Communications B Discussion CD		Communications A Communications B Discussion CD	Communications A Communications B Discussion CD	
	Reporting Reactions	Reporting Reactions	Reporting Reactions	Reporting Reactions	

- \* Classes were divided into four small groups of six to eight members for communication groups.
- \*\* Small groups could be combined into groups of approximate half-class size for discussion and reading lab.
- \*\*\* The entire class was combined for films and field trips.

Appendix II

Developmental Individualized Reading Program

Materials and Costs

	<u>TOTAL COST</u>	<u>YEARS OF LONGEVITY</u>	<u>COST FOR ONE YEAR</u>
<b>Equipment:</b>			
8 Jr. Controlled Readers (EDL)	\$1,680.00	10	\$168.00
6 Reading Accelerators (SRA)	389.70	10	38.97
5 Flash-X Machines (EDL)	41.00	5	8.20
12 Carrels (Sch. Equip. Dist.)	1,400.34	10	140.34
2 Record Players (Trumble Co.)	135.00	5	27.00
1 Dukane Filmstrip and Record Player Combination (Brandon's)	179.00	5	35.80
1 Dukane Filmstrip and Cassette Combination (Brandon's)	203.00	5	40.60
2 Cassette Recorders (Thurrow Electronic)	70.00	5	14.00
6 Earphones (Trumble Co.)	38.10	5	7.62
2 Stopwatch (Zipp Co.)	37.90	3	12.64
1 File Cabinet	60.00	10	6.00
	<u>\$4,234.04</u>		<u>\$499.17</u>

**Materials:**

Rate --

1 Set Rapid Reading Folders (Local production)	20.00	5	4.00
45 Controlled Reader Books (EDL) 3C 3E 5GH 5LJ 4KL 4MN 3D 4F 5HG 5JI 4LK	90.00	3	30.00
11 Controlled Reader Filmstrips (C through M) (EDL)	962.50	5	192.50
2 Maxwell Skimming and Scanning (McGraw-Hill)	8.91	3	2.97
5 Brown Efficient Reading (Health)	19.74	3	6.58
15 Better Reader Books (SRA)	44.25	5	8.85

Vocabulary --

2 Volumes Vocabulary Records (Scott, Foremen)	30.00	5	6.00
9 Word Clues Books (EDL)	19.80	3	6.60
8 Flash-X Cards (EDL)	28.80	5	5.76
1 Set Wordcraft Vocabulary (Communicad)	80.00	3	26.67
3 Grow in Word Power (Reader's Digest)	4.60	3	1.20
2 Basic Vocabulary Skills (McGraw-Hill)	7.92	3	2.64

Appendix II con't.

	<u>TOTAL COST</u>	<u>YEARS OF LONGEVITY</u>	<u>COST FOR ONE YEAR</u>
Comprehension --			
1 Set Listening Skills Program (SRA)	\$90.00	5	\$18.00
1 Set Listen and Think Tapes (EDL)	60.00	5	12.00
1 IIC Reading Laboratory (SRA)	68.96	4	17.24
1 IVA Reading Laboratory (SRA)	68.96	4	17.24
1 Senior Reading for Understanding Kit (SRA)	41.94	3	13.98
1 Junior Reading for Understanding Kit (SRA)	41.94	3	13.98
4 Sets <u>88 Passages Books</u> (College Skills)	6.60	3	2.20
4 Sets <u>100 Passages Books</u> (College Skills)	8.16	3	2.72
1 Set <u>Skill Building Books</u> (Barnell-Loft)	19.32	3	6.44
5 <u>Reading for the Main Idea</u> Books, (McGraw-Hill)	12.51	3	4.17
5 <u>Critical Reading Improvement</u> Books (McGraw-Hill)	14.75	3	4.92
10 <u>Advanced Reading Skill Builders</u> (Reader's Digest)	20.10	3	6.70
10 <u>New Reading Skill Builders</u>	20.10	3	6.70
12 <u>Scope Skill Builders</u> (Scholastic)	12.80	3	4.27
	<u>\$1,922.66</u>		<u>\$464.33</u>
Miscellaneous:			
Diagnostic Reading Test (Triggs)	\$80.00	2	\$40.00
Secretarial Time and Materials	300.00	1	300.00
Repair to Equipment	72.40	1	72.40
	<u>\$452.40</u>		<u>\$412.40</u>
<u>Total Cost for Equipment,</u> <u>Materials and Miscellaneous:</u>	<u>\$6,609.10</u>		<u>\$1,375.90</u>

Publisher's Names and Addresses

Barnell-Loft, Ltd.  
111 South Centre Avenue  
Rockville Centre, New York 11570

Brandon's Inc.  
1027 Mary Street  
Jacksonville, Florida 32207

College Skills Center  
101 West 31st Street  
New York, New York 10001

D. C. Health and Company  
285 Columbus Avenue  
Boston, Massachusetts 02116

McGraw-Hill Book Company, Inc.  
Manchester Road  
Manchester, Missouri 63011

Reader's Digest Services, Inc.  
Educational Division  
Pleasantville, New York 10570

Scholastic Book Service  
Scholastic Magazine, Inc.  
904 Sylvan  
Englewood Cliffs, New Jersey 07632

School Equipment Distributors, Inc  
319 Monroe Street  
Montgomery, Alabama 36104

Science Research Associates, Inc. (SRA)  
259 East Erie Street  
Chicago, Illinois 60611

Ronald Trumble Company, Inc.  
P. O. Box 50790  
Jacksonville, Florida 32207

Thurrow Electronics  
1032 South Main Street  
Gainesville, Florida 32601

Zipp Sporting Goods  
7230 Red Road  
South Miami, Florida 33143



Appendix III

STUDENT ATTITUDE SCALE\*

J. A. Battle

University of Florida

Students of this school, like students of all schools, have different feelings about things. This booklet is for you to express your feelings toward yourself, other students, your teachers, your school administration, and your school as a whole. This is NOT a test. There are no "Right" or "Wrong" answers as such. EVERY ANSWER THAT TELLS HOW YOU FEEL IS A RIGHT ANSWER FOR YOU. By marking how you feel about each statement, you can help your school become a better school.

DIRECTIONS: Please mark your answers on a separate answer sheet.

Please place your name, grade, date, and sex on the spaces provided on the top of the answer sheet.

Fill in Answer Space No. 1 if the statement is mostly true or true for you.

Fill in Answer Space No. 2 if the statement is about half-true and half-false for you.

Fill in Answer No. 3 if the statement is mostly-false or false for you.

\* University of Florida, Kellogg Foundation Leadership Project,  
Pupil Human Relations Study, 1953.

- | <u>1</u> | <u>2</u> | <u>3</u> |   |
|----------|----------|----------|---|
| MT       | S        | MF       | 1. I think I am too shy.  |
| MT       | S        | MF       | 2. I often feel the need to make excuses for the way I act.                                     |
| MT       | S        | MF       | 3. I often change the way I do things or what I believe in order to please someone else.        |
| MT       | S        | MF       | 4. It worries me to think that some of the people I know may dislike me.                        |
| MT       | S        | MF       | 5. I feel that I have little to give to the helping of others.                                  |
| MT       | S        | MF       | 6. I feel that I might be a failure if I don't make certain changes in my life.                 |
| MT       | S        | MF       | 7. When meeting a person for the first time, I want to know at once whether he or she likes me. |
| MT       | S        | MF       | 8. Although people sometimes praise me, I feel that I do not really earn the praise.            |
| MT       | S        | MF       | 9. I become afraid when I think of something I have done wrong or might do wrong in the future. |
| MT       | S        | MF       | 10. I would be happier if I didn't have certain faults or fears about myself.                   |
| MT       | S        | MF       | 11. I am not at ease at parties and other social affairs.                                       |
| MT       | S        | MF       | 12. I don't know what I really want out of life.  |

<u>1</u>	<u>2</u>	<u>3</u>	
MT	S	MF	13. I feel that I am too often left out of things.
MT	S	MF	14. When my feelings change from sad to happy and happy to sad, I do not know why.
MT	S	MF	15. I feel unhappy much of the time.
MT	S	MF	16. I dislike several of my classmates.
MT	S	MF	17. Members of my class do not know each other well.
MT	S	MF	18. Students at this school are snobbish or "stuck-up".
MT	S	MF	19. Many of my classmates do not act as old as their age.
MT	S	MF	20. A few students at this school run all the student affairs.
MT	S	MF	21. Many boys and girls at this school feel that they do not "belong" here.
MT	S	MF	22. There is little effort at this school to make new students feel "at home".
MT	S	MF	23. Students at this school do not try to help other students who are in trouble.
MT	S	MF	24. I find it hard to take a real interest in the activities of some of my friends.
MT	S	MF	25. When I am first getting to know a person of my age, I compare him or her with me to see whether I am better or not as good as this person.
MT	S	MF	26. I think that my teachers in general will not listen to student ideas.

- | <u>1</u> | <u>2</u> | <u>3</u> |  |
|----------|----------|----------|--|
| MT       | S        | MF       | 27. I feel that few of my teachers are willing to help one student at a time, (that is to help a student individually).                |
| MT       | S        | MF       | 28. Some of my teachers favor girls more than boys.  |
| MT       | S        | MF       | 29. Some of my teachers favor boys more than girls.  |
| MT       | S        | MF       | 30. Not many of my teachers are up to date (as they are behind the times) in what they teach and how they teach it.                    |
| MT       | S        | MF       | 31. I feel that many of my teachers think I know less than I do know.  |
| MT       | S        | MF       | 32. It seems to me that some of my teachers often talk unkindly to students.   |
| MT       | S        | MF       | 33. It seems to me that several of my teachers are nervous and easily excited.   |
| MT       | S        | MF       | 34. Some of my teachers are always using words that are too big for me to understand.  |
| MT       | S        | MF       | 35. I believe that most of my teachers are too strict.   |
| MT       | S        | MF       | 36. My teachers expect too much of me.   |
| MT       | S        | MF       | 37. I believe I have a teacher who would give a higher grade because a student complimented him or her or did a favor for the teacher. |
| MT       | S        | MF       | 38. I hate at least one of my teachers.  |
| MT       | S        | MF       | 39. I think that some of my teachers seem to feel that they are always right and the student is always wrong.                          |
| MT       | S        | MF       | 40. I believe that some of my teachers try to make students afraid of them.  |
| MT       | S        | MF       | 41. It seems to me that some of my teachers are inclined to be "bossy".  |
| MT       | S        | MF       | 42. I feel that none of my teachers grade fairly.  |
| MT       | S        | MF       | 43. I believe that most of my teachers should be more pleasant and cheerful.   |

1   2   3

- MT   S   MF   44.   I think that most of my teachers would rather not see and talk to me when school is out.
- MT   S   MF   45.   In many of my classes I feel that the teachers do not want me to express my real opinion, thoughts, or ideas.
- MT   S   MF   46.   It seems to me that my textbooks are "behind the times" or not up to date.
- MT   S   MF   47.   I don't believe that any of my courses or subjects will be useful to me in the work I might do when I finish school.
- MT   S   MF   48.   I think there is little opportunity or chance for students in this school of different grades to meet and get to know each other.
- MT   S   MF   49.   I believe there are too many rules in this school.
- MT   S   MF   50.   It seems to me that if a student is from a family who has more money, or is considered more important, that he or she will get better treatment from the school.

## Appendix IV

### Ohio Social Acceptance Scale\*

**DIRECTIONS:** On a separate sheet you will find the name of every student in your class. Place the number of one of the following paragraphs that describes how you feel about that person after his name. Place a "3" after your own name. Fill in all the blanks at the top of the attached sheet.

1. "My very, very best friend." I would like to have this person as one of my very, very best friends. I would like to spend a lot of time with this person. I would tell some of my troubles and some of my secrets to this person and would do everything I could to help this person out of trouble.
2. "My other friends." I would enjoy working and being with this person. I would invite this person to a party, and would enjoy going on picnics with this person and our friends. I would like to work with this person and I would like to be with this person often. I want this person to be one of my friends.
3. "I do not know this person very well." I would be willing to be on a committee or in a club with this person. This person is not one of my friends, but I think this person is all right.
4. "Don't care for them" I say "hello" whenever I meet this person around school or on the street, but I do not enjoy being with this person. I might spend some time with this person if I didn't have anything else to do, but I would rather be with somebody else. I don't care for this person very much.
5. "Dislike them." I speak to this person only when it is necessary. I do not like to work with this person and would rather not talk to this person.

\*Issued by Ohio Scholarship Tests and Division of Elementary Supervision, State Department of Education, Ohio. Prepared by the Euclid Elementary Teachers in Cooperation with the College of Education, the Ohio State University.

Dr. William W. Purkey  
 Dr. Bob Cage  
 Mr. William Graves  
 University of Florida  
 1970

Appendix V

FLORIDA KEY  
 (Inferred School Self Concept)

NEVER: 0      VERY SELDOM: 1      ONCE IN AWHILE: 2      OCCASION-ALLY: 3      FAIRLY OFTEN: 4      VERY OFTEN: 5

\_\_\_\_\_  
 Name of Student to be Evaluated

Compared with other students his age, does this student:

- |     |   |       |
|-----|---|-------|
| 1.  | get along with other students?                  | _____ |
| 2.  | get along with the teacher?                     | _____ |
| 3.  | keep calm when things go wrong?                 | _____ |
| 4.  | say good things about his school?               | _____ |
| 5.  | tell the truth about his school work?           | _____ |
|     | Relating  | _____ |
| 6.  | speak up for his own ideas?                     | _____ |
| 7.  | offer to speak in front of the class?           | _____ |
| 8.  | offer to answer questions in class?             | _____ |
| 9.  | ask meaningful questions in class?              | _____ |
| 10. | look people in the eye?                         | _____ |
| 11. | join in school activities?                      | _____ |
| 12. | talk to others about his school work?           | _____ |
|     | Asserting                                       | _____ |
| 13. | seek out new things to do in school on his own? | _____ |
| 14. | offer to do extra work in school?               | _____ |
|     | Investing                                       | _____ |
| 15. | finish his school work?                         | _____ |
| 16. | pay attention to class activities?              | _____ |
| 17. | do his school work carefully?                   | _____ |
| 18. | read in class?                                  | _____ |
|     | Coping  | _____ |
|     | TOTAL   | _____ |

TEACHER: \_\_\_\_\_  
 STUDENT'S:    SEX \_\_\_\_\_ AGE \_\_\_\_\_

## Appendix VI

### Goals for Discussion Groups

#### I. Understandings

##### A. About human behavior

1. We study people because the more we know about how they behave and why they behave, the better we can work together for the health, happiness, and welfare of everyone.
2. We study people by learning about how they adjust to their environments with food, shelter, and clothing, by learning about their customs, language, values, beliefs, and attitudes; by learning their physiology.
3. Some ways of learning about people are through observing them as we live and work in their environment; through studying their art, architecture, music, and writings; and through studying their physical make-up.
4. From our studies we can conclude some things for sure about people.
5. From our studies we can only infer some things about people.

##### B. About the language of people

1. We can learn much about people by studying their language.
2. We learn to control our use of language because it affects the behavior and attitudes of others toward us, toward themselves, and toward others.
3. We learn to use language in such a way that there is more understanding and less misunderstanding.



II. Attitudes

A. About others

1. In some ways others are like ourselves.
2. In some ways others are different from ourselves.

B. About ourselves

1. In many ways I am like others.
2. In many ways I am different from others.

III. Skills

A. Thinking

A critical thinking approach to solving problems is a useful skill involving generally five or six steps and certain thought processes.

1. The steps in problem solving are:

Identification and statement of the problem;

Gathering, organizing, and evaluating relevant data;

Analyzing, synthesizing and categorizing data, with-

holding judgment until all data are in;

Formulating hypothesis and/or considering alternatives;

Select an alternative or tentative conclusion;

Test or apply the alternative or conclusion;

2. The thought processes involved are:

Observing

Analyzing

Synthesizing

Comparing

Classifying

Interpreting

Summarizing

B. Listening

1. To listen attentively requires conscious effort and is an indication of concern for others.
2. We listen to try to get meaning from what we hear by:  
listening for main ideas, details and sequence in what we hear;  
listening for appeals to our emotional needs ;  
listening for appeals to our common sense or logic;  
listening to identify the attitude of the speaker toward his subject and toward his audience; i.e.--Is he biased or prejudiced for or against his subject? Does he like his audience? Does he know what he's talking about?  
Is he using words his audience can understand?

C. Speaking

1. To be understood requires conscious effort to speak loudly enough and distinctly enough for our words to be identified by our listeners.
2. To be heard willingly and enthusiastically, requires that our thought and ideas indicate knowledge of and concern for others.
3. To be accepted requires that we sometimes put ourselves in another's position.

Appendix VI  
(con't)

MODEL FOR DISCUSSION

Unit #1: Focus: Identifying Ourselves and Others

Outcomes:

(Discuss outcomes with students)

How do we want to be different at the end of the first session?

- 1) to be able to identify orally the teachers;
- 2) to be able to identify orally, by first name, all students in the group;
- 3) to be able to give at least one piece of information about each member of the group.

Procedures:

Problem #1:

Our problem is to learn some things about individuals in this group, including names (write problem on the board).

Step 1: Ask students to write questions they would ask of someone if they wanted to get acquainted with that person.

(Allow 5 minutes)

Step 2: Ask students to select a partner to interview and have them use their questions in talking with one another.

(Allow 5 minutes)

Step 3: Ask students to take partner and introduce partner to someone else telling something special about the partner.

(Limit 1 minute each)

Session #1 (Continued)

- Step 4: Continue introductions on a two by two basis until everyone in the group has met every other person.  
(20 minutes)
- Step 5: Teacher introduces self to the entire group. (2 minutes)
- Step 6: Ask students to make a name tag containing just first and last names and pin them on. (Name tags are to be collected by teachers and redistributed at the beginning of each session until everyone can recall first and last names of all members of the class.)

## Appendix VII

### Goals for Communications Groups

- A. Awareness of Self and Others
  - 1. To increase awareness of self and ways the student is perceived by others.
  - 2. To increase awareness of feelings of others.
  - 3. To increase awareness of expressing feelings verbally rather than acting them out in negative ways.
- B. Increase Sense of Well-Being
  - 1. To increase feelings of competency in meeting and interacting with new people and in new situations.
  - 2. To recognize and accept honest feelings in self and others.
  - 3. To increase sense of control over one's life situation.
- C. Improved Interpersonal Relationships
  - 1. To increase ability to communicate own feelings to others and to understand feelings of others.
  - 2. To increase feelings of identification with and acceptance by groups of peers.

Appendix VII  
(con't)

Sample Activities for Communications Groups

Introductions

Purpose: To get the group started and to encourage self-disclosure.

Procedure: Members pair off and talk to each other obtaining data about one another. The group then comes together and each person introduces his partner to the group.

Holding Hands in a Circle

Purpose: To explore feelings about touching and being close to others.

Procedure: Members close eyes and hold hands. The leader moves around the circle silently and firmly squeezes each pair of hands for a few moments.

Human Sociometry

Purpose: To deal with membership issues, to help people crystallize their feelings about others and to discuss them.

Procedure: One member stands in the center of the room and places every other member at a spot in the room which indicates his feeling of closeness to that member. Discussion follows.

## Appendix VIII

Historically, each year thirty new students are added to the existing class of sixty students at the ninth grade level. In the spring of 1970, the School was making an effort to increase the number of black students enrolled to obtain a more representative population to serve the research and development functions. Hence, priority was given to the enrollment of blacks at the ninth grade level.

A proposal to facilitate the integration of these students was developed, implemented, and evaluated during the summer, 1970. The project was funded by the Division of Sponsored Research, University of Florida, and served as the basis of the operational model for pilot testing in the summer, 1971.

Of the twenty-five students who participated in 1970, seventeen were white and eight were black. All seventeen whites and one black had attended the School prior to 1970. The remaining seven blacks were those who accepted invitations to participate. Invitations were randomly issued to the group of thirty students entering P. K. Yonge for the first time. The control group consisted of the remaining sixty-five ninth grade students, including those entering the School for the first time.

Both the developmental and pilot studies were conducted for three hours a day for five weeks. The schedule and activities were very similar except for refinement in the 1971 model. In addition, the mathematics and complementary camping program were deleted from the 1971 operational model because: 1) The amount of time that could be devoted to mathematics was not adequate to be of benefit to students.

2) The four day camping trip, while highly beneficial, might be difficult for most public schools to implement.

Description of these aspects of the 1970 model follow.

Mathematics Laboratory:

In the 1970 developmental program, students participated in game-type activities designed to teach mathematical concepts and to encourage positive attitudes toward and to promote feelings of success in mathematics. A regular mathematics teacher conducted this portion of the program. Students were given teacher-made diagnostic tests to identify deficiencies. Mathematics games and object manipulation activities, carried out individually and in small groups, were designed to attempt to correct these deficiencies. Because of limited time span involved, it was felt that little change could be detected by a standardized mathematics achievement test.

Fall Camping Project:

After the 1970 program, students and a staff sufficient for chaperoning and conducting activities participated in a camping experience at Camp Crystal Lake, owned by the Alachua County School Board. This camping program provided a four day common experience to build strong group feelings, improve attitudes toward the School, and increase acceptance of others. Students were made responsible for planning the educational program, field trips during camping recreation, and meals and did most of the work involved in implementation.

Data Gathering Instruments:

During the 1970 program, the Tennessee Self-Concept Scale was used. As the lowest level for which the Tennessee Self-Concept



Scale is considered valid is the ninth grade and because it seemed inappropriate for many of the students in this program, it was discontinued.

In the late spring and again in the fall of 1970, all ninth grade students were given the Stanford Achievement Test-advanced portion-reading and mathematics.

During the first week of the experimental program, students took the Diagnostic Reading Test-Form A. At the end of the five-week program they took Form C of this test. At the same time, they also completed the GHD Reading Attitude Scale and an open-ended evaluation of the reading laboratory.

At the last communication group session, all students completed a Leader Relationship Inventory and an evaluation of the communications group.

Grade point averages on students were computed by the School's Guidance Office from student records.

#### Summary of 1970 Results:

1. Attitudes toward the school of black students who participated, as measured by the Battle Student Attitude Scale, were almost identical with those of white students, experimental and control, on two measures taken before and after the camping. In both instances, there were marked positive differences between black students who participated in the program and those who did not. Biggest changes for pupils before and after the camping trip were attitudes toward self and attitudes toward school as a whole.

2. On the Ohio Social Acceptance Scale all subgroups had real or

apparent changes indicating greater acceptance after the camping trip. Those who participated in the summer program showed the most marked change in how they viewed themselves and also in how they viewed others. Gains were also registered by the minority view of itself and by the acceptance of blacks by whites. Blacks viewed whites significantly more favorably after the camping trip. A possible hypothesis to explain these changes might be that the summer program had left participants, both black and white, more open to change than those who had not participated.

3. As measured by the Tennessee Self-Concept Scale, pupils in the experimental program displayed an apparent positive change on the physical self factor. Statistically significant negative differences were found on the factors of personal self and social self. One explanation may be that as a result of the program, pupils were psychologically able to view themselves more realistically than before,

4. Three of four teachers in the summer program made statistically significant gains on the Tennessee Self-Concept Scale. Since they started at a relatively high level, the gains may be evidence of satisfaction at their ability to work effectively in a new situation.

5. Participants in the program tended to do well academically during the following year. The blacks in the summer program who were new to the School maintained a B average as ninth graders. Grade point averages were computed from student records by the School's Guidance Office.

6. There were apparent, but not statistically significant, gains on the Stanford Achievement Tests in arithmetic and reading, not too

surprising in light of the short duration of the experiment.

7. Student responses to the leader relationship inventory and student reactions to the group experience were not statistically analyzed. They were collected at the end of the five-week program and were summarized for evaluation of the communications group experience.

Generally, the reactions were favorable, and it seemed as if goals were met with success.

The results of the reaction to the group experience indicated that there was a high degree of participation by group members and a moderate-to-high degree of process. A number of uncertain responses were interpreted as a reflection of the short five-week time span. The same general results were found in the leader relationship inventory -- a high degree of favorable responses with a degree of uncertainty. Most students said they thought the group experience was helpful to them, and they were glad they had participated.

#### Data Analysis - 1970 Summer Program

##### Battle Student Attitude Scale:

The Battle Pupil Attitude Scale (modified form) was used to assess how pupils felt toward themselves, other pupils, teachers, and the School on a three point scale. The original Scale of sixty items was shortened because ten items were thought not to be relevant to the Laboratory School. The reliability of the shortened form would be expected to approximate .85.

Since it made little sense to give this instrument to pupils when they had just arrived at a new school, the test was given in

early November, just prior to the fall camping experience at Camp Crystal. It was given again shortly after the week spent at camp. Results are reported in Table I in terms of arithmetic means for various subgroups. The top possible score for the fifty-item test is 150. The higher the score the more positive the change.

Table I

MEANS ON STUDENT ATTITUDE SCALE BY RACE,  
EXPERIMENTAL AND CONTROL GROUPS,  
PRE AND POST TESTS

	BLACK		WHITE	
	<u>Exp.</u>	<u>Control</u>	<u>Exp.</u>	<u>Control</u>
Pre	117.7	99.6	120.4	118.3
Post	116.2	108.0	121.7	117.0
Gain	-1.5	8.4	1.3	-0.4

The means of both pre and the post tests are 116.9.

Table II

PRETEST AND POSTTEST MEANS BY QUESTION,  
STUDENT ATTITUDE SCALE, EXPERIMENTAL  
AND CONTROL GROUPS

		Pre	Post
1. I think I am too shy.	Exp.	.375	.542
	Con.	.273	.212
2. I often feel the need to make excuses for the way I act.	Exp.	.375	.500
	Con.	.333	.288
3. I often change the way I do things or what I believe to please someone else.	Exp.	.250	.500
	Con.	.333	.197
4. It worries me to think that some of the people I know may dislike me.	Exp.	.292	.208
	Con.	.045	.121
5. I feel that I have little to give to the helping of others.	Exp.	.583	.458
	Con.	.485	.394

STUDENT ATTITUDE SCALE (continued)

6.	I feel that I might be a failure if I don't make certain changes in my life.	Exp.	.417	.417
		Con.	.227	.394
7.	When meeting a person for the first time, I want to know at once whether he or she like me.	Exp.	.417	.583
		Con.	.394	.348
8.	Although people sometimes praise me, I feel that I do not really earn the praise.	Exp.	.208	.042
		Con.	.152	.121
9.	I become afraid when I think of something I have done wrong or might do wrong in the future.	Exp.	-.042	.208
		Con.	.000	.182
10.	I would be happier if I didn't have certain faults or fears about myself.	Exp.	-.083	.250
		Con.	-.288	.015
11.	I am not at ease at parties and other social affairs.	Exp.	.375	.375
		Con.	.439	.364
12.	I don't know what I really want out of life.	Exp.	.292	.292
		Con.	.258	.303
13.	I feel that I am too often left out of things.	Exp.	.375	.417
		Con.	.258	.121
14.	When my feelings change from sad to happy and happy to sad, I do not know why.	Exp.	.500	.667
		Con.	.394	.439
15.	I feel unhappy much of the time.	Exp.	.750	.875
		Con.	.621	.560
16.	I dislike several of my classmates.	Exp.	-.125	-.417
		Con.	.061	.121
17.	Members of my class do not know each other well.	Exp.	.292	.292
		Con.	.197	.152
18.	Students at this school are snobbish or stuck up.	Exp.	-.158	.542
		Con.	.318	.197
19.	Many of my classmates do not act as old as their age.	Exp.	-.125	-.042
		Con.	.000	.030
20.	A few students at this school run all the student affairs.	Exp.	.375	.045
		Con.	.030	.136

STUDENT ATTITUDE SCALE (continued)

21.	Many boys and girls at this school feel that they do not "belong" here.	Exp.	.625	.045
		Con.	.530	.242
22.	There is little effort at this school to make new students feel at home.	Exp.	.791	.750
		Con.	.727	.576
23.	Students at this school do not try to help other students who are in trouble.	Exp.	.625	.667
		Con.	.500	.576
24.	I find it hard to take a real interest in the activities of some of my friends.	Exp.	.375	.292
		Con.	.288	.288
25.	When I am first getting to know a person of my age, I compare him or her with me to see whether I am better or not as good as this person.	Exp.	.667	.583
		Con.	.515	.409
26.	I think that my teachers in general will not listen to student ideas.	Exp.	.458	.417
		Con.	.485	.364
27.	I feel that few of my teachers are willing to help one student at a time, (that is to help a student individually).	Exp.	.042	.125
		Con.	.061	.167
28.	Some of my teachers favor girls more than boys.	Exp.	.375	.000
		Con.	.318	.258
29.	Some of my teachers favor boys more than girls.	Exp.	.542	.250
		Con.	.470	.212
30.	Not many of my teachers are up to date (as they are behind the times) in what they teach and how they teach it.	Exp.	.417	.292
		Con.	.333	.212
31.	I feel that many of my teachers think I know less than I know.	Exp.	.208	.208
		Con.	.227	.121
32.	It seems to me that some of my teachers often talk unkindly to students.	Exp.	.458	.292
		Con.	.121	.197
33.	It seems to me that several of my teachers are nervous and easily excited.	Exp.	.375	.375
		Con.	.394	.242
34.	Some of my teachers are always using words that are too big for me to understand.	Exp.	.500	.583
		Con.	.454	.470

STUDENT ATTITUDE SCALE (continued)

35.	I believe that some of my teachers are too strict.	Exp.	.667	.500
		Con.	.590	.470
36.	My teachers expect too much of me.	Exp.	.541	.541
		Con.	.454	.288
37.	I believe I have a teacher who would give a higher grade because a student complimented him or her or did a favor for the teacher.	Exp.	.583	.417
		Con.	.257	.227
38.	I hate at least one of my teachers.	Exp.	.292	.208
		Con.	.091	.106
39.	I think that some of my teachers seem to feel that they are always right and the student is always wrong.	Exp.	.292	.417
		Con.	.182	.197
40.	I believe that some of my teachers try to make students afraid of them.	Exp.	.500	.500
		Con.	.424	.288
41.	It seems to me that some of my teachers are inclined to be "bossy."	Exp.	.208	.417
		Con.	.227	.030
42.	I feel that none of my teachers grade fairly.	Exp.	.833	.542
		Con.	.667	.606
43.	I believe that most of my teachers should be more pleasant and cheerful.	Exp.	.250	.167
		Con.	.152	.076
44.	I think that most of my teachers would rather not see and talk to me when school is out.	Exp.	.708	.458
		Con.	.561	.379
45.	In many of my classes I feel that the teachers do not want me to express my real opinion, thoughts, or ideas.	Exp.	.458	.333
		Con.	.394	.333
46.	It seems to me that my textbooks are behind the times or not up to date.	Exp.	.417	.500
		Con.	.106	.136
47.	I don't believe that any of my courses or subjects will be useful to me in the work I might do when I finish school.	Exp.	.292	.583
		Con.	.530	.364
48.	I think there is little opportunity or chance for students in this school of different grades to meet and get to know each other.	Exp.	.125	.292
		Con.	.409	.242

STUDENT ATTITUDE SCALE (continued)

49.	I believe there are too many rules in this school.	Exp.	.541	.625
		Con.	.742	.545
50.	It seems to me that if a student is from a family who has more money, or is considered more important, that he or she will get better treatment from the school.	Exp.	.417	.625
		Con.	.424	.363

Attitude Toward Self:

In examining the first fifteen items--attitude toward self--only three of the sixty items means reported are negative. Item 15, "I feel unhappy much of the time," received strong positive responses both pre and post by both experimental and control groups. The experimental group averaged .750 on the pretest. Such a high score would be expected to result in some regression effect on a retest, but this did not happen. Instead, the mean went up to .875. The small drop for the control group, .621 to .561, was probably a regression effect. Statistically significant shifts favoring the experimental group were recorded on items 1, 3, 7, and 15.

Attitude Toward Other Students:

The next ten items, 16 through 25--attitude toward other students--include forty item means. Four of these, all in the experimental group, are negative. On item 16, "I dislike several of my classmates," the experimental group averaged -.125 before going to camp and dropped to -.417 after the camp. This means that a substantial fraction agreed with the statement. On both tests the control group had a low, positive response. However, experimental students disagreed with item 18, "Students at this school are snobbish or stuck up," when they went to



camp--.458--and increased their disagreement to .542 after the camping. Both groups, on both pre and post tests, expressed strong disagreement with item 22, "There is little effort at this school to make new students feel at home." Almost as strong disagreement was expressed with item 23, "Students at this school do not try to help other students who are in trouble."

#### Attitude Toward Teachers:

Items 26 through 45 measured attitudes toward teachers. There was a slight apparent difference favoring the control group on change before and after the camping trip. Teachers received relatively good marks from both groups on items 34, 35, 36, 40, 42, and 44. None of the 60 item means were negative. However, twenty-three of forty post means dropped while seventeen increased. Experimental students gave teachers relatively strong support, both pre and post, on items 26, 34, 35, 36, 37, 40, 42, 44, and 45.

#### Attitude Toward School:

The final five items, 46 through 50, attitudes toward the School as a whole, received all positive responses. Five changes between pre and post tests favored the experimental group; four were statistically significant. Both groups tended to disagree strongly with item 49, "I believe there are too many rules in this school." In general, both also disagreed with item 50 that a student's economic or social background influenced his treatment in the School.

In summary, attitudes of black students who participated in the program toward the School, as measured by the Battle Student Attitude Scale were almost identical with those of white students, both those

in the program and those in the control group on pre and post measures taken before and after camping. In both instances, there were marked positive differences between black students who participated in the program and those who did not. Biggest changes for pupils before and after the camping trip were attitudes toward self and attitudes toward the School as a whole.

The real or apparent differences in amount of change, favoring each group, are reported in the following table:

Table III

CHANGES FAVORING EXPERIMENTAL AND CONTROL  
GROUPS BY CATEGORIES

	<u>Toward Self</u>	<u>Other Pupils</u>	<u>Teachers</u>	<u>Whole School</u>
Experimental	10	5	8 1/2	5
Control	5	5	11 1/2	0

THE OHIO SOCIAL ACCEPTANCE SCALE:

The Ohio Social Acceptance Scale presents all members of a group with an opportunity to give all other members a score from one to five, representing how close the rater feels to the person being rated. Short descriptions are given for the meaning of each point on the scale. A "1" is assigned to persons who are felt to be "My very, very best friend. I would like to have this person as one of my very, very best friends. I would like to spend a lot of time with this person. I would tell some of my troubles and some of my secrets to this person and would do everything I could to help this person out of trouble."

A "5" is given to "Dislike them. I speak to this person only when necessary. I do not like to work with this person and would rather not talk to this person."

Ratings are done anonymously. The rater is instructed to begin by marking a "3" after his own name on the class roll, a copy of which is given to each pupil. Pupils then read the descriptions which go with each number and proceed to assign numbers to each person in the class. A space is provided on the roll for indicating sex, race, and other variables of interest. It is thus possible to see how boys rate boys, how boys rate girls, how girls rate each other, how they rate boys, how new students rate new students, and how they rate each student.

A mean rating close to 2 would mean that others are viewed as "My other friends."

A mean rating close to 3 would indicate that "I do not know this person very well."

The Ohio Social Acceptance Scale was given to all ninth graders before and after they went camping. The results were analyzed by membership in the experimental group--those who had been in the summer program--the control group, by sex, and by race. Each of these had a before and after mean for how they saw themselves and how the other group, sex, or race saw them. Changes were noted and the significance of these changes calculated. (See Table IV).

Table IV

MEAN SCORES ON THE OHIO SOCIAL ACCEPTANCE SCALE FOR NINTH  
GRADE PUPILS BEFORE AND AFTER THE CAMPING EXPERIENCE  
BY GROUP, SEX, AND RACE AND DIFFERENCES

Experimental by Experimental			Experimental by Control		
Pre	Post	Change	Pre	Post	Change
2.61	2.32	-0.29**	2.71	2.69	-0.02
Control by Control			Control by Experimental		
2.80	2.75	-0.05	2.82	2.51	-0.31**
Females by Females			Females by Males		
2.59	2.41	-0.18**	2.83	2.73	-0.10
Males by Males			Males by Females		
2.45	2.41	-0.04	2.99	2.75	-0.24**
Minority by Minority			Minority by White		
2.45	2.18	-0.27*	2.78	2.65	-0.13*
White by White			White by Minority		
2.84	2.71	-0.13*	2.86	2.62	-0.24**

\* Significant at .05 level

\*\* Significant at .01 level

Negative changes indicate greater acceptance. All subgroups had real or apparent changes indicating greater acceptance. Those who participated in the summer program showed the most marked change in how they viewed themselves and also in how they viewed others. Both of these were significant at the .01 level. Gains were also registered by the minority view of itself and by the acceptance of blacks by whites. Blacks also viewed whites significantly more favorably after the camping trip. A possible hypothesis to explain these changes might be that the

summer program has left participants, both black and white, more open to change than those who had not participated.

How might the means be interpreted after the camping experience for how blacks view whites and how whites view blacks? The means are 2.62 and 2.65. In simplest terms, this would mean that if one black and three randomly selected whites were asked to rate the black, two would report that they did not know this person very well but that they would be willing to be on a committee or in a club with this person. This person is not one of their friends, but they think this person is all right. The third white would view the black as "One of my other friends. I would enjoy working and being with this person. I would invite this person to a party, and would enjoy going on picnics with this person and our friends. I would like to work with this person and I would like to be with this person often. I want this person to be one of my friends."

If a white and three blacks were selected at random, the responses would be about the same. Two blacks would view the white as a person they did not know very well, and the third would see him as another friend.

These are not as favorable as the acceptance blacks give each other. If five were selected at random and then a sixth one was identified as the subject to be rated, one would view the sixth person as not known very well and four would perceive him as another friend.

Whites, on the other hand, accepted each other after the campout about the same way they viewed the blacks, 2.71 to 2.65.

Two out of three in the experimental group perceived another person from this group as "other friends" and the third as a person he did not know very well. Of two persons randomly selected from the experimental group, one would perceive a random selectee from the control group as an "other friend," and the other would see him as a person he did not know very well. These indicate greater acceptance than that of control by control or of experimental by control.

#### SELF-CONCEPT--PUPILS AND TEACHERS

Teachers and pupils in the experimental project took pre and posttests on the Tennessee Self-Concept Scale to give a variety of scores on how the individual perceives himself, what he is, how he accepts himself, how self-critical he is, and to give a total score. Norms are available with which comparisons may be made. Reliability and validity of the scale are considered adequate and are reported in some detail in the Manual.

A "t test" was applied to compare pre and posttest scores. With the exception of a few individuals, scores on the total and subscales were relatively stable over the weeks of the summer project. Table V illustrates the change in student scores.

Table V

CHANGES IN STUDENT SCORES ON THE TENNESSEE  
SELF-CONCEPT SCALE

<u>Factor</u>	<u>Change in points</u>	<u>Standard Error</u>	<u>t</u>	<u>Significance Level</u>
Physical Self	1.86	1.77	1.048	n. s.
Moral-Ethical Self	-0.23	1.04	-0.220	n. s.
Personal Self	-3.09	1.20	-2.579	.05
Family Self	-1.23	1.63	-0.752	n. s.
Social Self	-2.32	1.04	-2.226	.05
Identity-- what he is	-1.18	2.77	-0.427	n. s.
Self-satisfaction (Acceptance of himself)	-2.09	2.16	-0.970	n. s.
Behavior (how he acts)	-0.62	1.53	-0.416	n. s.
Self-criticism	1.41	1.20	1.172	n. s.
Total	-4.00	5.36	-0.746	n. s.

A "change" is considered "real" if the odds for chance occurrence are five percent or less; changes which could have occurred by chance more than five times in a hundred are called "apparent" changes. Of the ten possible changes listed in Table V, nine are in the same direction. An increase in one of these--the self-criticism score--can be considered to be in the same direction as a decrease in other scores. Only on perception of physical self was there an apparent positive change. Two changes were statistically significant at the .05 level: perception of social self and personal self.

Another way to analyze change is through use of the "sign test." If changes are occurring by chance, about one-half of the changes are

negative and one-half are positive. If there are four possible changes, the chances on any one would be fifty percent positive and fifty percent negative, as illustrated by the following example. "P" stands for positive, and "N" stands for negative.

PPPP	PNNP
PPPN	NPNP
PPNP	NNPP
PNPP	NNNP
NPPP	NNPN
PPNN	NPNN
PNPN	PNNN
NPPN	NNNN

The four changes might occur in sixteen possible ways. Only one of these would be all positive, and one would be all negative. The number of changes and probabilities for their occurrence are given below.

All positive	1	1/16
One positive	4	4/16
Two positive	6	6/16
Three positive	4	4/16
All negative	1	1/16

If such a process were done with ten possible changes, the following would be expected by chance:

All negative	1	1/1024
Nine negative	10	10/1024
Eight negative	45	45/1024

If nine or ten changes in the same direction, and only chance is operating, then this would occur in about one percent of the cases. Hence, the overall shift is probably significant; nine of the changes occurring by chance in the same direction is a relatively rare event. It can be asserted that the change is "real," with about one chance in one hundred of being in error.



The sign test can thus be used to analyze changes in individual scores. Seven individuals had changes in the same direction for nine or all ten scores. In a group this size, only one or two such shifts can be expected by chance.

Still another way to study individual changes is by a statistic called "the standard error of measurement." If the same individual took the same test many times, his scores would tend to vary, largely because of chance factors. The standard error of measurement for him would be a measure of this expected spread. (What the standard deviation is to the group, the standard error of measurement is to the individual.) For the Tennessee Self-Concept Scale, the standard error of measurement is estimated at 8.40 points.

An individual's score can be expected to fall within one standard error in either direction about sixty-eight percent of the time; within two standard errors, about ninety-five percent of the time; and within three standard errors, more than ninety-nine percent of the time. For this particular test, it is possible for one or two individuals to have a shift of seventeen points or more or a shift of two standard errors. A shift of three standard errors, or about twenty-five points, however, is highly improbable. A shift of thirty-three points is almost impossible by chance in a group of this size.

On this test, seven individuals, as opposed to the expected one or two, dropped more than twenty points. Four of these seven dropped thirty points, and two lost more than forty points. One individual, however, gained fifty-three points. All of these may be viewed as real shifts in the given direction. (See Table VI).

Another way to get meaning from test scores is to compare these scores with the norms from some defined population on which the test was standardized. One kind of comparison is in the terms of percentile ranks. A percentile rank means the percent of some defined population (the norming population, or the group which took the test--the percentile ranks would almost surely be different in these two cases) which scored below the individual's score.

If an individual's percentile rank is 8, it means that eight out of every one hundred persons in the population to which he is being compared made a lower score. If the percentile rank is 85, then eighty-five out of every one hundred persons in the comparison group had a lower score. Ordinarily, a percentile rank of 99 is the highest reported.

Compared with the norming population for the Tennessee Self-Concept Scale, the percentile ranks of the average student ranged from a high 51 on personal self to a low of 10 on behavior--how the person acts. The total score mean for all pupils was at the 30th percentile. Changes in percentile ranks were slight between pre testing and post testing and were never more than four or five percentile points, even on those in which there were significant differences. This tends to be consistent with other research which shows that the self-concept is relatively stable over time and is not easy to change. When change does occur, the changes are rarely very large.

Table IV is a frequency distribution of scores on the pre and posttest.

Table VI

FREQUENCY DISTRIBUTION OF T.S.C. SCORES,  
PRE AND POSTTEST -- EXPERIMENTAL GROUP

<u>Score range</u>	<u>Frequency</u>	
	<u>Pre</u>	<u>Post</u>
400-419	1	0
380-399	1	1
360-379	3	3
340-359	4	4
320-339	7	5
300-319	6	2
280-299	2	4
260-269	1	2

$Q_1$  (25th percentile) is a score of about 325; the median is about 347;  $Q_3$  (75th percentile) is about 375. These are for test norms reported in the Manual. The range of scores, in terms of test norms, is from about the fourth percentile to the ninety-sixth percentile.

TEACHER SELF-CONCEPT

The five teachers associated with the project took the Tennessee Self-Concept Scale, pre and post, to measure changes in self-concept. Table VII presents data from this instrument.

Table VII

TENNESSEE SELF-CONCEPT SCALE FINAL SCORES AND CHANGES -  
EXPERIMENTAL PROGRAM TEACHERS

	<u>Final Total Score</u>	<u>Change</u>	<u>Percentile rank at end</u>
	365	7	72
	401	31	97
	400	25	96
	381	-6	86
Mean	387	14	92

Two changes might be attributed to chance, but the other two were

apparently real gains. These teachers gained about three and almost four standard errors; and since they started high, this is an indication that they experienced satisfaction with their work with the group and some enhancement of self-concepts.

**GRADE POINT AVERAGES, NINTH GRADE STUDENTS:**

Another way of looking at how well black students are integrated is to compare their academic achievement with that of other students. Of seven possible categories for ninth graders during the 1970-1971 school year, the black students who were in the summer program had the highest average. The one "old" black student in the summer program also did relatively well. However, it should be noted that the numbers involved were usually small and that no adjustment was made in scores for possible differences in measured academic potential. Further, when multiple comparisons were made, none of the differences was significant. Having made these qualifications, the new black students in the summer program did make slightly above a B average during the following academic year. Other groups had averages ranging from B down to C plus.

Table VIII

**GRADE POINT AVERAGES, NINTH GRADE**

New Blacks in Summer Program.....	3.071
Old White Students in Summer Program.....	3.000
New Whites Not in Summer Program.....	2.955
Old Black Students in Summer Program.....	2.750
New Blacks Not in Summer Program.....	2.393

Using the Scheffe procedure for determining 95 percent confidence intervals, none of the above differences would be significant at the .05 level.

STANFORD ACHIEVEMENT TESTS, ADVANCED BATTERY--ARITHMETIC AND READING.

The Stanford Achievement Test, Advanced Battery--Arithmetic and Reading was administered to all entering ninth graders in order to evaluate the effects of the program upon achievement in paragraph meaning, arithmetic computation, and arithmetic application. In late September all ninth graders were again administered the Stanford Achievement Test as a post measure.

The means for the experimental and control black and white students were calculated, using raw scores on pre and post test. The black students in the summer program had apparent gains on all three sub-tests. White students in the summer program had one apparent gain and two apparent losses. While not significant, apparent differences of blacks in the summer program were greater in every instance than apparent changes for whites in the summer program or for either blacks or whites in the control group.

Table IX portrays the means obtained by students on the Stanford Achievement Test.

Table IX

RAW SCORE MEANS - STANFORD ACHIEVEMENT TEST

PARAGRAPH MEANING COMPUTATIONS

ARITHMETIC COMPUTATIONS

	Control		Experimental		Control		Experimental		Control		Experimental	
	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White
Pre	30.50	35.80	32.85	36.50	21.00	18.00	20.00	17.70	13.50	15.73	12.29	14.43
Post	32.66	39.5	36.85	35.70	18.98	18.72	20.28	16.50	14.00	17.52	15.00	16.07
Difference	+2.16	+3.70	+4.0	-.80	-2.01	+7.2	+2.8	-1.20	+5.0	+1.79	+2.71	+1.64
n	6	33	7	11	6	26	7	13	6	16	6	14

Appendix IX

BIBLIOGRAPHY

1. Bower, Eli M., "The Achievement of Mental Competency," Learning and Mental Health in the School, ASCD Yearbook, Washington, D. C.: ASCD, 1966.
2. Combs, Arthur W., Educational Accountability Beyond Behavioral Objectives, ASCD, Washington, D. C., 1972.
3. Crosby, Muriel (Ed.), Reading Ladders for Human Relations, (4th edition), Washington, D. C.: American Council on Education, 1964.
4. Crosby, Muriel, An Adventure in Human Relations: A Three Year Experimental Project on School in Changing Neighborhoods, 1959-1962, Wilmington, Delaware: Wilmington Public Elementary Schools, 1960, 1962, 1963.
5. Fantini, Mario, "Public School of Choice and the Plurality of Publics," Educational Leadership, March, 1971.
6. Hall, E. T., The Silent Language. New York: Doubleday, 1959.
7. Hayakawa, S. I., "Communications: Interracial and International," ETC.: A Review of General Semantics, 1963, 20.
8. Johnson, Wendell, "ETC. and Semantic Health," ETC.: A Review of General Semantics, 1963, 20.
9. Marckwardt, A. H., "Implications of Language Process for the Teacher," Language, Linguistics, and School Programs. Champaign, Illinois: NCTE, 1963.
10. McLain, John (Chairman), Imperatives for Education, Task Force on Education, Committee on Children and Youth, Governor's Council for Human Services, Commonwealth of Pennsylvania, Philadelphia, 1970.
11. Proctor, Samuel, "Education for a Genuine Community," A Man for Tomorrow's World, A Report of the Conference; 1970. Association for Supervision and Curriculum Development; Washington D. C.; 1970.
12. Radke-Yarrow, Marion; Trager, Helen G.; and Davis, Hadassah, "Social Perceptions and Attitudes of Children," Genetic Monographs, 1949, (43).
13. Rapoport, Anatol, "Attitudes Toward Language and Communication," ETC.: A Review of General Semantics, 1963, (20).

14. Shane, Harold C., "A Curriculum Continuum; Possible Trends in the 70's," Phi Delta Kappan, March, 1970.
15. Shane, Harold C. and June Grant, "Cultural Change and the Curriculum: 1970-2000 D.," Educational Technology, April, 1970.
16. Smith, Othanel et al., Teachers for the Real World, The American Associates of Colleges for Teacher Education, Washington D. C., 1969.
17. Stans, Maurice H., "Where Will We Be 20 Years From Now?, " Februray, 1971.
18. Steinberg, E. R. (Ed.), "Needed Research in the Teaching of English," Cooperative Research Monograph: Number 11.
19. Steinberg, Stephen, "The Language of Prejudice," Today's Education; the Journal of the National Education Association, February, 1971.
20. Strickland, Ruth, G., "Needed Research in Oral English," Cooperative Research Monograph: Number 11. Washington D. C.: U. S. Department of Health, Education, and Welfare, 1962.
21. Taba, Hilda, Leadership Training in Intergroup Education. Washington, D. C.: American Council on Education, 1953.
22. Taba, Hilda et. al., Intergroup Education in Public Schools, Washington, D. C.: American Council on Education, 1951.