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ABSTRACT

In order to answer questions about the impact of desegregation upon the academic achievement and attitude of pupils and reactions of teachers, parents, and the community, longitudinal evaluation plans were adopted. The primary subjects were the 10,981 pupils who ranged from kindergarten through grade 8 in September 1967, at the start of complete desegregation. Since no laboratory desegregation experiment was possible, a number of quasi-experimental strategies were used. While teachers and some parents were surveyed by questionnaire, much of the community information was collected via unobtrusive measures such as systematic observation, and analysis of archival records and voting patterns. The results show that traveling to new schools by bus had no adverse effects upon the pupils, black or white. Bussed black pupils from formerly segregated schools showed greater group mean gains than their non-bussed transferred former classmates. Individual predictions among bussed black pupils were less reliable, however. Desegregation has had a profound influence upon community life. Black parents have taken an increasingly active part in school related activities. (Author/JW)

PR-71-9

INTEGRATION IN EVANSTON, 1967-71:

A LONGITUDINAL EVALUATION

Jayjia Hsia

August 1971

Educational Testing Service
Midwestern Office
Evanston, Illinois

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INTEGRATION IN EVANSTON, 1967-71: A LONGITUDINAL EVALUATION

A SUMMARY OF THE MAJOR FINDINGS

Background

Evanston is an affluent northshore suburb of Chicago, with a population of 79,808, 16 percent black. In spite of its conventional image of a typical dormitory suburb, Evanston is actually a city of remarkable diversity in life styles among its residents. There are wide ranges among Evanston residents' characteristics such as ethnic origins, income, housing, and jobs. The majority of white residents are well educated and well-to-do. Most heads of families have managerial, official, or professional jobs. Black Evanstonians, though a favored group in comparison with U. S. residents as a whole, are less well off than their white neighbors.

Evanston has been an educational-minded community since its founding as the campus town to Northwestern University over a hundred years ago. The high school and junior high schools had integrated student bodies. The elementary schools, however, manifested considerable racial inbalance due to restrictive residential patterns. Broad-based community support was sought in the decision as well as in planning for desegregation. With computer assistance, a plan for desegregation was formulated by combining redrawn school boundaries with a limited bussing program. Elementary schools were smoothly desegregated on schedule in September 1967.

In order to answer questions about the impact of desegregation upon the academic achievement and attitude of District 65 pupils and reactions of teachers, parents, and the community, longitudinal evaluation plans were adopted. A proposal for studying the impact of desegregation upon the pupils and the community was funded by the Rockefeller Foundation. The three-year study was undertaken jointly by the District 65 Board of Education and Educational Testing Service, a nonprofit organization devoted to research and measurement in education. In 1970 the Rockefeller Foundation augmented the original grant with additional funds for data analysis.

Design

The primary subjects were the 10,981 pupils who ranged from kindergarten through grade 8 in September 1967 at the start of complete desegregation. Since no laboratory desegregation experiment was possible under the

circumstances, a number of quasi-experimental strategies were used. Natural time series, using a single 'before' and a series of 'after' measures, were feasible for a battery of standardized academic tests and a pupil attitude questionnaire. For the rest, data were collected *ex post facto*. While teachers and some parents were surveyed by questionnaire, much of the community information was collected via unobtrusive measures such as systematic observation, and analysis of archival records and voting patterns.

The file of data was prepared for computer-assisted analysis. For the academic test data, analyses included distribution analysis, grade cohort comparisons, comparison of cross-sectional and longitudinal data, regression analyses, and multivariate analysis of variance program (MANOVA). Nonparametric tests of significance were used on data collected in the affective domain, as well as the *post hoc* adult and community data.

Findings

Pre-integration academic achievement.--Baseline academic measures were obtained in fall 1967. The status of all pupils at that time was considered the standard against which subsequent measures would be compared.

In 1967, Evanston five-year-olds entering kindergarten manifested a wide range of achievements needed for success in school. Diversity was great among black as well as white children. But the average white pupil began school with a substantial academic advantage which may, in part, have been associated with socioeconomic factors.

Throughout the years from kindergarten to eighth grade, pupils made consistent scholastic gains in all subject areas. The discrepancies between black and white pupils, however, remained throughout the school years. White pupils performed substantially above national norms. While average scores of black pupils were below national norms, they were similar to published means of black subjects in the Growth Study,[1] and substantially higher than the Caldwell Preschool Inventory lower-class norm group means.

Post-integration academic performance.--Academic gains made by District 65 pupils during the three years since desegregation were studied

[1]*The Growth Study* is an ETS-conducted, ten-year longitudinal study of the academic development of 34,000 pupils throughout the United States.

by means of grade cohort comparisons and regression analysis of matched longitudinal pre- and posttest scores. The achievement of pupils entering and leaving District 65 was studied by means of multivariate analysis of variance.

Comparisons were made among grades 1 and 3 cohorts with respect to Cooperative Primary Tests of Listening, Reading, Mathematics, and Word Analysis; and among grade 4 cohorts with STEP Reading, Mathematics, Science, Social Studies, Writing and Listening, and SCAT Verbal and Quantitative scores. While there were small fluctuations from year to year, white pupils' performance remained essentially the same, while black pupils made slight gains in most subject areas. In mathematics, consistent improvement was shown by black and white pupils in the primary grades.

Matched longitudinal regression analysis compared different types of desegregation treatments such as transferred by bus, transferred by walking, stayed in former all black school which was then integrated by bussing in white pupils, or stayed in integrated school. Traveling to new schools by bus apparently had no adverse effects upon the pupils, black or white. Bussed black pupils from formerly segregated schools showed greater group mean gains than their non-bussed transferred former classmates. Individual predictions among bussed black pupils were less reliable, however, because the correlation coefficient between pre- and posttest were lower for bussed black pupils.

A predictable and high rate of learning was shown by black girls who had been in integrated schools prior to 1967. Their rate of learning based on regression coefficients was significantly greater than that of white girl classmates, though the latter group's mean scores were higher before as well as after desegregation. Socioeconomic differences among black pupils may have been associated with these findings, since bussed black pupils were observed to have been lower in terms of some socioeconomic indices than other transferred black pupils.

Multivariate analysis of variance of test scores of pupils who withdrew from District 65 schools in 1967 and 1968, and who enrolled in 1968 or 1969, showed that there were no great migration effects among the pupil population. Pupils who enrolled in 1969 for the first time were found to be better students than those who left during 1968. But District

65 pupils in general, and black pupils in particular, were a stable group.

Letter grades from the cumulative folders of pupils in grades 1, 2, 4, and 5 were compared before and one year after desegregation. These data confirm the findings from standardized test batteries. Significant differences were found between black and white boys and girls before as well as after desegregation. There were no differences, pre- and post-treatment, however, in the frequencies of earned grades within each group.

Very small but consistent decrements in SCAT Quantitative and STEP Science mean scores were noted among grade 7 and 8 white pupils. There was a steady decrement in SCAT and STEP scores of grade 7 and 8 black pupils in several subject areas. These changes were not associated with desegregation, since middle schools were integrated before 1967. A possible explanation for the observed phenomena may be change of emphasis in the instruction of arithmetic computations and science concepts, coupled with some reported disciplinary problems within the middle schools.

Pupil attitudes before and after desegregation.--Attitude of pupils toward themselves and school was assessed by several means. Self reported questionnaires were administered to pupils in grades 3, 4, and 5 before and after desegregation by Professor Campbell of Northwestern University. These findings have not yet been published. A paper read by Weber[2] reported decreases in academic self concept of transferred black pupils. On a locus of control questionnaire, grade 8 black boys felt somewhat less sense of control over their environment than white boys. Socio-economic disparities between blacks and whites may have been associated with the observed differences.

Pupil attitudes perceived and rated by teachers were available in the permanent records of a sample of over 2,900 pupils in grades 2, 4, and 5 in 1967. There were differences in teachers' perception of black and white pupils' attitudes before as well as after desegregation. The process of desegregation itself, however, did not alter most teacher ratings. Two indices of teacher perception showed change after desegregation: there were more psychological referrals for black boys, and there were more written comments of mixed nature instead of favorable ones for black girls.

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[2]Stephen J. Weber, Thomas D. Cook, and Donald T. Campbell, The Effect of School Integration on the Academic Self-Concept of Public School Students, (paper read at the Midwest Psychological Association, Detroit, May 1971).

Systematic observation in natural classroom settings found differences between black and white pupils in grades 1 and 2 in three categories: (a) race and sex of contacts in the classroom differed by sex and race, with black boys least likely to interact with anyone of the same sex or race as himself, probably because student body was predominantly white, and teachers usually white and female, (b) white pupils were more physically active in class and the activity was an integral part of school work, such as moving from seat to teacher's desk or to reference shelves, and (c) black pupils paid attention more often t' some person other than their teacher. Observation in a structured group test of social relations for 38 classes in grades 2 and 5 showed that black pupils contributed as much as white pupils to planning and working on group projects in the classroom setting.

Backgrounds and Attitudes of District 65 Teachers

The teachers in District 65 schools were traditionally reputed to have been, and remain by national standards reported by Coleman et al and NEA, a well-qualified and experienced group of professionals. The teaching as well as administrative staff has been completely integrated at all levels. The transition from segregated to integrated classrooms was facilitated by a series of summer institutes.

The teachers were asked to evaluate the social, academic, and disciplinary aspects of their desegregated classrooms. On the whole, the teachers rated the academic progress of students and social patterns within their classes favorably. There was, however, especially among older teachers and middle school teachers, an awareness of some possible problem areas. Chief concern centered about the possible dangers inherent in dual disciplinary standards. There were no important differences between the points of view of black and white teachers.

Teachers rated black and white pupils favorably on a semantic differential. Black and white pupils were perceived as being equal in popularity and fairness. On a number of other dimensions, such as aggression and conscientiousness, however, significant differences were found in teacher perception, always in favor of white students. There was little difference between the perception of black and white teachers, although black teachers tended to view all pupils more favorably.

Although older teachers and middle school teachers expressed concern with regard to behavior of pupils in desegregated classrooms, there were no differences among groups of District 65 teachers when they were asked to assess their relationships with teachers of other ethnic origins. While a somewhat greater proportion of black teachers reported very poor rapport with white colleagues than vice versa, most teachers agreed that working relationships between black and white colleagues were excellent.

Impact on the Parents and the Community

Desegregation of all public schools has had a profound influence upon community life. Black parents have taken an increasingly active part in school related activities. PTAs, the Evanston Council of Parents and Teachers, and nominating groups for school board members have all shown broadened membership.

A questionnaire sent to a sample of black parents asked for their reactions after four years of desegregated schools. Almost all parents strongly favored the education experience in desegregated schools. Only a handful felt their children have been inconvenienced by the exigencies of riding a bus daily to school.

There have been conflicts associated with the rapid changes in community life. Chief among them was a disagreement between the school board and the superintendent engaged to carry out the integration plan. While desegregation was never at issue, the conflict grew rapidly into a series of confrontations with strong racial overtones. The willingness of all parties to settle the problem by democratic processes permitted the resolution of a conflict which threatened to polarize the community.

Many channels have been established within Evanston to improve communications between groups, and to settle any conflicts which may arise by peaceable means. Misunderstandings still appear, causing acrimonious rhetoric in board rooms and council chambers, but issues have consistently been settled by mutual accommodation in the community framework via democratic processes.

Conclusion

A recent publication from the U.S. Office of Education suggested that four conditions must be met before a desegregated school system could

be considered to be truly integrated. They are:

1. Academic instruction should ensure the intellectual growth of all pupils by accepting individual differences and using differences as a basis for learning about each other.
2. Fair distribution of symbolic offices and extracurricular activities among all the diverse groups of the school population.
3. Consider as an integral part of school activities the development of amicable social relations.
4. Faculty and administrative policies and views should foster an egalitarian and nonstratified society.

District 65 schools appear to have made steady progress towards achieving the goal of a completely integrated school system. Along a parallel course, the community of Evanston has made considerable gains in the improvement of communications between races, in mutual accommodations, and ensuring a more equitable distribution of power among its diverse population.

INTRODUCTION

Many changes have occurred in the nation's schools since the Supreme Court's *Brown* decision in 1954. Yet, with the recent Supreme Court decisions on busing and redrawing of school boundaries to achieve racial balance, the seventies promise to be a decade in which school desegregation will continue to remain an issue of wide-spread interest and concern. *De jure* segregation has been diminishing. But *de facto* segregation is increasing in our cities as white families move to the suburbs while black families, with less freedom of choice of residence, remain in city centers.

Evanston, Illinois is a stable, affluent community which undertook an affirmative commitment to eliminate school segregation related to housing patterns. The study reported here describes the elementary schools of Evanston, the students, and the city since desegregation of schools was accomplished in September 1967 by combining redrawn school boundaries with a small scale two-way bussing program.

This longitudinal evaluation of the impact of integration in Elementary School District 65 was conducted jointly by the District 65 Board of Education and Educational Testing Service, a nonprofit organization devoted to measurement and research in education. The work was supported by two consecutive grants from the Rockefeller Foundation.

Background

The Community: Its Neighborhoods and Residents

Evanston, first and largest of the lakeshore suburbs north of Chicago, covers an area of 8.3 square miles bordering Lake Michigan, and has a population of 79,808.[1] It is the sixth largest city in Illinois. Evanston was established more than a hundred years ago as a campus town adjacent to the newly founded Northwestern University. Town and gown have had a strong mutual influence upon each other in the course of their parallel growth.

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[1]Department of Commerce, U. S. Bureau of the Census, *1970 Census of Population, Illinois*. Washington, D. C.: Government Printing Office, February 1971.

Unlike other northshore suburbs, Evanston has never been primarily a bedroom community for Chicago commuters. Only one-third of the work force has jobs in Chicago. The city itself offers almost enough local positions (33,800) to keep all employed Evanstonians (36,608) busy.[2] While Northwestern University remains the largest single employer, there are also about 140 light manufacturing firms, as well as home offices of nearly fifty companies and national associations.

Evanston, despite the university, four other colleges, and its offices and light industries, remains primarily a residential community. Long range land use planning and conservation has preserved its residential neighborhoods and recreational lands. The well-maintained, older single-family houses which predominate the wide, tree-lined streets of established residential areas could serve as museum exhibits of American domestic architecture of the past century. The residents of Evanston are remarkable for their diversity. A broad range is manifested in such characteristics as ethnic origins, jobs, income, housing, and age groups. While people of northern European descent predominate, 16 percent of Evanstonians are black. The university has attracted a cosmopolitan group of faculty and students to the city. The presence of a number of residences for senior citizens, and the five educational institutions, cause two bulges in age distribution: the 18-25 year olds, and the over 65 years group. Evanstonians' housing ranges from lakeside mansions to boarding houses overlooking the railroad tracks. While over 1,500 families reported incomes over $25,000 in 1959, almost 1,400 families earned under $2,900.

On the whole, Evanston residents are well-educated and well-to-do. The median school years completed by persons 25 years old and over is 12.8. About 3 out of 10 have had four or more years of college. The median family income which was $9,193 in 1959 rose to $12,200 in 1968. Four out of 10 families own the house in which they live, and the median value of housing in 1959 was $24,300. Highest educational levels, income and housing values were reported by residents of census tracts along the lake shore, and by those in the north and northwestern parts of Evanston.

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[2]League of Women Voters of Evanston, *This is Evanston (5th ed.)*. Evanston, Illinois: League of Women Voters of Evanston, 1970.

The first black residents of Evanston arrived in the 1850's, not long after the Indian territories were opened to development as a result of the Treaty of Chicago. The major influx of blacks to Evanston was during the city's greatest period of growth, the 1920s, mainly in response to demand for domestic help among the northshore communities. Rigid housing restrictions were enforced in order to keep black residents within a contained locale. Two physical barriers, the Chicago Sanitary District Canal and the Northwestern Railway tracks effectively limited the Evanston ghetto to a triangle south and west of the better residential areas. By 1959, Evanston had black residents in every one of its 17 census tracts, but 8 out of 9 blacks were still living in the four tracts in the central and western parts of town. Figure 1 is a map showing the patterns of residential segregation in Evanston.

The black residents of Evanston enjoy a favorable status in comparison with United States residents as a whole. Black families are as likely to own their houses as other families. Their median family income in 1959 was $5,675, a figure above that of $4,791 for the total United States residents, and more than double the $2,520 median family income of United States black residents. Nevertheless, when the status of Evanston blacks is compared with that of Evanston whites, every index weighs the balance in favor of the white resident. Figures 2, 3, and 4 compare the income and employment status of black and white Evanstonians. Black families have less income than white families, and black men and women are less likely to have jobs in professional and managerial categories than whites, and more likely to have unskilled and semiskilled blue collar jobs.

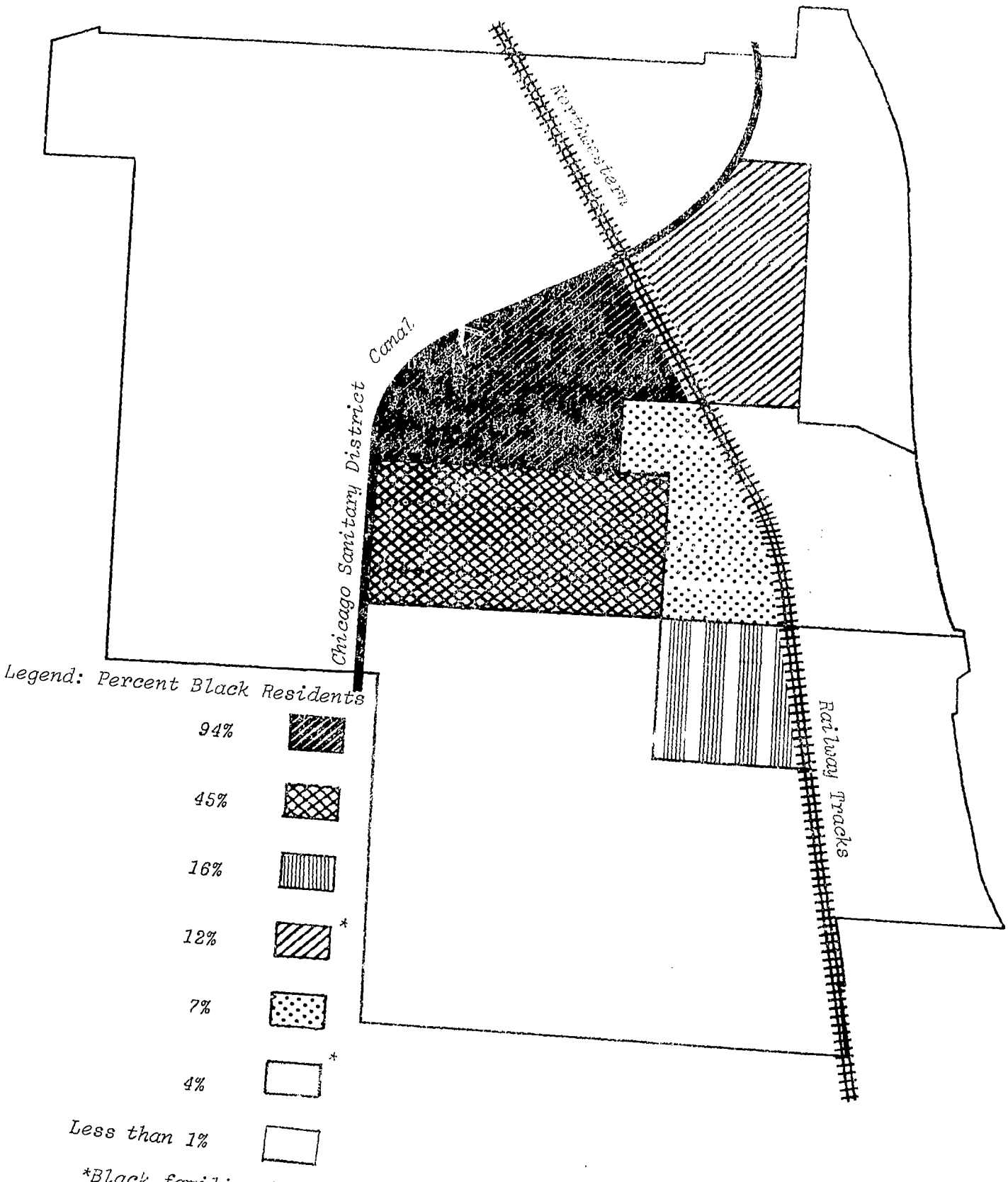
The Schools

The schools of Evanston have enjoyed a national reputation for excellence.[3] District 65 consists of 16 elementary schools serving grades K through 5, four middle schools (6-8), and one school for trainable mentally handicapped pupils. These schools serve about 11,000 pupils from Evanston as well as a section of neighboring Skokie. District 65 graduates continue their education in Evanston Township High School, which is administered by District 202. Average class size is 27. Per-pupil expenditure is over $1,000 per year.

[3]James B. Conant, *Slums and Suburbs*. New York: McGraw-Hill, 1961.

Figure 1

Degree of Residential Segregation in Evanston According to 1960 Census



*Black families in this census tract are not distributed throughout this area, but clustered along the railway tracts.

Figure 2

Income of Black and White Families in Evanston, 1959

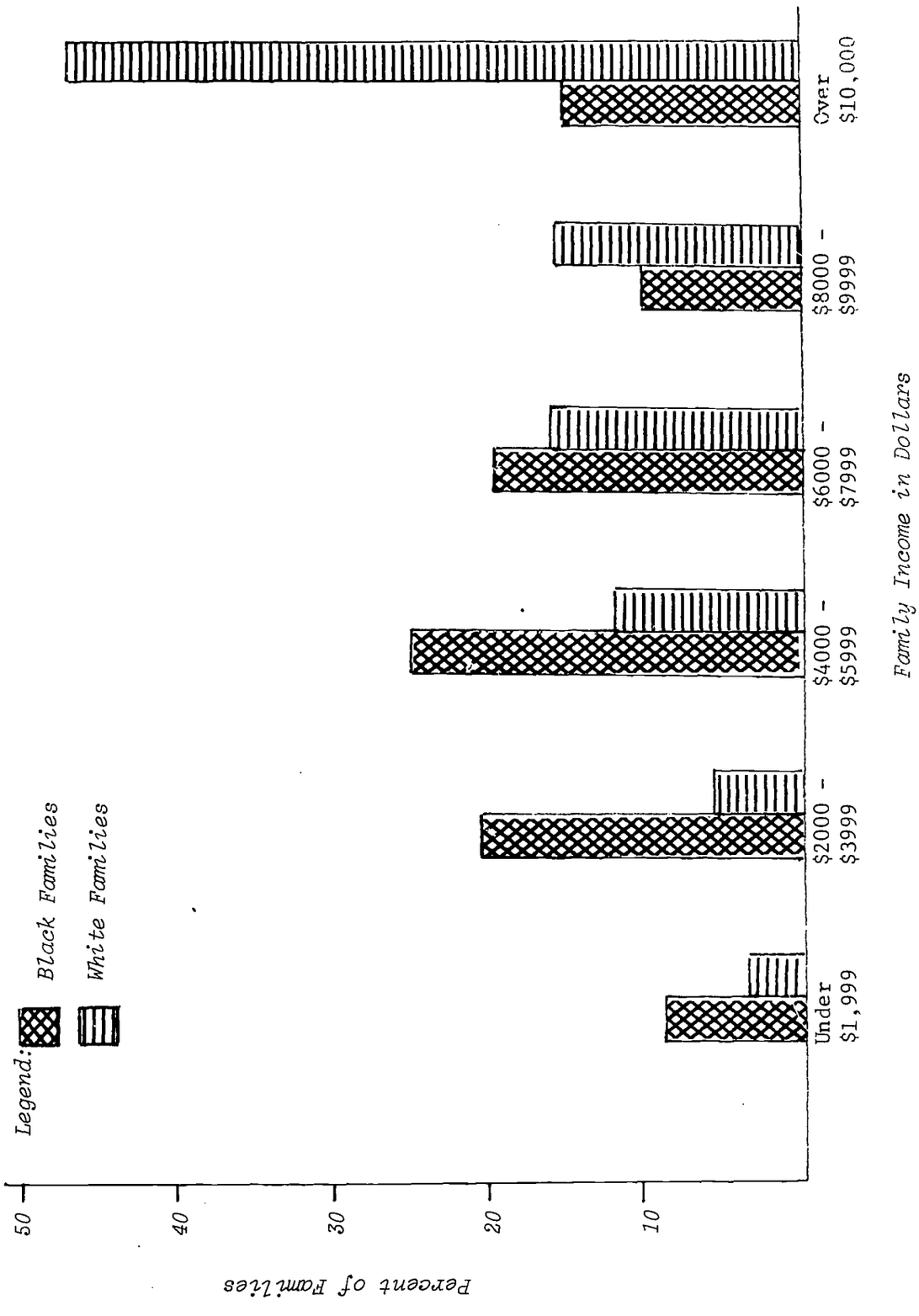


Figure 3

Job Status of 2,589 Black and 19,749 White Evanston Male Workforce, 1960

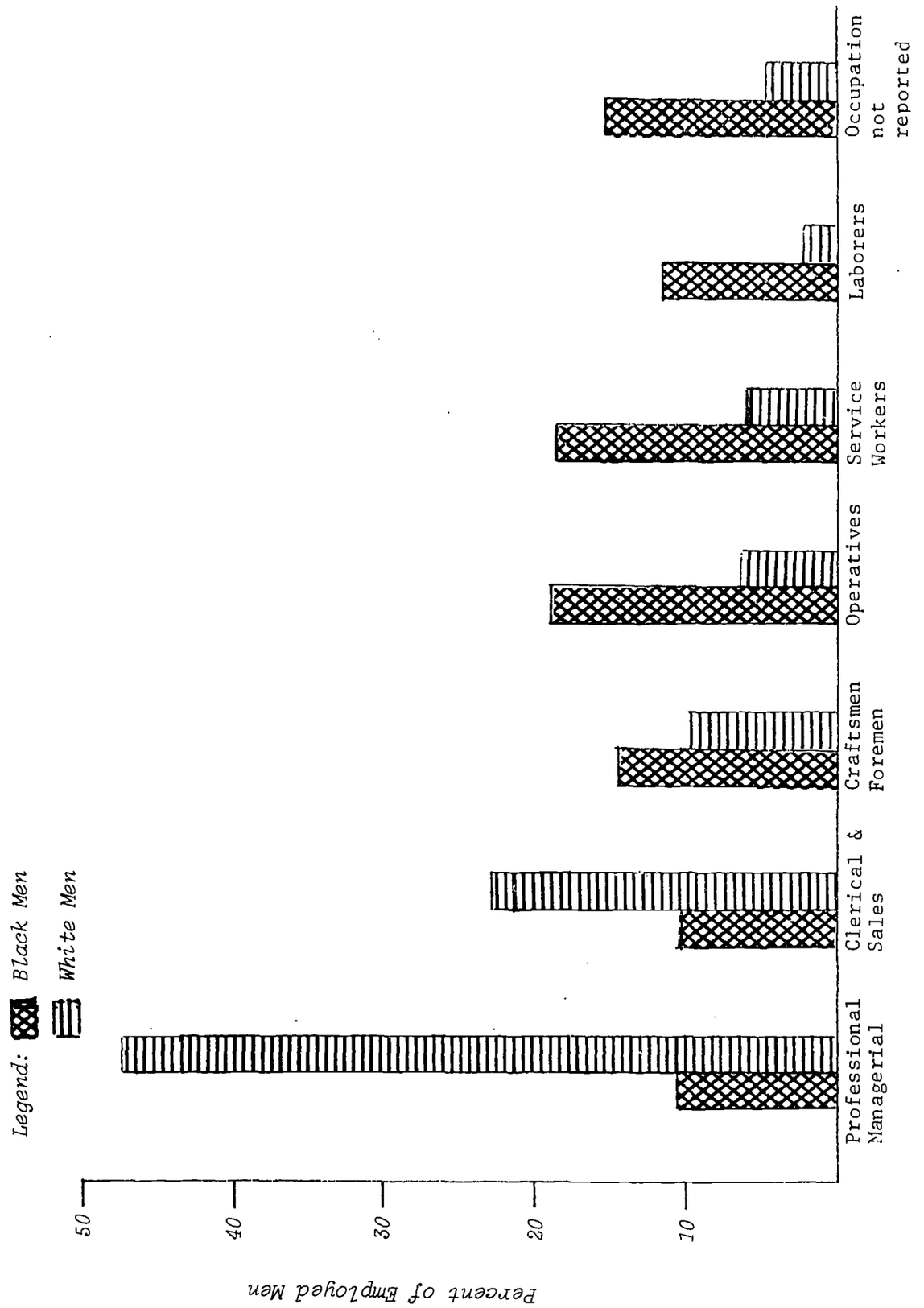
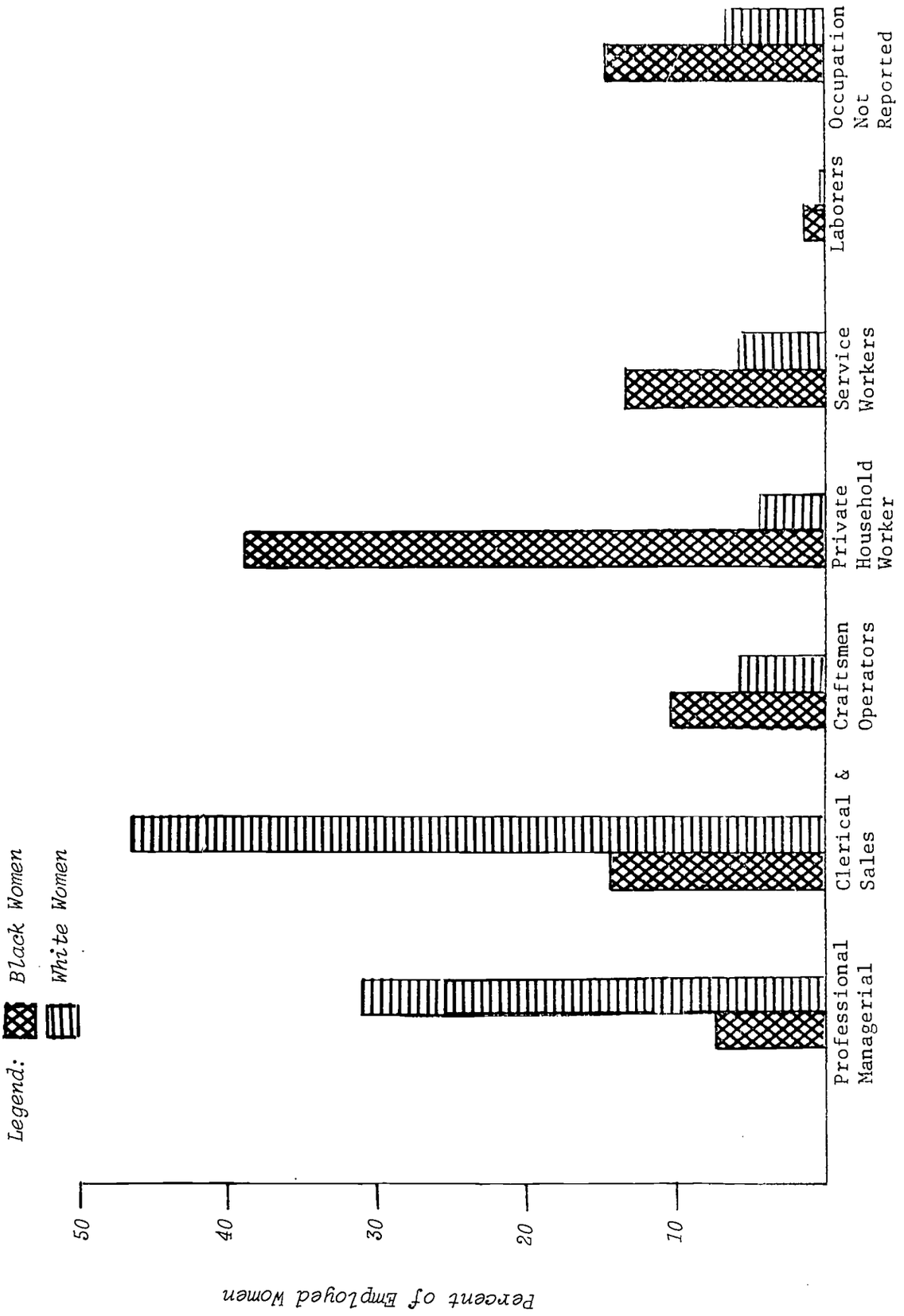


Figure 4

Job Status of 2,145 Black and 12,125 white Evanston Female Workforce, 1960



Elementary (K-6) school attendance boundaries prior to desegregation in 1967 are shown in Figure 5. Since the residential neighborhoods manifested increasing patterns of racial segregation, the schools in turn reflected racial inbalance. By 1960, Foster School had a 99 percent black student body, Dewey School was two-thirds black, while Noyes and Central Schools had one-third black pupils. Haven, Miller, and Washington Schools had five to ten percent black pupils, and the other elementary schools enrolled few or no black pupils. The three existing junior high schools were integrated, with 15 to 25 percent black pupils. The performance of pupils in predominantly black Evanston schools, according to data supplied by the Director of Research and Testing in District 65 for the Coleman Report,[4] was consistently below that of pupils in other Evanston schools. These inequalities in performance were not considered by Coleman to be solely a problem of race, but of disparities in socioeconomic status as well. It was these inequalities due to *de facto* segregation which led to the demands for and the decision to desegregate all elementary schools in Evanston.[5]

Integration Plan

The decision to desegregate all sixteen elementary schools in Evanston was not made capriciously. Table 1 shows a calendar of activities leading up to the actual desegregation day, a train of events which began a decade ago. In 1964, in response to pressure from local civil rights groups, the Board of Education adopted a resolution of intent to eliminate *de facto* segregation. In 1965, a broad-based Citizens' Advisory Commission on Integration was appointed to work with the superintendent, Dr. Oscar M. Chute, to develop a plan to redefine attendance areas in accordance with the decision to desegregate the all-black Foster School and achieve racial balance among all District 65 schools.

In 1966, a decision was made to develop a public laboratory school located in the Foster building. The Laboratory School, renamed in 1969

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[4]James S. Coleman et al., *Equality of Educational Opportunity*. Washington, D.C.: U.S. Department of Health, Education and Welfare, 1966, pp. 464-467.

[5]John E. Coons in Hill and Feeley (Eds.), *Affirmative School Integration*. Beverly Hills, California: Sage Publications, Inc., 1968, pp. 14-20.

Figure 5

School Attendance Areas of Community
Consolidated School District 65,
Cook County, Evanston, Illinois,
Before Desegregation

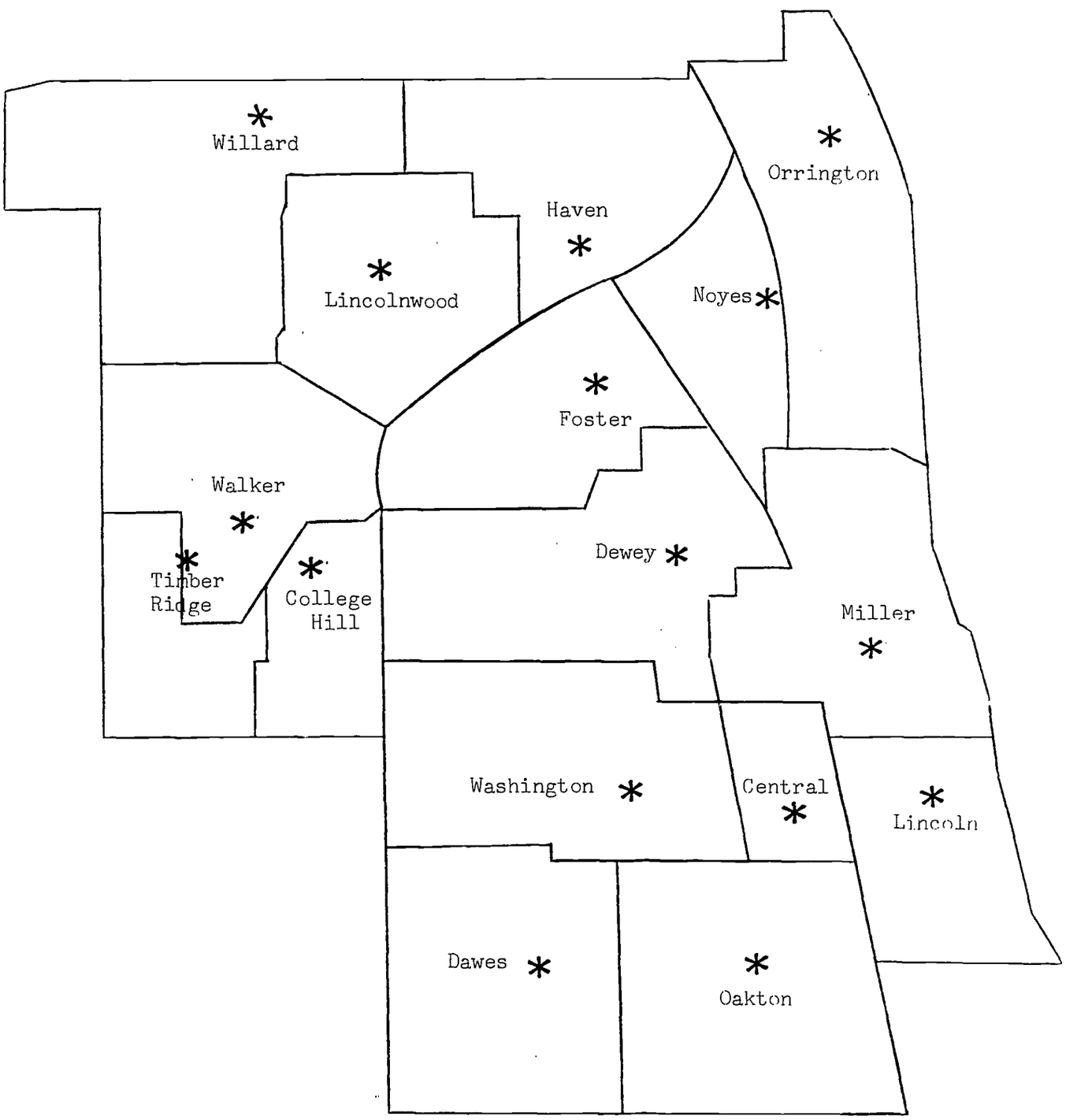


Table 1

A Calendar of District 65 Board of Education Actions
Toward Achieving Full School Integration

1.	1961		District Workshops for Teachers in Human Relations
2.	Summer,	1962	Summer School at Foster
3.	Sept.	1963	Voluntary Transfer Policy Implemented
4.	Oct.	1963	Intercultural Relations Committee Appointed
5.	June	1964	Middle School Concept Adopted
6.	Oct.	1964	Appointment of Foster School Committee
7.	Dec.	1964	Resolution to Eliminate De Facto Segregation Adopted
8.	June	1965	Head Start Launched
9.	Sept.	1965	Citizens Advisory Commission on Integration Appointed
10.	Sept.	1965	Higher Horizons in Human Relations Launched
11.	April	1966	Project Boost Launched
12.	Aug.	1966	Vote to Establish Kdg. Center and Lab School
13.	Sept.	1966	Kindergarten Center Opened at Foster
14.	Oct.	1966	Advisory Commission Recommends School Boundary Revisions
15.	Nov.	1966	Board Adopts New Attendance Areas
16.	July	1967	300 Teachers Attend Five Week Institute on Integrated Education
17.	Sept.	1967	Lab School Opens - Schools Fully Integrated

for Martin Luther King, Jr., was planned in order to offer innovative, experimental educational methods, materials, and curricula for pupils in grades K through 5. It was intended to be a microcosm of the entire district in terms of geographic location, achievement level, sex, race and socioeconomic status. Since its establishment in 1967, there have consistently been more applicants than available capacity.

Computer assistance from Illinois Institute of Technology was used in determining pupil assignments within the constraints of school capacities, racial balance of about 22 percent black pupils in each school, minimal displacement, optimal walking distance to new schools, safety and traffic factors, and future flexibility of boundaries in order to maintain racial balance. The elementary schools would serve grades K-5; with the addition of a fourth building, the middle schools would serve grades 6-8. The revised school attendance areas are shown in Figures 6 and 7. The Integration Plan was adopted in November 1966 to begin in September 1967. Boundary changes were made so that black enrollment at each school ranged from 17 to 25 percent. Children who did not live within one mile of their school or whose routes were considered hazardous, were bussed at district expense. Laboratory School pupils who lived outside the Foster School area were bussed to school at their parents' expense. A survey of Foster School parents was undertaken in order to ascertain that the decision to bus black pupils did not run counter to the wishes of the local community.

Many concerned citizens in District 65 were apprehensive about the possibility of academic, social, and economic consequences of desegregating elementary schools. A series of well-attended open forums conducted by school board members as well as the superintendent attempted to answer all questions with openness, prudence, and sincerity. Community organizations which lent active support to the plan to desegregate included all civil rights organizations, the League of Women Voters, the National Council of Jewish Women, churches, temples, school faculties, as well as PTAs.[6] A number of neighborhood organizations were started in opposition to the integration plan as well. Late in 1965, candidates for school board in support of

[6]Robert S. Siegler, *Elementary School Integration in Evanston, Illinois*. Evanston, Illinois: January 2, 1967, 32 pp. mimeographed.

Figure 6

REVISED SCHOOL ATTENDANCE AREAS

COMMUNITY CONSOLIDATED SCHOOLS DISTRICT 65

COOK COUNTY, EVANSTON, ILLINOIS
1967

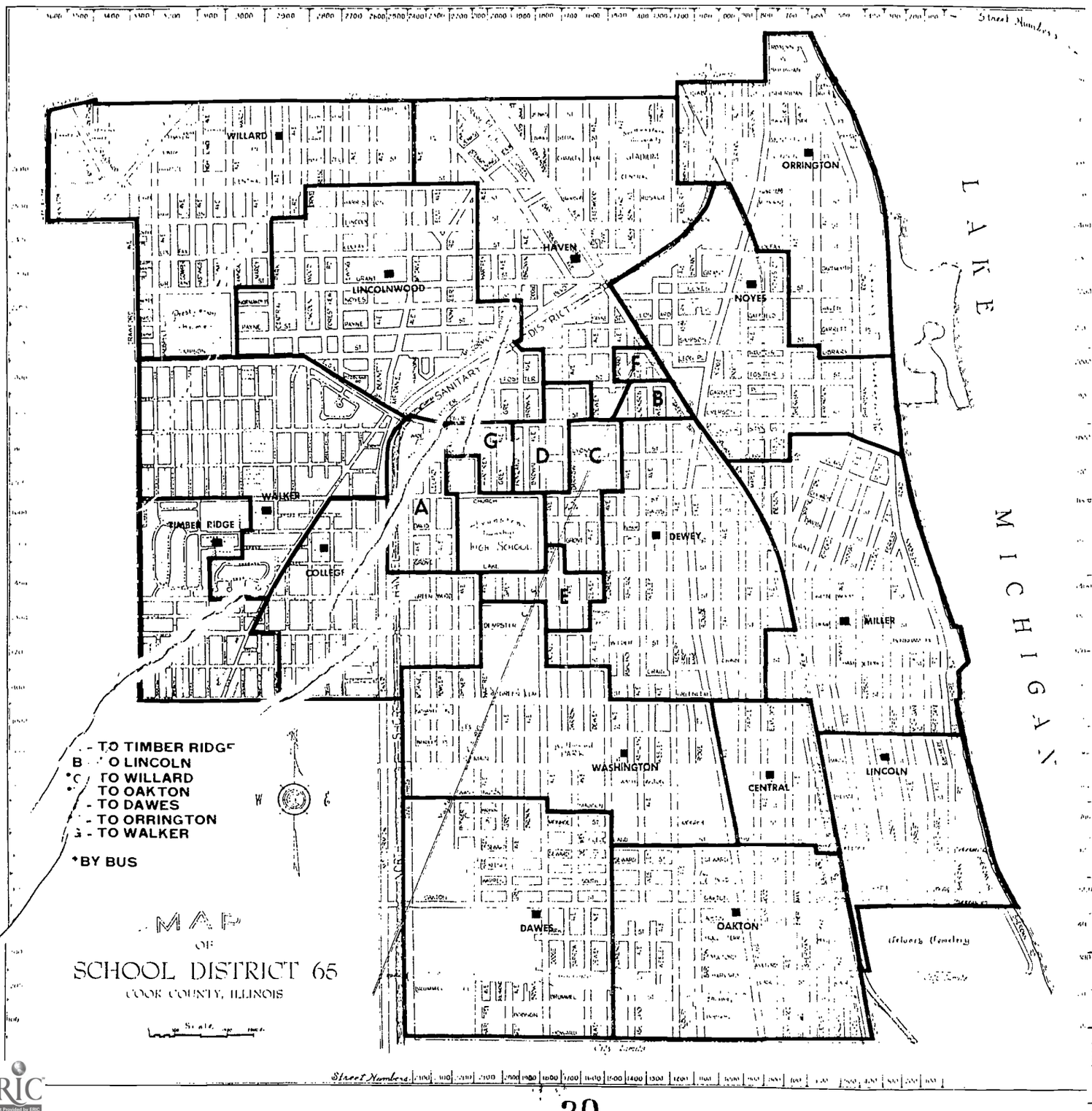
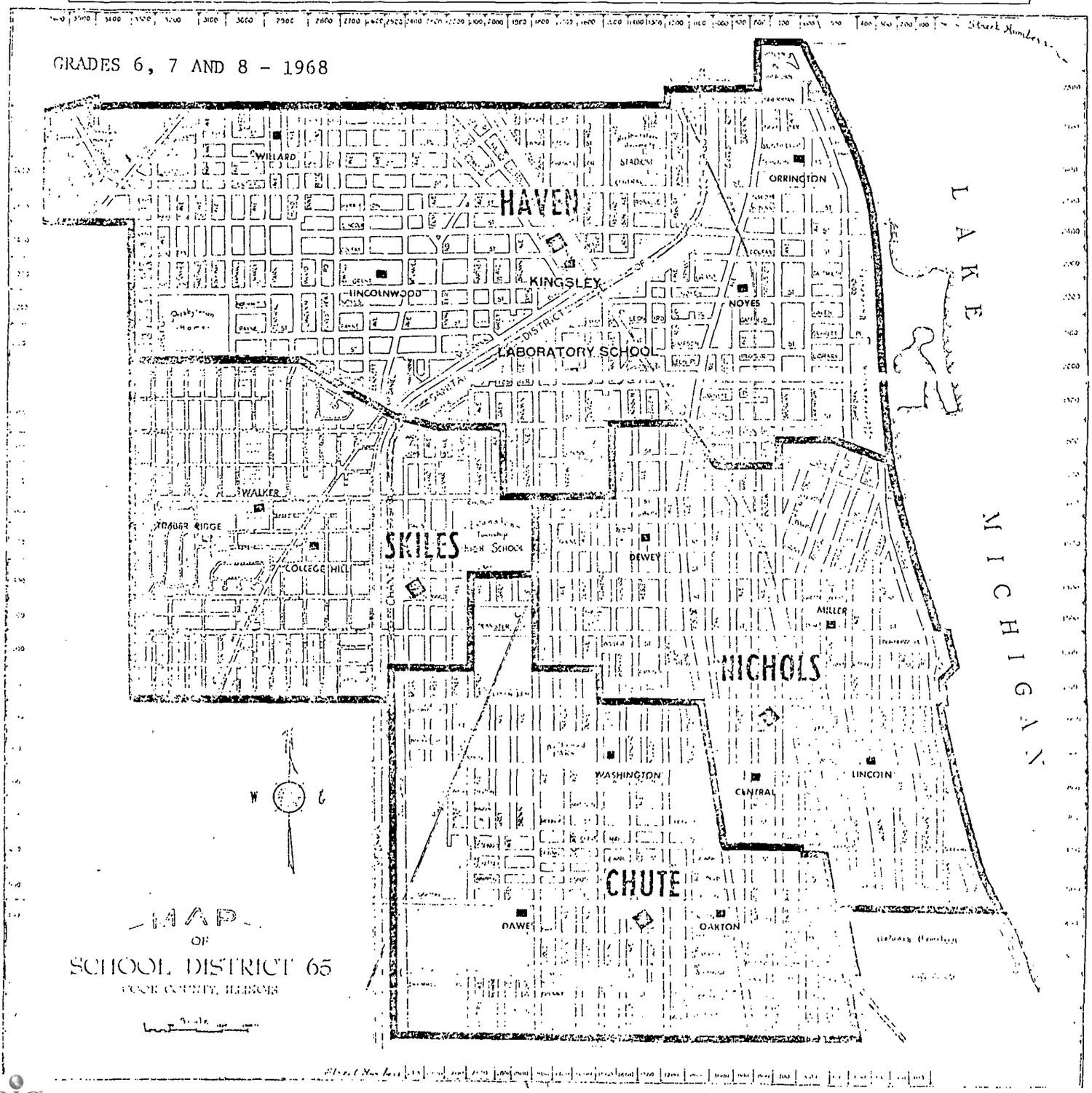


Figure 7

JUNIOR HIGH SCHOOL ATTENDANCE AREAS

COMMUNITY CONSOLIDATED SCHOOLS DISTRICT 65

COOK COUNTY, EVANSTON, ILLINOIS



continued planning for integration were elected. When Dr. Chute retired, he was succeeded by Dr. Gregory C. Coffin, an articulate advocate of integrated education. With the broad-based community support attained through deliberate planning and democratic processes, District 65 schools were desegregated without incident in September 1967.

At the time of desegregation, the administration committed itself to undertake a long term study on the impact of integration upon the children, the schools, and the community. In March 1968, the Rockefeller Foundation funded a proposal from District 65 for a three-year study. This was augmented by a supplementary grant for data analysis in 1970. District 65 Board of Education contracted Educational Testing Service to conduct the study in cooperation with school personnel.

Summary

The Board of Education of Elementary School District 65, Evanston, Illinois made a positive commitment to desegregate its 16 elementary schools by September 1967. A proposal for evaluation of the impact of desegregation upon the pupils and the community was funded by the Rockefeller Foundation. The three-year study was undertaken jointly by the District 65 Board of Education and Educational Testing Service, a nonprofit organization devoted to research and measurement in education.

Evanston is an affluent suburb of Chicago, with a population of 79,808, 16 percent black. In spite of the conventional image of a north-shore suburb, Evanston is actually a city of remarkable diversity in life styles among its residents. There are wide ranges among Evanston residents' characteristics such as ethnic origins, income, housing, and jobs. Black Evanstonians, though a favored group in comparison with U. S. residents as a whole, are less well-off than their white neighbors.

Evanston has been an educational-minded community since its founding as the campus town to Northwestern University over a hundred years ago. The high schools and junior high schools had integrated student bodies. The elementary schools, however, manifested considerable racial inbalance due to restricted residential patterns. Broad-based community support was sought in the decision as well as in planning for desegregation. With computer assistance, a plan for desegregation was formulated by combining redrawn school boundaries with a limited bussing program. Elementary schools were smoothly desegregated on schedule in 1967.

EVALUATION STRATEGY

What happens when a top-quality, majority-white school system becomes desegregated? The present study attempted to seek answers to questions in three major areas:

1. What impact has desegregation had upon the academic achievement of black and white pupils?
2. How have the pupils' attitudes to self and school been affected by the desegregation process?
3. What impact has desegregation had upon the parents, teachers, and the community?

A number of hypotheses with respect to the questions above were postulated in an interim report.[1] The design was shaped by the nature of these questions. The following section describes the evaluation design for each of the three major areas of interest.

Design

The design for the evaluation of integration in Evanston schools falls into a category of research classified as quasi-experimental.[2] A true experiment could have been accomplished by randomly assigning pupils to integrated and segregated schools, and then following their progress over time. But this type of scientific rigor was not reasonable under the circumstances.

In order to answer the question about the impact of desegregation upon the academic achievement of the pupils, the adoption of a natural time series design was possible with a single 'before' and a series of 'after' measures. A schematic presentation of the design for studying academic growth by means of standardized tests is shown in Table 2. Grades 1 and 4 were chosen for longitudinal study because Cooperative tests were geared for grades 1 through 3, while the STEP battery served grades 4 through 8.

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[1]Daniel P. Norton and Jayjia Hsia, *Evaluation of Integration of Evanston District 65 Schools: An Interim Report.* Princeton: Educational Testing Service, 1969.

[2]Donald T. Campbell, Reforms as Experiments, *American Psychologist.* April 1969, *24*, pp. 409-429.

Table 2

The Academic Test Schedule of District 65 Pupils' Fall 1967 through Fall 1970

Test Date/Grade	K	1	2	3	4	5	6	7	8
Fall 1967 (Baseline data)	X	X	X	X	X	X	X	X	X
Fall 1968	X	X	X	X	X	X	X	X	X
Fall 1969		X		X	X		X	X	X
Fall 1970					X			X	X

Use of naturally occurring groups permitted comparisons which refined the time series data. Pupils were grouped not only by race, sex, and grade level, but also by those who were bussed, by those with varying amounts of prior segregated school experience, and by those assigned to different receiving schools.

In addition to national norms, the possibility of making comparisons with another body of matched longitudinal data was possible from the Growth Study, an ETS-conducted study of academic development of 34,000 pupils in 140 elementary and 33 secondary schools. Data were available for black and white students in grades 5 through 12.[3]

Besides standardized test scores, academic change can be measured by teachers' grades. If desegregation affected pupils significantly, teacher's grading practices could reflect such changes. The use of grades before and after desegregation as pre- and posttreatment measures augmented the information available from the standardized test batteries.

Several approaches were used in assessing pupil attitude to self and school. A natural time series design was used by Dr. D.T. Campbell and his associates from Northwestern University. Grades 3 to 5

[3]Michael Rosenfeld and Thomas L. Hilton, Negro-White Differences in Adolescent Educational Growth, *American Educational Research Journal*, March 1971, *8*, pp. 267-283

pupils of four schools were administered a self-report attitude inventory in the spring of 1967 before desegregation. The instrument was repeated in spring of 1968 and 1969 to larger groups of grades 4 to 6 and 5 to 7 pupils, respectively.

Two observation instruments, the Russell Sage Test of Social Relations and PROSE, were used *ex post facto* to assess pupil attitude inferred from classroom behavior. The posttest only design was not by choice, but in the conviction that descriptions of status or processes of relatively uncontrolled information from a variety of sources would be preferable to no evaluation attempt at all. Every effort was made to examine data with extreme caution, to be alert to possible sources of invalidity, as well as to account for plausible rival explanations of observed phenomena.

The choice of designs for the evaluation of the impact of desegregation upon the parents, the teachers, and the community was also limited by the *ex post facto* nature of the study. Questionnaires for teachers and parents were administered several years after the implementation of the integration plan. Their expressed feeling about the beginning of desegregation, and comparisons with schools before desegregation may well have been distorted by lapses in memory. These opinions and attitudes were therefore checked against archival records and data from unobtrusive measures. For example, teacher responses to items about their attitude toward black and white pupils were checked against the actual comments made on permanent records of black and white pupils before and after desegregation.

Other records and unobtrusive measures useful in evaluating community reactions to integration were vote records, attendance at board meetings, participation in school related organizations and reports in local publications.

Subjects

The 10,861 pupils enrolled in District 65 in September 1967 constituted the population of the study. The distribution of pupils among the 16 elementary and 4 middle schools is shown in Table 3. Baseline data on academic achievement was obtained on the entire population. Samples selected for the longitudinal and grade cohort studies are depicted in Table 2.

Table 3

District 65 Pupil Enrollment Before and After Desegregation, Fall 1967

School	1962 Total N	Percent Black	1966 Total N	Percent Black	1967 Total N	Percent Black
Central	331	*32*	331	*39*	304	*33*
College Hill	486	*0*	456	*13*	375	*24*
Dawes	542	*<1*	489	*6*	574	*26*
Dewey	579	*67*	429	*60*	367	*22*
Foster/King Lab.	837	*100*	796	*83*	604	*28*
Haven/Kingsley	363	*7*	407	*6*	466	*16*
Lincoln	523	*2*	516	*0*	546	*11*
Lincolnwood	525	*0*	605	*6*	555	*24*
Miller	357	*7*	353	*6*	346	*16*
Noyes	285	*31*	312	*32*	265	*24*
Oakton	744	*<1*	768	*5*	744	*17*
Orrington	364	*0*	376	*3*	323	*23*
Timber Ridge	511	*0*	484	*14*	415	*23*
Walker	454	*2*	492	*15*	445	*19*
Washington	530	*7*	536	*25*	488	*26*
Willard	501	*1*	523	*<1*	547	*23*
Chute Middle			736	*16*	857	*16*
Haven Middle	611	*15*	702	*16*	1,061	*19*
Nichols Middle	634	*11*	740	*17*	743	*20*
Skiles Middle	686	*17*	736	*27*	838	*25*
Total	9,891	*18.6%*	10,787	*20.6%*	10,863	*21.3%*

From the original sampling frame, one-fourth of the white pupils in grades 1, 2, 4, and 5 were randomly selected. This sample, plus all the black pupils in these grades, were the subjects for whom cumulative folder data were collected.

Data Collection

The academic test batteries listed in Table 4 were scheduled for each year of the study between the second and third weeks after school opened in September. The test schedule was followed during 1967, 1968, and 1970. In 1968, however, the battery was given to the pupils during the first week of school for the convenience of testing personnel in each of the 20 schools. A series of workshops for the test administrators were conducted by ETS advisory services staff before the first test date in order to maintain uniform test conditions.

Personnel and methods of data collection varied for the other areas of the study. The coding of pupils' cumulative records was completed by ETS trained staff during the summer of 1968. Dr. Campbell's pupil attitude questionnaire was administered and analyzed by Northwestern University graduate students. PROSE observations were made by three volunteers recommended by the Volunteer Bureau of Evanston. These observers received training sessions using videotapes as well as real classrooms until a criterion of at least 90 percent interobserver agreement was reached. The Russell Sage Test of Social Relations was administered to randomly selected first- and second-grade classrooms by ETS psychologists. The teacher questionnaire was administered simultaneously in all schools during an inservice meeting in spring of 1970. Parent questionnaires were sent by mail to the homes of a 20 percent sample of black pupils. All questionnaires were answered anonymously in order to encourage frank responses.

Data Processing

A master pupil file of information was made available by District 65 data processing for all students in the Evanston school system during each of the four years of the study. For all years, the master pupil file

Table 4

Instruments, Schedules, and Subjects for Evanston Longitudinal Study, 1967-1970

Instrument	Form	Subjects	A Measure of	Date(s)
Caldwell Preschool Inventory	1	Grade K 1	Achievement in areas considered necessary for success in school	Fall 1967 Fall 1968
Cooperative Primary Listening Test	12A	Grade 1	Listening	Sept. 1967 1968 1969
Cooperative Primary Tests		Grade 2	Achievement in each subject area	
Pilot Test	1			
Listening	12A			Sept. 1967
Word Analysis	13A			1968
Math	12A			
Reading	12A			
Cooperative Primary Tests		Grade 3	Achievement in each subject area	Sept. 1967 1968 1969
Listening	23A			
Word Analysis	13A			
Reading	23A			
Writing Skills	23A			
Math	23A			
School and College Ability Tests (SCAT)	5A	Grades 4, 5, 6	Verbal (I-II) and Quantitative (III-IV) abilities; Total score (IV)	Sept. 1967 1968 1969 1970
I Vocabulary				
II Sentence completion				
III Computation				
IV Arithmetic reasoning				

Table 4 - continued

Instrument	Form	Subjects	A Measure of	Date
Sequential Tests of Educational Progress (STEP) Reading Writing Listening Math Science Social Studies	4A		Achievement in each subject area	
SCAT (same as 4-6)	4A	Grades 7, 8	Achievement in each subject area	Sept. 1967 1968 1969 1970
STEP (same as 4-6)	3A			May 1967 1968 1969
Campbell's Questionnaire		Grade 5- 4 schools 6 7	Pupil attitude	1968-1969
Personal Record of School Experience (PROSE)		Randomly selected pupils in Grades 1, 2	Observation of pupil activities	Spring 1969
Locus of Control Questionnaire		Randomly selected classrooms. Grades 6, 7, 8	Measure pupil sense of control over environment	1968-1969
Russell Sage Test of Social Relations (RSSR)		Randomly selected classrooms Grades 2,5	Instrument instruction	Summer 1968
Cumulative Records		Random sample of whites, all blacks, Grades 1, 2, 4, 5	Grades, personal information	Spring 1970
Teacher Questionnaire		District 65 Teachers	Integration attitude	Spring 1971
Parent Questionnaire		20% black parents	Integration attitude	1967-1970
PTA Presidents		PTA Presidents	Racial composition of PTA Boards and Council	

contained the name, race/sex code, school, grade and, in the case of the 1967 file, a code which represented both a prior school type and at the same time, a post desegregation treatment for each black pupil. These codes were as follows:

0. Black pupils who were in majority white schools before 1967.
1. Dewey (majority black school) pupils who stayed - white pupils transferred in to achieve racial balance.
2. Dewey transfers who walked to majority white receiving school.
3. Dewey transfers bussed to a majority white receiving school.
4. Foster (all black school) pupils who stayed - volunteer white pupils transferred to form integrated laboratory school.
5. Foster transfers who walked to majority white receiving school.
6. Foster pupils bussed to majority white receiving school.

Preparing Files for Analysis

For each year of the study the following steps were taken in preparing the final files for analysis:

1. The test score cards were put on tape.
2. The master pupil file (MPF) cards were put on tape.
3. The score file was checked for duplicate student I.D.'s, incorrectly assigned I.D.'s, misaligned I.D.'s and/or other test information, and scores out of possible range. From the student's name and by alphabetizing the master file by last and first name, most of these errors were corrected. When any given score file was corrected as far as possible, a check was made to see that the remaining errors did not exceed 2 percent of the total.
4. Both the master pupil file and the test score file for that year were sorted preparatory to matching students by I.D. to make a final record containing the MPF code information as well as the student's complete set of scores for a particular test. The philosophy finally adopted here in all cases was to use the master pupil file for that year (made up in the fall) with the scores for that year (also administered in the fall). The actual matching was done from the MPF I.D.'s and the additional codes were added to the test file. The codes were made uniform over all years for each school, including pupils in nongraded schools who were assigned grades by their teachers.

5. The final files were sorted by school within grade for running distribution analyses or by I.D. for longitudinal analyses.

Data Analysis

The comprehensive nature of the study precluded the possibility of a single analysis common to all areas of interest. Separate plans were necessary for the analysis of each domain. The greatest amount of attention was devoted to the processing and analysis of academic achievement data.

Distribution Analyses

Distribution analyses were done with the clean standardized test scores for each year. They provided the range and distribution of scores classified by grade level, sex, race for each school, and for the district. In addition to the number, mean and standard deviation of each category, scores of the 10th, 25th, 50th, 75th, and 90th percentiles were computed to permit grade cohort comparisons. The degree of skew and kurtosis of each distribution was provided. Finally, average percentile with respect to the national norms group (AVPTL, NN) was computed. The procedure was based on interpolation of published national norms data.

The distribution analyses revealed differences in distribution among groups which counterindicated extensive use of analyses of variance and covariance. Assumptions of anova and ancova statistical models could not consistently be met. While disparity in socioeconomic status was found between groups, analysis of covariance cannot provide appropriate adjustment to compensate for such preexisting differences between nonexperimental groups.[4]

Grade Cohort Comparisons

Data from distribution analyses were used to make grade cohort comparisons. Test scores were available in 1967 and successive years for all pupils in grades 1, 3, 4, 7, and 8. Cohort effect may have operated to account for slight differences in performance from year to year. But a consistent trend among grade cohort score distributions could be interpreted

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[4]Frederic H. Lord, A Paradox in the Interpretation of Groups Comparisons, *Psychological Bulletin*, 1967, *68*, pp. 304-305.

as indication of significant changes due to environmental treatment effects which include, in the present case, integration.

Comparison of Differences in Mean Academic Growth Using Cross-sectional, Unmatched and Matched Longitudinal Data

Hilton[5] has suggested the use of different sources of test data to make inferences about possible outcome of educational treatments measured by changes observed in repeated testings. In the case of Evanston, mean score gains could be associated not only with learning and integration or some other treatment, but may also appear spuriously as a result of retest effects, equating errors, selection effects, cohort change effects, regressions effects, and cohort differences. Careful use of longitudinal as well as cross-sectional data helps to rule out some of these sources of differences between pre- and posttests.

Regression Analysis of Matched Longitudinal Scores

Regression analyses were done in order to make some comparisons of the rate of learning among various naturally occurring groups such as black pupils who were bussed to receving schools versus those who walked. By using the 1967 scores as independent variables, and the most recent test scores as dependent variables, raw score regression weights could be thought of as a measure of rates of academic gain. A larger regression weight for one group implies that the group has had a higher rate of increase in posttest scores. This method, when used to compare groups with unequal pretest mean scores, avoids assumptions concerning scale linearity.

Migration Manova

Test scores of pupils entering and leaving District 65 during two years were analyzed to rule out significant cohort change effects. Dropouts constitute a major source of differences between pre- and posttest mean scores. Multivariate analysis of variance was done on scores of newly enrolled pupils in 1968 and 1969, and on scores of pupils who withdrew from District 65 in 1967 and 1968.

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[5]Thomas L. Hilton and Cathleen Patrick, Cross-sectional Versus Longitudinal Data: An Empirical Comparison of Mean Differences in Academic Growth, *Journal of Educational Measurement*, Spring 1970, 7, pp. 15-24.

Analysis of Pupils' Cumulative Records and Affective Data

The reliability of data from other sources could not be considered to be as high as that of standardized test scores. Much of it was collected after desegregation was completed. Computer assisted cross tabulations were therefore made. Non-parametric tests of significance were used when they were deemed appropriate.

Analyses of Archival Data and Questionnaires

Questionnaires were cross-tabulated and non-parametric tests of significance were used to answer some questions about opinions of parents and teachers in the study. It was decided to show time series in vote records, and other community data descriptively by means of graphs and tables.

Summary

In order to answer questions about the impact of desegregation upon the academic achievement and attitude of District 65 pupils and reactions of teachers, parents, and the community, longitudinal plans for the evaluation of desegregation were adopted.

Since no laboratory desegregation experiment was possible under the circumstances, a number of quasi-experimental strategies were used. Natural time series, using a single 'before' and a series of 'after' measures, were feasible for a battery of standardized academic tests and a pupil attitude questionnaire. For the rest, data were collected *ex post facto*.

While teachers and some parents were surveyed by questionnaire, much of the community information was collected via unobtrusive measures such as observation and use of archival records.

The file of data was prepared for computer-assisted analyses. For the academic test data, analyses included distribution analysis, grade cohort comparisons, comparison of cross-sectional and longitudinal data, regression analyses, and multivariate analysis of variance. Nonparametric tests of significance were used on data collected in the affective domain, as well as on the *post hoc* adult and community data.

PUPIL PERFORMANCE IN ACADEMIC AREAS

The first two chapters described the historical background for desegregating the elementary schools in Evanston and how subsequent plans for evaluating the desegregation process were drawn up and carried out. The chapters which follow report the findings. Since the main focal point was the student body of District 65, priority will be given to the description of the impact of desegregation upon the academic and affective behavior of the pupils. Chapters which describe the impact of desegregation upon the teachers, parents, and the community will follow.

How has desegregation affected boys and girls in Evanston since September 1967? Every school day since that time, busses from the central part of town carry black pupils to formerly all-white schools. At first, only 540 black pupils who lived more than one and a half miles from their receiving schools were provided with free transportation. By fall 1970, bus service had expanded to include about 1,000 black pupils attending schools closer to their homes. About 400 white pupils came from all parts of town, at their own expense, to the King Laboratory School in the predominately black neighborhood. Flexible bus and school boundaries permitted balanced distribution of black and white pupils in every one of the sixteen elementary schools, indeed, in virtually every classroom, each year.

The academic growth of these children is of primary interest. An unwieldy mass of aptitude and achievement data has accumulated over the course of four years. In order to avoid being bogged down in details, only highlights of the academic findings will be presented in the body of the report. A number of detailed distribution analyses are included in Appendix B for interested readers.

In order to describe pupil progress as completely as possible, several types of standardized test data will be included:

1. Baseline data, which indicate pupil status at the beginning of desegregation. These data are cross-sectional in nature, since they were obtained in the fall of 1967 from all pupils enrolled in District 65 schools.

2. Grade Cohort Data, which are test scores of all pupils in any one grade level for one year. For example, grade 4 cohorts for all years include all fourth grade pupils with test scores in 1967, 1968, 1969, and 1970.

3. Matched longitudinal data, which are from those pupils who have matched test scores for 1967 and 1970.

It is known that cross-sectional, unmatched and matched longitudinal data for the same school systems, tested repeatedly, can yield different results.[1] The sources of differences among these three types of data were considered in the interpretation of results.

Pupils' performances, measured by grades earned before and after desegregation, were compared in order to assess teachers' judgment of the pupils' academic growth.

Baseline Academic Data, 1967

The aptitude and achievement test scores of all pupils in September 1967, constituted the cross-sectional baseline data for District 65. For every test at every grade level, District 65 pupils manifested a wide range of individual differences in aptitude and achievement. The average white pupil entered kindergarten with greater readiness for school work than his black classmate, and maintained his advantage throughout the eight years of school. Tables and figures for this chapter are placed at the end of the chapter (pages 48-91) in order to avoid repeated interruptions in the text. A brief narrative description of their contents follows below.

Caldwell Preschool Inventory

Kindergarten and first grade pupils took the Caldwell Preschool Inventory,[2] an individually administered assessment of achievement in areas regarded as necessary for success in school, developed primarily for Head-Start program evaluation. The performance of the 1,049 kindergarten pupils showed wide variations. Figure 8 pictures the bimodal distribution of scores. While the scores of black and white pupils overlap extensively,

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[1]Thomas L. Hilton and Cathleen Patrick, Cross-Sectional Versus Longitudinal Data: An Empirical Comparison of Mean Differences in Academic Growth, *Journal of Educational Measurement*, Spring 1970, pp. 15-24.

[2]Bettye M. Caldwell, *The Preschool Inventory*. Princeton: Educational Testing Service, 1967.

white pupils began District 65 schools with considerable academic advantage. Figure 9 shows the same bimodality among first graders, as well as a test ceiling effect for white pupils. In Table 5, the mean values for black and white pupils in 1967 are compared with middle class and lower class norms.

Table 5

Comparison of Mean Kindergarten and Grade 1 Caldwell Preschool Inventory Scores with Middle and Lower Class Norms Groups, Fall 1967

Grade/Race	Black					White				
	N	$\bar{X}$	SD	PR*		N	$\bar{X}$	SD	PR	
K	214	51.4	13.2	<10	(Middle class norms)	835	68.8	11.8	64	(Middle class)
				59	(Lower class norms)				>100	(Lower class norms)
I	210	67.3	9.8	25	(Middle class norms)	712	78.6	9.0	88	(Middle class)
				78	(Lower class norms)				99	(Lower class norms)

* Percentile rank of five year old norms group used for K, six year old norms for grade 1.

Cooperative Primary Tests

Pupils in grades 1, 2, and 3 took appropriate forms of Cooperative Primary Tests. The wide range of individual differences noted in the Caldwell Scores distributions were again found. Figure 10 compares the average test score of black and white pupils with national norms in four subtests. White pupils generally achieved above, and black pupils generally below the national norms. Figures 11 and 12 show the considerable variation among schools in the Cooperative Listening Test scores of black and white first graders.

There were sex differences in test performance. Table 6 shows that in 1967, grade 3 black girls performed better than black boys in reading and mathematics. White girls read better than white boys, and white boys were better in mathematics.

STEP and SCAT

Pupils in grade 4 through 8 took appropriate forms of the SCAT and STEP tests. Figures 13 through 16 indicate the mean scaled scores for each

grade of black and white pupils in eight subtests. As in the Cooperative tests, white pupil means were above and black pupil means below national norms. The differences in achievement between girls and boys can be seen in Table 7. Black and white girls performed better than boys in reading, and black and white boys were better in mathematics.

Grade Cohort Data

The test performance of grades 1, 3, 4, and 8 cohorts from 1967 through 1970 are displayed graphically in Figures 17-23. On the whole, variations from year to year were slight. Because the sample sizes were large, about 200 black and over 800 white pupils for each class, small differences tend to be statistically significant. Therefore, statistically significant findings were viewed conservatively, as such small changes may not be very meaningful substantively. White pupils in the elementary schools improved slightly in mathematics in the course of the first year of integrated schooling. The early test date in 1969 may have obscured further gains. There was consistent higher achievement in mathematics for black pupils over the course of three years, especially in the higher scores obtained by the most able pupils (90th percentile).

Grade 1 Cohorts: Cooperative Listening Tests, 1967-69

There were very small cohort differences among the three classes of entering first graders, as can be seen in Figure 17. Black pupils of 1969 appear to be slightly more able on the Listening Test than 1967 and 1968 cohorts. The white pupils in 1968 and 1969 appear to be slightly more able than the 1967 cohort.

Grade 3 Cohorts: Cooperative Primary Tests, 1967-70

Figure 18 summarizes data of the black cohorts during the period of the study, and Figure 19, the white cohorts. There were some differences between years, with the 1968 pupils with at least one year's experience in integrated schools generally attaining higher scores. In mathematics, there was consistent improvement in mean scores of black and white pupils, as well as higher attainment by the most able (90th percentile) pupils over the years of the study.

Grade 4 Cohorts: STEP-SCAT Tests, 1967-70

Data for grade 4 black and white cohorts are shown in Figures 20

and 21 respectively, There were fluctuations from year to year. STEP subtest scores were generally lower in fall 1969, which may have reflected the early test date that year.

Grade 8 Cohorts: STEP-SCAT Tests, 1967-70

Figures 22 and 23 display data summaries for black and white pupils in the middle schools in eight subtests. There appears to be a slight but consistent deterioration in test performance of black pupils in most subject areas. For white pupils, there was consistent lowering of SCAT Quantitative and STEP Science scores over the course of four years. Tables 8 and 9 list N's, means, and standard deviations of all grades tested in STEP Reading and Mathematics each year.

Differences were obtained among schools. Figure 24 shows unmatched longitudinal mean trend lines for grades 1 to 3 in three elementary schools. Figures 25 to 28 picture the unmatched longitudinal mean gains for black and white pupils in STEP Reading and Mathematics for the four middle schools.

Matched Longitudinal Data

The stability of District 65 pupil population was confirmed by the proportion of pupils who had matched longitudinal data over the period of the study. Table 10 lists the proportions of black and white pupils with scores in 1970 and 1969, as well as 1967. Seventy-two to 82 percent of the black pupils and 72 to 74 percent of white pupils had matched scores. Pupils in the higher grades appeared to be more likely to stay in Evanston schools than those in early primary grades.

Within-group regression analyses were done with matched Cooperative Listening, and STEP Reading and Mathematics scores. The regression weights were then compared in order to make inferences about the relative rates of academic growth among groups. Tables 11 to 15 list regression statistics for grade 1, 4 and 5 pupils in 1967 with matched posttest scores. Virtually all groups showed significant mean gains in the final posttests. When the regression weights were compared, a number of significant differences were found between groups. These significant differences are seen in Table 16. Due to the small N's, confidence bounds around some of the regression weights were large, so that statistically significant results were less likely in these groups. Non significant differences were eliminated from the tables for the sake of brevity in presenting data.

Rates of Gain Among Black Pupils Who Received Different Desegregation Treatment

Cooperative Listening matched test scores.--Black pupils were classified as follows: (a) pupils in majority black schools who were transferred by bus to majority white receiving schools, (b) pupils in majority black schools who were transferred by walking to majority white receiving schools, (c) pupils in majority black schools who remained, and were joined by white pupils from other schools, and (d) pupils who had already been in majority white schools in 1967, and who were not physically affected by the integration plan. No significant differences among groups were found, when a series of t-tests for difference between regression weights were computed. Nor were there significant differences between black and white pupils in rates of learning as measured by the regression weights.

STEP Reading matched test scores.--In addition to the four groups above, black pupils also were grouped into girls and boys who remained in formerly integrated schools, and who were therefore relatively unaffected by the integration plan. Statistics for difference between regression weights are summarized in Table 16. Grade 4 black pupils in 1967 who were transferred by bus made significantly greater gains in reading than pupils who walked to their new schools. Grade 5 pupils in 1967 who remained in their former schools had higher and more predictable rates of reading gains than transferred pupils, walking as well as bussed. Group mean scores gains were greatest with the bussed group.

Figure 29 shows mean score gains of the three treatment groups in STEP Mathematics and Reading. Greater group mean score gain coupled with low correlation coefficients for individually matched scores among grade 5 bussed black pupils may have reflected diverse integration experiences making their posttest scores less predictable individually, but group gains were impressive. Analysis of social economic status data shown on p. 134 and following pages, found that transferred black pupils were lower in terms of social economic indices than non-transferred black pupils. The observed greater group gains may therefore have been associated with regression effects.

Rates of Gain Made by Pupils Classified by Sex and Race

Cooperative Listening matched test scores.--No significant differences were found among groups in regression weight. Neither sex nor race

appear to have been significant factors in Listening gains made between grades 1 and 3.

STEP Reading matched test scores.--Black girls in grades 4 and 5 in 1967, who had been in integrated schools all along, manifested significantly greater rates of gain in reading than white girls. Their mean pre- and posttest scores were different, however, with the white girls' being higher. White boys in grade 5 made significantly greater reading gains than white girls. Like the black girls, white boys' pretest as well as posttest mean scores were lower than white girls'.

STEP Mathematics matched test scores.--White boys in grade 4 in 1967 gained at a faster rate than black boys. Figure 30 shows mean score gains of the grade 5 pupils classified by race and sex. Comparison of cross-sectional unmatched and matched longitudinal scores are shown in Figures 31, 32, and 33.

The Growth Study and District 65 Matched Longitudinal Gains, Grades 5-8

Figure 34 shows the mean matched longitudinal trend lines for District 65 pupils and Growth Study subjects in reading and mathematics.[5] In both subjects, Evanston white pupils were above the Growth Study white subjects. Black pupils' mean reading scores were virtually identical with Growth Study black subjects, and the mathematics mean scores were lower than the Growth Study blacks'. The observed group differences may have been associated with social economic status factors, since it was shown in Chapter I that Evanston white residents fell mainly in the highest occupations categories.

Analysis of Pupil Migration In and Out of District 65

A multivariate analysis of variance (MANOVA) program was used to analyze STEP and SCAT scores of 580 white pupils in grades 4, 5, and 6 who fell into the following categories:

Migration Type	N
Left District 65 during 1967-68	85
Left District 65 during 1968-69	176
New to District 65 in 1968-69	79
New to District 65 in 1969-70	240

[5]Hilton and Patrick, *op. cit.*, p.22.

Numbers of black migrants were too small to be analyzed. While no large migration effects were found, 1968 white pupils who left were significantly less able in all subject areas than those white pupils who were new to the district during 1969.

White Pupils Who Were Bussed to the Laboratory School

Table 17 shows the mean scores of white pupils who volunteered to attend the Martin Luther King Jr. Laboratory School. They came to school in the black residential area by bus. The fare was paid by their families. The Laboratory School pupils were a self-selected group, and they have consistently performed above District 65 means throughout the years of the study.

Discussion

Observed differences in academic achievement may be associated with:

1. Learning and maturation for Evanston pupils between 1967 and 1970.
2. Treatment effect, which was, in this case, desegregation of all elementary schools in 1967.
3. Historical and environmental events other than treatment, which could provide alternate explanation of effects. Changes in instruction, curriculum or organization within District 65 Schools would be examples.

A number of additional sources could give rise to observed changes between before and after measure for an experimental treatment. Some possibilities for the present study are:

1. *Retest effect*, which is a loss in scores due to boredom with repeated testings, or alternately a gain due to practice.
2. *Instrumentation*. Changes due to equating of different levels and forms of tests are assumed to be negligible in this study.
3. *Cohort change effect*. In unmatched longitudinal scores, cohort changes between testings may be due to differential losses or gains as a result of pupils moving in and out of the school district.
4. *Selection effect*. In the case of matched longitudinal scores, selection effect occurs when pupils with missing test scores are lower in general ability than those who remain.

5. *Cohort differences.* Test differences may result from the fact that pupil population for one year may be different from another year. The samples drawn from these populations would then be different.

6. *Altered test conditions.* The reliability of test scores would be questioned if test conditions were not identical from year to year.

7. *Regression effects.* Statistical regression may operate when groups are selected on the basis of their extreme scores.

Interpretation of Academic Test Data

Matched longitudinal regression analyses indicated that all pupils made significant academic progress from the start of integration in September 1967, until the present time. White pupils' mean achievement scores in all subject areas remained well above national norm means, as well as above Growth Study white means. Black pupils' mean achievement gain scores were similar to those of black subjects of the Growth Study, despite the fact that the brunt of school transfers and bus rides was borne by District 65 blacks in the desegregation process.

Has integregation *per se* had any appreciable effect on the achievement scores of elementary pupils in District 65? While there were small fluctuations in test performance in all subject areas from one year to another, no consistent trends were observed in the data to date. In grades 1, 3, and 4, which were subject to close scrutiny, black pupils appeared to have made some small gains, while white pupils remained essentially the same, except for improvement in mathematics.

Nor has riding buses to school apparently had any remarkable impact upon the achievement of pupils, black or white. White pupils of the Laboratory School, who rode to school daily at their families' expense, had mean achievement scores consistently above District 65 norms. This phenomenon cannot, however, justifiably be attributed to the efficacy of bussing. A more likely explanation is that the population was self-selected and, therefore, an atypical group.

The effects of riding busses for black pupils were more complicated. The numbers of black pupils in each grade who were transferred were small; and findings must be regarded as tentative in nature. Correlation coefficients between matched pre- and posttreatment scores indicated that black

pupils who remained in their formerly majority black or majority white schools, had more predictable posttest scores than their classmates who were transferred during the process of desegregation. Slopes of the regression lines, and mean pre- and posttest differences indicate, however, that the rate of group gain among bussed pupils was likely to be higher than their walking or stayed-in former majority black schools classmates. These differences among groups may have reflected the stimulating experiences of the bussed pupils in their various receiving majority white schools, or they could be associated with regression effects.

The black pupils whose performance was most predictable, as well as more likely to have shown fastest rates of growth, were in majority white integrated schools to begin with. The integration plan had affected them very little. Indeed, black pupils who were in integrated schools of long standing, specifically the girls, consistently showed greater average rates of growth in reading between grades 4 and 8 than their white girl classmates. They started and ended with lower mean scores, but regression weights for their scores were significantly larger.

Were there environmental and historic events, other than desegregation, which may have been associated with the small differences observed among the academic performance of middle school pupils? Changes in curriculum and instructional methods may well have had systematic influence upon achievement scores. In comparing matched and unmatched longitudinal scores with cross-sectional and grade cohort scores, it was observed that very small but consistent decrements were noticed in subsequent years in comparison with 1967 scores between grades 7 and 8 in SCAT Quantitative and STEP Science mean scores for all pupils. The scores of the 25th and 10th percentiles were also appreciably lowered. These losses could not have been associated with desegregation, since the middle schools were integrated well before 1967. They may possibly have been concomitant with cohort differences or with the reorganization of middle schools to serve grades 6, 7, and 8.

A plausible rival explanation could be the changes in curricula and methods of instruction which have been initiated since desegregation. In science, three changes of science supervisors in District 65 have meant several changes in policy. In 1968, a discovery method of teaching science, emphasizing learning through inductive reasoning, may have affected pupils

of dissimilar abilities differentially. The pupils in the upper achievement ranges were not affected, and some actually made more progress in science concepts. The performance of pupils in the lower score ranges were systematically lowered. This trend may be reversed in time as teachers become more familiar with the new discovery curriculum.

SCAT Quantitative test mean scores in grades 7 and 8 have decreased consistently over the years of the study. The most reasonable explanation appears to be that relatively less attention was given to timed, simple computation drills in arithmetic classes. The Stanford Diagnostic Test in Mathematics was administered to grade 6 pupils in 1970. Substantial deficits in computational skills were found. The lack of these skills could explain the discrepancy in 1970 grade 8 white pupils' STEP Mathematics mean score falling at the 73rd percentile nationally, while the same pupils were at the 46th percentile in SCAT Quantitative mean scores. One half of the latter test consisted of computations, while the former test emphasized mathematics concepts.

Accounting for Possible Sources of Invalidity

In order to study the possibilty of test differences, longitudinal and cross-sectional data were scrutinized. If retest effect was operating to change test scores, the changes would presumably occur in a consistent direction for all tests and all years. No such systematic changes were observable in the data.

Serious deleterious cohort changes did not occur to any great extent in District 65 during the course of the study. Evidence from the migration MANOVA, as well as from the percent of pupils for whom matched longitudinal data was available, support the relative unimportance of this source of invalidation. As to the possibility of selection effects altering matched longitudinal scores, the virtual coincidence of matched and unmatched longitudinal trend lines for most black cohorts and all white cohorts studied, indicate that the effects of differential selection are not important in the present case. In only two groups, grade 1 black pupils in Listening, and grade 4 black cohort in Reading, could the possibility of a selection effect in matched longitudinal data be seriously entertained.

An examination of grade 1 Cooperative Listening mean scores, as well

as the score distributions over three years, does not support the possibility of major cohort differences affecting cross-sectional grade cohort data. First graders, black and white, appear to have become slightly more able during the past three years, but those differences were not significant statistically. Statistical regression may have been in operation in comparisons among desegregation treatment groups. The bussed black pupils were generally lower than the stayed black pupils in achievement test scores at pretest.

Grades as Indices of Academic Growth

Letter grades earned by District 65 pupils before and after integration represent teachers' judgment of academic development. The cumulative records of pupils in grades 1, 2, 4, and 5 were examined for changes in grades earned before and after fall 1967. There was considerable missing information in the records of the sample of pupils randomly selected for study. Therefore, any findings are regarded as tentative in nature.

Tables 18 and 19 show the grade point averages of black and white boys and girls before and after desegregation. White pupils' grade point averages in reading and mathematics were generally about one standard deviation higher than black pupils'. The differences in grades within each group before and after desegregation were small. 1967-68 GPAS were generally slightly lower. A series of chi-square tests for differences between observed and expected frequencies of grades earned showed consistent differences between black and white pupils. Although white pupils received higher grade point averages before and after desegregation, no differences were found among black or white pupils in the frequencies of grades earned before and after desegregation.

The teachers' judgments of academic achievement, then, reinforced the findings from standardized tests. Integration apparently did not affect the academic performance of black and white pupils significantly by either criterion.

Summary

Evanston five-year olds entering kindergarten manifested a wide range of achievements needed for success in school. Diversity was great among black as well as white children. But the average white pupil began

school with a substantial academic advantage. This phenomena may have been associated with socioeconomic differences.

During the eight years of school in District 65, pupils made consistent scholastic gains in all subject areas. The discrepancies between black and white pupils, however, remained throughout the school years. White pupils performed substantially above national norms. While average scores of black pupils were below national norms, they were similar to published means of black subjects in the Growth Study.

After desegregating all elementary schools, white pupils' performance in standardized achievement tests remained constant. Black pupils have made slightly greater gains in most subject areas. Bussing did not adversely affect black or white pupils. Indeed bussed black pupils from segregated classes showed greater mean score gains than their non-bussed classmates. A predictable and high rate of learning was manifested among black girls who had always attended white majority schools. The rate of learning in reading, as measured by the slopes of regression lines, was higher than white girls, though black girls' mean scores remained lower.

Letter grades from the cumulative folders of pupils in grades 1, 2, 4, and 5 were compared before and one year after desegregation. The data confirms the findings from standardized test batteries. Significant differences were found between black and white boys and girls before as well as after desegregation. There were no differences, however, in the frequencies of earned grades within each group pre- and posttreatment.

Very small but consistent decrements in SCAT Quantitative and STEP Science mean scores were noted among grade 7 and 8 pupils. These changes were not associated with desegregation, since middle schools were integrated before 1967. The most likely explanation for the phenomena was a change of emphasis in the instruction of arithmetic computations and science concepts.

Table 6

Mean Cooperative Reading and Mathematics Test Scores of Grade 3 Pupils Classified by Race and Sex, Fall 1967

Test/Race Cooperative Reading	Black Boys	Black Girls	White Boys	White Girls
N	119	133	473	412
$\bar{X}$	20.0	25.0	33.2	35.7
SD	7.5	8.0	9.5	8.1
PR*	22.1	36.6	61.9	69.6
Mathematics				
N	120	134	473	415
$\bar{X}$	25.4	26.2	37.1	35.8
SD	6.4	6.1	8.5	8.0
PR	23.3	25.6	63.7	59.8

*Percentile rank based on national norms

Table 7

Mean Step Reading and Mathematics Scores of Grade 8 Pupils Classified by Race and Sex Fall 1967

Test/Race STEP Reading	Black Boys	Black Girls	White Boys	White Girls
N	84	109	448	441
$\bar{X}$	259.3	267.7	283.9	288.6
SD	18.1	17.2	16.3	15.1
PR	33.9	46.8	73.3	80.5
Mathematics				
N	85	109	448	442
$\bar{X}$	255.6	253	273.3	270.3
SD	12.6	11.9	13.3	12.6
PR	41.2	35.4	78.4	73.3

Table 8

Cross-Sectional and Unmatched Longitudinal* STEP Reading
Mean Scores of Black and White Pupils Grades 4-8
Fall 1967-70

Race		Black				White			
Year		1967	1968	1969	1970	1967	1968	1969	1970
Grade 8	N	193	203	265	249	889	830	888	831
	$\bar{X}$	264.0	262.3	260.7	260.8	286.2	286.5	285.5	286.3
	SD	18.0	17.5	16.9	17.2	15.9	16.4	17.5	16.5
7	N	184	238	254	231	781	859	859	844
	$\bar{X}$	259.2	256.8	252.8	254.5	280.7	278.6	277.3	277.8
	SD	15.3	15.5	14.6	14.7	16.5	17.4	17.8	17.8
6	N	229	234	238		857	856	896	
	$\bar{X}$	250.8	249.3	249.1		270.4	271.2	270.4	
	SD	14.8	15.0	14.7		15.4	17.0	17.2	
5	N	230	233			876	849		
	$\bar{X}$	242.0	242.5			262.0	260.9		
	SD	12.4	13.7			17.1	17.9		
4	N	236	240	243	252	866	848	848	780
	$\bar{X}$	236.5	235.6	235.4	235.4	252.8	251.9	251.0	252.5
	SD	10.6	11.3	9.2	9.4	16.0	15.8	16.5	16.0

*Cross sectional scores are vertical, unmatched longitudinal scores fall diagonally from lower left to upper right.

Table 9

Cross-Sectional and Unmatched Longitudinal* STEP Mathematics
Mean Scores of Black and White Pupils Grades 4-8
Fall 1967-70

	Race	Black				White			
	Year	1967	1968	1969	1970	1967	1968	1969	1970
Grade 8	N	194	204	267	249	890	841	897	820
	$\bar{X}$	254.1	253.9	253.0	252.9	271.8	271.7	270.6	270.5
	SD	12.3	11.6	12.0	12.5	13.1	11.6	12.1	13.0
7	N	187	232	254	226	784	868	859	847
	$\bar{X}$	250.6	250.5	248.3	248.6	266.7	265.9	265.0	263.9
	SD	12.0	11.1	11.0	11.3	11.7	11.5	12.4	12.5
6	N	226	234	240		860	856	894	
	$\bar{X}$	243.0	240.5	240.6		259.0	257.1	257.2	
	SD	9.9	8.4	9.7		11.1	12.3	12.0	
5	N	226	235			874	851		
	$\bar{X}$	237.7	238.6			253.0	252.4		
	SD	7.0	8.2			11.3	11.6		
4	N	233	238	244	250	865	845	847	763
	$\bar{X}$	233.8	234.4	234.0	233.8	244.7	244.6	243.7	243.6
	SD	4.9	6.4	5.1	5.3	10.3	10.1	10.0	10.2

*Cross sectional scores are vertical, unmatched longitudinal scores fall diagonally from lower left to upper right.

Table 10

Proportion of 1967 Grade 1, 4, and 5 Pupils with Matched Longitudinal Test Scores in 1969 and 1970

Grade	Year	Test	N	% Matched Scores
		Race - Black		
1	1967	Cooperative Listening	277	*72.2*
3	1969		200	
4	1967	STEP Reading	236	*78.4*
7	1970		185	
4	1967	STEP Mathematics	233	*76.4*
7	1970		178	
5	1967	STEP Reading	230	*81.7*
8	1970		188	
5	1967	STEP Mathematics	226	*81.0*
8	1970		183	
		Race - White		
1	1967	Cooperative Listening	848	*73.2*
3	1969		621	
4	1967	STEP Reading	866	*71.8*
7	1970		622	
4	1967	STEP Mathematics	865	*72.4*
7	1970		626	
5	1967	STEP Reading	876	*74.3*
8	1970		651	
5	1967	STEP Mathematics	874	*73.2*
8	1970		640	

Table 11

Regression Analyses of Matched Longitudinal Cooperative Listening Test Scores, Grade 1, Fall 1967 and Grade 3, Fall 1969

Race	Grade	Sex	Treatment	Year	N	$\bar{X}$	S.D.	t	r*	b	S_b
BLACK											
	3	Boy	Who stayed in former	1969	19	30.0	5.8	2.25*	.4792	.4607	.2047
	1		majority black school	1967	19	22.4	6.0				
	3	Girl	Who stayed in former	1969	19	27.2	6.3	3.21**	.6141	.7466	.2327
	1		majority black school	1967	19	21.7	5.2				
	3	Boy	Transferred from	1969	35	27.8	5.0	1.94	.3200	.2659	.1371
	1		majority black school	1967	35	20.7	6.0				
	3	Girl	Transferred from	1969	36	28.1	7.6	3.40**	.5040	.5496	.1615
	1		majority black school	1967	36	21.3	7.0				
WHITE											
	3	Boy		1969	288	36.7	5.7	11.43**	.5599	.4222	.0369
	1			1967	288	29.0	7.6				
	3	Girl		1969	259	37.3	5.5	11.11**	.5696	.4148	.0373
	1			1967	259	29.1	7.6				

* p <.05
** p <.01

*Legend: r - correlation coefficient
b - regression coefficient
S_b - standard error
t - ratio of variable to sample estimate of standard error of variable

Table 12

Regression Analyses of Matched Longitudinal STEP Reading Scores,
Grade 4, 1967 and Grade 7, 1970

Race	Grade	Treatment	Year	N	$\bar{X}$	S.D.	t	r*	b	S_b
				BLACK						
	7	Remained in former	1970	15	257.6	12.5	4.11**	.7519	.8386	.2040
	4	majority black school	1967	15	239.0	11.2				
	7	Transferred, walked to	1970	27	247.7	9.8	1.51	.2887	.4176	.2770
	4	receiving schools	1967	27	232.4	6.8				
	7	Transferred, bussed to	1970	54	251.2	14.8	7.81**	.7348	1.1795	.1510
	4	receiving schools	1967	54	234.6	9.2				
	7	Boys remained former	1970	47	257.1	14.2	3.79**	.4923	.6986	.1841
	4	integrated school	1967	47	238.5	10.1				
	7	Girls remained former	1970	42	258.0	14.7	7.84**	.7783	1.0128	.1292
	4	integrated school	1967	42	239.2	11.3				
				WHITE						
	7	Boys	1970	304	274.4	18.3	12.24**	.5759	.5477	.0447
	4		1967	304	250.2	19.2				
	7	Girls	1970	302	281.3	14.7	16.1 **	.6809	.6341	.0394
			1967	302	255.5	15.8				

* $p < .05$
** $p < .01$

*Legend: r - correlation coefficient
b - regression coefficient
S_b - standard error
t - ratio of variable to sample estimate of standard error of variable

Table 13

Regression Analyses of Matched Longitudinal STEP Mathematics Scores,
Grade 4, 1967 and Grade 7, 1970

Race									
			BLACK						
Grade	Treatment	Year	N	$\bar{X}$	S.D.	t	r*	b	S_b
7	Remained in former	1970	14	246.9	12.6	-.04	-.0138	-.0418	.8717
4	majority black schools	1967	14	233.5	4.02				
7	Transferred, walked	1970	26	247.0	8.8	.3374	.0687	.1298	.3846
4	receiving schools	1968	26	233.6	4.7				
7	Transferred, bussed	1970	54	245.2	11.6	3.34**	.4203	.9574	.2866
4	to receiving schools	1968		234.3	5.1				
7	Boys remained in former	1970	44	250.9	9.8	1.29	.1946	.3141	.2443
4	integrated school	1968	44	234.1	6.0				
7	Girls remained in former	1970	40	249.7	11.2	1.55	.2440	.6467	.4170
4	integrated school	1968	40	233.3	4.2				
			WHITE						
7	Boys	1970	302	265.7	13.6	16.23**	.6837	.8350	.0515
4		1968		246.3	11.1				
7	Girls	1970	306	262.7	10.5	14.23**	.6322	.7468	.0525
4		1968		243.5	8.9				

** $p < .01$

*Legend: r - correlation coefficient
b - regression coefficient
S_b - standard error
t - ratio of variable to sample estimate of standard error of variable

Table 14

Regression Analyses of Matched Longitudinal STEP Reading Scores,
Grade 5, 1967 and Grade 8, 1970

Race

Grade	Treatment	Year	N	$\bar{X}$	S.D.	t	r*	b	S_b
BLACK									
8	Remained in former majority black schools	1970	23	259.0	18.3	9.22**	.8954	1.0659	.1157
5		1967	23	245.5	15.4				
8	Transferred, walked to receiving school	1970	30	256.1	14.5	2.24*	.3901	.4952	.2209
5		1967	30	242.1	11.5				
8	Transferred, bussed to receiving school	1970	41	265.9	16.9	3.63**	.5029	.5903	.1625
5		1967	41	244.2	14.4				
8	Boys remained in former integrated school	1970	38	256.8	14.5	4.21**	.5746	.7211	.1712
5		1967	38	241.4	11.6				
8	Girls remained former integrated school	1970	56	263.9	18.0	8.83**	.7687	1.0769	.1219
5		1967	56	243.0	12.8				
WHITE									
8	Boys	1970	323	283.9	17.5	20.70**	.7561	.7832	.0378
5		1967	323	261.3	16.9				
8	Girls	1970	311	289.4	14.4	17.6**	.7069	.6315	.0359
5		1967	311	265.2	16.1				

* $p < .05$
** $p < .01$

*Legend: r - correlation coefficient
b - regression coefficient
S_b - standard error
t - ratio of variable to sample estimate of standard error of variable

Table 15

Regression Analyses of Matched Longitudinal STEP Mathematics Scores, Grade 5, Fall 1967 and Grade 8, 1970

Race / Grade	Treatment	Year	N	$\bar{X}$	S.D.	t	r*	b	S_b
BLACK									
8	Remained in former majority black schools	1970	20	255.3	13.8	2.98**	.5751	.9761	.3272
5		1967	20	238.9	8.1				
8	Transferred, walked to receiving schools	1970	31	250.7	13.8	2.01*	.3501	.7352	.3653
5		1967	31	238.5	6.6				
8	Transferred, bussed to receiving schools	1970	39	254.9	13.2	2.40*	.3664	.7060	.2947
5		1967	39	237.7	6.9				
8	Boys remained in former majority white schools	1970	38	252.6	12.2	3.66**	.5205	.8898	.2433
5		1967	38	239.2	7.1				
8	Girls remained in former majority white schools	1970	55	252.5	11.3	3.37**	.4196	.7072	.2101
5		1967	55	237.0	6.7				
WHITE									
8	Boys	1970	318	272.2	13.5	21.18**	.7659	.8713	.0411
5		1967	318	255.3	11.9				
8	Girls	1970	306	269.2	11.2	18.78**	.7329	.7880	.0420
5		1967	306	252.5	10.4				

*p < .05
**p < .01

*Legend: r - correlation coefficient
b - regression coefficient
S_b - standard error
t - ratio of variable to sample estimate of standard error of variable

Table 16

Significant Differences Between Regression Weights for Matched Longitudinal Regression Analyses

Contrast: *Treatment Groups*	Grade	N	b	t
TEST - STEP READING				
Blacks bussed, transfer	7-4	54	1.1795	2.39*
Blacks walked, transfer		27	.4176	
Blacks bussed, transferred	8-5	41	.5903	
Blacks who stayed in former majority black schools		23	1.0659	2.12*
Blacks walked, transferred	8-5	30	.4952	
Blacks who stayed in former majority black schools		23	1.0659	2.34*
Black integrated girls	7-4	42	1.0128	2.53*
White girls		302	.6341	
Black integrated girls	8-5	56	1.0769	3.89*
White girls		311	.6315	
White boys	8-5	323	.7832	2.90*
White girls		311	.6315	
TEST - STEP MATHEMATICS				
White boys	7-4	302	.8350	2.06*
Black integrated boys		44	.3141	

*p < .05

Table 17

Martin Luther King, Jr. Laboratory School White Bussed Pupils' Mean Scores in Reading, Listening, and Mathematics 1967-1970

Test - Cooperative Listening Test	Year	N	$\bar{X}$	SD
Grade 1	1967	115	30.4	7.7
	1968	56	33.6	7.1
	1969	66	32.1	6.1
District 65 White Pupils	1967	848	28.8	7.5
Grade 3	1967	72	39.0	5.9
	1968	50	37.6	6.8
	1969	98	38.0	5.8
District 65 White Pupils	1967	887	36.9	5.8
Test - Cooperative Reading Test				
Grade 3	1967	72	36.0	10.1
	1968	50	34.3	11.0
	1969	98	35.8	10.0
District 65 White Pupils	1967	885	34.4	9.0
Test - STEP Reading				
Grade 4	1967	77	256.8	17.4
	1968	70	256.8	17.3
	1969	67	253.0	16.3
	1970	82	258.4	17.6
District 65 White Pupils	1967	866	252.8	16.0
Test - STEP Mathematics				
Grade 4	1967	77	249.2	11.2
	1968	70	248.1	10.7
	1969	67	246.4	11.4
	1970	79	247.0	11.4
District 65 White Pupils		865	244.7	10.3

Table 18

Reading Grade Point Average of Pupils
Before and After Integration
Fall 1967

	Pre-Integration (1966-67)			Post Integration (1967-68)		
Grade		3			4	
Race/Sex	N	GPA*	SD	N	GPA	SD
White Boys	99	2.91	.88	103	2.83	.87
White girls	105	3.17	.83	104	3.14	.89
Black boys	61	2.21	.87	71	1.99	.74
Black girls	66	2.48	1.02	70	2.06	.81
		4			5	
White boys	52	2.98	.95	51	2.86	.99
White girls	60	3.23	.78	59	3.22	.85
Black boys	31	1.64	1.03	34	1.76	1.00
Black girls	55	2.15	.81	62	2.05	.77

*Grade point average on 1 to 4 scale with 4 representing letter grade A.

Table 19

Mathematics Grade Point Average of Pupils
Before and After Integration
Fall 1967

	Pre-Integration (1966-67)			Post-Integration (1967-68)		
Grade		3			4	
Race/Sex	N	GPA*	SD	N	GPA	SD
White boys	99	2.82	.95	103	2.79	1.08
White girls	104	3.01	.88	104	2.88	1.01
Black boys	60	1.97	1.00	71	1.85	.74
Black girls	66	2.19	.91	69	1.75	.87
		4			5	
White boys	52	2.98	.93	52	2.77	.95
White girls	60	2.95	.94	61	3.00	.94
Black boys	32	1.56	1.30	35	1.51	1.05
Black girls	58	2.17	1.08	61	1.82	.88

*Grade point average on 1 to 4 scale with 4 representing letter grade A.

Figure 8
Caldwell Preschool Raw Scores:
Frequency Polygon of Caldwell Preschool Test Scores of Kindergarten Pupils in District 65, Fall 1967

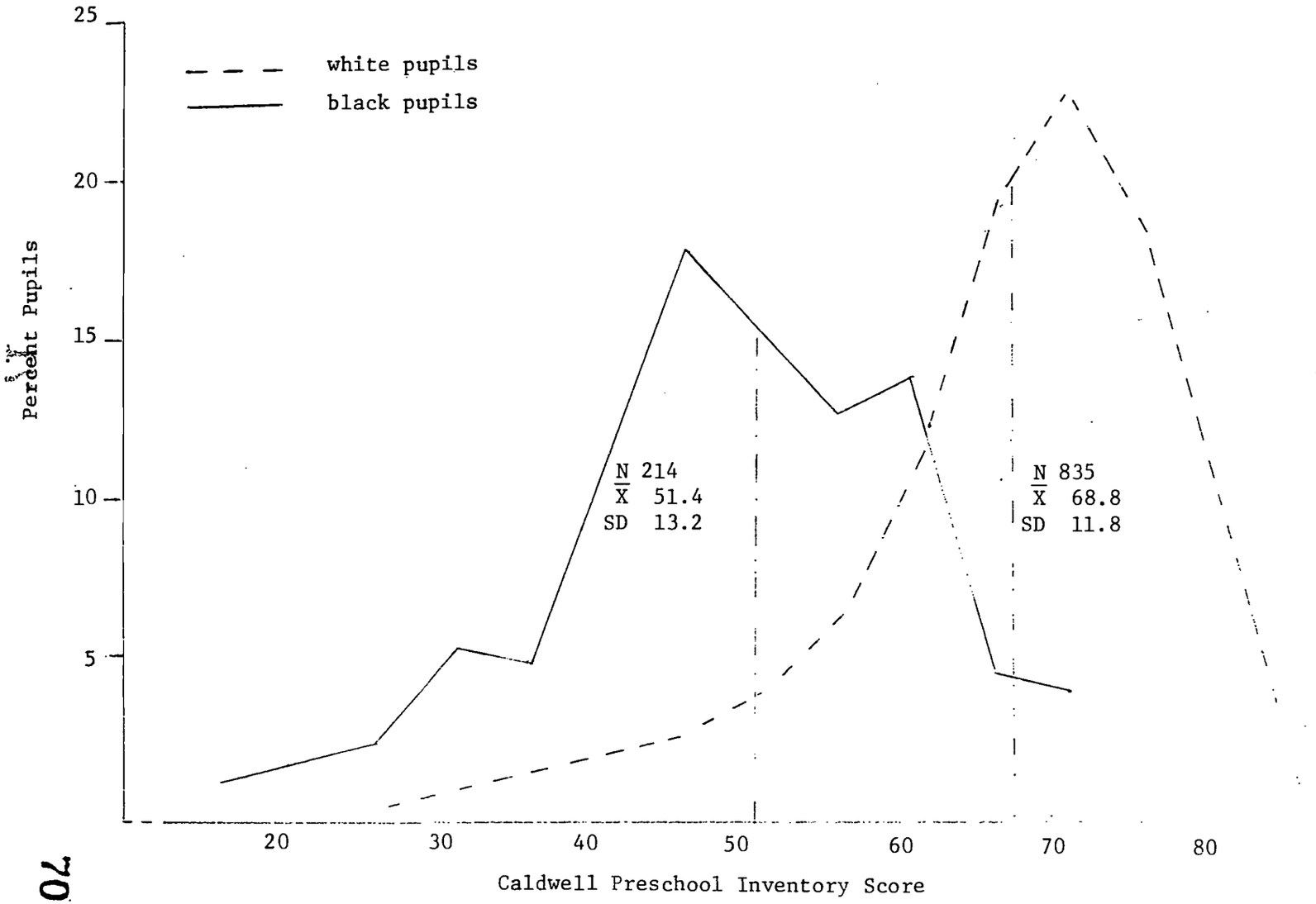


Figure 9
Caldwell Preschool Raw Scores:
Frequency Polygons of Caldwell Preschool Test Scores of Grade 1 Pupils in District 65, Fall 1967

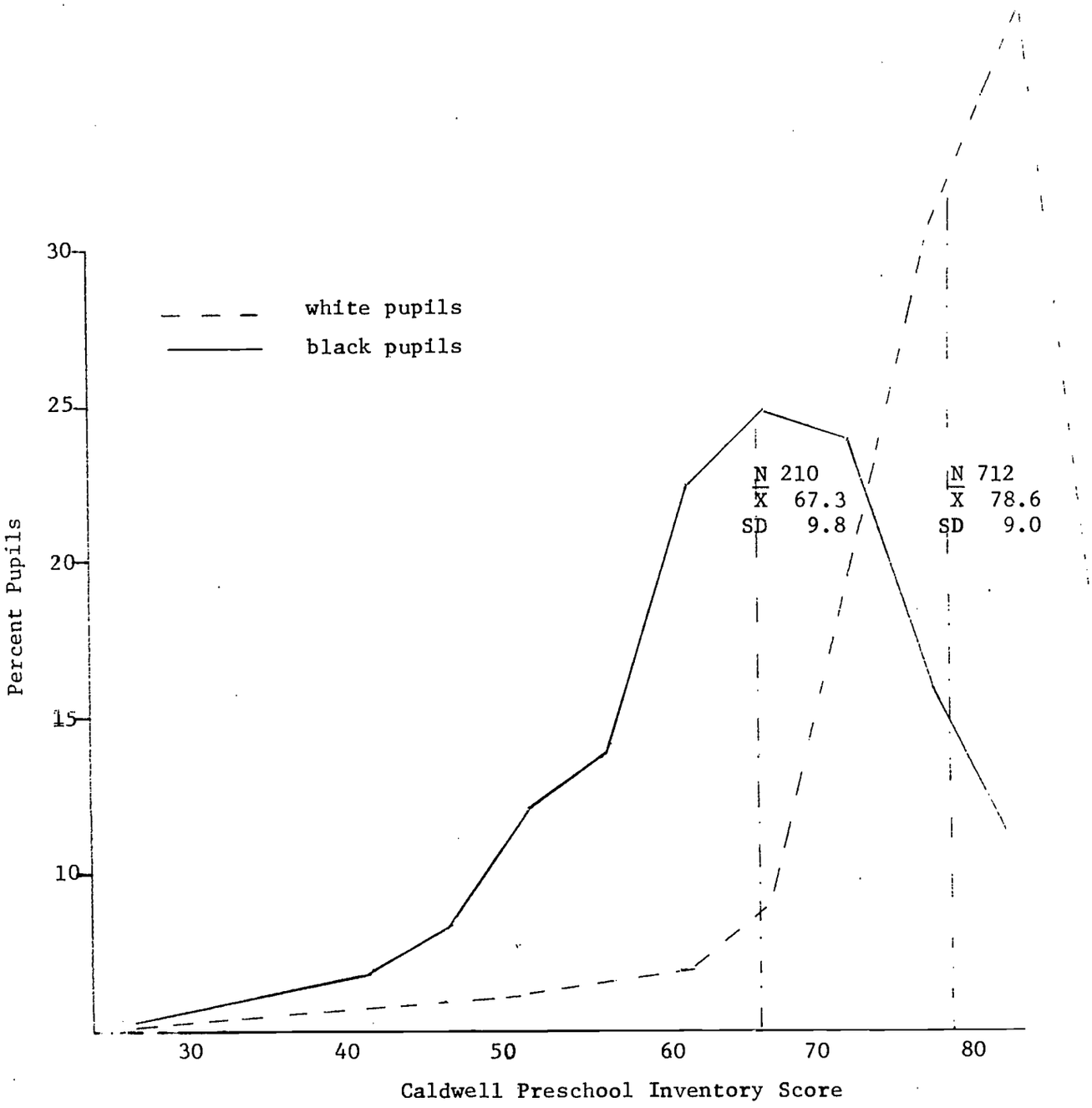


Figure 10

Mean Scaled Scores of Black and White Pupils in Grades 1, 2, and 3 on Cooperative Listening, Reading, Mathematics, and Word Analysis Test, Fall 1967

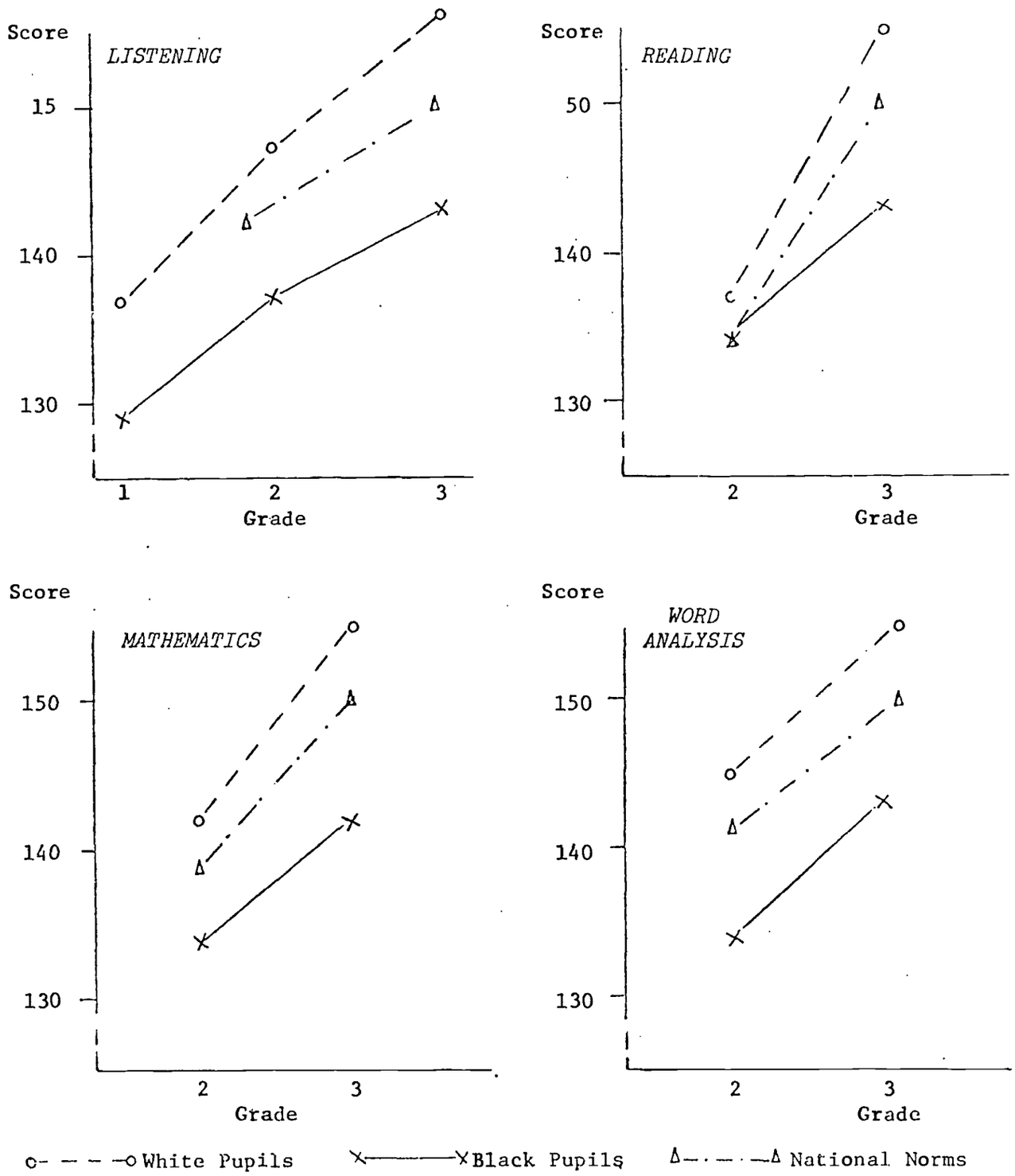
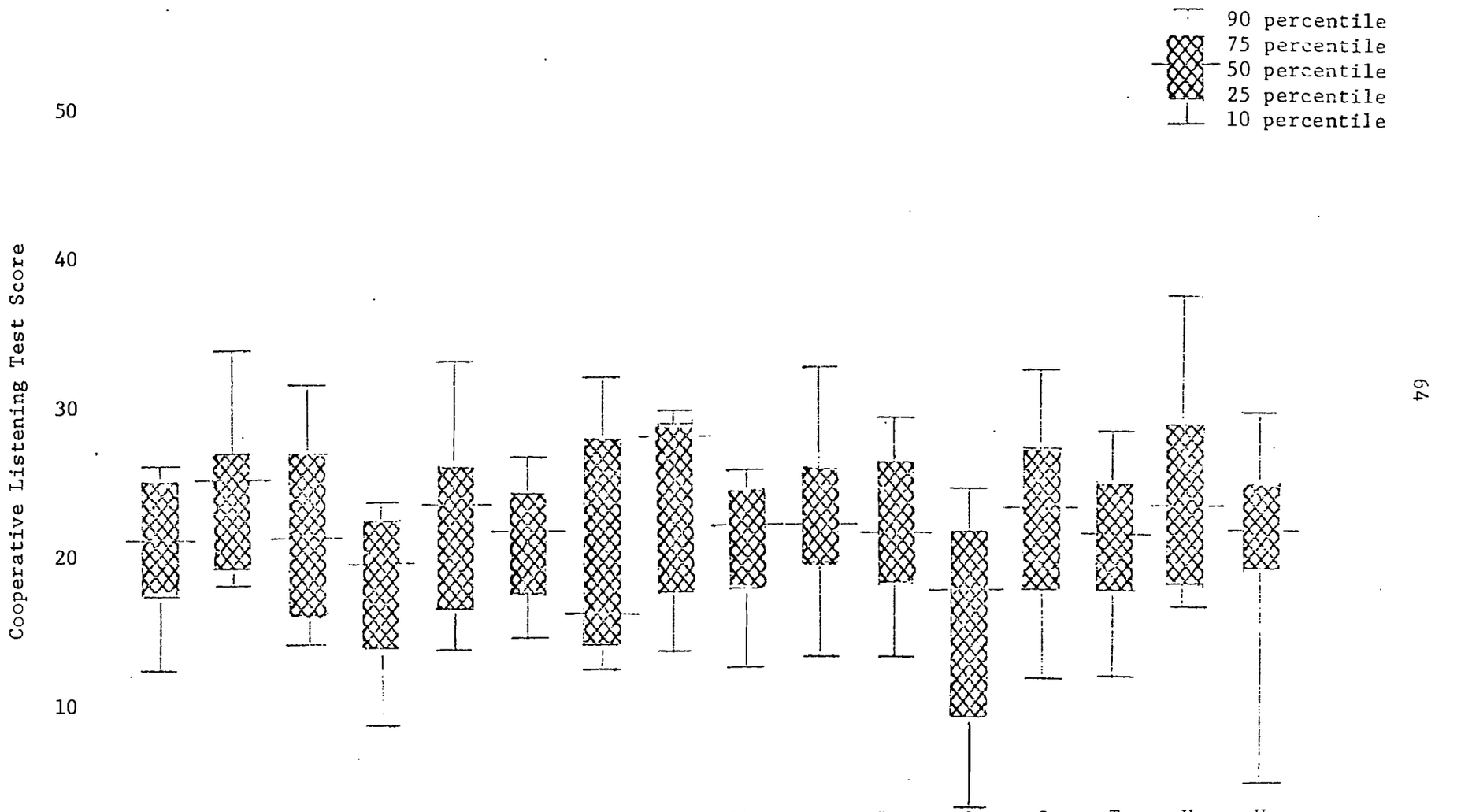
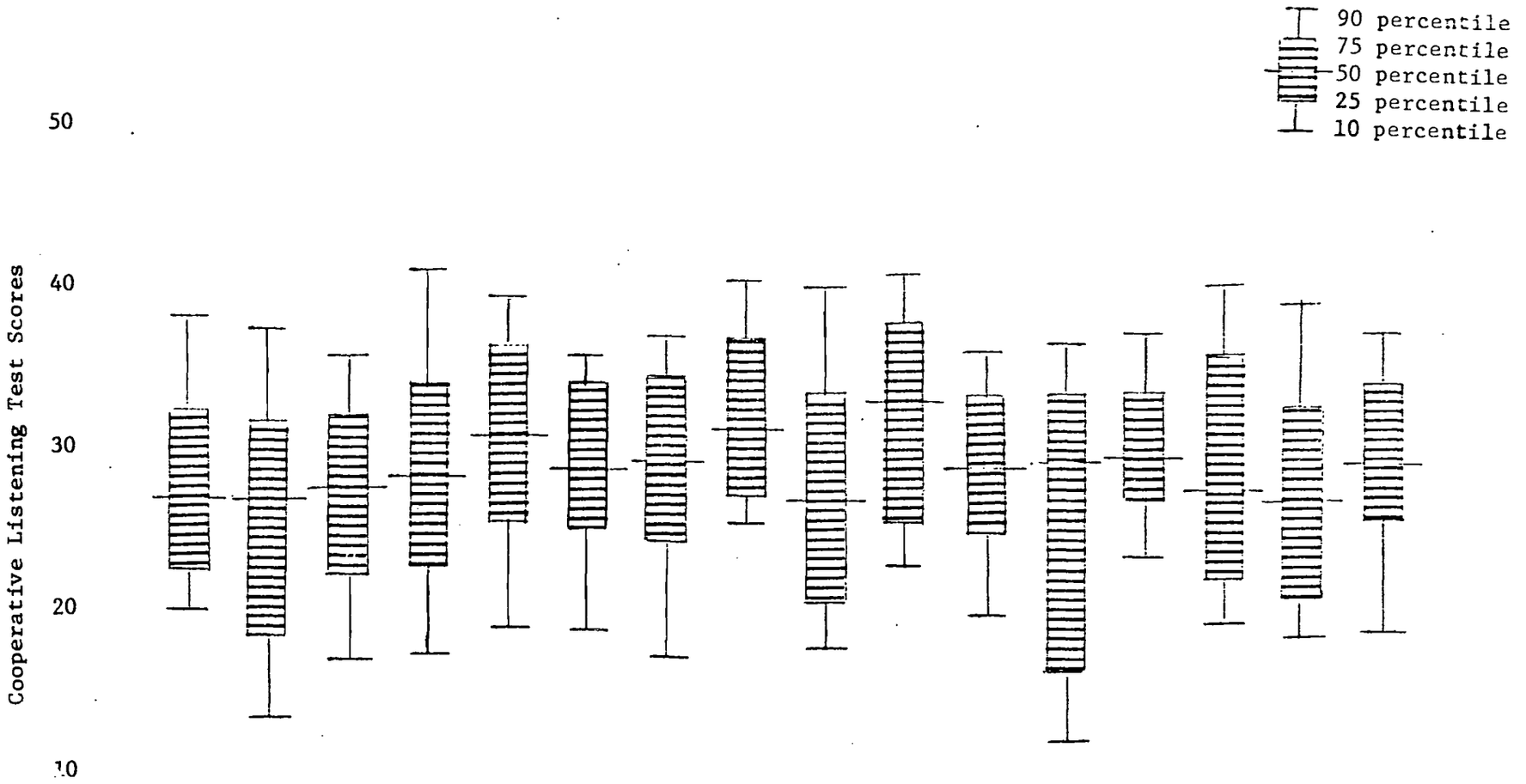


Figure 11
Variations among Schools in Range of Grade 1 Scores of Entering Black Pupils:
Cooperative Listening Test, Form 12A, Fall 1967



School	E	F	G	H	I	J	K	L	M	N	P	Q	S	T	U	V
N	18	8	24	14	46	12	8	11	10	20	25	14	12	12	25	18
$\bar{X}$	20.1	24.1	21.7	17.7	22.3	20.3	19.9	23.9	22.8	21.2	15.6	15.6	22.2	20.6	23.9	20.7
SD	5.1	5.4	7.0	5.4	7.2	5.6	7.9	7.1	5.4	7.3	5.9	7.6	7.6	5.5	7.4	7.6

Figure 12
Variations among Schools in Range of Grade 1 Scores of Entering White Pupils:
Cooperative Listening Test, Form 12A, Fall 1967



School	E	F	G	H	I	J	K	L	M	N	P	Q	S	T	U	V
N	30	29	61	42	115	63	71	60	44	23	94	33	35	37	55	55
$\bar{X}$	28.4	26.3	27.3	29.1	30.4	28.9	28.6	31.8	27.3	32.0	28.5	25.6	29.8	28.6	28.4	28.4
SD	7.1	8.1	6.9	7.9	7.7	6.6	7.2	6.3	8.5	7.1	6.6	10.2	5.2	8.5	7.1	7.1

Figure 13

Mean Converted Scores of Black and White Pupils in Grades 4-8
on STEP Reading and Writing Test, Fall 1967

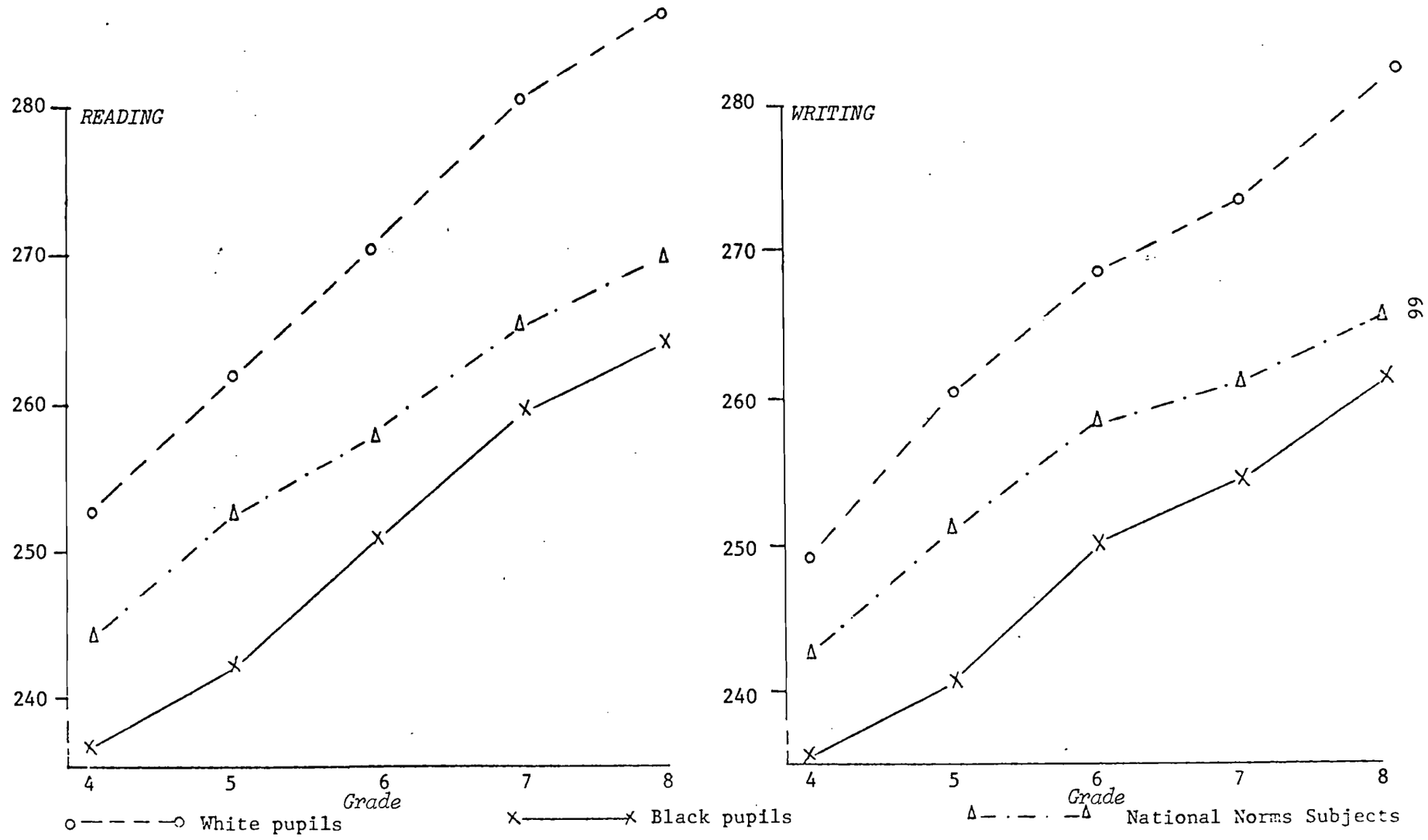


Figure 14
Mean Converted Scores of Black and White Pupils in Grades 4-8
on STEP Mathematics and Science Tests, Fall 1967

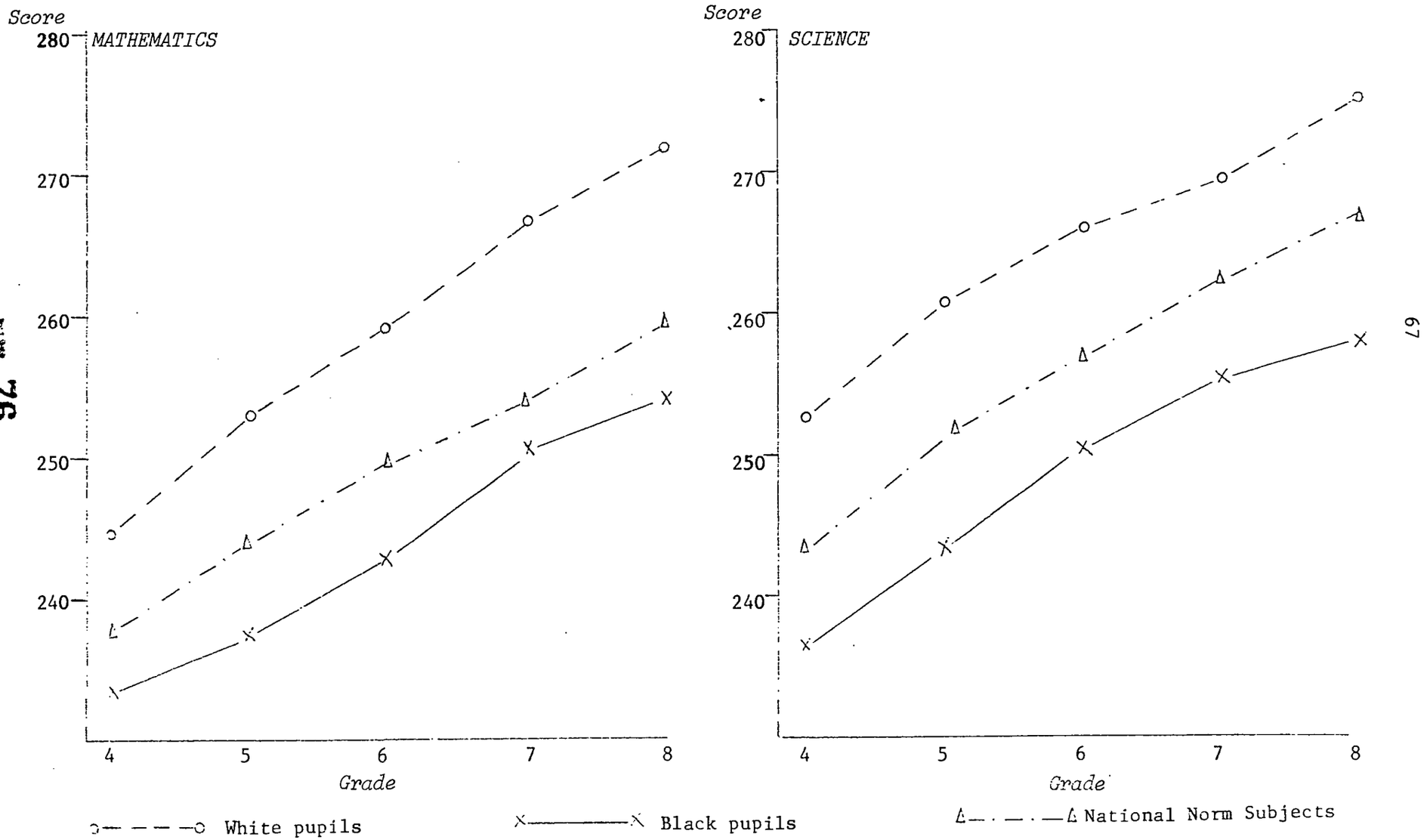


Figure 15
Mean Converted Scores of Black and White Pupils in Grades 4-8
on STEP Listening and Social Studies Tests, Fall 1967

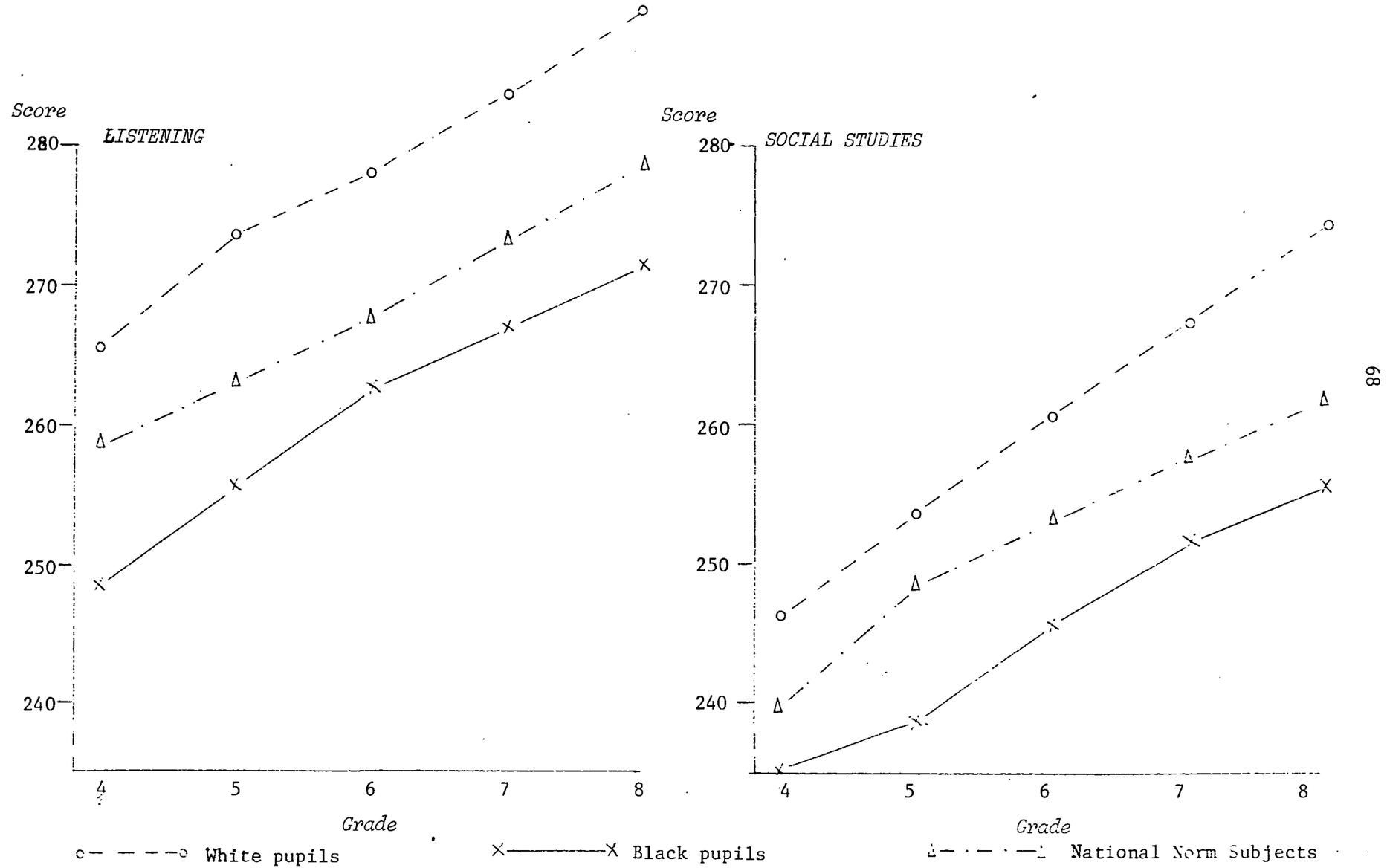


Figure 16

Mean Converted Scores of Black and White Pupils in Grades 4-8
on SCAT Verbal and Quantitative Tests, Fall 1967

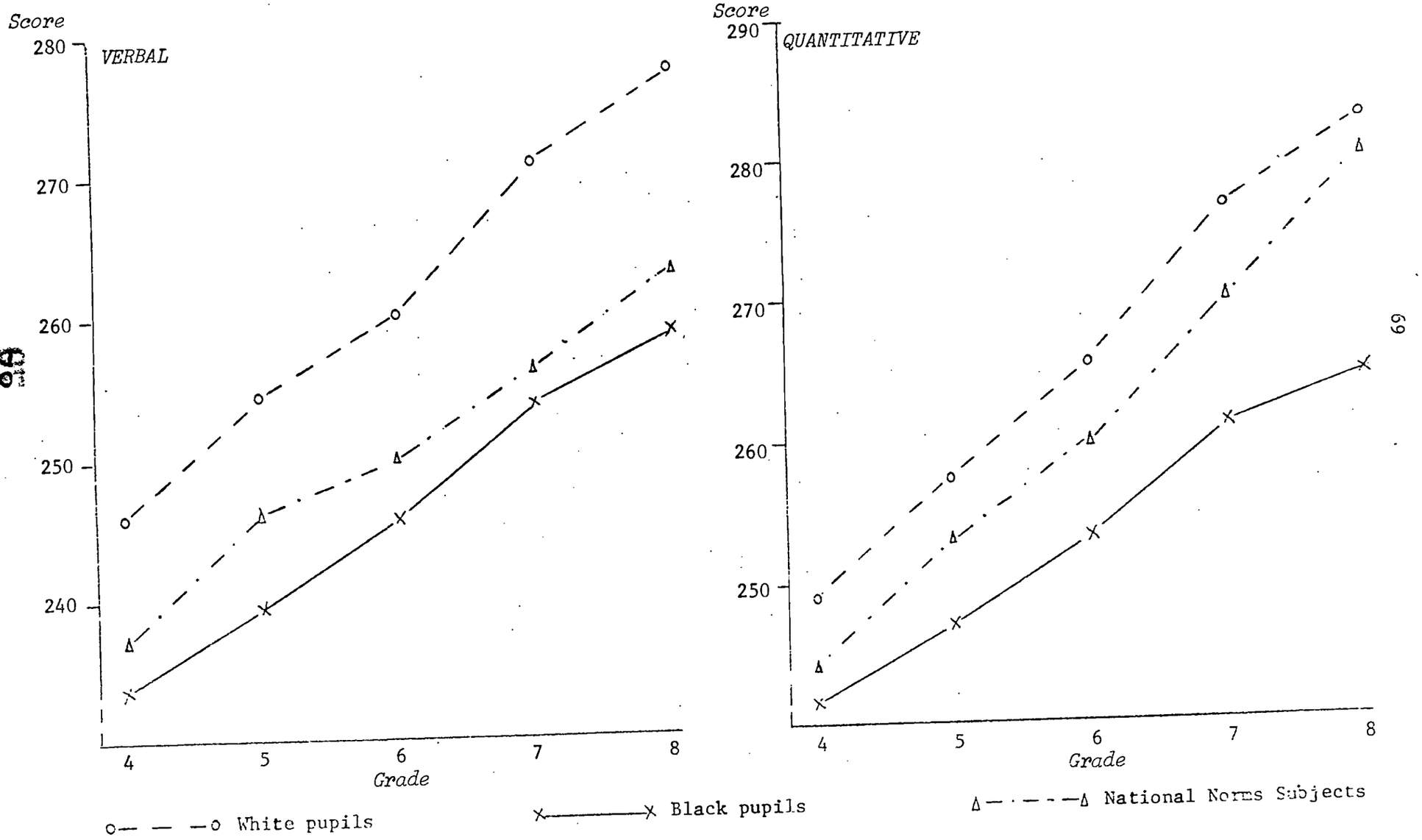


Figure 17
Grade 1 Cohort Comparisons:
Distribution of Pupils' Cooperative Listening Test Scores, Fall 1967-69

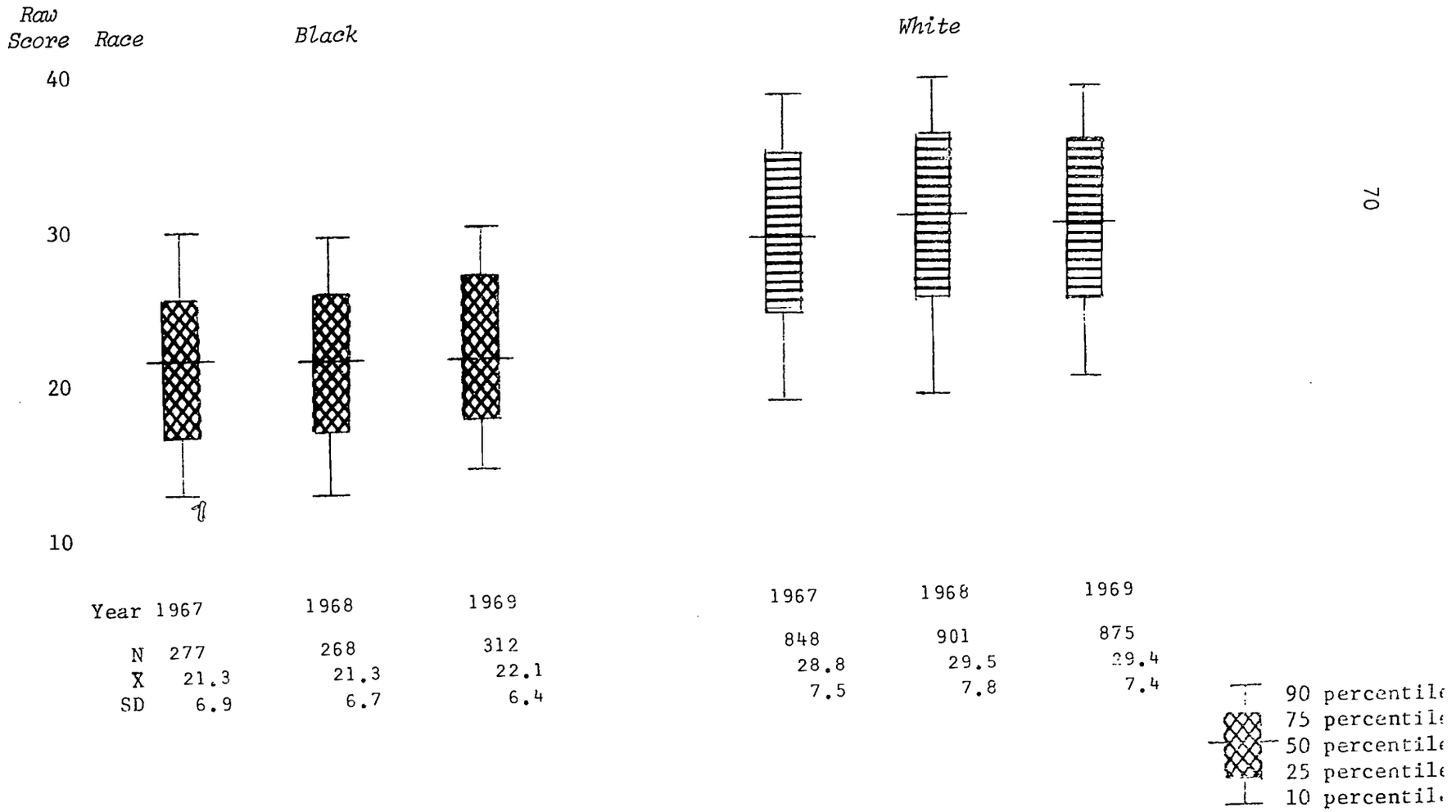
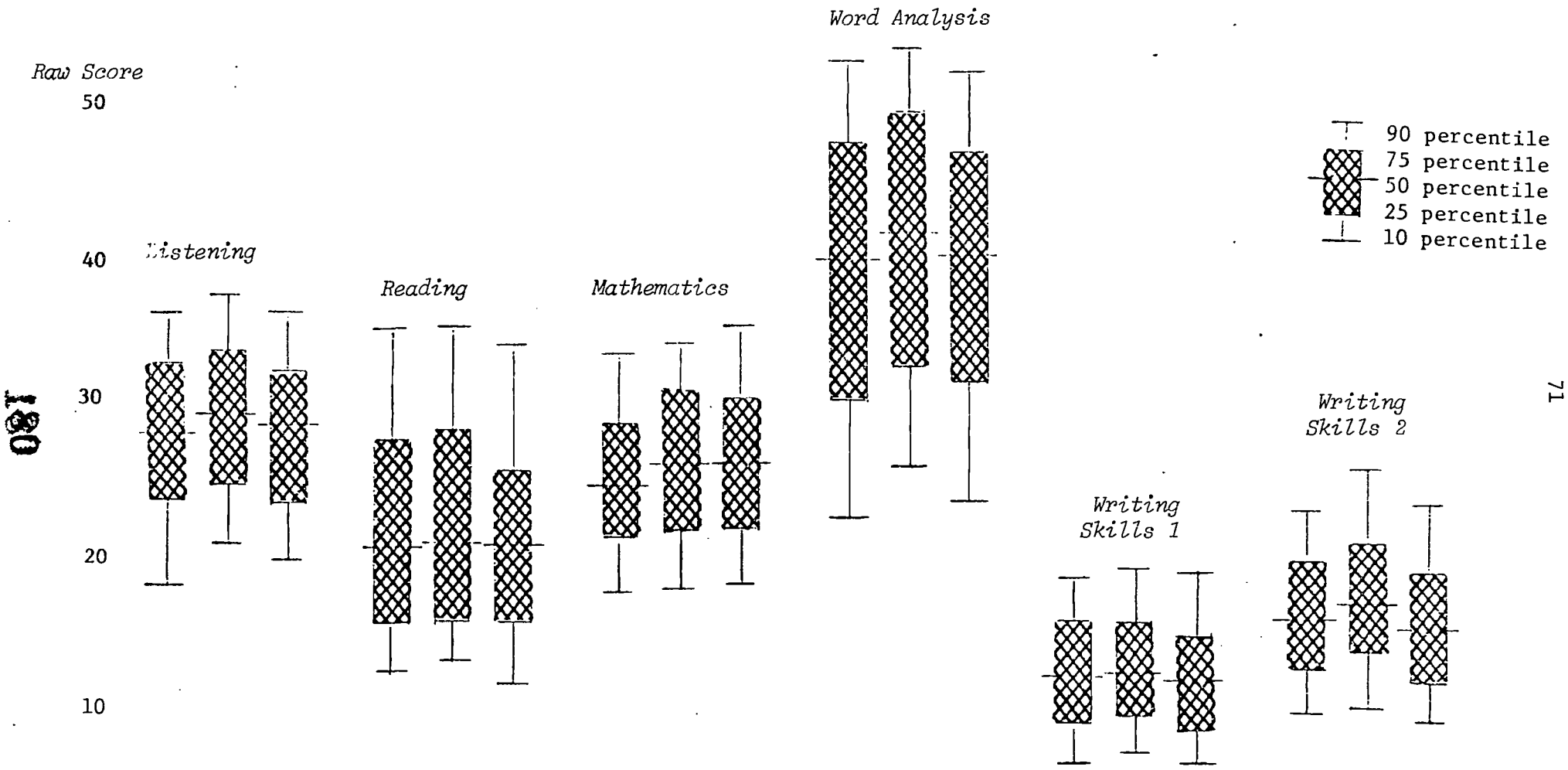
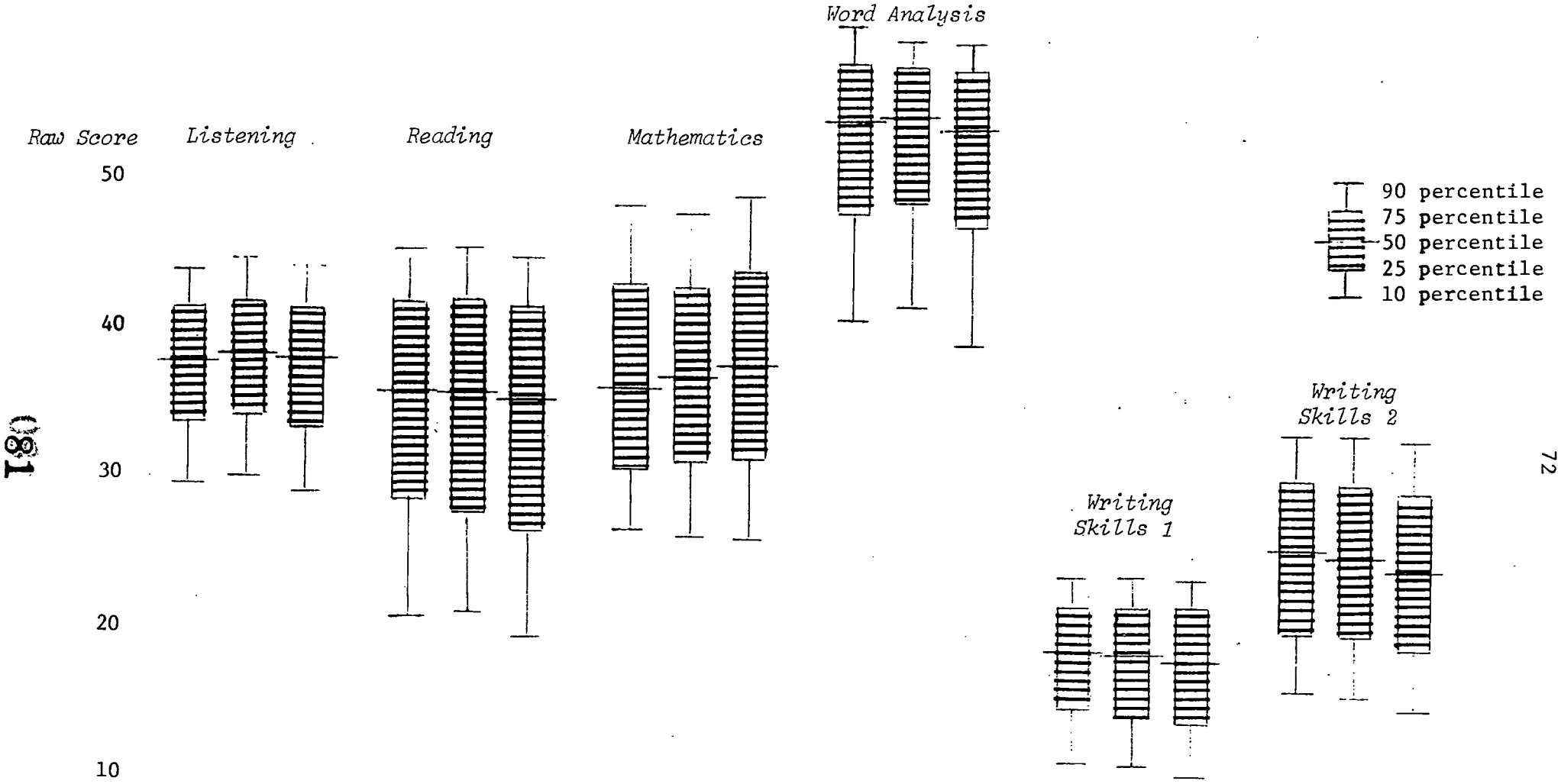


Figure 18
Grade 3 Cohort Comparisons:
Distribution of Black Pupils Cooperative Primary Test Scores, Fall 1967-69



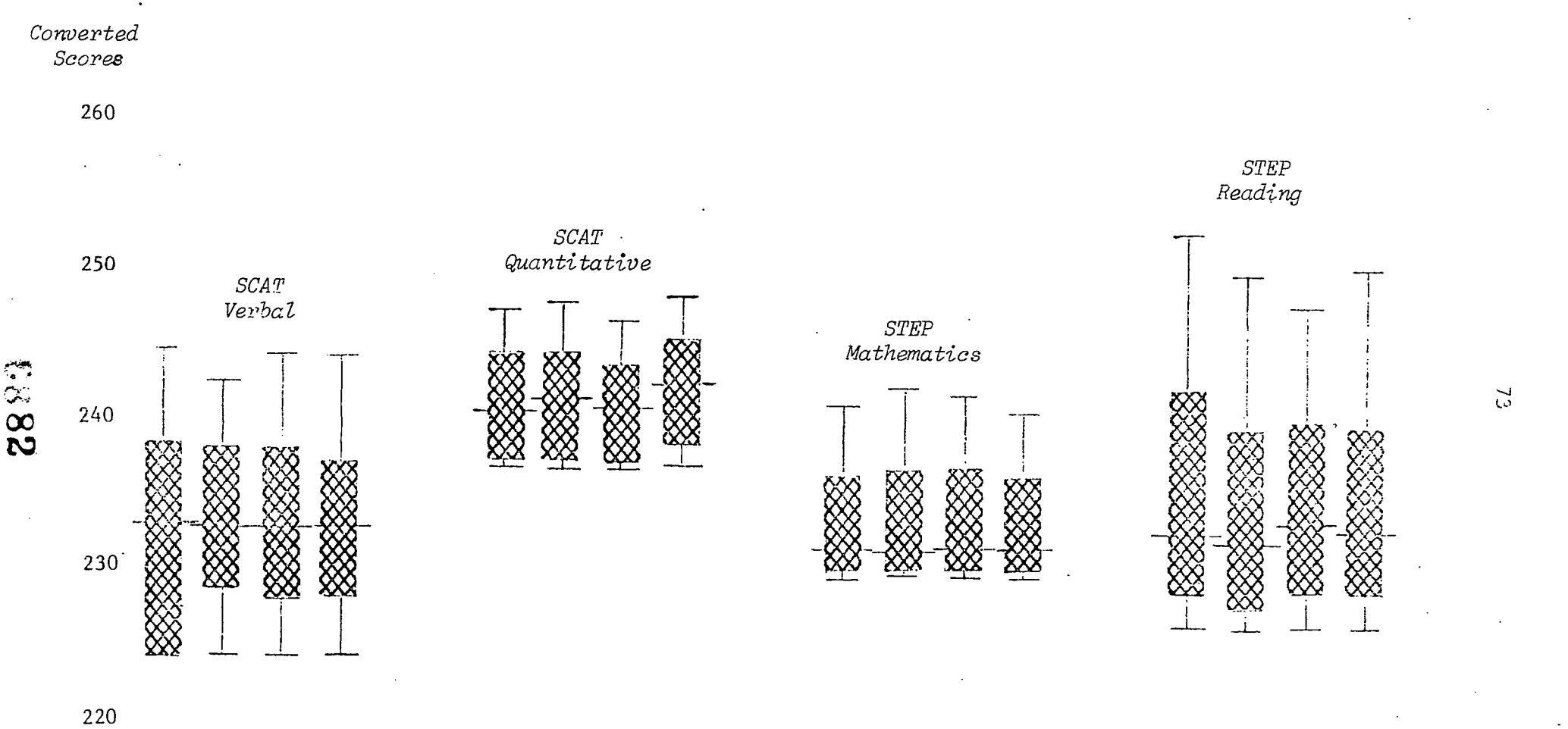
Year	1967	68	69	67	68	69	67	68	69	67	68	69	67	68	69	67	68	69
N	254	244	267	252	242	262	254	243	265	254	243	268	251	243	265	252	242	263
$\bar{X}$	28.5	29.9	29.0	22.6	23.2	22.1	25.8	26.9	27.0	39.2	41.0	38.8	13.2	13.5	12.6	17.0	18.1	16.4
SD	6.6	6.2	6.2	8.2	8.6	8.4	6.2	7.1	6.7	10.5	10.3	10.6	4.7	4.6	4.7	5.5	5.7	5.7

Figure 19
Grade 3 Cohort Comparisons:
Distribution of White Pupils Cooperative Primary Test Scores, Fall 1967-69



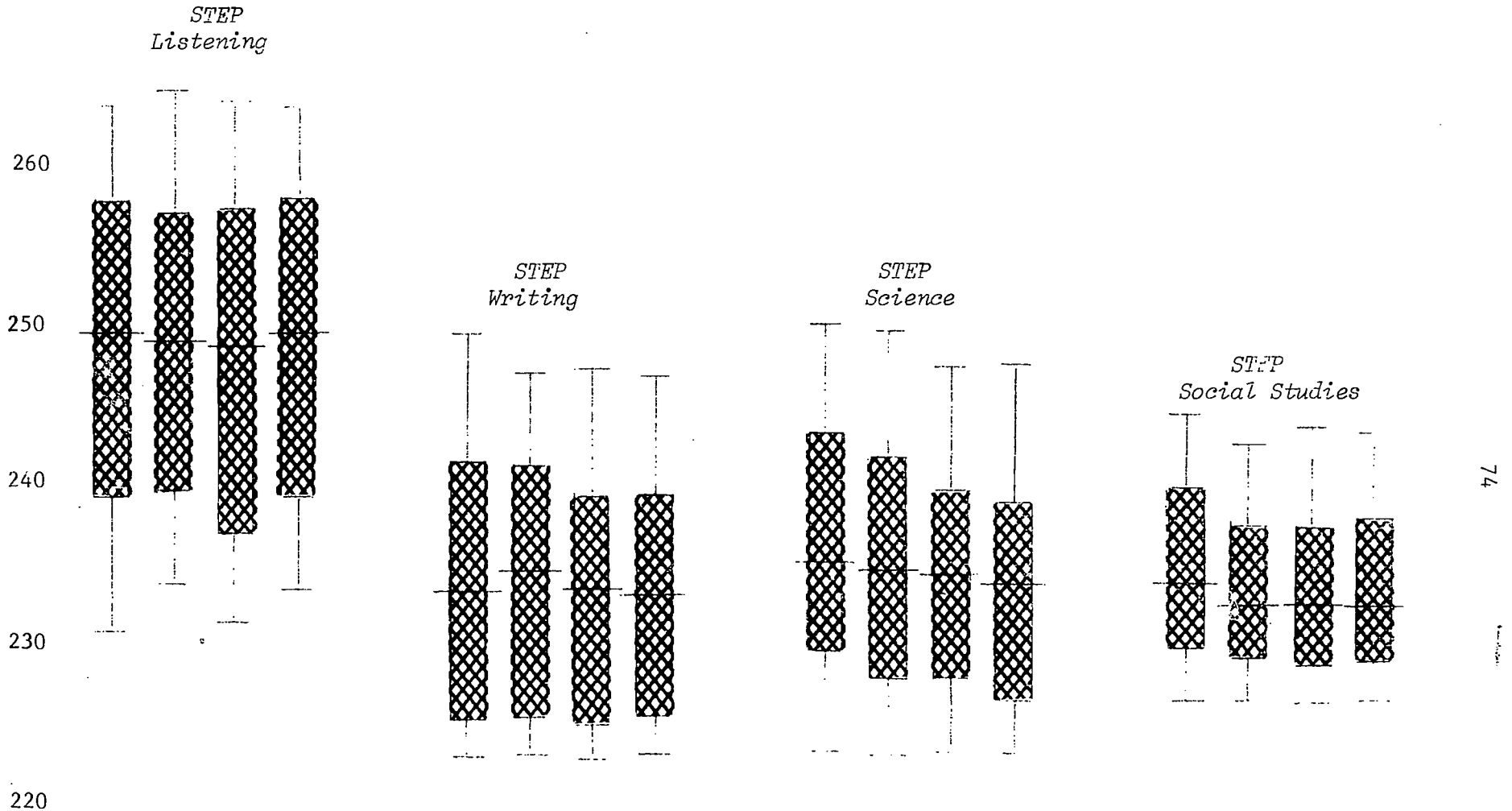
Year	1967	68	69	67	68	69	67	68	69	67	68	69	67	68	69	67	68	69
N	887	847	857	885	843	854	888	843	856	887	845	856	885	846	852	885	846	852
$\bar{X}$	36.9	37.4	36.8	34.4	34.2	33.2	36.5	36.5	37.2	51.2	51.5	50.4	17.6	17.4	17.0	24.4	24.1	23.3
SD	5.8	5.7	5.9	9.0	9.1	9.6	8.3	8.1	8.4	7.9	7.3	8.4	4.6	4.7	5.0	6.4	6.6	6.8

Figure 20
Grade 4 Cohort Comparisons:
Distribution of Black Pupils' STEP-SCAT Converted Scores, Fall 1967-70



Year	1967	68	69	70	67	68	69	70	67	68	69	70	67	68	69	70
N	229	232	233	227	209	229	214	198	233	238	244	250	236	240	243	252
$\bar{X}$	233.9	233.9	233.5	233.4	240.6	241.6	241.1	242.6	233.8	234.4	234.0	233.8	236.5	235.6	235.4	235.4
SD	7.5	7.3	7.0	7.1	4.5	4.4	4.0	4.8	4.9	6.4	5.1	5.3	10.6	11.3	9.2	9.4

Figure 20 continued

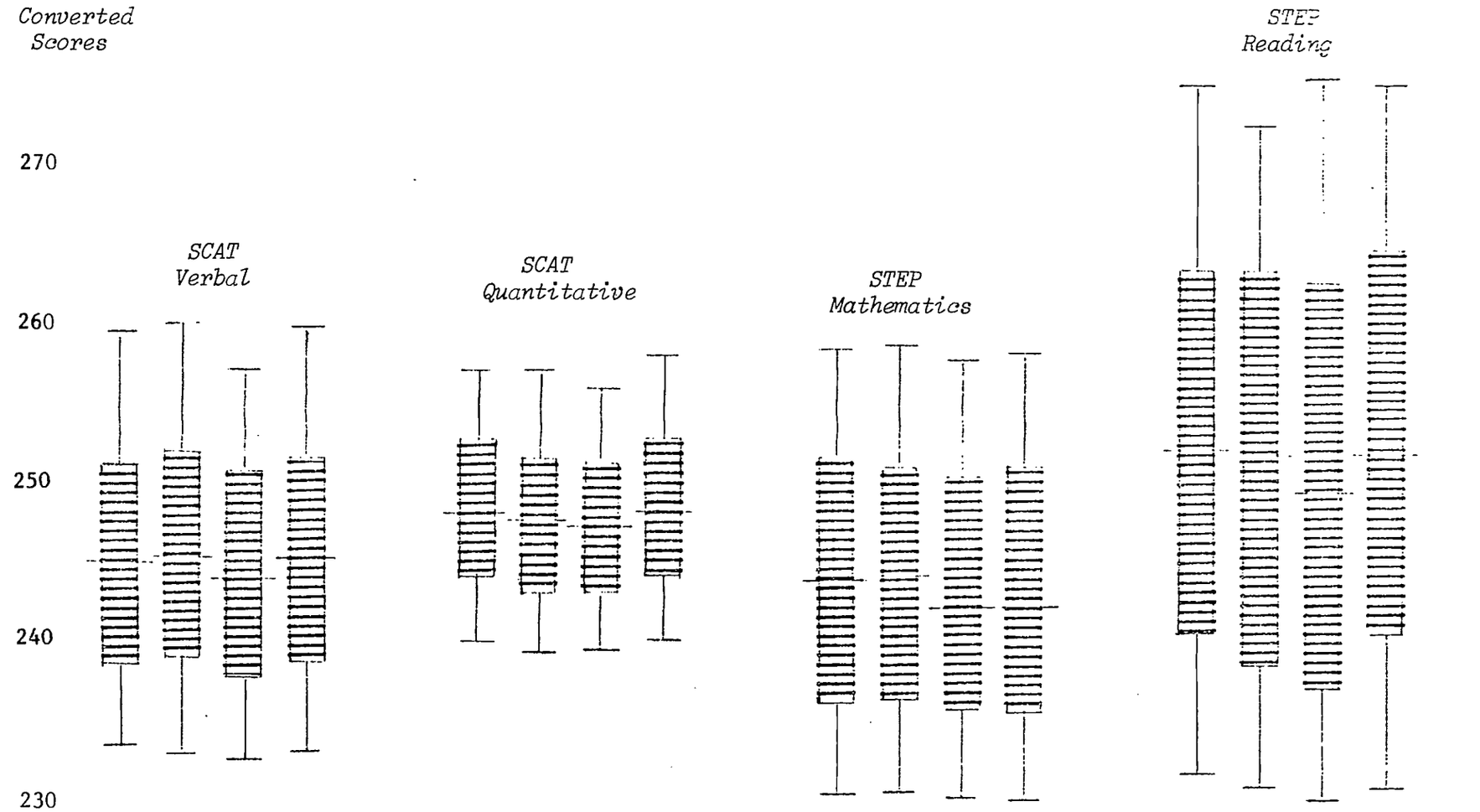


Year	1967	68	69	70	67	68	69	70	67	68	69	70	67	68	69	70
N	236	241	245	252	235	241	243	249	235	243	243	243	236	241	243	250
$\bar{X}$	248.5	249.0	247.8	249.0	235.1	235.1	234.4	234.1	236.7	235.7	234.8	234.5	235.0	233.9	233.6	233.9
SD	12.5	12.3	13.0	11.9	10.2	10.1	10.2	9.1	9.9	10.2	9.1	9.6	6.8	6.5	6.2	6.5

Figure 21

Grade 4 Cohort Comparisons:

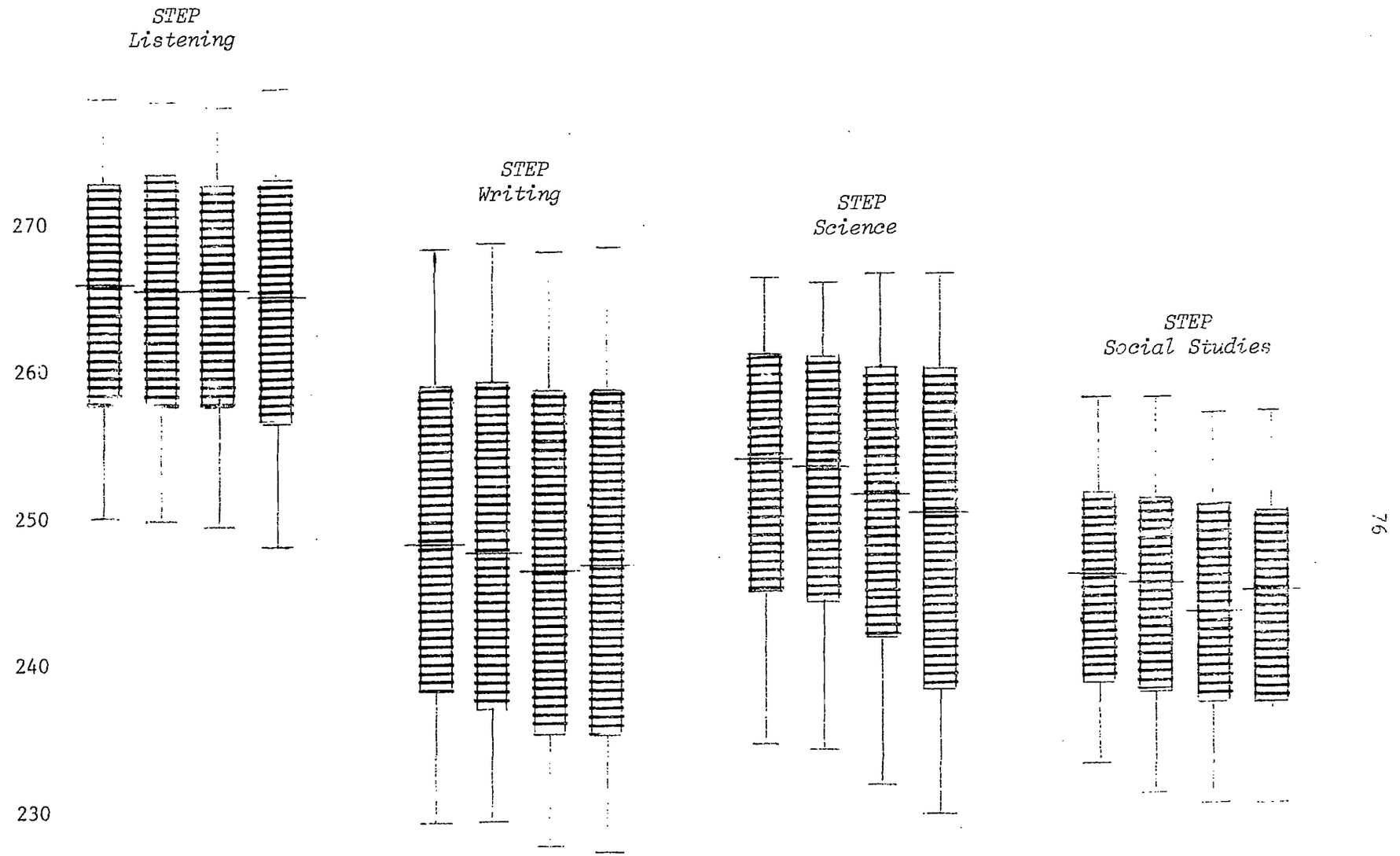
Distribution of White Pupils' STEP-SCAT Converted Scores Fall 1967-69



	SCAT Verbal				SCAT Quantitative				STEP Mathematics				STEP Reading			
Year	1967	68	69	70	67	68	69	70	67	68	69	70	67	68	69	70
N	865	843	845	766	862	839	840	734	865	845	847	763	866	848	848	780
X̄	246.0	246.5	245.3	246.3	249.1	248.2	247.8	249.2	244.7	244.6	243.7	243.6	252.8	251.9	251.0	252.3
SD	10.0	10.3	10.2	10.1	6.9	6.9	6.4	7.0	10.3	10.1	10.0	10.2	16.0	15.8	16.5	16.3

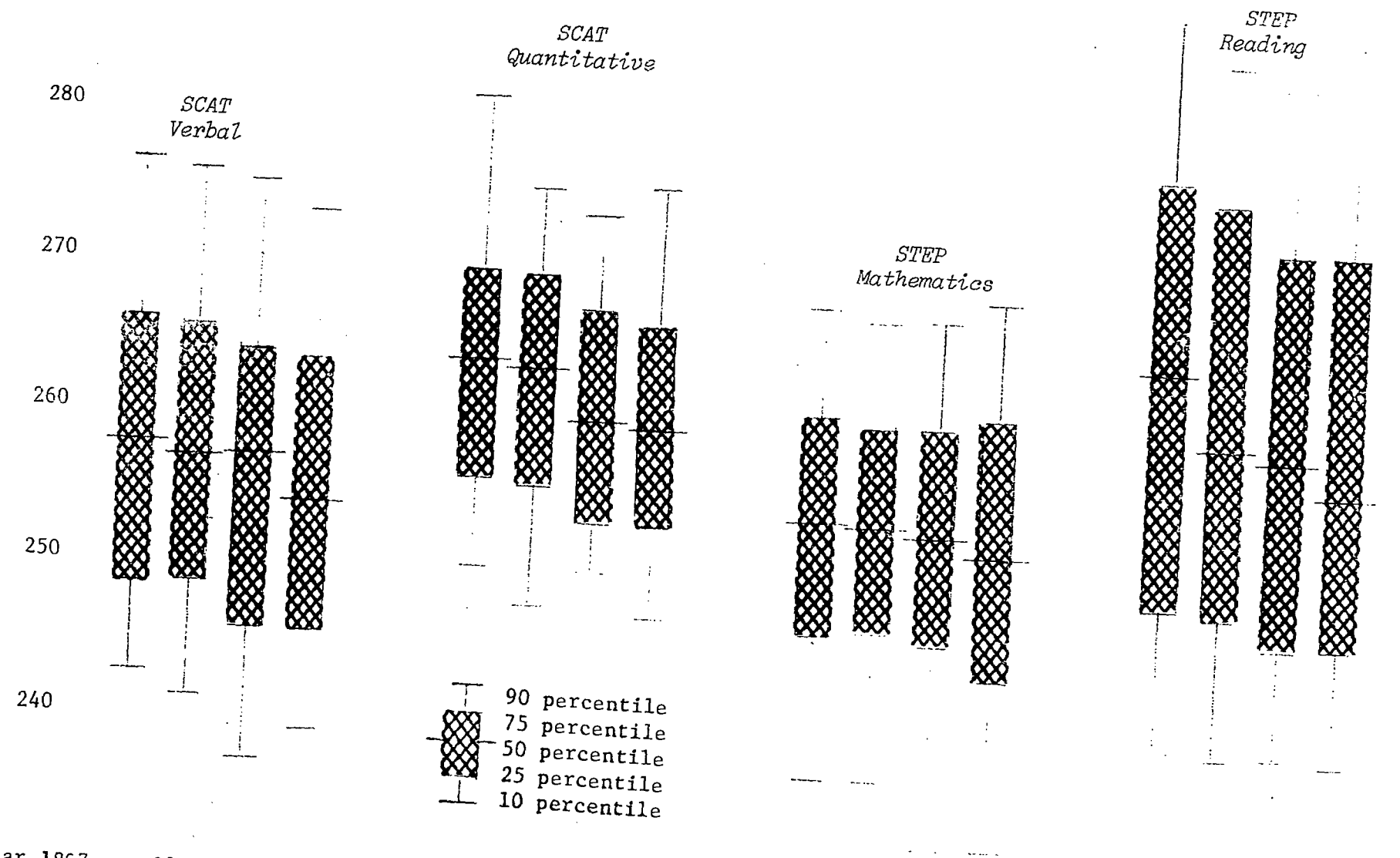
90 percentile
75 percentile
50 percentile
25 percentile
10 percentile

Figure 21 continued



Year	1967	68	69	70	67	68	69	70	67	68	69	70	67	68	69	70
N	866	848	848	776	866	840	842	763	865	848	849	762	868	842	849	777
$\bar{X}$	265.6	265.2	265.0	264.9	249.2	248.9	247.7	247.7	252.7	252.0	250.8	249.6	246.1	245.2	244.2	244.3
SD	11.6	11.8	11.1	12.3	14.9	14.8	15.2	15.3	12.4	12.5	13.4	14.1	9.5	9.9	10.0	9.7

Figure 22
Grade 8 Cohort Comparisons:
Distribution of Black Pupils' STEP-SCAT Converted Scores, Fall 1967-70



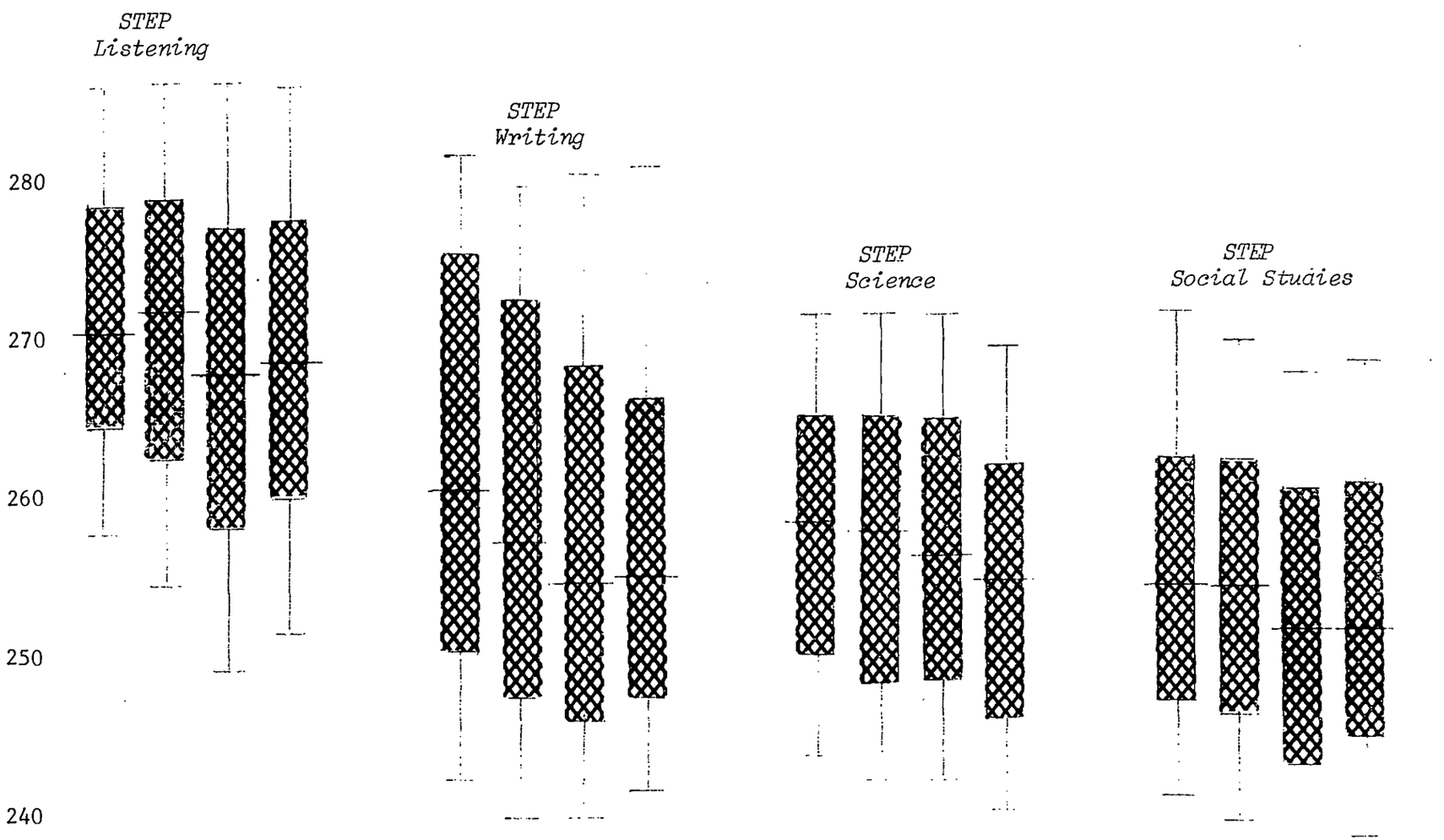
Year	1967	68	69	70
N	194	202	269	251
X	258.8	258.0	256.5	255.6
SD	12.5	13.0	13.5	13.2

	67	68	69	70
N	193	203	268	249
X	264.5	263.1	261.7	260.9
SD	12.0	10.9	10.3	10.4

	67	68	69	70
N	194	204	267	249
X	254.1	253.9	253.0	252.9
SD	12.3	11.6	12.0	12.5

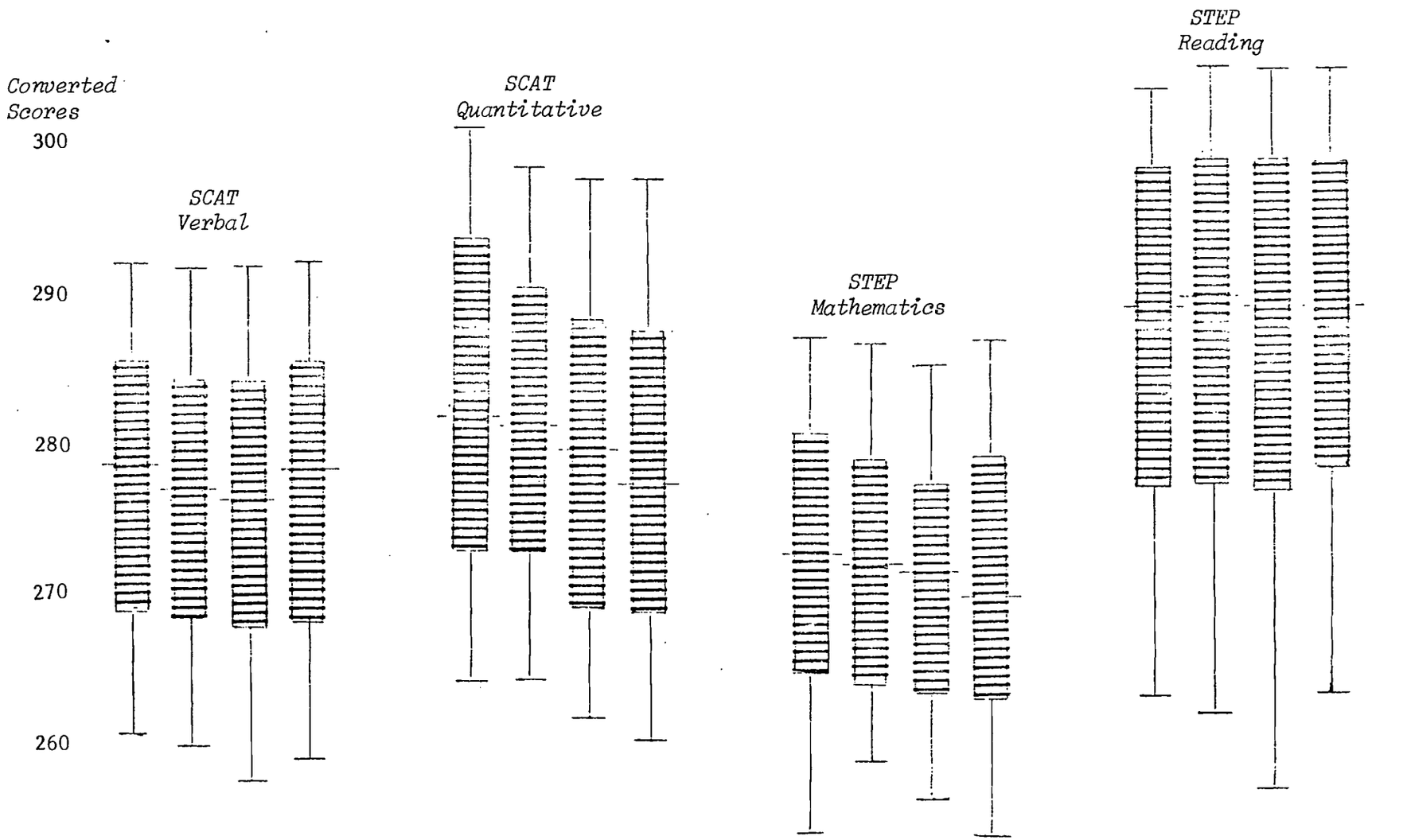
	67	68	69	70
N	193	203	265	249
X	264.0	262.3	260.7	260.8
SD	18.0	17.5	16.9	17.2

Figure 22 continued



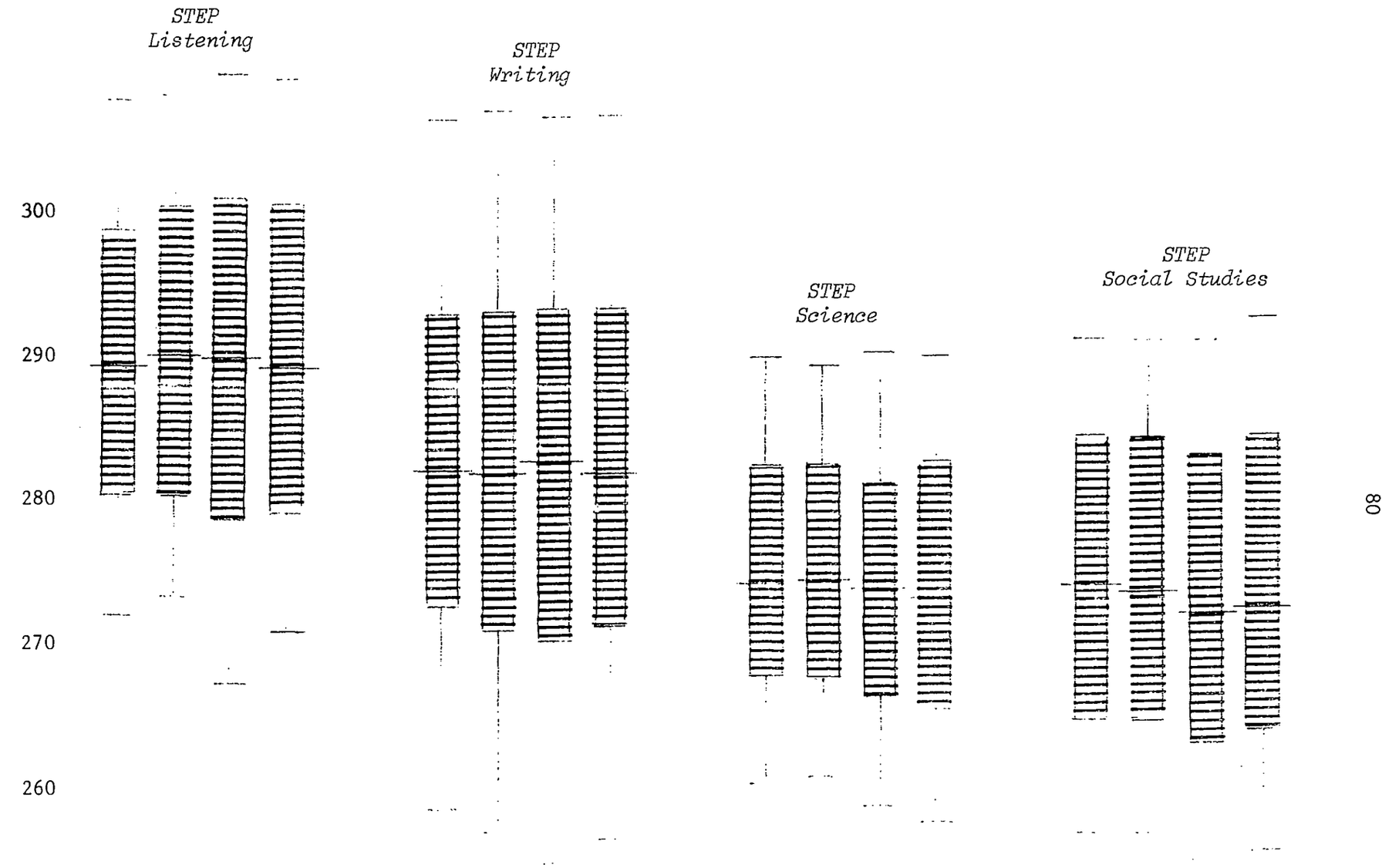
Year	1967	68	69	70	67	68	69	70	67	68	69	70	67	68	69	70
N	191	200	267	247	193	204	267	248	194	202	265	250	193	206	264	251
$\bar{X}$	271.8	271.4	268.6	269.2	261.9	259.2	257.9	258.3	257.9	257.3	257.0	254.7	255.4	254.6	252.8	253.2
SD	10.8	13.1	14.7	14.0	15.8	15.3	15.7	14.7	10.7	10.9	11.3	10.7	11.3	12.0	12.2	11.3

Figure 23
Grade 8 Cohort Comparisons:
Distribution of White Pupils' STEP-SCAT Converted Scores, Fall 1967-70



	SCAT Verbal				SCAT Quantitative				STEP Mathematics				STEP Reading			
Year	1967	68	69	70	67	68	69	70	67	68	69	70	67	68	69	70
N	893	825	898	819	892	825	897	818	890	841	897	820	889	830	888	831
$\bar{X}$	277.2	276.6	275.9	276.8	282.8	281.7	279.6	278.5	271.8	271.7	270.6	270.5	286.2	286.5	285.5	286.3
SD	12.3	12.1	12.8	12.9	14.6	13.6	13.8	13.7	13.1	11.6	12.1	13.0	15.9	16.4	17.5	16.5

Figure 23 continued



Year	1967	68	69	70	67	68	69	70	67	68	69	70	67	68	69	70
N	891	829	901	820	891	832	894	817	893	837	901	824	890	838	898	830
X	289.9	290.8	289.5	289.7	282.3	282.3	281.6	282.2	275.0	274.9	274.4	273.5	274.3	273.9	273.2	274.0
SD	14.2	14.0	17.2	15.2	17.7	18.6	18.7	18.9	11.9	11.2	12.9	13.1	13.9	13.7	14.4	14.8

Figure 24
Comparison of Unmatched Longitudinal Gains of Mean Scaled Scores on Cooperative Listening Tests of Black and White Pupils in Three Elementary Schools

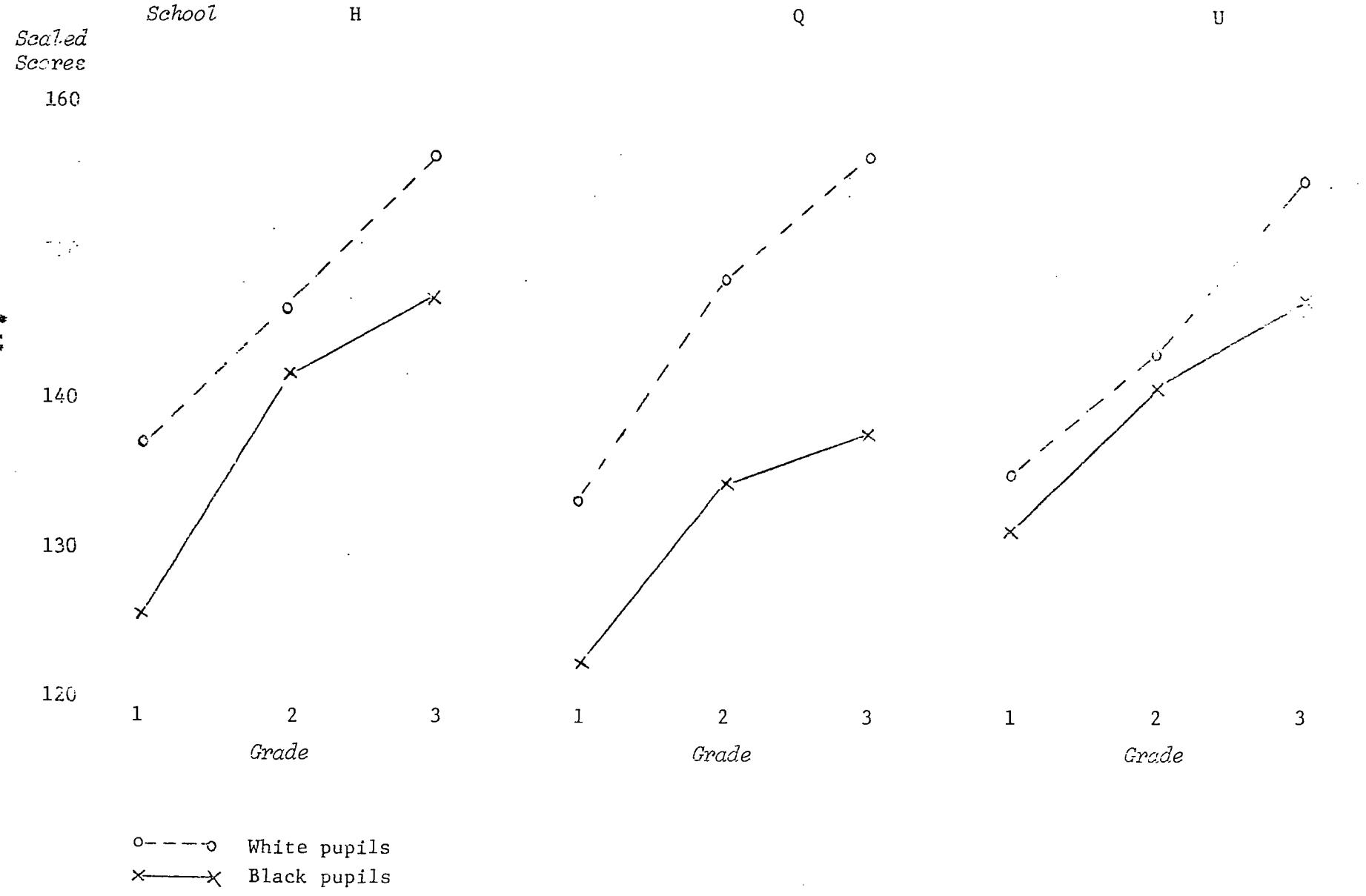
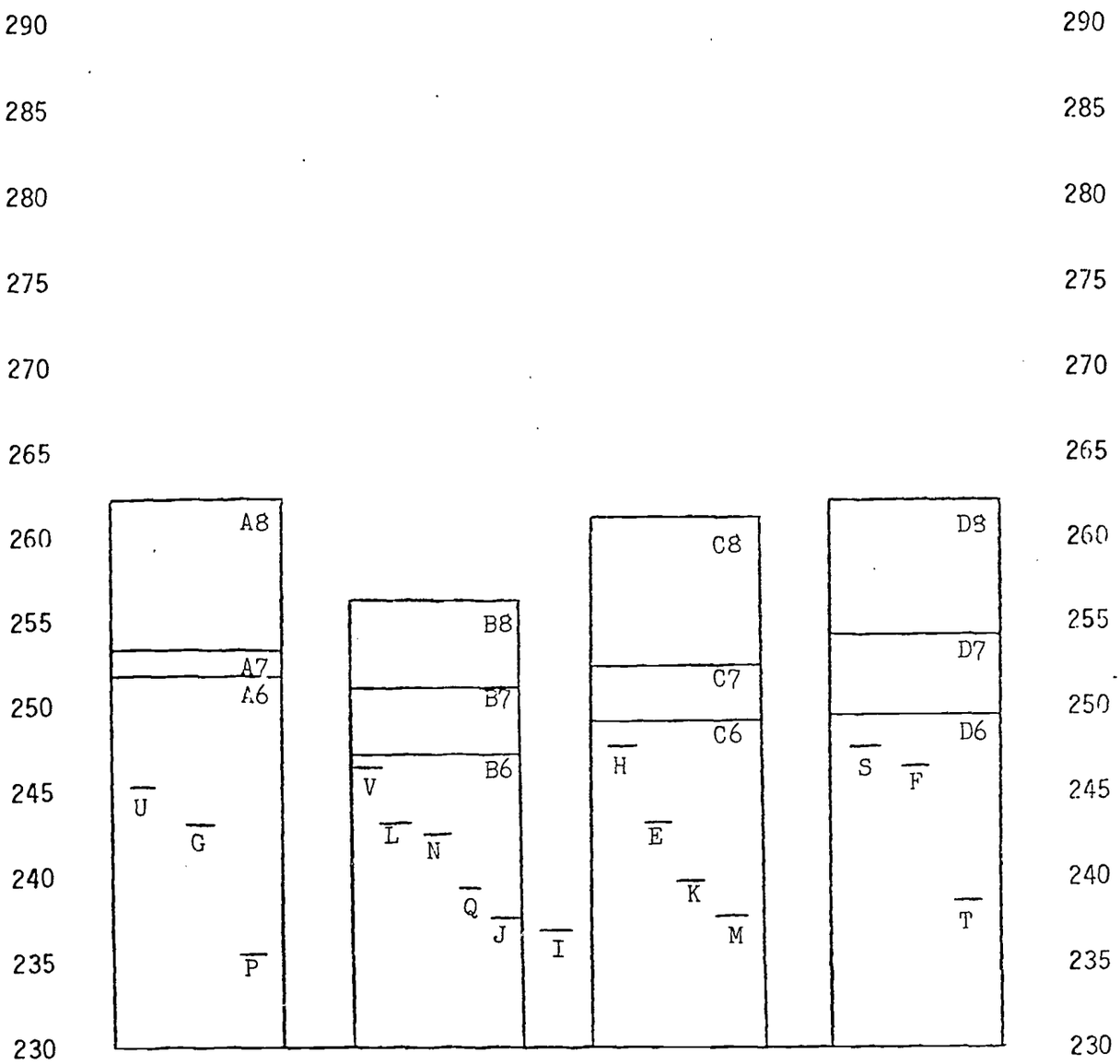


Figure 25

Mean Gains Based on Unmatched Longitudinal Data of Black Pupils in Four Middle Schools and Their Respective Feeder Elementary Schools* between Fall 1967 and Fall 1970

Mean STEP Converted Scores: Reading

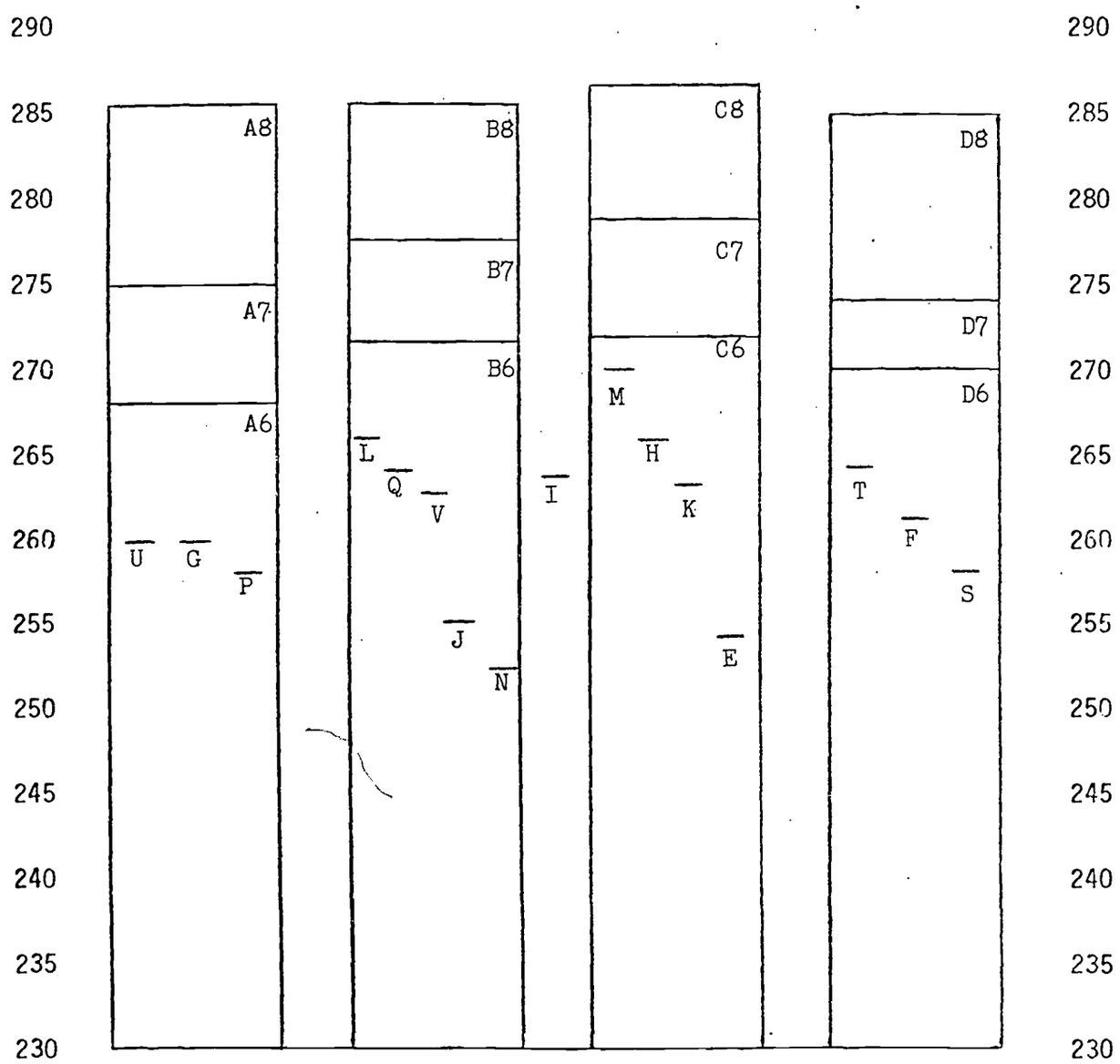


*A-D = Middle School Codes
E-V = Elementary School Codes
A6 = Grade 6 of School A
G5 = Grade 5 of School G

Figure 26

Mean Gains Based on Umatched Longitudinal Data of White Pupils in Four Middle Schools and Their Respective Feeder Elementary Schools* between Fall 1967 and Fall 1970

Mean STEP Converted Scores: Reading

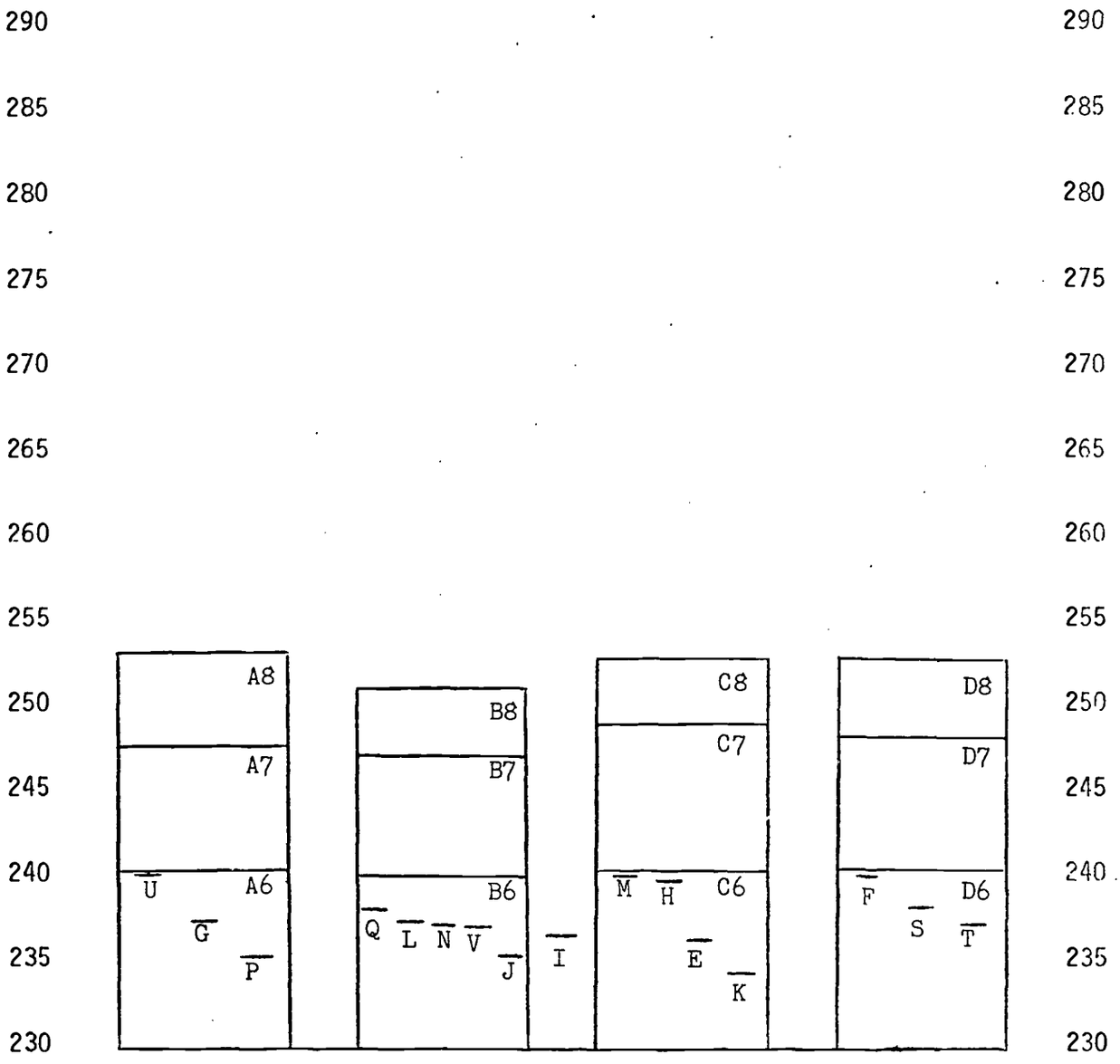


*A-D = Middle School Codes
E-V = Elementary School Codes
A6 = Grade 6 of School A
G5 = Grade 5 of School G

Figure 27

Mean Gains Based on Umatched Longitudinal Data of Black Pupils in Four Middle Schools and Their Respective Feeder Elementary Schools* between Fall 1967 and Fall 1970

Mean STEP Converted Scores: Mathematics

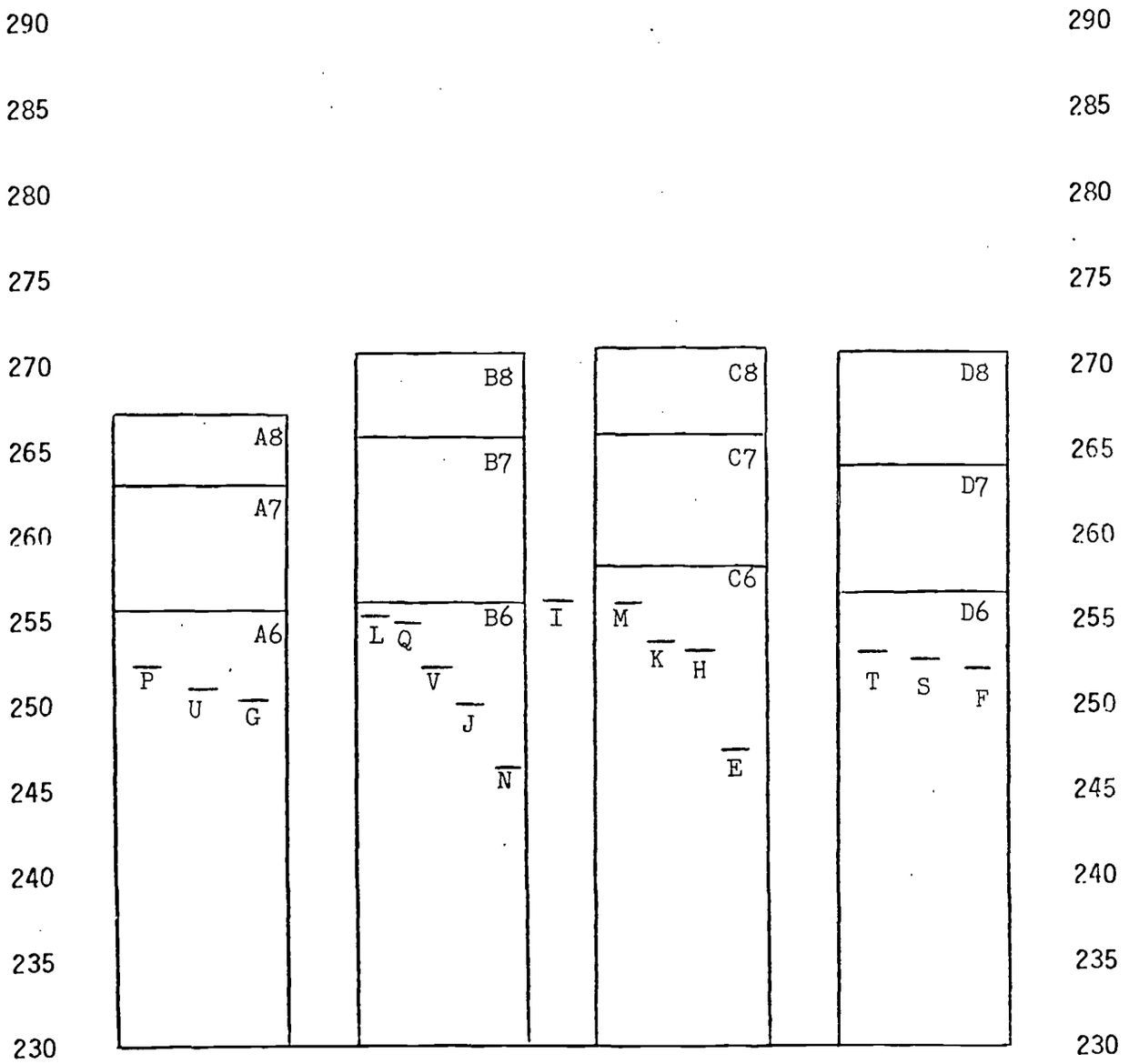


*A-D = Middle School Codes
E-V = Elementary School Codes
A6 = Grade 6 of School A
G5 = Grade 5 of School G

Figure 28

Mean Gains Based on Unmatched Longitudinal Data of White Pupils in Four Middle Schools and Their Respective Feeder Elementary Schools* between Fall 1967 and Fall 1970

Mean STEP Converted Scores: Mathematics



*A-D = Middle School Codes
E-V = Elementary School Codes
A6 = Grade 6 of School A
G5 = Grade 5 of School G

Figure 29
Matched Longitudinal Mean Score Gains in Reading and Mathematics for Grade 5 Black Pupils in Majority Black Schools Who Were Subject to Three Types of Desegration Treatment: Stayed, Transferred by Bus, and Transferred by Walking

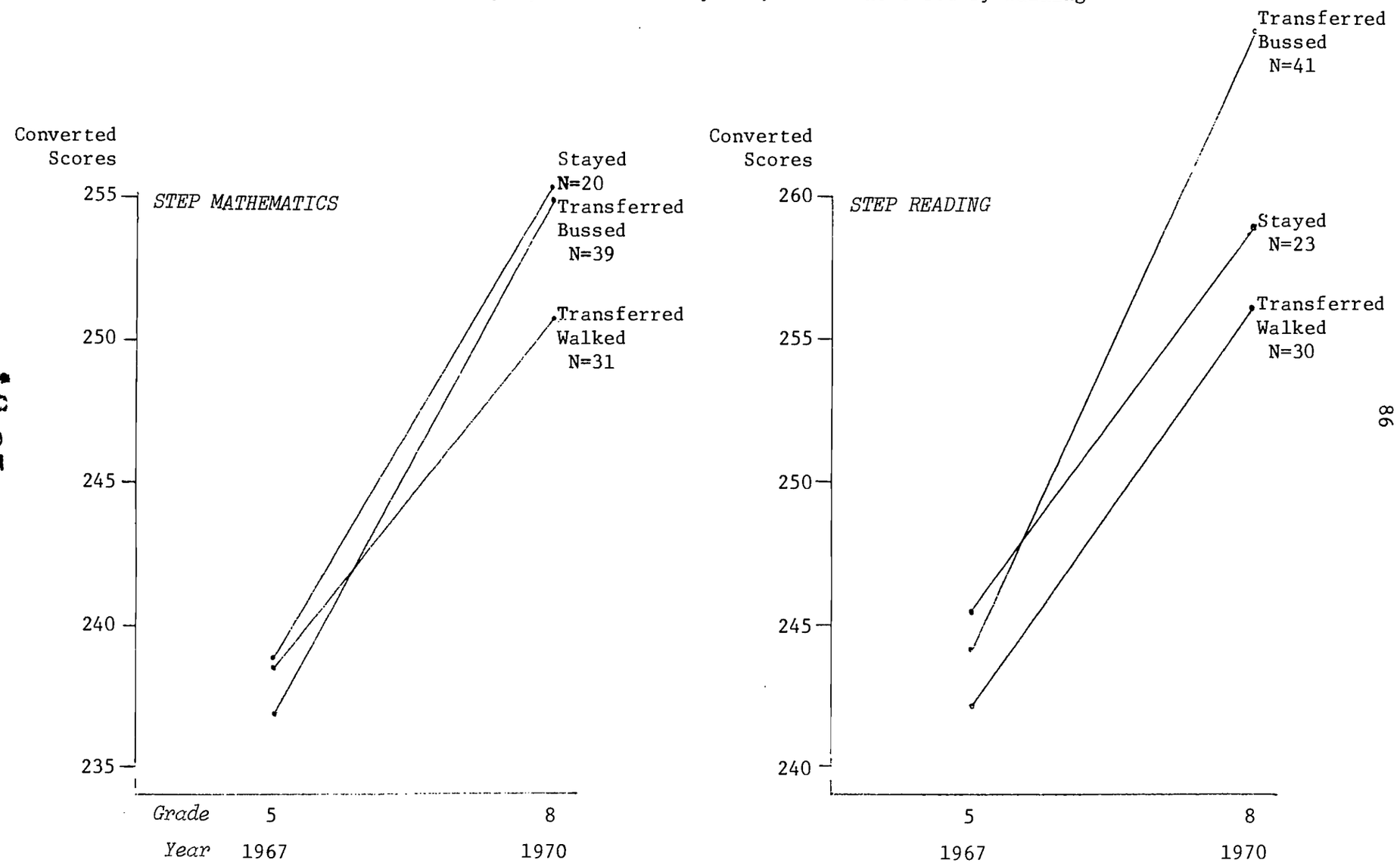
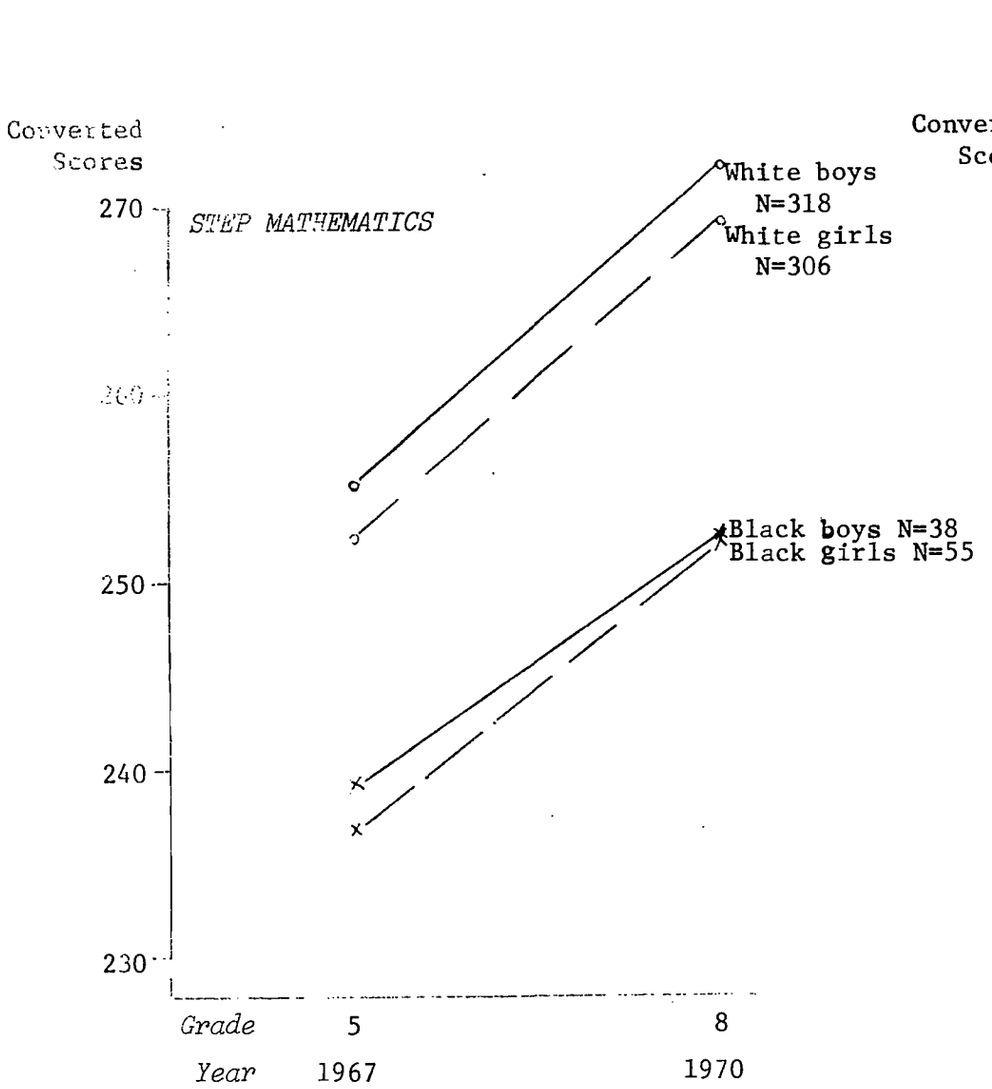


Figure 30
Matched Longitudinal Mean Score Gains in STEP Reading and Mathematics for
Grade 5 Pupils by Race and Sex



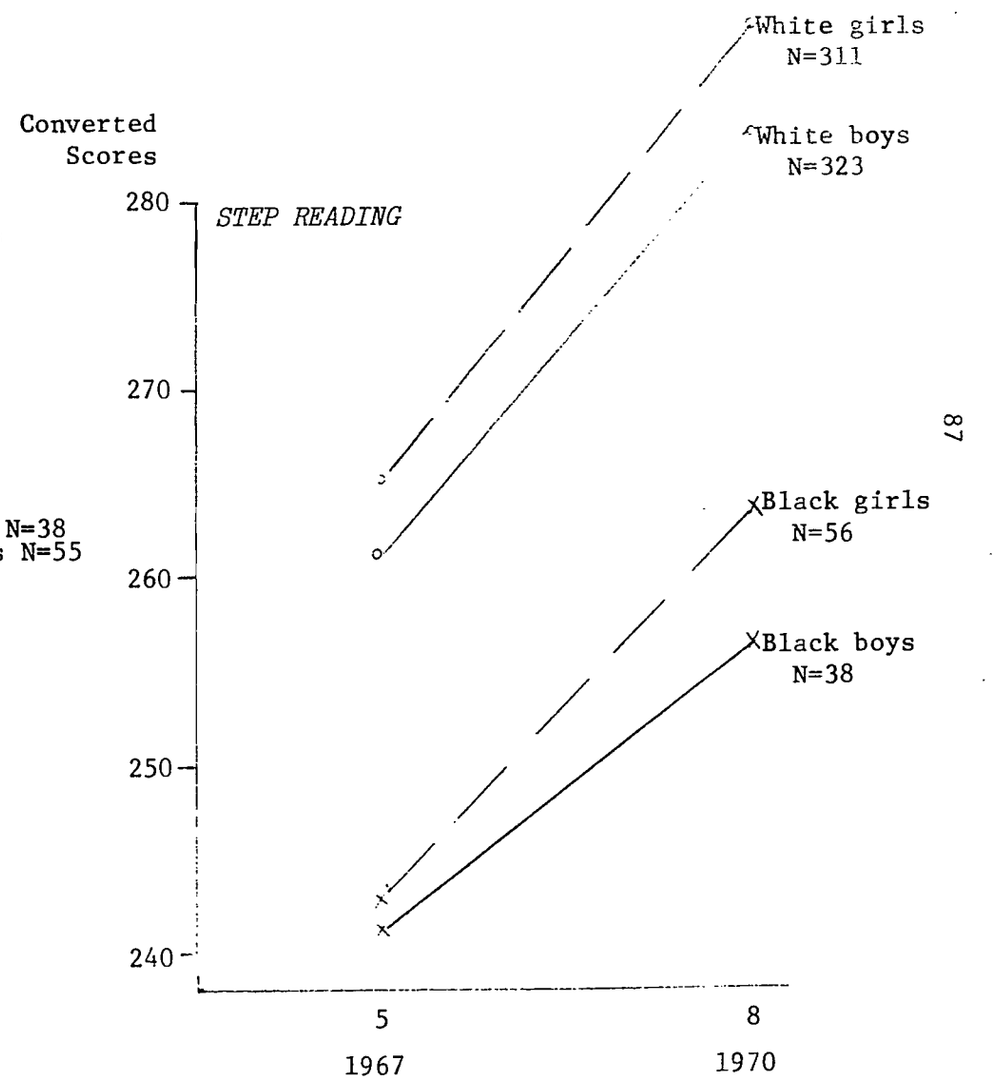


Figure 31
...ross-sectional, unmatched, and matched Longitudinal Trend Lines for Cooperative ...Listening Test Means of 1967 Grade 1 Cohorts by Race

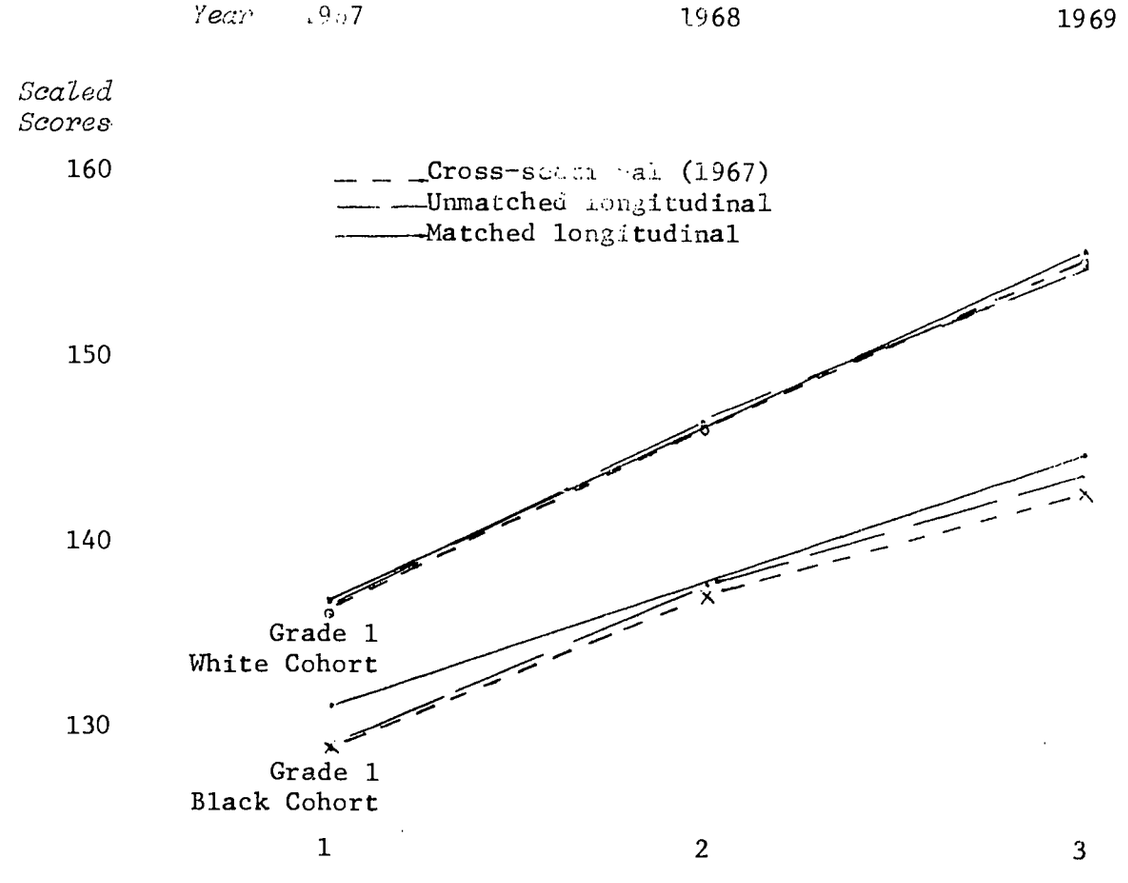


Figure 32
Cross-sectional, Unmatched and Matched Longitudinal Trend Lines for STEP
Reading Mean Scores of 1967 Grade 4 and Grade 5 Cohorts by Race

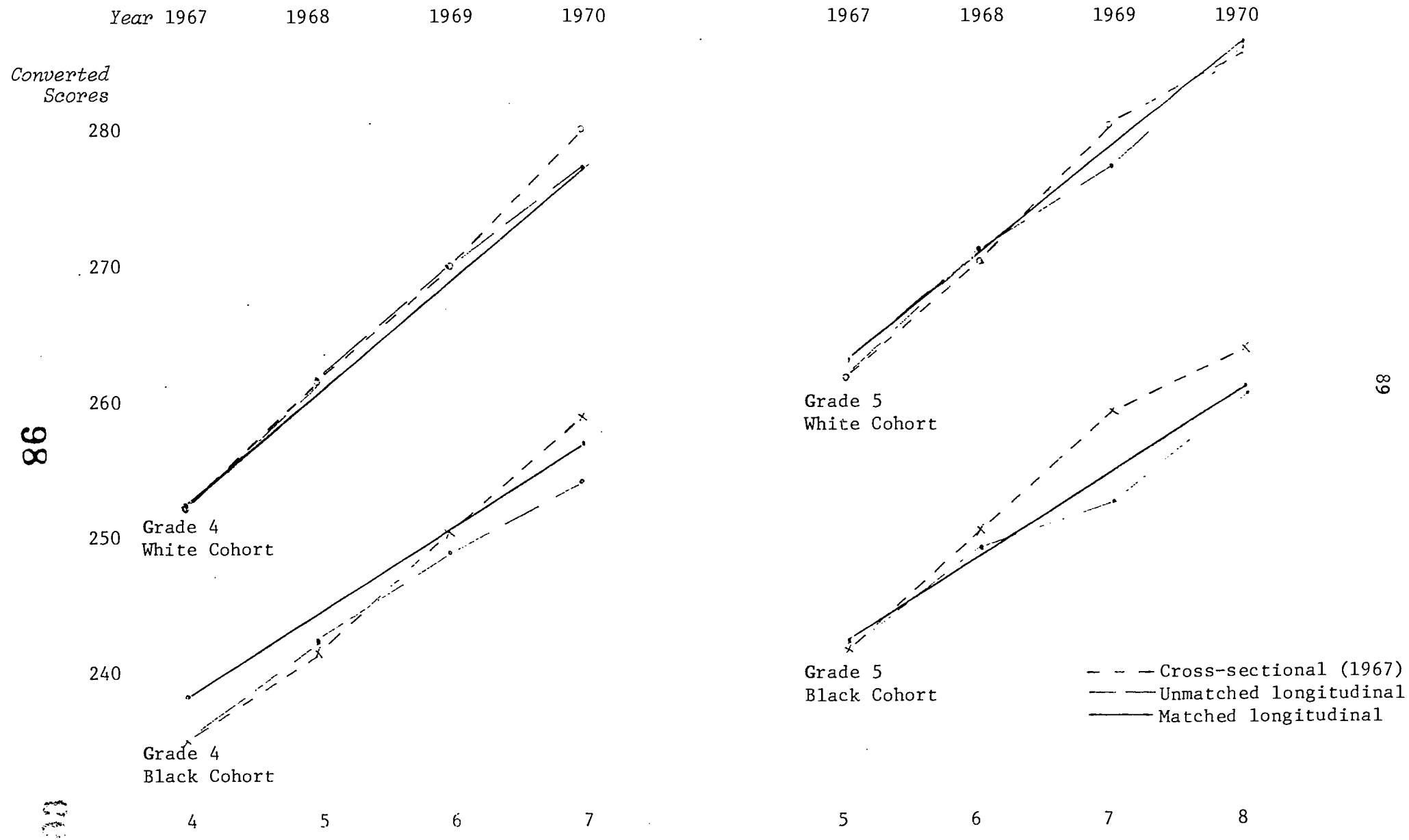


Figure 33
Cross-sectional, Unmatched and Matched Longitudinal Trend Lines for STEP
Mathematics Mean Scores of 1967 Grade 4 and Grade 5 Cohorts by Race

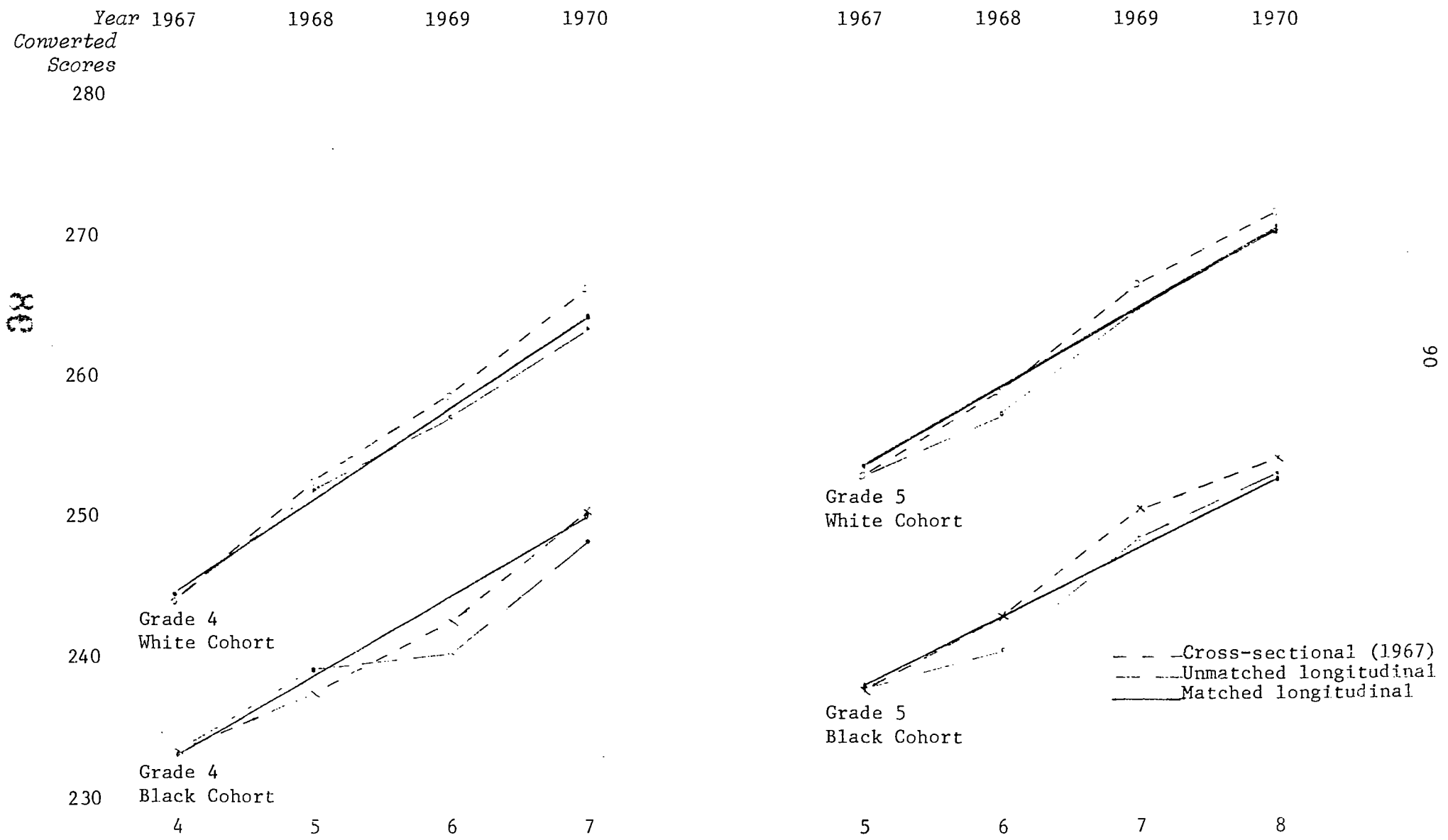
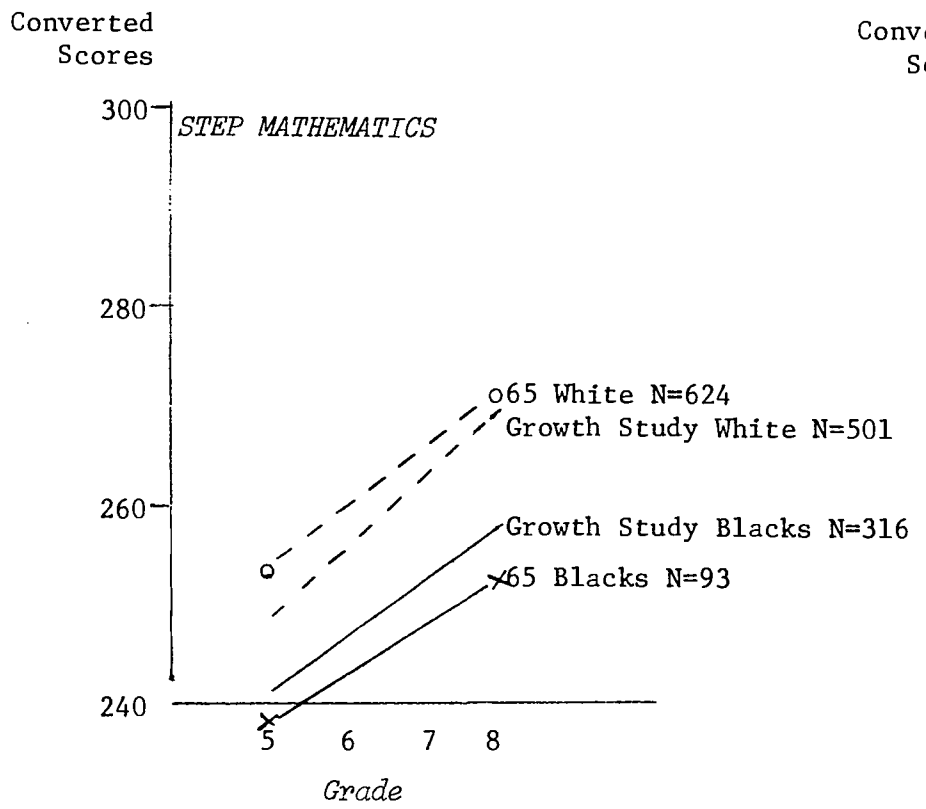
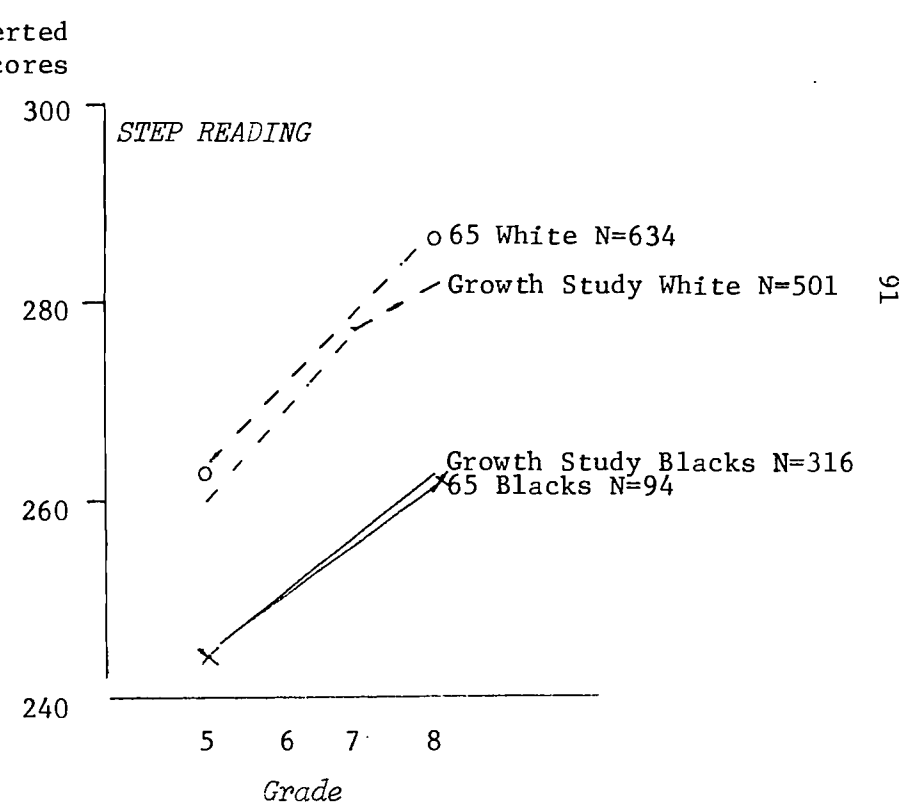


Figure 34
Matched Longitudinal Mean Score Gains in STEP Reading and Mathematics
for Black and White Pupils of District 65 and ETS Growth Study





EXPLORATION OF NON-ACADEMIC PUPIL CHARACTERISTICS

It has been shown that the academic development of elementary school pupils was altered very little by desegregation. What of the personal growth of these same children in the integrated classroom setting? Were there any observable changes in the pupils' attitudes toward themselves and to school?

Measurement in attitude change generally does not reach the degree of accuracy manifested by standardized achievement tests. A number of different approaches were used to assess pupils' feelings about themselves and their schools. Data from self-reported questionnaires, from teacher judgments of attitudes, from the permanent record of pupils, and from systematic observations in natural and structured classroom settings were used in combination to draw inferences about changes in the affective domain.

Self-Reported Attitude Data

Pencil and paper instruments are the most common way of measuring attitude changes. Questionnaires were a fast and easy way to collect self-reported information from intermediate and upper elementary school pupils. Two instruments were administered to District 65 pupils: an academic self-concept instrument designed by Northwestern University psychologists, and a measure of locus of control.

Academic Self-Concept Questionnaire

A 13-item questionnaire, 'How I Feel about School' was designed and administered by Dr. Donald T. Campbell of Northwestern University to all grade 3, 4, and 5 pupils in four schools of varying racial composition in June 1967. It was repeated in 1968 and 1969 to all classrooms with pretested subjects.

Results reported by Weber, Cook, and Campbell of Northwestern indicated that white pupils and segregated black pupils attained higher

academic self-concept scores than black pupils who were already in integrated classrooms.[1] After desegregation, formerly segregated black pupils were reported to decline in academic self-concept. White pupils from a formerly two-thirds black school also showed decreased academic self-concept after the proportion of black pupils in their school was reduced in the desegregation process. Desegregated white pupils in all white schools showed slight gains in academic self-concept the first year, and little change thereafter. The Northwestern psychologists interpreted these findings in terms of social evaluation theory. The deflated self-concepts of black pupils shown by this instrument, they inferred, may have reflected adaptation to new norms and more realistic conception of academic performance. Details of the study are being prepared for publication by Weber et al.

Locus of Control Inventory

The "Social Reaction Inventory," a ten-item forced-choice instrument (see Appendix A) was administered to all pupils in six randomly selected grade 8 classrooms in May 1969. There were a total of 133 subjects classified by race and sex. A series of chi-square tests for frequency of observed responses showed no significant differences between black and white girls in response rate. Nor were there significant differences between response frequencies of black and white boys with the exception of a single item. A greater proportion of black boys chose the statement, "Getting a good job depends mainly on being in the right place at the right time," rather than the alternative, "Being a success is a matter of hard work, luck has little to do with it"; χ^2 of 6.02 was significant at the .05 level.

In a ten-item instrument, administered to a relatively small number of subjects, the occurrence of one significant difference by chance

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[1]Stephen J. Weber, Thomas D. Cook, and Donald T. Campbell, The Effect of School Integration on the Academic Self-Concept of Public School Students, (paper read at the Midwest Psychological Association, Detroit, May 1971).

cannot be ruled out. Similar findings were reported by Coleman[2] who concluded that the sense of control over environment is an important factor in academic achievement.

Teacher Assessment of Habits and Attitudes

Pupils in lower grades were not able to take pencil and paper attitude tests. Nevertheless, it was possible to unobtrusively collect information about teachers' perceptions of pupil habits and attitudes. A new format in permanent records allowed teachers to rate pupil behavior in a number of areas in addition to grades in academic subjects. These data were collected for a sample of pupils in grades 1 and 2 the year before and a year after desegregation.

Teacher Ratings

Teachers rated grades 1 and 2 pupils as "doing well," "making acceptable progress," or "needs to improve" in the following areas:

Plays well with others
Respects rights and property of others
Is developing self discipline
Accepts responsibility
Is courteous
Follow directions
Works well alone
Works well with others
Completes assignments in reasonable time
Works carefully and neatly
Uses time and materials well
Shows initiative

Before as well as after desegregation, there were significant differences among groups in the teacher ratings. Girls are rated higher than boys, and whites are rated higher than blacks in all areas. The consistent ranking order was: white girls, white boys, black girls and black boys. A typical example was the ratings for the statement 'is courteous'. Tables 20 and 21 show the frequency of ratings received by each group as first graders in 1966-67 and as second graders in 1967-68.

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[2]James S. Coleman et al., *Equality of Educational Opportunity*. Washington D.C: U.S. Department of Health, Education and Welfare, 1966, p. 320.

Table 20

Number of 1966-67 Teacher Responses to the Statement 'is courteous' Classified According to Nature of Response on Sex and Race of Grade 1 Pupils

Sex/Race	Needs Improvement	Making Acceptable Progress	Doing Well	Total
White girls	2	23	82	107
White boys	3	44	54	101
Black girls	9	40	24	73
Black boys	14	41	14	69
Total	28	148	174	350

$\chi^2=73.5$; $p<.01$

Table 21

Number of 1967-68 Teacher Responses to the Statement 'is courteous' Classified According to Nature of Response on Sex and Race of Grade 2 Pupils

Sex/Race	Needs Improvement	Making Acceptable Progress	Doing Well	Total
White girls	0	30	86	116
White boys	4	41	64	109
Black girls	6	44	29	79
Black boys	7	44	24	75
Total	17	159	203	379

$\chi^2=47.6$; $p<.01$

Changes in rating of pupil habits and attitudes by teachers before and after desegregation were not great. All groups improved in the proportion of pupils considered doing well, but the differences for each group between the two years were not statistically significant. The slight improvements observed may have been a function of maturation between grade 1 and 2. In any case, there were no instances of decrement in attitude ratings by teachers in association with desegregation.

Referrals to Psychologists and Social Workers

An additional unobtrusive measure of perceived pupil behavior was found in the frequency of teacher referrals for consultation with school psychologists and social workers. It was assumed that teachers who make such referrals were expressing their concern over some aspect of a pupil's behavior in the classroom.

Tables 22 and 23 show the number of pupils sampled from three grade levels who were referred to a psychologist in 1966-67 and 1967-68, respectively. The proportion of referrals in groups of pupils classified by race and sex are as follows:

	1966-67 (Before Desegregation)	1967-68 (After Desegregation)
Black boys	*6.2%*	*12.9%*
White boys	*4.8*	*5.4*
Black girls	*3.3*	*5.9*
White girls	*1.6*	*1.8*

Rank order of groups in terms of number of referrals for psychologists and social workers were: black boys, white boys, black girls and white girls. After desegregation, the proportion of pupils referred to the social worker for counseling increased slightly for all groups except black boys. There were no major changes in proportions of referrals to the psychologist for testing except among black boys, which doubled during the year after desegregation. It could be speculated that the increased numbers of referrals for individual diagnostic testing indicated increased teacher concern with black boys' academic achievement. Change in behavior among black boys during this period may also have been a possibility. The data do not permit a choice as to which is the more likely explanation.

Table 22

Number of Referrals to School Psychologist Classified by Sex and Race of Pupils in Grades 1, 3, and 4 in 1966-67

Sex/Race	Psychologist Referrals	No Referral	Total
White boys	15	295	310
White girls	5	312	317
Black boys	13	196	209
Black girls	8	234	242
Total	41	1037	1078

$\chi^2=8.7$; nonsignificant

Table 23

Number of Referrals to School Psychologist Classified by Sex and Race of Pupils in Grades 2, 4, and 5 in 1967-68

Sex/Race	Psychologist Referrals	No Referral	Total
White boys	18	313	331
White girls	6	334	340
Black boys	27	190	217
Black girls	15	230	243
Total	66	1067	1131

$\chi^2=27.8$; $p<.01$

Tables 24 and 25 show the number of pupils referred to school social workers for counseling in 1966-67 and 1967-68. The percent of referrals for each group are below:

	1966-67	1967-68
Black boys	*14.3%*	*14.0%*
White boys	*6.1*	*8.5*
Black girls	*4.1*	*7.5*
White girls	*.6*	*2.3*

Table 24

Number of Referrals to School Social Worker Classified by Sex and Race of Pupils in Grades 1, 3, and 4 in 1966-67

Sex/Race	Social Worker Referral	No Referral	Total
White boys	19	291	310
White girls	2	315	317
Black boys	30	180	210
Black girls	10	232	242
Total	51	1018	1079

$\chi^2=45.5$; $p<.01$

Table 25

Number of Referrals to School Social Worker Classified by Sex and Race of Pupils in Grades 2, 4, and 5 in 1967-68

Sex/Race	Social Worker Referral	No Referral	Total
White boys	28	303	331
White girls	8	333	341
Black boys	30	184	214
Black girls	19	234	253
Total	85	1054	1139

$\chi^2=26.7$; $p<.01$

Teacher Comments as Indicators of Perceived Pupil Attitude.

A final source of teacher perception of student attitudes was the nature of written comments in the cumulative records of individual pupils. Tables 26 and 27 show the results from a survey of over 2000 cumulative folders. White girls received most positive and least negative comments from teachers before and after desegregation. Black girls and white boys received about the same proportions of positive, negative, and mixed comments. Black boys were given the most negative as well as least positive remarks.

The proportions of different types of teacher comments remained about the same for white pupils and for black boys. After desegregation, the number of positive comments for black girls decreased, and the number of mixed comments increased, but the number of negative remarks did not change. The changes noted in teachers' perceptions of pupils' attitudes towards school after desegregation confirmed, to some extent, the findings from Weber's report of pupils' self-reported academic self-concept.[3]

Table 26

Number of Observed Teacher Comments in Cumulative Records Classified by Nature of Comments and Sex and Race of Pupils in Grades 1, 3, and 4 in 1966-67

	Nature of Comments				
Sex/Race	Negative	Mixed	Positive	NR	Total
White boys	44	118	97	50	309
White girls	17	100	146	54	317
Black boys	49	89	41	33	212
Black girls	39	85	75	43	242
Total	149	392	359	180	1080

$\chi^2=63.3$; $p<.01$

[3]Weber et al, *op cit.*

Table 27

Number of Observed Teacher Comments in Cumulative Records Classified by Nature of Comments and Sex and Race of Pupils in Grades 2, 4, and 5 in 1967-68

	Nature of Comments				
Sex/Race	Negative	Mixed	Positive	NR	Total
White boys	50	128	106	47	331
White girls	18	110	156	57	341
Black boys	56	96	45	22	219
Black girls	44	108	63	38	253
Total	168	442	370	164	1144

$\chi^2=77.7$; $p<.01$

Pupil Attitude Inferred from Observations

The behavior of children in their classrooms is amenable to systematic observation. The data can then be used to make inferences about pupil attitude to specific classroom situations. The instrument, PROSE, Personal Record of School Experience, was used to record day to day activities of young children in school.[4] The Russell Sage Test of Social Relations[5] was used to gauge how well pupils work together in a structured classroom situation.

PROSE Findings

The Personal Record of School Experiences was used to record the behavior of 114 randomly selected boys and girls in grades 1 and 2 during the 1968-69 academic year. Each pupil was observed for three cycles, each consisting of 5 events, covering 148 categories of behavior. The limitations of the data obtained does not warrant extensive interpretation, however, some tentative inferences were drawn.

[4]Theoretical Considerations and Measurement Strategies. *Disadvantaged Children and Their First School Experiences*, Princeton: Educational Testing Service, PR-68-4, December 1968.

[5]The Russell Sage Social Relations Test: A Technique for Measuring Group Problem Solving Skills in Elementary School Children, *Journal of Experimental Education 28*, September 1959, pp. 85-99.

Analysis of PROSE records yielded no differences between black and white pupils' behavior in most categories. The nature of adult-pupil interactions, the quality of peer group interactions, use of materials, physical space and equipment, signs of emotion, and group size all failed to distinguish behavior of black pupils from whites.

In only three categories were differences between races found to be significant. The data are summarized in Tables 28 to 30. An expected but still important difference among groups is the sex and race of adults as well as peers with whom pupils had contact. Since most pupils in school are white, and most teachers are white and female, white girls were most frequently found interacting with persons like themselves in sex and race. White boys and black girls were observed to have contact with teachers who are like them in race or sex.

Table 28

Frequency of Observed Pupil Contacts Classified by Sex and Race of Contact and Pupil Sex and Race

Race	Other sex Other race	Other sex Same race	Same sex Other race	Same sex Same race
White boys	-	39	-	17
White girls	1	14	3	48
Black boys	42	1	6	3
Black girls	2	-	11	9
Total	45	54	20	77

$\chi^2=266.8$; $p<.01$

Table 29

Frequency of Observed Pupil Physical Activity Classified by Race and Activity Level

Activity Level/Race	Black	White
High with locomotion	3	12
Moderate with locomotion	27	53
High without locomotion	0	2
Moderate without locomotion	87	227
Low	298	376
Total	415	670

$\chi^2=29.0$; $p<.01$

Table 30

Frequency of Observed Attention to Adult Classified by Pupil Race and Adult Category

Pupil Race/Adult	Teacher	Teacher Aide	Observor	Other Adult	None	Total
Black	125	25	1	14	264	429
White	176	33	4	2	495	710
Total	301	58	5	16	759	1139

$\chi^2=15.5$; $p<.01$

Black boys were seldom observed to have teacher contacts who were alike in race or sex. Most same-sex, same-race contacts observed among black boys were with their peers. Educational literature has frequently cited this phenomenon as being associated with pupil as well as teacher attitude towards school.

Two other differences observed between black and white pupils were in the level of physical activity and the adult to whom pupils paid attention. White pupils were observed more often to be in physical motion than black pupils. It can be seen in Table 30 that most pupils work on their own with relatively little adult supervision. The observed activities were learning oriented such as going to teacher for assignment or checking of work, moving from one area of the room to another for books and materials, and other school work related movements. White pupils were found more often paying attention to their teacher rather than some other person. This observed difference may be another aspect of differences in readiness for school work as shown by the Caldwell Pre-school scores. It may also be associated with observed socioeconomic differences between black and white pupils.

Russell Sage Test of Social Relations (RSSR)

RSSR is a measure of group dynamics. It is a situational test which assesses two aspects of elementary school children's skills in social relations: in cooperative group planning and cooperative group action. The test consists of three block construction problems, and was administered to 38 classrooms in ten schools. There were 19 grade 2 and the same number of grade 5 classes.

It was found that even second grade pupils in all schools were able to spontaneously plan a group project using democratic procedures. Every class decided to vote on the method as well as personnel for the block building task. The expected differences in behavior between grade 2 and grade 5 classes were found, as can be seen in Table 31. Grade 5 classes were more likely to be rated mature in their operations.

In order to obtain indications of the degree to which black pupils in desegregated classrooms felt free to participate in group projects, the scoring for the planning stage was recorded by race. Table 32 shows the results. The proportion of ideas offered by black pupils during the planning stages was 19 percent of the total. Thus black pupils made as many suggestions as white pupils, considering the fact that they constituted about one-fifth of the population. There were significant

differences between schools in the proportion of planning contributions by black pupils, but interpretation is hazardous due to the limited number of observations.

Table 31

Frequency of Class Rating of Operation's Stage of Russell Sage Tests of Social Relations Classified by Grade Level and Rating

Rating	*Mature*	*Rollicking*	*Suppressed*	*Immature*	*Excited*	*Bickering*	*Disinterested*	*Rowdy*	*Total*
Grade 5	14	2	-	1	-	2	-	-	19
2	6	1	1	8	1	-	1	1	19
Total	20	3	1	9	1	2	1	1	38

χ^2=15.0; p<.05

Table 32

Number of Ideas Observed Being Communicated During Planning Stage of Russell Sage Tests of School Relations Classified by School and Pupil Race

School/Race of Pupil	Black	White	Total
F	10	36	46
G	4	51	55
H	19	45	64
K	2	37	39
L	1	25	26
M	14	37	51
Q	4	46	50
S	15	35	50
U	11	14	25
V	5	39	44
Total	85	365	450

χ^2=104.8; p<.01

These between school differences were confirmed during the operations stage. The emotional climate of the class was categorized every minute during the building of the block models (behavior category units). Table 33 shows that the behavior of the classes during the actual construction stages was overwhelmingly classified as friendly and supportive. There were 35 instances of observed bickering, quarreling, or fighting among 600 observation units. Only three of these observed hostilities were interracial. These three instances were observed in schools where teachers reported the most interracial friendship and least socioeconomic disparity between races. Overt hostility then, does not necessarily indicate permanent estrangement between individuals, but may be a sign of increased frequency of interaction.

Table 33

Number of Behavior Categories Units Observed During Operations Stage of Russell Sage Tests of Social Relations Classified by School and Category of Behavior

School/Behavior Categorized Units	*Quiet-Suppressed*	*Friendly-Supportive*	*Noisy-Joking*	*Tense-Excited*	*Bickering-Screaming*	*Boisterous-Screaming*	*Angry-Quarrelsome*	*Total*
F	–	39	6	3	6	5	2	61
G	7	53	5	8	6	1	–	80
H	–	71	5	8	7	–	3	94
K	–	44	–	5	1	1	–	51
L	11	18	12	5	5	1	–	52
M	–	43	–	6	–	1	–	50
Q	–	37	3	7	4	–	–	51
S	–	73	–	4	–	1	–	78
U	2	19	1	–	–	–	–	22
V	–	47	9	4	1	–	–	61
Total	20	444	41	50	30	10	5	600

$\chi^2=370.8$; $p<.01$

It would thus seem reasonable to conclude that in structured classroom situations, when pupils are expected to work together to solve a specific problem, the degree of cooperation manifested by all pupils was quite remarkable. Attitude data from other sources, such as teacher reports, show that black and white pupils have learned to work smoothly together in group projects in the elementary classrooms, in spite of the lowered self-esteem reported among black pupils after desegregation.

Another factor which needs to be considered in trying to understand the reported decrement in self esteem among black pupils is the socioeconomic disparity between the races. Tables 34 to 37 classify parent's occupations and number of siblings of black and white pupils collected from cumulative records. Black pupils were more likely to have working mothers than whites. Their parents' jobs were more often classified as laborers, domestics, and semi-skilled workers. They were more likely to have greater numbers of sisters and brothers than

Table 34

Observed Frequency of Mother's Occupation Classified by Pupil Race and Occupational Category

Occupation/Race	Black	White	Total
Laborer or domestic worker	165	4	169
Semi-skilled worker	40	0	40
Clerical or sales or service manager	125	63	188
Skilled in protection	16	8	24
Sales agent or representative	12	5	17
Technical worker	3	5	8
Manager or foreman	8	12	20
Professional	18	76	94
Not employed	309	808	1117
Total	696	981	1677

$\chi^2=231.8$; $p<.01$

their white classmates. Somes of these differences may also be reflected in reported attitudes to self and school.

Table 35

Observed Frequency of Father's Occupation Classified by Pupil Race and Occupational Category

Occupation/Race	Black	White	Total
Laborer or domestic worker	165	30	195
Semi-skilled worker	140	27	167
Clerical sales or service worker	70	66	136
Skilled or protective worker	124	66	190
Sales agent or representative	35	138	173
Technical worker	11	34	45
Manager or foreman	15	121	136
Official	3	47	50
Professional	37	426	463
Not employed	24	9	33
Total	624	964	1588

$\chi^2=672.9$; $p<.01$

Table 36

Observed Frequency of Brothers Classified by Pupil Sex, Race and Number of Brothers

Sex and Race/Number of Brothers	0	1	2	3	4	5	>6	Total
White boys	176	192	107	35	4	1	2	520
White girls	166	207	82	23	8	1	2	489
Black boys	87	121	78	33	12	10	7	349
Black girls	111	113	95	31	25	3	3	381
Total	543	633	362	122	49	15	14	1739

$\chi^2=89.9$; $p<.01$

Table 37

Observed Frequency of Sisters Classified by Pupil Sex, Race, and Number of Sisters

Sex and Race/Number of Sisters	0	1	2	3	4	5	>6	Total
White boys	182	208	97	21	6	2	1	517
White girls	179	189	84	22	9	1	4	488
Black boys	90	116	80	37	16	4	2	345
Black girls	111	103	95	50	16	6	3	384
Total	562	616	356	130	47	13	10	1734

$\chi^2=78.1$; $p<.01$

Summary

Attitude of pupils toward self and school was assessed by several means. Self-reported questionnaires were administered by a group of Northwestern University psychologists to pupils in grades 3, 4, and 5 before desegregation. They were retested twice. Dr. Campbell and his Northwestern colleagues reported that black pupils who moved from a segregated school to majority white receiving schools showed decreased academic self concept. Details of their findings will be published in the near future. On a locus-of-control questionnaire, administered *post hoc*, eighth-grade black boys manifested less sense of control over their environment in one item than white boys. Socioeconomic disparities as well as desegregation effects may have been associated with the observed differences.

Pupil attitudes perceived and rated by teachers in 1966-67 and 1967-68 were available in the permanent records of a sample of over 500 pupils in grades 2, 4, and 5 in 1967. There were differences in teachers' perceptions of black and white pupils' attitudes before and after desegregation, but desegregation per se did not alter teacher ratings very much. Only two indices of teacher perception manifested change after desegregation: there were more psychological referrals for black boys, and more written comments of mixed nature instead of favorable ones for black girls.

Systematic observation in natural classroom settings conducted after integration found differences between black and white pupils in grades 1 and 2 in three categories: (a) race and sex of contacts in the classroom differed by sex and race with black boys least likely to interact with anyone of the same sex or race as himself, (b) white pupils were more physically active in class. The observed activities were school oriented, such as seeking teacher's help, going to reference shelves, or working on a project, and (c) black pupils were more often attending to some person other than their teacher. Observation in a structured group test of social relations for 38 classes in grades 2 and 5 showed that black pupils contributed as much as white pupils to planning and working on group projects in the classroom. There were differences found among schools in ratings of pupil behavior during the social relations test.

DISTRICT 65 TEACHERS

The Evanston Schools have had, for many years, a national reputation for excellence. District 65 has, therefore, been able to maintain a reasonably selective policy in hiring of teachers. A legitimate concern of many education-minded community members has been whether integrating the schools caused any noticeable shifts in quality of teachers who work in District 65. One approach to finding answers to the question is to examine the teacher turnover rate across recent years. Another is to look at the credentials and teaching experiences of the faculty presently teaching in District 65 schools.

Annual Teacher Attrition Rate: 1957-70

An index of staff satisfaction is the rate teachers return to a school district for the following academic year. Has the integration of elementary schools affected teacher turnover in Evanston? The annual percentage attrition rate for the decade prior to integration, and that since 1967, is pictured in Figure 35. While the 22.7 percent attrition of 1967-68, the starting year of desegregration, is among the high figures, it was surpassed in 1959-60 and 1965-66 with 23.0 percent and 23.6 percent respectively. The attrition rate since 1967 has been diminishing steadily.

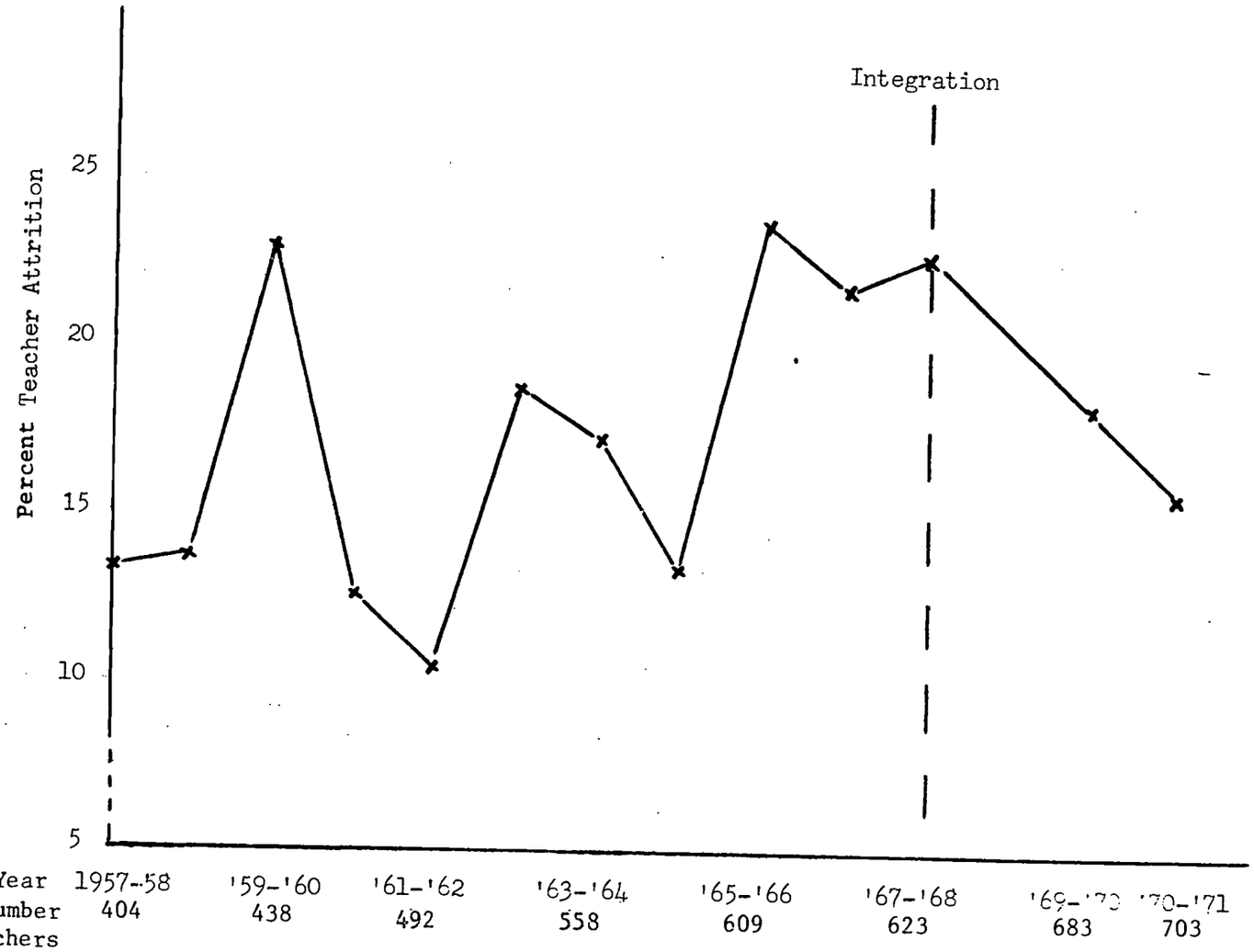
An examination of the stated causes in personnel records for leaving District 65 during the entire time span, from 1967 to 1970, yielded the reasons below:

Stated Reasons for Leaving District 65	*Percent of All Non-returning Teachers*
Another position	*8%*
Continuing education	*4*
Death	*1*
Follow husband elsewhere	*12*
Marriage or family reasons	*11*
Maternity	*16*
Medical	*3*
Personal	*10*
Retirement	*8*
Other or nonspecified	*27*
Total	*100%*

Annual attrition rate seems to indicate no remarkable teaching staff loss accompanying the process of integration.

Figure 35

Annual Attrition of District 65 Teaching Staff, 1957-1970



Teacher Questionnaire

A survey of District 65 teachers was conducted in spring 1970 in order to collect information in three areas: the personal and educational background as well as teaching experience of the teachers; their assessment of the academic, social, and disciplinary aspects of desegregated classrooms; and their attitude toward black and white pupils. The 683 teachers of District 65 during the 1969-70 academic year constituted the population of the survey. The questionnaire was simultaneously administered in each of the twenty District 65 schools during an inservice education afternoon in May of 1970. A total of 509 questionnaires were obtained. Sources of attrition consisted of absent as well as nonresponding individuals. The instrument, *The Rockefeller Institute Sponsored Evanston Integration Study Teacher Questionnaire*, is included in Appendix A.

Sources of Population Attrition

The 509 returned questionnaires represented a 74.5 percent return based on the total number of teachers. During data processing, another 14.6 percent were eliminated. These were excluded for a variety of reasons such as incomplete forms, errors, and all responses by teachers considered not to have been exposed to a representative group of black as well as white pupils. These nonrepresentative teachers included substitutes, remedial specialists, special education teachers, and librarians. A total of 409 usable questionnaires, 59.9 percent of the total teaching population remained for analysis; 49 or 12 percent were black teachers. The nonresponse rate varied among items, with the majority of items in Section A manifesting less than one percent nonresponses. There was in Section C, the semantic differential, as much as 10 percent nonresponse on individual items.

Educational Background and Experience of District 65 Teachers

The first part of the questionnaire asked the teachers of District 65 to describe their training and teaching experience. A table of response frequencies is included in Appendix B, Tables 66 to 69, pages 201 to 212. Over half of the respondents have studied beyond the baccalaureate level. Ten percent are currently working for master's degrees; 36 percent had obtained master's degrees; and 7 percent were educated beyond the master's level, are studying for, or have obtained the doctorate.

The amount of teaching experience reported by the 1970 teacher respondents was considerable. Over half of the teachers reported that they had taught in District 65 for four years or more. The summary below classifies the proportions of teachers with varying amounts of teaching experiences.

Years of Teaching Experience	*Percent of District 65 Teachers*
1 - 3 years	*32%*
4 - 10 years	*30*
11 - 20 years	*25*
over 21 years	*13*
Total	*100%*

The undergraduate training of the teachers was varied. The different types of institutions attended were as follows:

Type of Undergraduate Institution Attended	*Percent of District 65 Teachers*
Private non denominational	*29%*
Private Protestant	*17*
Private Catholic	*7*
State College	*9*
State University	*28*
State Teachers or Normal	*8*
Other	*2*
Total	*100%*

When they were asked to rate the academic level of their own undergraduate school with respect to all the nation's colleges and universities, 70 percent rated their own institutions as being among the top quarter nationally, and over 90 percent ranked their own education as being in the top half of the nation.

When these descriptive statistics, which were consistent with District 65 personnel records, were compared with similar data from national studies such as the Coleman Report,[1] and the NEA Research Bulletin,[2] present Evanston teachers can justifiably be characterized as a relatively well-trained and experienced group.

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[1]James S. Coleman et al., *Equality of Educational Opportunity*. Washington D. C.: Department of Health, Education and Welfare, 1966, pp. 130-ff.

[2]National Education Association, Research Division, Facts on American Education, *NEA Research Bulletin*, Vol. 49, No. 2, May 1971, pp. 47-51.

Integration of District 65 Staff

Although there were segregated all-black and all-white schools before 1967 in Evanston, the staff at most schools had been integrated. Six of the 20 schools in District 65 had all-white staffs prior to desegregation in 1967. Table 38 shows the pattern of staff integration in District 65 during the interval from 1966 to 1970. Every District 65 school had integrated faculties by 1969.

The numbers and proportion of professional staff are listed below by race:

Race/Academic Year	1967-68	1968-69	1969-70	1970-71
Black	68	60	63	77
White & others	555	600	620	626
Total	623	660	683	703
Percent Black	*10.9*	*9.1*	*9.2*	*11.0*

While teaching staff has almost doubled in the last fifteen years, the total number of administrators in District 65 has decreased from 55 to 39 over the past four academic years. The proportion of black administrators, however, rose from 12.7 percent to 33.3 percent. Part of this increased ratio may have been due to the appointment of several black assistant principals whose roles included disciplinary actions and communications with parents. There have been several black principals with doctorate degrees. The black associate superintendent for personnel services and interim chief administrator for District 65 during the 1970-71 academic year was an Evanston native who had been principal of the formerly all-black Foster School. The proportion of black administrators in District 65 has increased since desegregation as shown below:

Race/Academic Year	1967-68	1968-69	1969-70	1970-71
Black	7	8	11	13
White	48	38	29	26
Total	55	46	40	39
Percent Black	*12.7*	*17.4*	*27.5*	*33.3*

Table 38

Integrated Faculty in District 65 Schools

School	1966 Yes	1966 No	1967 Yes	1967 No	1968 Yes	1968 No	1969 Yes	1969 No	1970 Yes	1970 No
Elementary School										
Central	X		X		X		X		X	
College Hill		X		X	X		X		X	
Dawes	X		X		X		X		X	
Dewey	X		X		X		X		X	
King Lab	X		X		X		X		X	
Kingsley	X		X		X		X		X	
Lincoln		X	X		X		X		X	
Lincolnwood	X		X		X		X		X	
Miller		X		X		X	X		X	
Noyes	X		X		X		X		X	
Oakton	X		X		X		X		X	
Orrington	X			X	X		X		X	
Timber Ridge		X	X		X		X		X	
Walker		X		X		X	X		X	
Washington	X		X		X		X		X	
Willard		X	X		X		X		X	
Middle Schools										
Chute			X		X		X		X	
Haven	X		X		X		X		X	
Nichols	X		X		X		X		X	
Skiles	X		X		X		X		X	

Faculty Attitudes towards Teaching in Desegregated Classes

In addition to supplying information about their educational backgrounds and teaching experiences, District 65 teachers responded to attitude items in the questionnaire. Section B of the questionnaire was designed to assess faculty attitude concerning teaching experiences with integrated classes. Table 67, Appendix B, pages 205-206, summarizes their responses to a series of attitudinal statements about social, academic, and disciplinary aspects of integrated classrooms in a Likert-type format. They were requested to react to each statement by stating the degree to which they agreed or disagreed with the contents. The final section of the questionnaire was a semantic differential which inquired into teacher attitudes toward black and white pupils.

Social Patterns in School

Evanston teachers were asked to assess the social climate within their classroom; 9 out of 10 teachers reported that black and white pupils worked together well in classroom activities. The same proportion reported that black pupils have been elected to leadership positions in classrooms, and that genuine friendships have developed among black and white boys as well as girls. Eight out of 10 teachers said that black and white pupils played together happily during free time and recess, while 7 of 10 reported that black and white pupils shared tables and socialized during lunch hours.

A closer scrutiny of teacher responses, categorized by grade assignment, showed substantial differences between the reports of elementary (K-5) teachers and those of middle school teachers (6-8) with regard to social patterns in school. Contingency Tables 39 to 42 indicate that the proportion of junior high teachers, who disagreed with the questionnaire statements, was substantially higher than the proportion of disagreeing grade school teachers.

It appears that teachers generally perceive the climate of the elementary schools as being more likely to foster positive social relationships among black and white pupils than that of the middle schools. This observation is not inconsistent with the agreement between elementary and middle school teachers that integration during the lower grades is one way to prevent future polarization between races.

Table 39

Number of Teacher Responses to the Statement: *"Black and white pupils happily play together during free time and recess,"* Classified According to Nature of Response and Level of School Assignment

Grade Level/Response	Disagree	Agree	Total
Elementary school teachers	37	238	275
Middle school teachers	49	85	134
Total	86	323	409

$\chi^2=28.84$; $p<.001$

Table 40

Number of Teacher Responses to the Statement: *"Black and white pupils share tables and socialize during lunch hour,"* Classified According to Nature of Response and Level of Teaching Assignment

Grade Level/Response	Disagree	Agree	Total
Elementary school teachers	29	246	275
Middle school teachers	85	49	134
Total	114	295	409

$\chi^2=125.15$; $p<.001$

Table 41

Number of Teacher Responses to the Statement: *"Genuine friendships are developing between black and white girls."*

Grade Level/Response	Disagree	Agree	Total
Elementary school teachers	40	235	275
Middle school teachers	52	82	134
Total	92	317	409

$\chi^2=30.42$; $p<.001$

Table 42

Number of Teacher Responses to the Statement: *"Genuine friendships are developing between black and white boys,"* Classified According to Nature of Responses and Level of Teaching Assignments

Grade Level/Response	Disagree	Agree	Total
Elementary school teachers	26	249	275
Middle school teachers	39	95	134
Total	65	344	409

$\chi^2=26.03$; $p<.001$

Academic Aspects of Desegregation

District 65 teachers were also asked to respond to items describing the academic progress of their pupils after desegregation. They were in general agreement that desegregation had, by academic criteria, been successful. Six out of 10 teachers reported that teaching in an integrated classroom is no more difficult than before. Eight out of 10 reported that able black pupils were challenged to better performance in a desegregated classroom setting, while only 4 of 10 felt that some black pupils may be discouraged by the academic competition. Their reservations were classical in nature. Eight out of 10 teachers said that while some parents pressured their children too much for grades, other parents failed to show enough interest in their children's school work. Sixty-four percent of the teachers believed that the learning environment was adversely affected by the 1969-70 Board-superintendent controversy.

Disciplinary Problems Since Desegregation

A series of items in the Teacher's Questionnaire dealt with one of the frequently cited possible problem areas in desegregated schools--discipline. The dilemma encountered by administrators and teachers of newly desegregated school systems has been described frequently in recent literature. Mercer's[3] discussion on the dilemma of discipline, that of securing conformity of minority pupils to majority role expectations within the Riverside California school system, is an example.

The responses of District 65 teachers indicated their awareness of a prevalent belief among pupils and parents that black and white pupils did not receive equal treatment in disciplinary actions. Half of the teachers agreed with the statement that there appeared to be a dual standard of expectations of behavior, with less required of black pupils. Nine out of 10, however, stated that they personally believed that there should be only a single standard for all pupils. This expressed principle was in substantial agreement with Mercer's analysis and recommendations for discipline in newly desegregated school systems.

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[3]Jane R. Mercer, Issues and Dilemmas in School Desegregation: A Case Study. In Educational Testing Service's *Proceedings of the Western Regional Conference on Testing Problems, 1968*. Princeton: Educational Testing Service, 1968, pp. 1-22.

"Innovative approaches to dealing with special disciplinary problems have been tried by teachers and administrators," was a statement with which 80 percent of the respondents agreed. Six out of 10 teachers said, however, that minority pupils were just as responsive to traditional rewards and sanctions as the majority group pupils. The problem, according to a majority of the teachers, lay rather in the differences of the guidelines and expectations in work and play of some pupils.

The concern over discipline appeared to be more prevalent among the middle school teachers than grade school teachers. Table 43 indicates there was a significant difference in the proportion of middle school teachers who expressed belief in black-white differences in behavior norms when compared with that of elementary teachers.

Table 43

Number of Teacher Responses to the Statement: *"Black and white pupils do not have the same expectations for how they should behave in school,"* Classified According to Nature of Response and Level of School Assignment

Grade Level/Response	Disagree	Agree	Total
Elementary School Teachers	146	118	264
Middle School Teachers	34	97	131
Total	180	215	395

$\chi^2=30.4$; $p<.001$

While a majority from each of the four middle schools expressed belief in the existence of differing black-white behavior norms, there were substantial differences among teachers' attitudes from the fifteen responding elementary schools. The majority of teachers from six schools stated there were no differences in the expectations and norms of black and white pupils. It is of interest to note that the black and white pupils in four of these schools were, in fact, more alike socioeconomically than in other schools. Table 70 in Appendix B on page 215 shows that the difference in average cost of housing of black and white pupils' neighborhoods was less in these four schools that in most other District 65 schools. Tables 44 and 45 show the differences in opinion among teachers from fifteen grade schools and those from four middle schools.

Table 44

Number of Elementary School Teacher Responses to the Statement: *"Black and white pupils do not have the same expectations for how they should behave in school,"* Classified According to Nature of Response and School

School	E	G	H	I	J	K	L	M	N	P	Q	S	T	U	V	Total
Response																
Agree	4	12	7	5	12	14	12	11	5	16	6	9	9	10	14	146
Disagree	10	7	10	17	3	6	5	6	9	7	8	7	3	12	8	118
N. R.	0	1	0	0	1	2	1	0	0	3	1	1	1	0	0	11
Total	14	20	17	22	16	22	18	17	14	26	15	17	13	22	22	275

$\chi^2=44.3$; $p<.05$

Table 45

Number of Middle School Teachers Responses to the Statement: *"Black and white pupils do not have the same expectations for how they should behave in school,"* Classified According to Nature of Response and School

School	A	B	C	D	Total
Response					
Agree	13	30	37	17	97
Disagree	11	9	9	5	34
Total	24	39	46	22	131

$\chi^2=6.24$; not significant

The responses to items about discipline were further analyzed by classifying respondents in terms of sex, race, and age group. The number and direction of black and white teacher's responses are indicated in Table 46. In most cases, there was no significant difference found between proportions of black and white teachers' responses. The statement "black and white pupils do not have the same expectations for how they should behave in school," found significantly more black teachers in disagreement and more white teachers in agreement with it. Chi-square test of discrepancy between expected and observed frequencies was 9.7, which was significant at the .05 level.

Table 46

Number of Teacher Responses to Statements Regarding Discipline in District 65 Schools Classified According to Nature of Response and Race of Respondent

Race	Black		White	
Statement/Response	Agree	Disagree	Agree	Disagree
Pupils from disadvantaged homes do not follow the same guidelines in work and play as middle class children.	30	18	275	67
Minority children are less responsive to traditional rewards and sanctions, such as praise and being sent to the principal's office.	17	28	140	201
Black and white children believe they are all treated equally in disciplinary situations.	13	35	115	226
Parents seem to believe their children are treated equally in disciplinary situations.	11	35	154	179
I feel there is a dual standard for dealing with black and white pupils in disciplinary matters.	25	22	166	176
Black and white pupils do not have the same expectations for how they should behave in school.	19	28	219	123

No differences in response proportions between male and female teachers were found. The difference in response of various age groups, however, was significant. More teachers under 35 years of age disagreed with the statement that there were different expectation of behaviour norms between black and white pupils, while greater numbers of teachers over 36 years of age agreed that pupils did hold different expectations of behavior. Contingency Table 47 below shows these age group differences.

Table 47

Number of Teacher Responses to the Statement: *"Black and white pupils do not have the same expectations for how they should behave in school,"* Clasified According to Nature of Response and Age

Age Group/*Response*	Agree	Disagree	Total
Under 35 years	111	93	204
36 years and over	131	50	181
Total	242	143	385

χ^2=13.3; p<.001

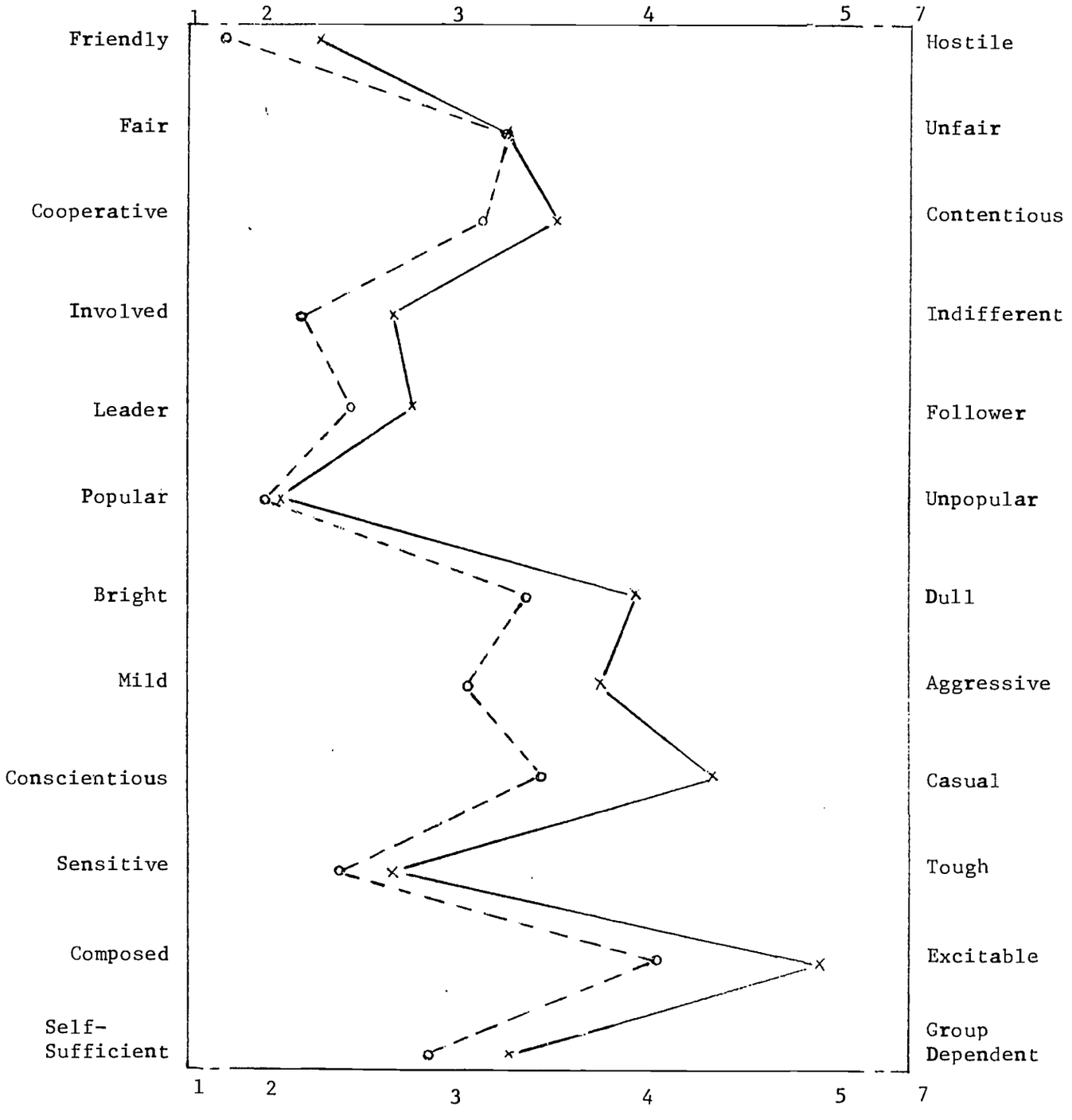
Teacher Ratings of Black and White Pupils

District 65 teachers were requested in Section C of the Teacher Questionnaire to respond to a semantic differential, a widely used method of measuring attitude toward specified objects. The semantic differential consisted of twelve bipolar adjectives such as friendly-hostile, sensitive-tough, and fair-unfair. Each pair of adjectives was graphically separated by seven intervals, for example: fair-:-:-:-:-:-:-:- unfair. The teachers responded by indicating where along this continuum the attitude object, in this case, the typical black or white pupil, falls.

Figure 36 graphically presents the mean ratings of black and white pupils. Table 48 shows the mean and standard deviation of ratings for black and white pupils, as well as the *t* values for differences between the means. On two sets of adjectives: fair-unfair and popular-unpopular, no significant differences in teacher perception of black and white pupils were found. The direction of the difference was consistently in favor of the white pupil. These findings are in substantial agreement with teacher ratings of black and white pupils' attitudes in the permanent records before and after desegregation described in the chapter on non-academic characteristics of pupils beginning on page 95.

Figure 36

Semantic Differential Mean Scores of Black and White Pupils
by 408 District 65 Teachers, Spring 1970



Legend: o -- = white pupils
x — = black pupils

Table 48

Semantic Differential Ratings[a] of Black and White Pupils by 408 District 65 Teachers

Bipolar Adjective	Pupil Race				t Value
	Black		White		
	$\bar{X}$	SD	$\bar{X}$	SD	
Friendly..... - Hostile	2.32	1.57	1.75	1.23	5.52**
Fair..... - Unfair	3.27	1.30	3.30	1.25	0.25
Cooperative.... - Contentious	3.60	1.41	3.18	1.22	4.39**
Involved ..... - Indifferent	2.73	1.43	2.16	1.07	6.44**
Leader..... - Follow	2.81	1.27	2.46	1.08	4.02**
Popular..... - Unpopular	2.26	1.14	2.22	1.01	0.52
Bright..... - Dull	3.95	1.11	3.40	0.99	7.09**
Mild..... - Aggressive	3.16	1.21	3.84	1.08	8.03**
Conscientious.. - Casual	4.44	1.35	3.53	1.15	9.88**
Sensitive..... - Tough	2.67	1.47	2.41	0.92	2.77*
Composed..... - Excitable	5.00	1.19	4.06	1.08	15.96**
Self Sufficient - Group Dependent	3.29	1.58	2.86	1.26	4.01**

[a]rating scale for Bipolar Adjectives from 1 to 7, ranging from most positive 1 to most negative 7.

*p<.005
**p<.001

In a rating scale of one to seven, four would be the logical midpoint of the scale. In only two cases did the mean rating of all teachers exceed four. Black pupils were generally considered higher than this average in casualness and excitability. The teachers, as a group, rated all pupils on the favorable side of the scale.

An examination of the responses classified by race of the teachers yielded the finding that black teachers tended to rate both black and white pupils more favorably than white teachers did. However, the direction of the black teachers' ratings of black and white pupils was not different from ratings by white teachers as can be seen in Table 49.

Table 49

Black and White Teacher's Responses to Semantic Differential *"Think of the black/white pupils you have taught within the last three years in District 65. Rate them on the following qualities."*

Adjectives	Races of Teacher/Pupil	N	$\bar{X}$	SD
Composed-Excitable:	black/black	44	4.16	1.59
	white/black	318	4.91	1.79
	black/white	42	3.69	1.24
	white/white	311	4.11	0.99
Conscientious-Casual:	black/black	45	4.11	1.48
	white/black	319	4.49	1.33
	black/white	43	3.21	1.32
	white/white	310	3.56	1.11
Mild-Aggressive:	black/black	44	4.50	1.22
	white/black	319	3.91	1.18
	black/white	43	3.51	1.23
	white/white	311	3.08	1.05
Involved-Indifferent:	black/black	45	2.40	1.48
	white/black	317	2.65	1.38
	black/white	44	1.89	1.40
	white/white	310	2.20	1.35
Friendly-Hostile	black/black	45	2.11	1.91
	white/black	318	2.36	1.51
	black/white	44	1.27	1.07
	white/white	313	1.82	1.23

Climate of Teacher Relations

District 65 Teachers were asked to assess their relationship with colleagues of different ethnic origins in Item A-17. Nine out of ten teachers reported the climate of professional relationships as being positive; they either considered colleagues of a different race as real friends or respected colleagues. About one in five among the black teachers reported distant or negative relationships with some white colleagues, while only one in ten white teachers reported less than cordial relationships with black colleagues. Table 50 indicates significant difference between black and white teachers in proportion of perceived positive-negative relationships.

Table 50

Frequency of Teacher Respondents Classified by Race and Nature of Response to Statement: *"Think of a colleague of a different race with whom you have had contact during your working day. Do you think of him/her the most as (1) a real friend, (2) a respected colleague, (3) a polite but distant co-worker, (4) someone who fails to be cooperative, or, (5) downright hostile."*

Response/Race	Black	White	Total
	N	N	N
Real Friendship	15	136	151
Respected Colleague	22	185	207
Polite but Distant Co-Worker	7	21	28
Failure to Cooperate or Hostile	2	4	6
Total	46	346	392

$\chi^2=8.1$; $p<.05$

As many middle school teachers reported cordial professional relations as elementary school teachers, as shown in Table 51. The disquiet which some middle school teachers reported with respect to pupils, then, were not reported to have affected their rapport with their colleagues.

Table 51

Frequency of Teacher Respondents by Grade Level Assignment to Statement: *"Think of a colleague of a different race with whom you have had contact during your working day. Do you think of him/her the most as (1) a real friend, (2) a respected colleague, (3) a polite but distant co-worker, (4) someone who fails to be cooperative, or (5) downright hostile."*

Response	Grade Level Assignment	
	K-5	6-8
	N	N
Real Friendship	111	46
Respected Colleague	136	74
Polite but Distant Co-worker	18	10
Failure to Cooperate	3	1
Hostile	2	-
Total	270	131

$\chi^2=8.5$; not significant

Preparation for Teaching Desegregated Classrooms

The teachers of District 65 schools were offered inservice training and summer programs in order to prepare them to deal with and understand the cultural and educational problems associated with desegregation. These programs were funded by the U. S. Office of Education, under the provisions of Title IV, section 405 of the Civil Rights Act of 1964.

Of the teacher respondents to the 1970 teacher questionnaire, 42 percent had participated in at least one summer institute program, as shown in Table 52.

Table 52

Frequency of Teacher Respondents Classified by Grade Level Assignment and Participation in District 65 Summer Institutes

Grade Level Assignment	In Service Duration				Total
	No Response	None	One Summer	Two or more Summers	
K - 5	2	143	82	48	275
6 - 8	1	89	32	12	134
Total	3	232	114	60	409
Percent	*0.7*	*56.7*	*27.9*	*14.7*	*100*

A majority of the teacher respondents who attended summer institutes rated their programs as being helpful or of great value in making the transition to integrated classrooms. Table 53 indicates more K-3 and 6-8 teachers rated the summer institutes to be of value than 4-5 teachers.

Table 53

Frequency of Teacher Responses to the Question: *"How much do you feel the summer institute helped you in understanding and teaching your black pupils in integrated classrooms?"*, Classified by Grade Level Response

Response	Grade Level Assignment			Total
	K-3	4-5	6-8	N
Of great value or helped some.....	52	17	40	109
No response.....	55	33	89	177
Caused unnecessary apprehension.....	2			2
Total	109	50	129	288

χ^2=10.9; p<.05

In general, the youngest, least experienced teachers, and those over forty-six years of age, felt they had benefited most from the in-service training. There appeared to be no differences between black and white teachers in the rating of summer institute programs. Tables 54 and 55 list the response to a question on the value of summer institutes classified by respondent age and race, respectively.

Table 54

Frequency of Teacher Responses to the Question: *"How much do you feel the summer institute helped you in understanding and teaching your black pupils in integrated classrooms?"*, Classified by Age Group

Age Group Response	Of great value or helped some	Made no difference or caused unnecessary apprehension
Under 26	21	1
26-35	28	7
36-45	35	13
46-55	34	4
Over 56	29	2
Total	147	27

χ^2=10.2; p<.05

Table 55

Frequency of Teacher Responses to the Question: *"How much do you feel the summer institute helped you in understanding and teaching your black pupils in integrated classrooms?"*, Classified by Nature of Response and Race of Respondent

Response	White	Black
"Institute of Great Value"	67	13
"Helped Some"	58	8
"No Difference"	12	12
"Caused Unnecessary Apprehension"	3	-
"No Response"	211	22
Total	351	55

$\chi^2=1.7$; d.f.=4

Summary

The teachers in District 65 schools were traditionally reputed to have been, and remain, a well-qualified and experienced group of professionals. The teaching as well as administrative staff has been completely integrated at all levels. Preparation for the transition from segregated to integrated classrooms was made by a series of summer institutes, in which many Evanston teachers participated.

The teachers were asked to evaluate the social, academic, and disciplinary aspects of their desegregated classrooms as they functioned in 1970, three academic years after the start of desegregation. On the whole, the teachers rated the academic progress of students and social patterns within their classes very favorably. There was, however, especially among older teachers and middle school teachers, a general awareness of some possible problem areas. They expressed concern about the possible dangers inherent in dual disciplinary standards. There were virtually no important, statistically significant differences between these general points of view of black and white teachers.

Teachers rated black and white pupils favorably in relative values on a semantic differential. Black and white pupils were perceived as being equal in popularity and fairness. On a number of other dimensions, however, significant differences were found in teacher perception, always in favor of white students. There was no significant difference between the perception

of black and white teachers, although black teachers tended to view all pupils more favorably.

Although greater numbers of older teachers and middle school teachers expressed concern with regard to behavior and discipline of pupils in desegregated classrooms, there were no differences among groups of District 65 teachers when they were asked to assess their relationships with teachers of other ethnic origin. While somehwat greater proportion of black teachers reported poor rapport with white colleagues than vice versa, there was general agreement that relationships between black and white colleagues were excellent.

SOME PARENT REACTIONS AND COMMUNITY EVENTS SINCE DESEGREGATION

The impact of desegregation upon the lives of school children and their teachers has been described. There have also been many changes outside the schools in the four years since desegregation. Attitude changes in the community were less amenable to measurement, however, than those of pupils and teachers. It was therefore necessary to rely partially upon unobtrusive measures recommended by Webb et al[1], such as social patterns and archival records.

Parents' Reactions to Desegregated Schools

When the original plans were formulated to desegregate Evanston elementary schools in 1966, a door-to-door survey was conducted among black parents whose offspring were to be bussed to new schools away from their own neighborhoods. Ninety-eight percent of the parents said, at that time, that their families were willing to submit to the inconvenience of bussing so that they could benefit from quality integrated schooling. In the spring of 1971, a questionnaire covering some of the same points was mailed to a sample of black parents.

Parent Questionnaire Findings

The 20 percent sample of parents were classified into parents of high and low achieving black pupils. Achievement level was defined by choosing the high and low deciles of composite STEP scores of all black pupils in grades 4, 6, and 7 in Fall 1970. A total of 141 parent questionnaires were sent. The response rate was 31 and 17 percent, respectively,for high and low achievers' parents. Table 70 , Appendix B, summarizes response frequencies. The numbers were too small to warrant statistical analyses, but some tenuous trends were observed.

High achievers' parents were generally higher in socioeconomic status than low achievers' parents. High achievers were also more likely to have been in integrated schools before 1967, so that they had to

[1]Eugene J. Webb, Donald T. Campbell, Richard D. Schwartz, and Leo Sechrest, *Unobtrusive Measures: nonreactive research in the Social Sciences*. Chicago: Rand McNally and Company, 1968.

adjust to a new school or to be bussed less often. These findings were confirmed by classifying the occupation categories of fathers of transferred and stayed black pupils. Table 56 shows that there were significantly more fathers of pupils who stayed in integrated schools in the professional, managerial, and skilled workers categories than fathers of transferred pupils. It would appear that, despite every effort to be impartial in desegregation assignment, housing patterns within the black community resulted in the less affluent children being bussed, while the socioeconomically more advantaged pupils who lived in integrated neighborhoods were subject to less upheaval. There is, therefore, all the more reason to consider the relative smooth desegregation process and continued academic growth of the bussed black children to be a genuine achievement.

Table 56

Frequency of Father's Occupation of Black Pupils Classified by Desegregation Treatment and Occupation Category

Job/Desegregation Treatment	Stayers	Transferred	Total
Laborer or domestic worker	85	78	163
Semi-skilled worker	67	59	126
Clerical and sales or service worker	50	24	74
Skilled and protective worker	67	50	117
Sales agent or representative	25	7	32
Technician	8	5	13
Manager or foreman	11	3	14
Official	5	0	5
Professional	36	4	40
Not employed	9	3	12
Total	363	233	596

$\chi^2=39.7$; $p<.01$

Among all respondents, high and low achieving, two parents reported that their children were still uncomfortable in their receiving schools. Two parents said their children had experiences with a teach-

er who treated them unfairly. Three parents considered getting their children to the bus each morning an inconvenience. For the rest, comments were overwhelmingly favorable to school desegregation in Evanston.

Parent Participation in PTA

Almost every PTA meeting or other school function in District 65 is integrated these days, even though many black parents must go outside their own neighborhood to attend. Figure 37 demonstrates the increasing proportions of black parents who worked in school related organizations, either as board members of the 20 PTAs, or as members of the coordinating Evanston Council of Parents and Teachers. There has been a threefold increase in the number of black officers in school organizations.

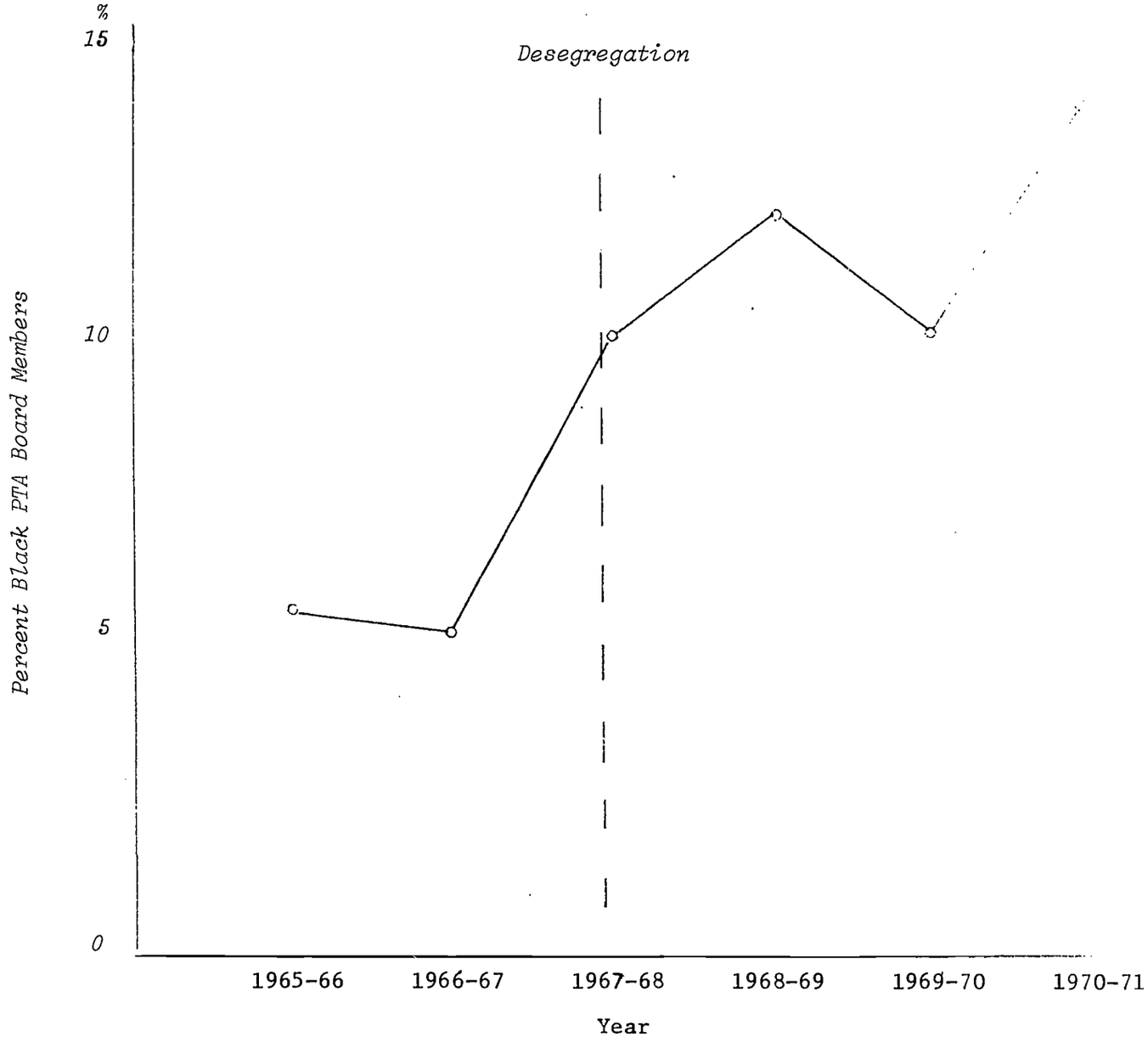
Desegregation and the Community

An educational reorganization which involved over 10,000 school children could not be accomplished without support from as well as profound effect upon the surrounding community. The election of District 65 caucus-nominated pro-integration school board members during the late 1960's was indicative of substantial citizen support for a principle which was ripe for implementation. During the succeeding years diverse opinions, held by a heterogeneous citizenship, were expressed in letters to the weekly *Evanston Review* over such issues as bussing, the school lunch program, discipline, and particularly over a board decision not to renew the superintendent's contract after June 1970.

The eventual settlement of this latter controversy, like the decision and plans for integration, came about through community choice expressed at the polls. An election for three new District 65 board members scheduled for April 1970 was made the instrument for a final decision. The incumbent board agreed not to seek a new superintendent until after the results of the board elections. The District 65 caucus had been the organization which drew up the uncontested list of candidates for the school board for over forty years. During that time, only two independent candidates had gained seats on the board without caucus support. The caucus-nominated candidates pledged to uphold the

Figure 37

Percent of Black Parents in District 65 Who Were PTA Board Members Before and After Desegregation in Fall 1967



board decision, while candidates of a newly organized Citizens for 65 promised to retain the superintendent, Dr. Gregory Coffin. The April turnout was the largest in the history of board elections: 26,738 votes were cast, compared with previous board elections in the range of 500 to 4,000 votes. The caucus candidates won by a majority of 51 percent of the votes cast, and the decision to seek a new superintendent committed to integrated education was upheld by the new board of education.

The election of two board members in the following year, April 1971, again resulted in a higher than usual turnout, with 13,203 votes cast. Three slates were offered to the voters. In addition to candidates recommended by the caucus and Citizens for 65, a new group, the Coalition of Independent Voters, supported an all-black slate of candidates. There was a difference of sixty-eight votes between the top vote-getting black candidate and one of the two caucus-supported winners. The broadened base of community participation in educational decision making, as seen in the vote records in Table 57, can be considered a healthy sign in a democratic form of government.

Table 57

Total and Foster-King Laboratory School Precinct[a] Votes Cast by District 65 Board Elections, 1961-1971

Date	Total Vote	Foster-King Lab School Vote	Date	Total Vote	Foster-King Lab School Vote
April 1961	458				
April 1962	3,618[b]		April 1967	1,283	46
April 1963	3,357		April 1968	2,144	28
April 1964	6,821[b]		April 1969	4,192	234
April 1965	515	16	April 1970	26,738	1,670
April 1966	3,367[b]	364	April 1971	13,203	836

[a]Precinct serving primarily black voters, which began in 1965

[b]Concurrent with tax vote or bond issue referendum

Integration in the Community

Parallel to integration within District 65 schools, all sectors of Evanston community life has proceeded to increase in diversity. The institutions for higher learning, the City Council, neighborhood and

service organizations have continued to seek increased participation of minority group members.

Black aldermen and women have won seats to the City Council to bring special interests of their wards to the attention of the community at large. A black assistant city manager was appointed to help with long range planning and coordination of the municipal machinery. A reorganization of the Police Department has placed top priority on police community relations. A Fair Housing Review Board was formed to investigate complaints of violations of the Fair Housing Ordinance which prohibited discrimination in real estate transactions. The semi-autonomous Human Relations Commission was established by ordinance in 1968 to replace an earlier community relations commission. The executive director and commission members act together as a conciliatory agency between contending groups and individuals in order to resolve conflicts peaceably.

To a certain extent, the strident overtones sometimes heard in council chamber and board rooms or seen in the papers, are signs of increased channels of communications between groups. Major disagreements have consistently been settled by negotiation or in the voting booths. The broadened base of community power can be considered a positive gain for a participatory democratic form of government.

Summary

Desegregation of all public schools has had an impact upon community life. There has been an increase in the number of black parents participating in school-related organizations and activities. PTAs, the Evanston Council of Parents and Teachers, and nominating groups for school board members have all shown broadened membership.

A questionnaire sent to a sample of black parents asked for their reactions after four years of desegregated schools. Almost all parents strongly favored the educational experience in desegregated schools. Only three respondents felt their children have been inconvenienced by the exigencies of riding a bus daily to school.

Many channels have been established within Evanston to improve communications between groups and to settle by peaceable means any conflicts which may arise.

CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE STUDY

A recent publication, *Planning Educational Change: Integrating the Desegregated School*,[1] published by the U.S. Office of Education, suggested the following criteria for judging whether a school system can be considered integrated:

1. Academic instruction should ensure the academic growth of blacks, browns, and whites alike, not only by accepting individual differences, but by using differences as a basis for learning about each other.
2. Extracurricular activities and symbolic offices of the school should not be dominated by members of a particular racial or cultural group. Clubs and associations should be representative of the diverse school population.
3. Social relationships among people of different races should not be considered apart from all other activities.
4. Faculty and administrative policies and views should foster an equal non-stratified society. A close relationship between the school and the community can facilitate community integration.

Academic Instruction

Using these criteria, what would be the judgment of the degree of attainment of integration within District 65 schools? With respect to academic instruction, District 65 has manifested resourcefulness and flexibility in the methods and materials of teaching. Curriculum changes include many multi-ethnic textbooks replacing older books representing traditional points of view. Black history and culture is offered to all pupils at all grade levels. Individually prescribed instruction, ungraded classes and team teaching have been introduced to take individual differences into account.

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[1]Mark Chesler, Carl Jorgensen, and Phyllis Erenberg. *Planning Educational Change: Integrating the Desegregated School*. Washington: Government Printing Office, 1970.

The success of these many approaches are reflected by the small but positive changes in black pupils' achievement levels in elementary school. Mathematics scores improved consistently in elementary school for blacks as well as white pupils.

There have been less successful efforts as well. In the middle schools, black pupils' average achievement levels among successive grade cohorts have dropped in most subject areas. White pupils in eighth grade showed a decline in arithmetic and science test scores. In addition, teachers in middle schools report more cause for concern with respect to social and disciplinary aspects of integrated schooling. Yet integration per se probably could not be associated with these problems since middle schools have been desegregated for years.

Extracurricular Activities

When extracurricular activities are considered, the schools have made a positive effort to include all pupils. The black pupils who are bussed to majority white schools have been encouraged to participate in after school activities. Bus schedules have been modified to permit late return to their homes. Other activities such as school sponsored scout troops, orchestra and band, Theater 65 conducted jointly by District 65 and Northwestern University Department of Drama, special interest clubs, and intramural sports have all become more diverse im membership during the past few years.

According to Evanston teachers, black pupils were as popular as white pupils and they were as often elected to school offices. Appointed symbolic offices such as student teachers, fire marshalls and patrol boys and girls have been carefully apportioned among groups. Furthermore, the faculty sponsors for extracurricular activities have not been limited to any single sex or race.

Social Relationships

Since desegregation in 1967, social relationships among individuals of different ethnic backgrounds have been established at every age level. District 65 staff report the growth of black-white friendships among pupils as well as teachers. Of course, conflicts arise as well,

but all are learning how to settle disagreements peaceably without undue emphasis on racial differences.

A test of social relations among elementary school classrooms showed that even second graders were able to plan and carry out a structured group activity using democratic methods. Black pupils contributed as much as white pupils in the planning as well as operational phases of the task.

School and Community Relations

Many community organizations have sought a widened base of support among diverse groups within the city. A citywide controversy concerning school administration spurred the organization of many local groups of mixed membership. Some of these groups which began as political action units have fostered closer social relations among individuals as well. While there have been many points of difference, black and white citizens of Evanston have begun to learn to give attention to each other's points of view and to seek solutions to common problems within the existing structures of political and social institutions.

It would seem that Evanston has made a start toward integration, according to criteria published by the office of education. Problems will no doubt continue to occur, but channels have been established for better intergroup communications and procedures for solving differences within the framework of a just and democratic community.

Recommendations for Future Study

A three year study, at first glance, should be adequate to assess the long term impact of an integration program upon a school system and its community. In practice, however, data accumulated in the present study have served more to raise new questions than to provide definitive answers. The story of integration in the District 65 schools is still unfolding, and continued study will be needed to determine the long range effects of the many changes in the school and the city. Some specific areas which have shown tantalizing aspects which might profitably be explored in the future include:

(1) Continued longitudinal monitoring of the academic achievement of various subgroups of District 65 pupils in all subject areas, in elementary as well as in middle schools.

For example, a close watch should be kept on the progress of middle school pupils, including item analysis of standarized tests, especially among the less able, in Science and Mathematics, in order to be alert to possible deterioration in academic performance; so that appropriate adjustments in teaching methods or curricula could be made.

(2) Further study of the attitude to self and school of black and white pupils in the integrated classroom setting. Within and between school comparisons may serve to isolate successful practices in promoting a cooperative and confident classroom atmosphere.

(3) Continued study of the underlying causes for the observed differences between black boys and girls of middle school level in reading and writing achievement, in sense of control over their environment, and in teachers' perception of their attitudes towards school.

(4) Studies focusing upon the relationship between socioeconomic indices such as parental job status and housing value and school experiences of transferred and bussed pupils. It might be postulated that pupils from less affluent backgrounds would find transferring to a school in a high socioeconomic neighborhood a more stressful experience than pupils who attend a school in a neighborhood resembling their own.

(5) Reanalysis of available teacher data and continued study including interviews with teachers who have left District 65 schools during the period immediately preceeding and since desegregation, to determine problems encountered by teachers of integrated classroom and find ways to ameliorate the problems.

(6) Parents of low achieving black pupils were found to be less likely to answer a questionnaire about school experiences than high achievers' parents. A more intensive study could be designed in order to determine whether the observed phenomena was associated with a simple non-response tendency, or whether it was related to implicit dissatisfaction with how desegregation has affected their children.

Summary

A recent publication from the U. S. Office of Education suggested that four conditions must be met before a desegregated school system could be considered to be truly integrated. They are:

1. Academic instruction should ensure the intellectual growth of all pupils by accepting individual differences and using differences as a basis for learning about each other.
2. Fair distribution of symbolic offices and extracurricular activities among all the diverse groups of the school population.
3. Consider as an integral part of school activities the development of amicable social relations.
4. Faculty administrative policies and views should foster an egalitarian and nonstratified society.

From the evidence described in the body of this report, District 65 Schools have made steady progress towards achieving the goal of a completely integrated school system. Along a parallel course, the community of Evanston has made considerable gains in the improvement of communications between races, and ensuring a more equitable distribution of power among its diverse population.

The study has generated a number of questions which must await future research for answers. Further study in a number of areas were recommended, including aspects of pupil attitude and achievement, the relationship between socioeconomic status and pupil performance in the desegregated classroom setting, teacher attitude to desegregation, and the reaction of parents of pupils from different ability levels to the academic and social changes associated with integration.

APPENDIX A:

INSTRUMENTS

SOCIAL REACTION INVENTORY

Social Reaction Inventory

Directions:

This is a measure of personal belief. There are no right or wrong answers. Each item on the following answer sheet consists of two sentences labeled a or b. Please choose the one sentence which you personally believe to be more true by writing either a or b in the square to the left of the numbers.

_ 1 a. The idea that the teachers are unfair to students is nonsense.

b. Most students don't realize the extent to which their grades are influenced by accidental happenings.

_ 2 a. No matter how hard you try, some people just don't like you.

b. People, who can't get others to like them, don't understand how to get along with people.

_ 3 a. Heredity plays the major role in determining personality.

b. It is one's experiences in life which determine what they're like.

_ 4 a. In the case of a well prepared student, there is rarely such a thing as an unfair test.

b. Often exam questions are so unrelated to course work that studying is really useless.

_ 5 a. Becoming a success is a matter of hard work, luck has little to do with it.

b. Getting a good job depends mainly in being in the right place at the right time.

_ 6 a. There are certain people who are just no good.

b. There is some good in everybody.

_ 7 a. One should always be willing to admit his mistakes.

b. It is usually best to cover up one's mistakes.

- 8 a. Sometimes I can't understand how teachers arrive at the grades they give.

b. There is a direct connection between how hard I study and the grades I get.

_ 9 a. There is too much emphasis on athletics in school.

b. Team sports are an excellent way to build character.

_10 a. What happens to me is my own doing.

b. Sometimes I feel that I don't have enough control over the direction my life is taking.

The Rockefeller Foundation Sponsored
EVANSTON INTEGRATION STUDY
Teacher Questionnaire

This questionnaire has been designed to obtain information about your background and experiences in teaching in the District 65 schools. Your cooperation in completing all sections in a frank and open spirit will add valuable information to the Evanston Integration Study. Analyses will be undertaken only on a group basis; information from a single questionnaire will not be used by itself. All information will be held in confidence and processed by the research department of Educational Testing Service.

There are three sections to the questionnaire, each with its own set of directions. Please read each carefully, and answer it independently without regard to whether you think others will agree with you. This questionnaire will be collected and sealed in your presence at the end of this session. If you prefer to answer anonymously, the space for your name can be left blank.

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Col.

1. I.D. *(Do not write anything here)* _____

2. Name _____ _____
Last First

3. Grade now teaching _____ 5-6

4. School _____ 7-8

SECTION A: Background Characteristics

Please answer by circling ONE of the categories below.

5. Sex/Race 9

White male = 1
White female = 2
Black male = 3
Black female = 4
Other male = 5
Other female = 6

6. What was your age on your last birthday? 10

Under 26 = 1
26 to 35 = 2
36 to 45 = 3
46 to 55 = 4
Over 56 = 5

7. What is your highest academic degree? 11

Bachelors = 1
B.A. + 30 but no Masters = 2
Masters = 3
Masters + 30 = 4
Masters + 60 = 5
Doctorate = 6
Other = 7

8. What subject areas are you now teaching? 12

Most or all subjects at my grade level = 1
Language Arts and/or Social Sciences = 2
Science and/or Mathematics = 3
Foreign Language = 4
Health and Physical Education = 5
Music, Art or Drama = 6
Allied Arts = 7
Other = 8

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Col.

9. What was your undergraduate major? — 13

Humanities	= 1
Social Science	= 2
Education	= 3
Natural Science	= 4
Mathematics	= 5
Fine Arts	= 6
Foreign Language	= 7
Health and Physical Education	= 8
Other	= 9

10. What type of Undergraduate Institution did you attend? — 14

Private non-denominational	= 1
Private Protestant	= 2
Private Catholic	= 3
State Teachers or Normal	= 4
State College	= 5
State University	= 6
Other	= 7

11. How would you rate the academic level of your college among all the nation's colleges and universities? — 15
(Give your best estimate)

Top 10%	= 1
11-25%	= 2
26-50%	= 3
51-75%	= 4
76-90%	= 5
Lowest 10%	= 6

12. How many years of full-time teaching experience have you had as of June, 1970? — 16

1-3 years	= 1
4-6 years	= 2
7-10 years	= 3
11-16 years	= 4
17-20 years	= 5
21-30 years	= 6
Over 31 years	= 7

13. How many years have you taught in District 65 schools? — 17

1-3 years	= 1
4-6 years	= 2
7-10 years	= 3
11-16 years	= 4
17-20 years	= 5
21-30 years	= 6
Over 31 years	= 7

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Col.

14. How many years have you taught in your present school? *(See question 4)* — 18

    1-3 years = 1
    4-6 years = 2
    7-10 years = 3
    11-16 years = 4
    17-20 years = 5
    21-30 years = 6
    Over 31 years = 7

15. Did you attend any of the Evanston Summer Institutes or comparable training programs that offer special training in communication skills and human relations? — 19

    No = 1
    Yes, one = 2
    Yes, two or more = 3

16. If you answered "Yes" to the previous question, how much do you feel the Summer Institutes helped you in understanding and teaching your black pupils in the integrated classrooms? — 20

    It was of great value = 1
    It helped some = 2
    It made no difference = 3
    It made me unnecessarily apprehensive = 4

17. Think of a colleague of a different race with whom you have had contact during your working day. Do you think of him/her the most as: — 21

    A real friend = 1
    A respected colleague = 2
    A polite but distant coworker = 3
    Someone who fails to be cooperative = 4
    Downright hostile = 5

SECTION B: Teaching in a Desegregated School

The following statements have been devised to assess teachers' attitudes toward various aspects of working in a desegregated school system. There are no right or wrong answers. The best answer is the one which reflects your true personal feelings about the issue being considered.

To answer the questions, choose the statement below *(in italics)* which corresponds most clarly with your personal reaction, and place the corresponding number in the series immediately to the right of each statement.

1 = Strongly agree
2 = Agree
3 = Mildly agree
4 = Mildly disagree
5 = Disagree
6 = Strongly disagree

	Strongly agree	*Agree*	*Mildly agree*	*Mildly disagree*	*Disagree*	*Strongly disagree*	For ETS use only Col.
Academic Aspects of Desegregation							
1. Teaching is made more difficult by the differences in academic aptitude between black and white pupils.	1	2	3	4	5	6	22
2. The parents of some District 65 pupils fail to show enough interest in their children's school work.	1	2	3	4	5	6	23
3. There is too much parental pressure on some pupils for good grades, without regard to their native capabilities.	1	2	3	4	5	6	24
4. Some very able black pupils are challenged to perform better in school as a result of desegregation.	1	2	3	4	5	6	25
5. Some black pupils are discouraged by the academic competition of a desegregated school, and give up trying.	1	2	3	4	5	6	26
6. Board-superintendent controversies, such as have occurred in Evanston, affect the learning environment for some pupils adversely.	1	2	3	4	5	6	27
Social Patterns in School							
1. Black and white pupils work well together in classroom activities.	1	2	3	4	5	6	28
2. Black and white pupils happily play together during free time and recess.	1	2	3	4	5	6	29
3. Black and white pupils share tables and socialize during lunch hour.	1	2	3	4	5	6	30
4. Genuine friendships are developing between black and white boys.	1	2	3	4	5	6	31

	Strongly agree	Agree	Mildly agree	Mildly disagree	Disagree	Strongly disagree	For ETS use only Col.
5. Genuine friendships are developing between white and black girls.	1	2	3	4	5	6	32
6. Integration during the lower grades is an easy way to prevent future polarization between races.	1	2	3	4	5	6	33
7. Black pupils have been elected to leadership positions in classrooms.	1	2	3	4	5	6	34
Disciplinary Problems in District 65 Schools							
1. Black and white pupils do not have the same expectations for how they should behave in school.	1	2	3	4	5	6	35
2. Pupils from disadvantaged homes do not follow the same guidelines in work and play as middle class children.	1	2	3	4	5	6	36
3. Minority children are less responsive to traditional rewards and sanctions, such as praise and being sent to the principal's office.	1	2	3	4	5	6	37
4. I feel there is a dual standard for dealing with black and white pupils in disciplinary matters, with a less demanding set of expectations and requirements for the black pupils.	1	2	3	4	5	6	38
5. I believe a single standard of behavior should be used for both black and white pupils.	1	2	3	4	5	6	39
6. Innovative approaches to dealing with special disciplinary problems have been tried by teachers and administrators.	1	2	3	4	5	6	40
7. Black and white children believe they are all treated equally in disciplinary situations.	1	2	3	4	5	6	41
8. Parents seem to believe their children are treated equally in disciplinary situations.	1	2	3	4	5	6	42

SECTION C: Semantic Differential

Below are two identical descriptive scales for rating your pupils. Please rate each type of pupil, black or white, by placing an "X" at the point on the line which most closely describes your own feelings. If you feel the pupils are extreme on any specific characteristic, use one of the end points. If you think they are moderate, use one of the middle points. Please rate each pupil group for all of the 12 items. There are no right or wrong responses. We are interested in your spontaneous, intuitive descriptions, so please don't puzzle at length over individual items.

Think of the black pupils you have taught within the last three years in District 65. Rate them on the following qualities:

									For ETS use only
									Col.
Hostile	:	:	:	:	:	:	:	Friendly	50
Fair	:	:	:	:	:	:	:	Unfair	51
Cooperative	:	:	:	:	:	:	:	Contentious	52
Indifferent	:	:	:	:	:	:	:	Involved	53
Follower	:	:	:	:	:	:	:	Leader	54
Unpopular	:	:	:	:	:	:	:	Popular	55
Bright	:	:	:	:	:	:	:	Dull	56
Aggressive	:	:	:	:	:	:	:	Mild	57
Conscientious	:	:	:	:	:	:	:	Casual	58
Tough	:	:	:	:	:	:	:	Sensitive	59
Composed	:	:	:	:	:	:	:	Excitable	60
Group Dependent	:	:	:	:	:	:	:	Self-Sufficient	61

Think of the white pupils you have taught within the last three years in District 65. Rate them on the following qualities:

									For ETS use only Col.
Hostile	:	:	:	:	:	:	:	:	Friendly	65
Fair	:	:	:	:	:	:	:	:	Unfair	66
Cooperative	:	:	:	:	:	:	:	:	Contentious	67
Indifferent	:	:	:	:	:	:	:	:	Involved	68
Follower	:	:	:	:	:	:	:	:	Leader	69
Unpopular	:	:	:	:	:	:	:	:	Popular	70
Bright	:	:	:	:	:	:	:	:	Dull	71
Aggressive	:	:	:	:	:	:	:	:	Mild	72
Conscientious	:	:	:	:	:	:	:	:	Casual	73
Tough	:	:	:	:	:	:	:	:	Sensitive	74
Composed	:	:	:	:	:	:	:	:	Excitable	75
Group Dependent	:	:	:	:	:	:	:	:	Self-Sufficient	76

COMMENTS: Please express any special feeling you have with respect to your own experiences with integration in District 65.

Card Code = 41 79-80

Parent Questionnaire

Dear District 65 Parent or Guardian:

This questionnaire is part of a study on the outcome of Evanston school integration. The study is being conducted by District 65 and Educational Testing Service.

Please cooperate by answering all the questions as frankly as you can. We are interested in learning how integration has affected your child and your family.

Individual answers will be kept confidential, and you are not asked to identify yourself by name on the form. Your help in this important study will be very much appreciated.

Please return the completed form to Educational Testing Service (ETS) in the stamped addressed envelope provided, as soon as possible.

Sincerely yours,

Evanston Integration Study

Educational Testing Service
960 Grove Street
Evanston, Illinois 60201

JH:ASB

Part 1: Your Child

1. Did your child transfer to another grade school in District 65 as a result of the 1967 integration plan?

   -- yes
   -- no

2. Did your child take a bus to his or her new school?

   -- yes, provided by District 65
   -- yes, paid by family
   -- no, still walked to school

3. What grade is your child in now? _____

4. What school does your child now attend? _____

5. If your child is now in Junior High, which elementary school did he go to after September 1967? _____

6. If your child changed grade school as a result of integration, how long did it take for him or her to adjust to the new elementary school?

   -- adjusted immediately
   -- it took some weeks
   -- it took several months
   -- still not comfortable about situation

7. If your child was bussed by District 65, how has bussing affected his life?

   -- enjoys ride
   -- makes no difference
   -- inconvenienced somewhat
   -- is a real drag

8. Looking back over the three years of integrated schooling in Evanston, how does your child feel about his or her integrated school experiences?

   -- likes integrated school better
   -- doesn't make much difference
   -- liked old school better

9. How has your child's school work progressed since integration?

   -- has improved significantly
   -- has improved some
   -- stayed about the same
   -- has gone down some
   -- has gone down significantly

10. In general, how does your child feel about his or her teachers?

    -- they understand and like him or her
    -- they are fair to him or her
    -- they are not very interested in him or her
    -- they pick on him or her unfairly

Please turn over to page 2

Part II: Your Family

1. Who is filling in this form? (check one)

-- father
-- mother
-- grandmother
-- grandfather
-- other relative (please state relationship to child)
-- other adult (please describe)

2. How many adults are there living in your home? (list number if more than one in each category.)

-- father
-- mother
-- grandmother
-- grandfather
-- aunt
-- uncle
-- other (how many?)

3. How many children are there living at home?

-- one
-- two
-- three
-- four
-- five or more

4. What kind of work does head of household do? Check one, closest category.

-- not working
-- workman, laborer: factory filling station attendant, longshoreman, domestic work
-- semiskilled worker: such as machine operator, bus or cab driver, meat cutter, etc.
-- skilled worker: craftsman or foreman; baker, carpenter, plumber, plasterer, etc.
-- clerical or sales: clerk, mail carrier, etc.
-- technical: such as draftsman, surveyer, dental technician
-- managerial: such as sales manager; officer in large company
-- professional: accountant, artist, clergyman, doctor, teacher, etc.

5. Do you own or rent your own home or apartment?

-- rent
-- own

6. How many years of schooling did mother or female head of household complete?

-- grade school
-- some high school
-- high school graduate
-- technical or business school after high school
-- some college
-- graduated from four year college
-- graduate or professional school

7. Which of the following do you have in your home? (check all that apply)

-- dictionary
-- musical instrument
-- map of the U. S.
-- daily newspaper
-- weekly newsmagazine
-- encyclopedia

8. About how many books are there in your home?

-- 1-10
-- 11-50
-- 51-100
-- over 100

9. How would you describe your neighborhood?

-- an above average integrated area
-- an above average segregated area
-- an average integrated area
-- an average integrated area
-- an average segregated area
-- a below average integrated area
-- a below average segregated area

10. How does your family compare to the other families in the neighborhood?

-- much better off
-- better off
-- about the same
-- worse off
-- much worse off
-- don't know, not sure

Part III: School and Family Relations

1. How often do you talk to your child about his day in school?

-- occasionally
-- once or twice a week
-- every day

2. How often do you check on your child's homework?

-- occasionally
-- once or twice a week
-- daily

3. How important do you feel it is for your child to do well in school?

-- unimportant
-- fairly important
-- important
-- very important

4. How far do you expect your child to go in his or her schooling?

-- through grade school
-- high school
-- some college
-- finish college
-- graduate or professional school

Please turn over to page 4

5. How many conferences with your child's teacher have you or another adult member of your family had since September 1970?

-- none
-- one
-- two
-- three or more

6. How many PTA meetings at your child's school have you or another member of your family attended since September 1970?

-- none
-- one
-- two
-- three or more

7. Have you attended any District 65 Board of Education meetings since September 1970?

-- no
-- yes, one
-- yes, two
-- yes, three or more

8. Have you worked on any PTA activities or held office in the PTA during the time from 1967 up to the present time?

-- no
-- yes, during the first year
-- yes, have continued throughout the three year period?

9. Did you vote during the last District 65 referendum?

-- yes
-- no

10. Are you active in Citizens for 65 or CIV or any of the school oriented citizens' groups?

-- no
-- yes

Please use space below for any additional comments on problems or experiences you have had with the effects of integration on your child and family.

APPENDIX B:

RESULTS

Academic Achievement Tests

Distribution Analyses

Table 58

EVANSTON 67 COOP LISTENING 042571 — SCHOOL D.65 — GRADE 1

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
49									
48						1		1	1
47									
46									
45			[illegible]		3			3	3
44				2		2		2	2
43			4	4	4	4		8	8
42			4	6	4	6		10	10
41			6	10	6	10		16	16
40		1	5	14	5	15	1	19	20
39	1	1	10	7	11	8	2	17	19
38		1	15	12	15	13	1	28	29
37	2		12	15	14	15	2	27	29
36	1		26	13	27	13	1	39	40
35	1		19	21-	20	21	1	40	41
34	5	1	16-	15	21	16	4	35-	37
33		3	16	26	16	29-	3	42	45-
32	2	2	26	21	28-	23	4	47	51
31	5	1	18	18	23	19	6	36	42
30	2	2	17	16*	19	18	4	33	37
29	3	4	28	20	31	24	7	48*	55
28	2	9	32*	17	34	26*	11	49	60
27	4	2	24	27	28-	29	6	51	57*
26	6	6-	25	17	33*	23	14	42	56
25	14-	5	18	16-	32	21	19-	34	53
24	11	10	10	11	21	25	21	28-	49
23	8	9	13-	14	21	23-	17	27	44
22	7	5*	11	9	20	15	15-	20	35
21	11*	9	17	8	28-	17	20*	25	45-
20	11	6	11	7	22	13	17	16	33
19	6	5	12	7	18	12	11	19	30
18	6	6-	11	5	17	15	12	20	32
17	5	2	8		15	2	10-	8	18
16	7-	7	7	7	17	14	15	16	31
15	7	2	4	3	11	5	9	7	16
14	5	5	4	5	12	11	13	10	23
13	3	2	5	2	8	4	5	7	12
12	5	4	4	3	9	7	9	7	16
11	2		2		4		2	2	4
10	1	1		1	1	2	2	1	3
9	2	1	2	1	4	2	3	3	6
8					3	4	4	3	7
7			1		2		1	1	2
6									
5									
4									
3							1		1
2	2	1			3	1	1	1	4
1									
0	5	6	5	9	10	15	11	14	25
NUMBER	160	117	457	391	517	508	277	848	1125
MEAN	20.7	21.9	29.2	29.5	26.3	27.9	21.3	28.8	27.0
ST.DEV.	6.[illegible]	[illegible]	7.[illegible]	7.[illegible]	8.1	7.9	6.9	7.5	8.0
10 PCTL	12.5	13.3	17.2	19.4	15.7	16.9	12.9	18.4	16.1
25 PCTL	16.3	17.7	23.3	24.5	20.7	22.6	16.6	24.1	21.4
MEDIAN	21.1	22.3	28.5	29.8	26.6	27.[illegible]	21.5	29.0	27.2
75 PCTL	[illegible]	26.1	34.0	[illegible]	32.2	33.6	25.4	34.4	32.9
90 PCTL	30.[illegible]	[illegible]	37.[illegible]	[illegible]	36.[illegible]	35.1	29.3	36.2	37.3
RBI/S.D.	-0.447	-0.166	-3.126	2.105	[illegible]	[illegible]	-[illegible].427	-4.124	-3.082
SKEWNESS	-0.087	-0.038	-0.[illegible]	-0.323	[illegible]	-0.219	-0.072	-0.347	-0.275
MAX PIGS	1.000	1.000	0.162	0.147	0.194	0.245	1.000	0.059	0.105
KURTOSIS	3.[illegible]	3.[illegible]	2.[illegible]	[illegible]	[illegible]	2.647	3.4[illegible]	2.815	2.695

EVANSTON 68 COOP LISTENING 042671 — SCHOOL D.65 — GRADE 1

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
49									
48									
47				1		1		1	1
46									
45			2	2	2	2		4	4
44			1	3	1	3		4	4
43	1		4	4	5	4	1	8	9
42		1	6	7	8	8	1	15	16
41			12	11	12	11		23	23
40		1	14	9	14	10	1	23	24
39			16	12	16	12		28	28
38			19	12	19	12		31	31
37			16	18	16	18		34	34
36		2	28	25	28	27	2	53	55
35	3	1	24-	16-	27	17	4	40-	44
34	2	2	19	21	21-	23-	4	40	44-
33			23	17	23	17		40	40
32	1		19	25	20	25	1	44	45
31		3	20	25	20	26	3	45	48
30	7	2	28-	24*	35	26	9	52*	61
29	6	5	22*	22	28	27-	11	44	55
28	2	5	19	23	21-	28*	7	42	49*
27	10	2	28	22	38*	24	12	50	62
26	6-	7-	25	14-	31	21	13-	39	52
25	7	7	18-	12	25	19	14	30-	44
24	8	6	7	18	15	24	14	25	39
23	13	6	16	8	29	14	19	24	43
22	6	9	12	12	18-	21-	15	24	39-
21	10*	4*	13	9	23	13	14*	22	36
20	6	11	11	7	17	18	17	18	35
19	16	7	7	3	23	10	23	10	33
18	4	6	9	4	13	10	10	13	23
17	4-	5	9	2	13	7	9-	11	20
16	7	7-	6	6	13	13	14	12	26
15	2	7	7	7	9	14	9	14	23
14	5	2	6	2	11	4	7	8	15
13	5	3	5	4	10	7	8	9	17
12	5	3	2	2	7	5	8	4	12
11	3		2	3	5	3	3	5	8
10	2	2	2		4	2	4	2	6
9	1	3	2	1	3	4	4	3	7
8		2				[illegible]			[illegible]
7	[illegible]		2						4
6		1	1	1	1	2	1	2	3
5				3		3		3	3
4	1				1		1		1
3									
2		1				1	1		1
1									
0	4	2	1	2	5	4	6	3	9
NUMBER	145	123	484	417	629	540	268	901	1169
MEAN	21.4	21.2	29.1	29.3	27.5	27.9	21.3	29.5	27.7
ST.DEV.	6.5	7.0	7.9	7.6	8.3	8.3	6.7	7.8	8.3
10 PCTL	12.6	12.6	18.[illegible]	20.[illegible]	16.1	14.[illegible]	12.6	18.7	16.1
25 PCTL	17.3	16.5	24.6	25.5	21.5	22.3	16.8	25.0	21.9
MEDIAN	21.4	20.9	29.9	30.5	27.6	29.5	21.3	30.2	28.1
75 PCTL	25.8	25.5	35.[illegible]	35.[illegible]	34.1	34.1	25.7	35.5	34.1
90 PCTL	29.4	29.4	39.0	39.1	38.2	38.2	29.4	39.1	38.2
RBI/S.D.	0.294	0.798	-4.069	-4.932	2.345	-3.435	0.761	-6.334	-4.057
SKEWNESS	0.060	0.176	-0.453	-0.592	-0.229	-0.362	0.117	-0.517	-0.291
MAX PIGS	1.000	1.000	0.063	0.041	0.182	0.085	1.00[illegible]	0.025	0.061
KURTOSIS	3.215	3.341	2.684	3.369	2.420	2.745	3.309	2.[illegible]	2.57[illegible]

Table 58-Continued

EVANSTON 69 COOP LISTENING 042070 SCHOOL D.65 GRADE 1

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
47			2		2			2	2
46			1	1	1	1		2	2
45			2	3	2	3		5	5
44			4	2	4	2		6	6
43			1	3	1	3		4	4
42			4	10	4	10		14	14
41			8	4	8	4		12	12
40		1	7	12	7	13	1	19	20
39	3	1	13	11	16	12	4	24	28
38	1	1	21	16	22	17	2	37	39
37		2	15	19	15	21	2	34	36
36	1	1	18	21	19	22	2	39	41
35			21-	22-	21	22		43-	43
34			15	15	15	15-		30	30
33		2	16	23	18-	25	2	41	43-
32	1	3	12	22	13	25	4	34	38
31	3	2	26	29-	29	31	5	55	60
30	8	9	21	25*	29	34	17	46-	63
29	9	3	31*	16	40	19	12	47*	59
28	13	6	27	21	40	27*	19	48	67*
27	7-	5	25	21	32*	26	12-	46	58
26	7	4-	24	16	31	20	11	40	51
25	7	10	17	23-	24	33	17	40-	57
24	12	2	14-	19	26	21	14	33	47
23	10	5	15	13	25	18	15	28	43
22	[illegible]*	[illegible]*	14	11	20-	20-	15*	25	40-
21	12	9-	13	7	25	16	21-	20	41
20	12	13	9	9	21	22	25	18	43
19	7	10	13	5	20	15	17	18	35
18	8-	9	7	1	15	10	17-	8	25
17	9	12-	8	6	17	18	21	14	35
16	6	8	5	3	11	11	14	8	22
15	5	5	3	5	8	10	10	8	18
14	5	2	2	1	7	3	7	3	10
13	3	6	7	1	10	7	9	8	17
12	1	1	3	2	4	3	2	5	7
11	2	1	1	2	3	3	3	3	6
10	6	2		2	6	4	8	2	10
9	1		1	1	2	1	1	2	3
8									
7	1			1	1	1	1	1	2
6		2	1		1	2	2	1	3
5									
4				1		1		1	1
3			1		1			1	1
0	2	2	3		5	2	4	3	7
NUMBER	166	140	450	425	616	571	312	875	1187
MEAN	22.2	21.9	29.0	30.0	27.1	27.9	22.1	29.4	27.5
[illegible]	6.3	6.5	7.5	7.2	7.8	7.9	6.4	7.4	7.[illegible]
10 PCTL	14.0	14.6	19.0	20.9	16.9	17.1	14.2	19.7	17.0
25 PCTL	17.9	17.3	24.2	25.3	21.6	22.3	17.5	24.8	21.9
MEDIAN	22.3	20.7	29.3	30.5	27.4	28.3	21.4	29.7	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	33.6	[illegible]	[illegible]	[illegible]
90 PCTL	29.5	30.3	38.4	38.3	37.7	38.0	30.0	38.5	37.8
FB1/S.D.	0.339	1.996	-2.191	-3.858	-0.765	-2.113	1.659	-4.278	-2.002
SKEWNESS	0.064	0.405	-0.252	-0.463	-0.075	-0.217	0.230	-0.354	-0.142
MAX PDS	1.000	0.251	0.210	0.065	1.000	0.224	0.363	0.055	0.249
KURTOSIS	2.929	3.037	2.893	3.248	2.663	2.571	2.978	3.038	2.609

Table 59

EVANSTON 67 COOP LISTENING 042371 — SCHOOL D.65 — GRADE 3

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
52			1		1			1	1
51									
50									
49			1		1			1	1
48				1		1		1	1
47			6	1	6	1		7	7
46			10	10	10	10		20	20
45			20	13	20	13		33	33
44			20	13	20	13		33	33
43		2	31	25	31	27	2	56	58
42	2		[illegible]	23	23	23	2	44	46
41	2	2	28-	33-	30	35	4	61-	65
40	1	2	39	37	40-	39-	3	76	79-
39	4	2	30	26	34	28	6	56	62
38		2	33-	24	33	26	2	57-	59
37	4	4	34*	32*	38	36	8	66*	74
36	5	4	40	24	45-	28-	9	64	73-
35	5	5	27	21	32*	26*	10	48	58*
34	6	10	26-	24	32	34	16	50-	66
33	7-	5-	18	18-	25	23	12-	36	48
32	5	10	12	21	17	31	15	33	48
31	10	8	19	13	29-	21-	18	32	50-
30	5	6	11	9	16	15	11	20	31
29	7*	9*	10	14	17	23	16*	24	40
28	4	2	6	7	10	9	6	13	19
27	7	11	6	3	13	14	18	9	27
26	7	9	4	2	11	11	16	6	22
25	7	10-	4	2	11	12	17-	6	23
24	5-	5	5	6	10	11	10	11	21
23	5	4	2	2	7	6	9	4	13
22	3	3	1	1	4	4	6	2	8
21	3		2	4	5	4	3	6	9
20	3	3	2	1	5	4	6	3	9
19	4	3	1		5	3	7	1	8
18	4	5		2	4	7	9	2	11
17	1	3	1	2	2	5	4	3	7
16	2	1			2	1	3		3
15		3				3	3		3
14									
13	1	1			1	1	2		2
12			1		1			1	1
11									
10			1		1			1	1
9									
8									
7									
6	1				1		1		1
5									
4									
3									
2									
1									
0	1		2	2	3	2	1	4	5
NUMBER	120	134	473	414	593	548	254	887	1141
MEAN	26.5	26.6	37.1	36.6	35.4	34.8	28.5	36.9	35.1
ST.DEV.	6.7	6.5	5.9	5.6	7.0	6.9	6.6	5.8	6.9
10 PCTL	19.2	18.5	29.6	29.2	25.5	25.0	19.0	29.4	25.2
25 PCTL	24.1	[illegible]	[illegible]	[illegible]	31.3	30.7	24.5	33.7	31.0
MEDIAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	35.7	[illegible]	[illegible]	[illegible]
75 PCTL	[illegible]	33.4	[illegible]	[illegible]	[illegible]	40.1	33.4	41.1	40.2
90 PCTL	36.7	[illegible]	[illegible]	[illegible]	[illegible]	42.9	36.7	43.7	43.2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-9.95[illegible]
SKEWNESS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-0.663	-0.246	-0.830	-0.722
MAX PLUS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.025	0.390	0.016	0.010
KURTOSIS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.305	2.814	4.131	3.344
[illegible]	0.514	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.663	0.586

EVANSTON 68 COOP LISTENING 042671 — SCHOOL D.65 — GRADE 3

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
52									
51									
50			1		1			1	1
49									
48			[illegible]	1	[illegible]	1		6	6
47			8	8	8	8		16	16
46			14	11	14	11		25	25
45	1		15	17	[illegible]	17	1	32	33
44	1		19	15	20	15	1	34	35
43		2	22	13	22	20	2	40	42
42	2	2	27-	25	29	27	4	52	56
41	2	2	31	30-	33-	32	4	61-	65-
40		1	32	34	42	35-	1	66	67
39	[illegible]	[illegible]	26	29	27	33	5	55	60
38	3	7	31-	36-	34	43	10	67-	77
37	3	5	30*	23*	33-	28	8	53*	61
36	8	3	33	24	41*	27-	11	57	[illegible]
35	3	7	25	24	28	31*	10	49	59
34	8-	4-	20-	27-	28	26	12-	42-	54
33	6	13	14	17	20	30	19	31	50
32	4	8	16	17	20-	25	12	33	45-
31	5	7	17	13	22	20-	12	30	42
30	6*	17*	10	9	16	26	23*	19	42
29	8	5	5	5	13	10	13	10	23
28	5	5	9	5	12	10	8	14	22
27	3	7	5	10	8	17	10	15	25
26	8	12-	6	4	14	16	20-	10	30
25	7-	12	4	3	11	15	19	7	26
24	4	5	5	5	9	10	9	10	19
23	1	1	2		3	1	2	2	4
22	2	4		1	2	5	6	1	7
21	6	1		1	6	2	7	1	[illegible]
20	2	2	1	2	3	4	4	3	7
19	2		1	1	3	1	2	2	4
18		3				3	3		3
17				1		1		1	1
16	3	1		1	3	2	4	1	5
15			1		1			1	1
14									
13		1				1	1		1
12									
11									
10									
9									
8									
7									
6	1				1		1		1
5									
4									
3									
2									
1									
0									
NUMBER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	29.6	30.2	37.5	37.2	36.0	35.4	29.9	37.4	35.7
ST.DEV.	6.8	[illegible]	5.7	5.7	5.7	6.5	6.2	5.7	6.6
10 PCTL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.1	[illegible]	[illegible]	26.7
25 PCTL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31.2	[illegible]	[illegible]	[illegible]
MEDIAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36.3	30.1	[illegible]	[illegible]
75 PCTL	34.3	[illegible]	[illegible]	[illegible]	[illegible]	40.3	34.2	41.4	40.6
90 PCTL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	43.7
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-4.966	[illegible]	[illegible]	[illegible]
SKEWNESS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-0.517	[illegible]	[illegible]	[illegible]
MAX PLUS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.641	0.402	0.617	[illegible]
KURTOSIS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.886	[illegible]	[illegible]	2.197
AVERAGE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.359	[illegible]	[illegible]

Table 59 - continued

EVANSTON 69 COOP LISTENING [illegible] SCHOOL D.65 GRADE 3

SCORE	N.BOY	N.GIRL	W.BOY	W.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
50									
49			[illegible]		[illegible]			[illegible]	[illegible]
48			[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
47								[illegible]	7
46		[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	1[illegible]	1[illegible]
45			14	1[illegible]	[illegible]	11		[illegible]	25
44			2[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
43			1[illegible]	1[illegible]	1[illegible]	[illegible]		[illegible]	3[illegible]
42	[illegible]	[illegible]	[illegible]	1[illegible]	[illegible]	2[illegible]	4	4[illegible]	45
41	[illegible]	[illegible]	[illegible]	[illegible]-	[illegible]	27	6	49-	55
40	[illegible]	1	[illegible]	25	[illegible]-	26-	3	63	66-
39	4	2	30	35	[illegible]	38	6	72	76
38	[illegible]	2	[illegible]-	[illegible]-	[illegible]	[illegible]		[illegible]	[illegible]
37	1		[illegible]7*	[illegible]*	[illegible]	21	1	3[illegible]*	3[illegible]
36	[illegible]	[illegible]	[illegible]	2[illegible]	[illegible]-	34-	1[illegible]	5[illegible]	6[illegible]-
35	6	[illegible]	28	31	34*	34*	9	59	69*
34	[illegible]-	[illegible]	[illegible]	1[illegible]	[illegible]	[illegible]	1[illegible]	[illegible]	4[illegible]
33	6	8	15-	15-	2[illegible]	27	14-	34-	48
32	[illegible]	[illegible]-	1[illegible]	[illegible]	[illegible]	2[illegible]	14	27	41
31	1[illegible]	1[illegible]	1[illegible]	[illegible]7	[illegible]	27	[illegible]	[illegible]	5[illegible]
30	12-	12	14	12	2[illegible]-	24-	2[illegible]	26	5[illegible]-
29	5*	3*	1[illegible]	8	21	16	13*	24	37
28	10	9	5	6	15	17	17	13	32
27	4	7	[illegible]	7	9	14	11	9	2[illegible]
26	7	6	[illegible]	5	13	11	13	11	24
25	8-	5	1[illegible]	[illegible]	1[illegible]	13	13	1[illegible]	31
24	8	[illegible]-	[illegible]	[illegible]	1[illegible]	1[illegible]	16-	6	22
23	6	7	[illegible]			7	13	2	15
22	3	1	4	1	7	2	4	5	9
21	4	6	2	1	6	7	10	3	13
20	2	5	1	[illegible]	[illegible]	[illegible]	7	4	11
19	2	3	1	[illegible]	3	5	5	3	9
18	3	1		1	[illegible]	2	4	1	[illegible]
17	2				2		2		2
16	1	[illegible]	[illegible]	[illegible]	2	3	3	2	5
15	1				[illegible]		1		1
14	1	[illegible]			[illegible]	1	2		[illegible]
13									
12									
11									
10									
[illegible]	1	1	[illegible]		[illegible]	1	2	1	3
NUMBER	1[illegible]7	1[illegible]	[illegible]	[illegible]	[illegible]	54[illegible]	257	[illegible]7	1124
MEAN	2[illegible].2	3[illegible].7	[illegible]	[illegible]	[illegible]	[illegible]	29.	3[illegible]	34.9
ST.DEV.	6.3	6.1	[illegible]	[illegible]	[illegible]	[illegible]	6.2	5.[illegible]	6.[illegible]
10 PCTL	2[illegible].9	2[illegible].7	2[illegible]	[illegible].7	2[illegible]	25.2	2[illegible]	28.[illegible]	25.1
25 PCTL	24.7	24.[illegible]	3[illegible]	[illegible]	[illegible]	33.3	24.[illegible]	33.2	[illegible]
MEDIAN	29.[illegible]	29.	37.[illegible]	[illegible]	[illegible]	35.5	29.3	37.4	35.8
75 PCTL	3[illegible]	3[illegible]	[illegible]	41.[illegible]	4[illegible]	3[illegible]	3[illegible]	[illegible]	4[illegible]
90 PCTL	37.5	3[illegible]	4[illegible]	[illegible]	[illegible]	43.5	36.[illegible]	43.[illegible]	43.4
[illegible]	-[illegible]	1.[illegible]	-1[illegible]	-[illegible]	-[illegible]	-[illegible]	[illegible] .476	-7.[illegible] -[illegible]	-[illegible].47
MAX PROB	1.000	0.714	[illegible]	1.[illegible]	[illegible]	0.652	1.000	0.[illegible]18	0.62[illegible]
KURTOSIS	2.464	3.[illegible]	3.1[illegible]7	3.3[illegible]	2.775	2.671	2.787	3.256	2.727
AVAIL.NY	0.373	0.94[illegible]	[illegible].693	[illegible]	0.517	0.611	0.359	0.694	0.614

Table 60

EVANSTON 67 COOP READING 042371 SCHOOL D.65 GRADE 3

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
51									
50			2	1	2	1		3	3
49			5	4	5	4		9	9
48			5	4	5	4		9	9
47			7	14	7	14		21	21
46		1	20	11	20	12	1	31	32
45			20	13	20	13		33	33
44		1	17	28	17	29	1	45	46
43		1	18	19	18	20	1	37	38
42		2	14	14-	14	16	2	28	30
41	1	3	16-	25	17	28-	4	41-	45
40			23	23	23-	23		46	46-
39		2	22	19	22	21	2	41	43
38			13	25	13	25		38	38
37	2	1	18	14-	20	15	3	32	35
36	1	6	17	16*	18	22	7	33-	40
35		1	17	22	17	23	1	39	40
34	5	2	16-	16	21	18-	7	32*	39
33	3	2	13*	16	16	18*	5	29	34-
32	1	4	17	17	18	21	5	34	39*
31		6	20	14-	20*	20	6	34	40
30	4	4-	14	9	18	13	8	23	31
29	2	6	11	10	13	16	8	21	29
28		8	11	14	11	22	8-	25-	33
27	3	5	13	3	16	8	8	16	24
26	3	1	17-	10	20	11-	4	27	31
25	1	9*	8	6	9	15	10	14	24
24	4-	7-	14	3	18	10	11	17	28-
23	5	5	6	6	13	11	10*	14	24
22	5	5	10	3	15-	8	10	13	23
21	8	12	8	7	16	19	20-	15	35
20	8*	3	8	7	16	10	11	15	26
19	6-	4-	13	4	19	8	10	17	27
18	8	5	12	6	20	11	13	18	31
17	9	5	2	3	11	8	14-	5	19
16	8	10	8		16	10	18	8	26
15	6-	1	3	2	9	3	7	5	12
14	7	4	3	2	10	8	13	5	18
13	3	2	4	1	7	3	5	5	10
12	7		2	1	9	1	7	3	10
11	1	1	1		2	1	2	1	3
10	3				3		3		3
9	1	1			1	1	2		2
7									
6			1		1			1	1
5	1				1		1		1
4									
3			1		1			1	1
1	2				2		2		2
0	2	1	2	4	4	5	3	6	9
NUMBER	[illegible]	133	[illegible]	[illegible]	[illegible]	592	[illegible]	[illegible]	1137
MEAN	20.0	25.0	33.2	35.7	30.5	33.1	22.6	34.4	31.8
ST.DEV.	7.5	8.0	9.5	6.1	10.6	9.3	8.2	9.0	10.1
10 PCTL	11.9	15.6	19.2	23.4	16.2	19.4	13.6	20.7	17.6
25 PCTL	15.1	18.6	26.2	30.9	21.6	26.5	16.6	26.5	23.6
MEDIAN	18.9	24.3	34.5	37.1	31.5	34.4	21.3	35.6	32.9
75 PCTL	23.6	30.2	40.9	41.9	39.5	40.7	28.3	41.4	40.1
90 PCTL	32.5	36.1	45.1	44.9	44.5	44.3	34.0	45.0	44.4
RBI/S.D.	1.903	1.935	-3.695	-5.474	-2.140	-3.829	2.665	-6.762	-4.545
SKEW-RBI	[illegible]	0.411	[illegible]	[illegible]	[illegible]	-0.402	0.411	[illegible]	-0.339
MAX PIGS	0.276	0.267	0.075	0.045	0.218	0.068	0.141	0.022	0.048
KURTOSIS	3.207	2.655	2.374	2.621	2.099	2.237	2.931	2.598	2.194
AVPTL,NN	0.221	0.366	0.619	0.576	0.534	0.616	0.297	0.655	0.576

EVANSTON 68 COOP READING [illegible] SCHOOL [illegible]

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
51			1		1			1	1
50									
49			5	5	5	5		10	10
48			5	10	5	10		15	15
47			11	15	11	15		26	26
46		1	8	11	[illegible]	12	1	19	20
45			13	15	[illegible]	15		28	28
44	1	2	12	26	13	28	3	38	41
43		1	13	25-	13	26	1	38	39
42	1		20	21	21	21	1	41-	42
41	1	5	24-	24	25	29-	6	48	54-
40		1	[illegible]	[illegible]	[illegible]	22	1	40	41
39	2	1	16	15	18	16	3	31	34
38	1		8	18-	9	18	1	26	27
37	1	3	13	17	14	20	4	30	34
36	1	3	12	[illegible]	13	16	4	25	29
35	2	2	21	11	23	13	4	32-	36
34	1	4	16-	15	17	19-	5	31*	36
33	1	6	15*	12	16	16*	7	27	34-
32		4	10	7	10	11	4	17	[illegible]
31	1	4-	17	16	18-	20	5	33	38
30	3	4	11	14-	14*	18	7	25	32
29	2	5	13	8	15	13	7-	21	28
28	3	2	11	18	14	20	5	29	34
27	1	3	16	9	17	12	4	25-	29
26	2	14	10	8	12	22-	16	18	34
25	5-	5*	11-	9	16	14	10	20	30
24		2-	14	8	14	10	2	22	24-
23	6	5	10	8	16	13	11*	18	29
22	4	8	8	7	12-	15	12-	15	27
21	5*	4	11	5	16	9	9	16	25
20	7-	3	9	7	16	10	10	16	26
19	5	6	13	4	18	10	11	17	28
18	[illegible]	10	[illegible]	1	12	11	18	5	23
17	4	8	8	1	12	9	12-	9	21
16	10-	9	8	4	18	13	19	12	31
15	6	4	6		12	4	10	6	16
14	4	7	2	1	6	8	11	3	14
13	3	3	3	1	[illegible]	4	6	4	10
12	1		1	1	2	1	1	2	3
11	1	1	1		2	1	2	1	3
10	[illegible]		[illegible]		[illegible]		2	1	[illegible]
9	1		1		2		1	1	2
8			1		1			1	1
7	1	1			1	1	2		2
6	1				1		1		1
5									
4	1				[illegible]		1		1
3	1				1		1		1
2									
1									
0			[illegible]	1	[illegible]	1	[illegible]	[illegible]	6
NUMBER	101	141	432	411	[illegible]	552	[illegible]	843	[illegible]
MEAN	21.0	24.8	32.0	35.8	30.4	33.0	23.2	34.2	31.7
ST.DEV.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10.1
10 PCTL	12.5	15.0	19.1	23.6	16.3	18.8	14.1	20.9	17.4
25 PCTL	15.7	17.7	25.1	29.7	21.7	25.7	16.7	27.4	25.6
MEDIAN	19.6	24.3	33.6	37.5	[illegible]	34.0	21.8	35.3	32.6
75 PCTL	25.3	30.9	40.7	42.7	[illegible]	41.3	29.0	41.6	40.6
90 PCTL	[illegible]	[illegible]	[illegible]	[illegible]	43.7	44.6	35.7	45.0	44.3
RBI/S.D.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SKEW-RBI	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-0.317	0.439	[illegible]	[illegible]
MAX PIGS	0.213	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.125	[illegible]	[illegible]
KURTOSIS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.103
AVPTL,NN	0.253	[illegible]	0.595	0.701	[illegible]	[illegible]	0.315	[illegible]	0.574

Table 60 - continued

[illegible] BY LOOP READING 031771 SCHOOL D.65 GRADE 3

SCORE	N.BOY	N.GIRL	C.BOY	C.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
[illegible]			3	.	3	6		9	9
[illegible]			4	4	[illegible]	4		10	10
7			6	14	6	10		18	18
[illegible]			6	10	8	10		15	15
[illegible]			7	15	7	15		22	22
[illegible]			[illegible]	22	15	22		37	37
[illegible]		1	13	27	13	27	1	39	40
42		2	20	23-	20	25	2	43	45
41	1	2	20	15	21	17-	3	35-	38
[illegible]	1	1	20-	15	21	16	2	35	37
[illegible]	3	2	14	17	17	19	5	31	36-
[illegible]		2	15	24	15-	26	2	39	41
37		2	13	24-	19	26	2	43	45
36	2	1	14	19	16	19	3	32	35
35	4	3	14	13*	16	16	7	27-	34
34	3	2	16	15	19	17-	5	31	36
33		2	9-	13	9	15	2	22*	24
32	2	4	14*	15	16	19*	6	29	35-
31	1	2	15	12	17	14	3	28	31*
30	3	2	11	11	14	13	5	22	27
29	1	4-	12	8-	13*	12	5	20	25
28	5	3	13	10	18	13	8	23	31
27	3		7	6	12	6	3	15	18
26	5-	7	13	11	23	18	12-	29-	41
25	3	10	9	5	16	18	19	17	36
24	5	5	14-	5	19	10-	10	19	29
23	7	4*	12	9	19	13	11	21	32
22	11	7-	11	6	22	13	18*	17	35-
21	17	7	11	5	12-	12	8	16	24
20	7-	6	7	5	14	14	13	15	28
1[illegible]	6	4	13	9	17	13	8	22	30
1[illegible]	7	13-	7	2	15	15	20	10	30
17	9	6	13	2	22	8	15-	15	30
1[illegible]	4	7	7	4	11	11	11	11	22
1[illegible]	5-	1	4	3	9	4	6	7	13
1[illegible]	11	3	6	1	17	4	14	7	21
13	7	1	2	3	4	4	9	5	13
[illegible]			3	1	6	1	3	4	7
11	2			1	2	1	2	1	3
1[illegible]	2	3	2		4	3	5	2	7
		1		1	1	2	2	1	3
		4	1	1	1	4	3	2	5
6	1	1			1	1	2		2
	2	1	1		3	1	3	1	4
[illegible]	1			1	1	1	1	1	2
				1		1		1	1
[illegible]		1	1		1	1	1	1	2
1	1				1		1		1
	[illegible]		2	[illegible]	[illegible]	7	7	[illegible]	11
[illegible]	13	126	440	414	576	540	262	854	111[illegible]
MEAN	21.3	23.3	31.7	34.7	29.2	32.1	22.1	33.2	30.6
[illegible]					10.9	10.2			
10 [illegible]	12.8	14.0	17.	21.2	15.3	16.0	12.6	15.2	15.
25 PCTL	14.7	17.	24.0	25.2	21.0	24.3	16.6	26.1	22.3
MEDIAN	2.	22.2	32.	35.7	29.0	33.5	21.7	34.9	31.
75 [illegible]	[illegible]	2.	40.0	42.	38.2	40.6	24.4	41.0	38.
[illegible]	1.	[illegible]	-2.774	[illegible]	-1.1	-4.873	1.796	-4.412	-3.5
[illegible]	0.284	0.21	-0.3	-1.75	-0.121	-0.482	0.272	-0.37	-0.293
[illegible]	[illegible]	1.2	[illegible]	0.024	0.713	0.048	0.310	0.024	0.064
[illegible]	2.543	2.437	2.23	3.13	2.102	2.426	2.357	2.53	2.190
[illegible]	0.2	0.327	0.37	0.55	0.433	0.586	0.284	0.421	0.542

Table 61

EVANSTON 67 COOP MATH. 042371 SCHOOL 0.65 GRADE 3

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
60									
59									
58									
57									
56			2	1	2	1		3	3
55			3	2	3	2		5	5
54			5	2	5	2		7	7
53			6	2	6	2		8	8
52			5	3	5	3		8	8
51			11	3	11	3		14	14
50			11	4	11	4		15	15
49			12	4	12	4		16	16
48			10	12	10	12		22	22
47			13	16	13	16		29	29
46			13	13	13	13		26	26
45			13	7	13	7		20	20
44	1	1	16-	9	17	10	2	25	27
43	1		14	13	15	13	1	27-	28
42		1	20	17-	20-	18	1	37	38
41		1	13	14	13	15	1	27	28-
40			19	11	19	11		30	30
39	1	1	13	15	14	16-	2	28	30
38		2	11	20	11	22	2	31	33
37	1	3	26*	14	27	17	4	40*	44
36	1	2	21-	16*	22	18	3	37-	40
35	3	4	22	20-	25*	24	7	42	49
34	3	1	20	23	23-	24	4	43	47*
33	2	1	25	18	27	19*	3	43	46-
32	5	7	13	21	18	28	12	34	46
31	7	6	18-	20	25	26	13	38	51
30	4	4-	23	17-	27	21	8	40-	48
29	4-	6	18	24	22	30	10-	42	52
28	9	10	15	17	24-	27	19	32	51-
27	9	6	13	9	22	15-	15	22	37
26	3	15*	19	8	22	23	18*	27	45
25	13*	10	4	17	17	27	23-	21	44
24	8	9	8	4	16	13	17	12	29
23	6	12-	4	4	10	16	18	8	26
22	10-	5	6	3	16	8	15-	9	24
21	7	9	2	5	9	14	16	7	23
20	6	2	2	1	8	3	8	3	11
19	2	4		1	2	5	6	1	7
18	6	3	1	2	7	5	9	3	12
17	1	4	2	1	3	5	5	3	8
16	3	1		2	3	3	4	2	6
15		2				2	2		2
14		1				1	1		1
13	1				1		1		1
12									
11									
10	1				1		1		1
9									
8		1	1		1	1	1	1	2
7									
6									
5	2				2		2		2
4									
3	1		2	1	3	1	1	3	4
NUMBER	120	134	473	415	593	549	254	888	1142
MEAN	25.4	26.2	37.1	35.8	34.8	33.5	25.8	36.5	34.1
ST DEV.	6.4	6.1	8.5	8.0	9.4	8.6	6.2	8.3	9.0
10 PCTL	17.4	18.6	26.4	25.7	23.1	23.6	18.4	26.4	23.0
25 PCTL	21.6	22.6	30.5	29.8	27.8	27.3	22.0	30.2	27.6
MEDIAN	25.0	25.8	36.5	35.0	34.1	32.6	25.4	35.8	33.4
75 PCTL	29.3	29.6	43.6	41.8	41.9	39.4	29.4	42.6	40.8
90 PCTL	33.0	34.9	49.1	47.0	48.1	46.0	33.9	47.9	46.9
RBI/S.D.	-0.001	1.405	0.565	1.209	0.599	1.980	0.438	1.370	1.923
SKEW:RBI	-0.134	0.297	0.064	0.145	0.060	0.207	0.067	0.113	0.139
MAX P(G)	1.000	0.506	1.000	0.685	1.000	0.255	1.000	0.533	0.270
KURTOSIS	4.289	3.452	2.441	2.484	2.574	2.534	3.962	2.468	2.569
AVPTL.NN	0.233	0.256	0.637	0.598	0.555	0.515	0.245	0.619	0.536

Table 61 - continued

EVANSTON 8R COOP MATH. 042671 SCHOOL 0.65 GRADE 3

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
60									
59			1		1			1	1
58									
57			2		2			2	2
56			2	1	2	1		3	3
55			1		1			1	1
54			3	4	3	4		7	7
53			4	6	4	6		10	10
52			3	1	3	1		4	4
51			3	2	3	2		5	5
50			7	6	7	6		13	13
49			9	5	9	5		14	14
48			9	6	9	6		15	15
47			15	9	15	9		24	24
46		1	12	10	12	11	1	22	23
45	1		15	9	16	9	1	24	25
44		2	9	8	9	10	2	17	19
43		2	21-	18	21	20	2	39	41
42		1	12	16	12	17	1	28-	29
41	2	1	19	13-	21-	14	3	32	35
40	2	2	18	20	20	22-	4	38	42-
39	1	2	19	21	20	23	3	40	43
38		1	24	23	24	24	1	47	48
37		2	22*	15	22	17	2	37-	39
36	1	4	24	18*	25	22	5	42*	47
35	1	2	14	22	15*	24	3	36	39
34	5	4	23	21	28	25*	9	44	53*
33	4	6	14	16	18	24	10	32	42
32	5	8-	19-	15	24	23	13	34	47
31	6-	5	14	15	20	20	11-	29-	40
30	4	8	13	15-	17	23	12	28	40
29	7	8	15	18	22-	26	15	33	48
28	7	3*	18	7	25	10	10	25	35-
27	6-	14-	10	11	16	25-	20*	21	41
26	4*	7	10	6	14	13	11	16	27
25	4	8	7	18	11	26	12	25	37
24	3	10	4	10	7	20	13	14	27
23	8	10-	3	5	11	15	18	8	26
22	6-	4	5	4	11	8	10-	9	19
21	5	1		4	5	5	6	4	10
20	4	6	3	4	7	10	10	7	17
19	5	9	2	2	7	11	14	4	18
18		2		1		3	2	1	3
17	3	4	1	1	4	5	7	2	9
16	2	2	1	1	3	3	4	2	6
15		1	1	2	1	3	1	3	4
14									
13									
12	1	1			1	1	2		2
11									
10	1				1		1		1
9	1				1		1		1
8	1		1		2		1	1	2
7	1				1		1		1
6									
5	1				1		1		1
4									
3									
0	1		3	1	4	1	1	4	5
NUMBER	102	141	432	411	534	552	243	843	1086
MEAN	26.0	27.5	37.2	35.8	35.0	33.7	26.9	36.5	34.3
ST.DEV.	7.4	6.8	8.1	8.1	9.1	8.6	7.1	8.1	8.9
10 PCTL	17.2	19.0	27.0	24.9	23.3	22.9	18.7	25.8	23.1
25 PCTL	21.6	23.0	31.5	30.8	28.7	27.1	22.5	30.8	28.1
MEDIAN	26.7	26.9	37.1	35.8	35.1	33.6	26.8	36.5	34.2
75 PCTL	30.9	31.8	42.9	41.4	41.3	39.7	31.4	42.2	40.5
90 PCTL	34.1	36.5	47.6	46.4	46.9	45.0	35.6	47.1	46.1
RBI/S.D.	-1.240	2.031	-0.457	-0.034	-1.523	1.045	0.278	-0.334	-0.300
SKEW:RBI	-0.301	0.419	-0.054	-0.004	-0.161	0.109	0.044	-0.028	-0.022
MAXP(GS)	0.650	0.243	1.000	1.000	0.431	0.915	1.000	1.000	1.000
KURTOSIS	3.502	2.891	2.924	2.627	3.017	2.495	3.381	2.780	2.758
AVPTL,NN	0.269	0.305	0.646	0.602	0.574	0.526	0.290	0.624	0.550

Table 61-continued

EVANSTON 69 COOP MATH 032277 SCHOOL 065 GRADE 3

SCORE	WHITE MALE	WHITE FEMALE	BLACK MALE	BLACK FEMALE	BOY	GIRL	NEGRO	OTHER	TOTAL
60									
59									
58									
57									
56			1	1	1	1		2	2
55				3		3		3	3
54			4		4			4	4
53			12	3	12	3		15	15
52			5	6	5	6		11	11
51			9	6	9	6		15	15
50		1	7	9	7	10	1	16	17
49			12	11	12	11		23	23
48			15	10	15	10		25	25
47			13	10	13	10		23	23
46		1	14	7	14	8	1	21	22
45		1	14	9	14	10	1	23	24
44			21	5	21	8		29	29
43			14	9	14	17		31	31
42	2		16	15	18	15	2	31	33
41	1		11	15	12	15	1	26	27
40	3	2	32	16	35	18	5	48	53
39	2	1	16	23	18	24	3	39	42
38		1	12	15	18	16	7	27	34
37	1	3	15	22	16	25	4	37	41
36	1	1	16	18	17	19	2	34	36
35	1	4	14	29	18	33	8	43	51
34	5	4	46	23	21	27	9	39	48
33		5	20	15	20	20	5	35	40
32		8	10	17	12	25	10	27	37
31		5	17	12	25	17	13	29	42
30		9	20	20	24	29	15	40	55
29	6	8	10	13	18	21	16	23	39
28	7	8	8	11	15	19	15	19	34
27	11	9	15	8	26	17	20	23	43
26	6	5	6	8	12	11	11	12	23
25	5	8	15	9	20	17	13	24	37
24	14	5	3	5	17	14	19	12	31
23	10	8	9	2	19	13	18	14	32
22	5	9	6	4	11	11	14	8	22
21	3	8	4	1	7	12	11	8	19
20	7	3	5	1	12	4	10	6	16
19	6	4	2	2	7	6	10	3	13
18	3	2	1	1	3	4	5	2	7
17	5		21	1	7	1	5	3	8
16		4		1	1	5	4	1	5
15	1	2				3	3		4
14	1				1		1		1
13									
12	1				1		1		1
11									
10	1				1		1		1
9									
8			1			1		1	1
7									
6									
5		1				1	1		1
4									
3	3	1	2		5	1	4	2	6
NUMBER	135	130	440	416	575	546	265	856	1121
MEAN	26.8	27.2	37.6	36.7	35.1	34.4	27.0	37.2	34.8
ST. DEV.	6.7	6.7	8.7	8.2	9.4	8.8	6.1	8.4	9.1
10 PCTIL	18.7	19.5	25.4	26.1	22.8	23.0	19.0	25.7	22.9
25 PCTIL	22.6	22.4	30.9	31.2	27.5	28.4	22.5	31.0	27.9
MEDIAN	26.4	27.2	38.2	36.4	34.8	34.3	26.8	37.1	34.5
75 PCTL	30.7	31.4	44.3	42.2	42.3	40.3	30.9	43.4	41.4
90 PCTL	37.6	35.0	49.0	46.2	48.0	47.0	35.7	48.6	47.6
RBI/S.D.	1.257	1.333	-0.925	-0.643	0.295	0.301	1.355	-1.006	0.5119
SKEW:RBI	0.276	0.286	-0.108	-0.077	0.030	0.032	0.279	-0.084	0.038
MAXPCTSS	0.603	0.563	1.000	1.000	1.000	1.000	0.298	0.988	1.000
KURTOSIS	2.708	4.119	2.784	2.836	2.167	2.686	3.418	2.422	2.400
AVPTL.MN	0.280	0.293	0.853	0.831	0.566	0.550	0.286	0.642	0.558

Table 62

EVANSTON 67 STEP READING 04/0171 SCHOOL DATA

SCORE	N. BOY	N. GIRL	O. BOY	O. GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
306									
305									
304									
303			2	1	2	1		3	3
276			2	2	2	2		4	4
295									
294									
293			2	3	2	3		5	5
292									
291									
290			1	3	1	3		4	4
289									
288									
287			3	9	3	9		12	12
286									
285									
284			5	4	5	4		9	9
283									
282			2	7	2	7		9	9
281									
280									
279			3	13	3	13		16	16
278									
277		1	5	9	5	10	1	14	15
276									
275		1	8	14	8	15	1	22	23
274									
273									
272		1	7	14	7	15	1	21	22
271									
270		1	9	17	9	18	1	26	27
269									
268			10	17	10	17		27	27
267									
266			6	9	6	9		15	15
265	1		12	14	13	14	1	26	27
264									
263		1	12	12	12	13	1	24	25
262									
261		3	14	8	14	11	3	22	25
260	5		10	13	15	13	5	23	28
259		1	14	10	14	11	1	24	25
258									
257		1	13	9	13	10	1	22	23
256			16	7	16	7		23	23
255	1	1	6	15	7	16	2	21	23
254	1	2	15	16	16	18	3	31	34
253		2	15	8	15	10	2	23	25
252	1	1	5	13	6	14	2	18	20
251	1	1	13	6	14	7	2	19	21
250	1	2	10	3	11	5	3	13	16
249	3	2	10	22	13	24	5	32	37
248	1		5	9	6	9	1	14	15
247		1	11	8	11	9	1	19	20
246	1	3	13	14	14	17	4	27	31
245	1		8	7	9	7	1	15	16
244	2	3	10	6	12	9	5	16	21
243	4	2	9	3	13	5	6	12	18
242	6	6	16	12	22	18	12	28	40
241	2	1	6	10	8	11	3	16	19
240	2	2	7	1	9	3	4	8	12
239	3	1	11	6	14	7	4	17	21
238	2	5	7	6	9	11	7	13	20
237	3	1	8	6	11	7	4	14	18
236	7	2	9	4	16	6	9	13	22
235	3	3	7	10	10	13	6	17	23
234	3	5	12	6	15	11	8	18	26
233	4	5	14	3	18	8	9	17	26
232	6	10	7	5	13	15	16	12	28
231	6	11	13	8	19	19	17	21	38
230	8	6	10	5	18	11	14	15	29
229	9	4	4	6	13	10	13	10	23
228	11	2	7	6	18	8	13	13	26
227	9	2	1	3	10	5	11	4	15
226	14	19	13	6	27	25	33	19	52
0	1		3	1	4	1	1	4	5
NUMBER	121	115	438	428	559	543	236	866	1102
MEAN	235.3	237.7	250.3	255.5	247.1	251.7	236.5	252.8	249.3
ST. DEV.	9.3	11.8	15.3	16.3	15.5	17.1	10.6	16.0	16.4
10 PCTL	226.4	226.1	234.2	233.6	228.6	230.1	226.2	231.9	229.2
25 PCTL	228.2	229.8	238.1	243.7	233.8	237.2	228.7	240.8	235.0
MEDIAN	232.1	233.2	249.6	254.3	246.0	250.2	237.6	252.1	248.1
75 PCTL	240.4	243.1	259.8	267.9	257.0	264.5	242.0	263.4	260.2
90 PCTL	249.1	254.2	270.1	277.4	267.8	275.3	252.2	275.0	272.0
RBI/S.D.	5.534	5.800	5.101	1.957	6.987	3.544	8.622	4.984	7.484
SKEW/XRBI	1.232	1.325	0.597	0.232	0.724	0.373	1.375	0.485	0.557
MAX FREQS	0.033	0.030	0.038	0.261	0.020	0.080	0.013	0.040	0.018
KURTOSIS	3.870	4.290	3.171	2.408	3.214	2.336	4.596	2.682	2.682
AVPTL.NN	0.311	0.361	0.628	0.710	0.560	0.636	0.335	0.669	0.597

Table 62 - continued

EVANSTON 68 STEP READING 041371 SCHOOL 0.65 GRADE 4

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
300									
299			1		1			1	1
298									
297									
296									
295									
294									
293				3		3		3	3
292									
291									
290			3	3	3	3		6	6
289									
288									
287		1	5	6	5	7	1	11	12
286									
285									
284	1		5	4	6	4	1	9	10
283									
282		1	3	3	3	4	1	6	7
281									
280									
279			5	3	5	3		8	8
278									
277			11	13	11	13		24	24
276									
275			5	5	5	5		10	10
274									
273									
272			17	14	17	14		31	31
271									
270	1	1	16	13	17	14	2	29	31
269									
268		3	12	9	12	12	3	21	24
267									
266			9	12	9	12		21	21
265		1	10	19-	10	20	1	29	30
264									
263		1	8	9	8	10	1	17-	18
262									
261		1	16-	11	16	12-	1	27	28
260			8	17	8	17		25	25-
259			11	5	11-	5		16	16
258									
257		2	7	14	7	16	2	21	23
256		2	8	7	8	9	2	15	17
255									
254		2	14	24*	14	26	2	38	40
253		1	13	14	13	15	1	27	28
252		1	11	13	11	14	1	24*	25
251			8	12	8	12		20	20
250	1	1	8*	7	9	8*	2	15	17
249	2	3	16-	10	18	13	5	26	31
248	2	2	10	7	12	9	4	17	21*
247		1	2	10	2*	11	1	12	13-
246	1	5	15	6	16	11	6	21	27
245	1	1	6	3	7-	4	2	9	11
244		2-	2	6	2	8	2	8	10
243	1		1	0	1	0	1	11	12
242	3	5	15	13-	18	18	8	28	36
241		3	8	5	8	8	3	13	16
240	2	1	5	8	7	9	3	13	16
239	1	5	8	7	9	12	6-	15-	21
238	4	2*	13	8	17	10	6	21	27
237	2	4	12-	5	14	9	6	17	23
236	5-	5	7	7	12	12-	10*	14	24
235	1	2	10	5	11	7	3	15	18
234	4	7-	11	6	15	13	11	17	28-
233	3*	9	9	5	12	14	12	14	26
232	5	6	14	5	19-	11	11-	19	30
231	5	4	13	2	18	6	9	15	24
230	11-	5	6	6	17	11	16	12	28
229	9	7-	10	4	19	11	16	14	30
228	10	6	10	7	20	13	16-	17	33
227	10-	9	5	4	15	13	19	9	28
226	26	14	18	7	44	21	40	25	65
0	3	1	3	2	6	3	4	5	9
NUMBER	114	126	454	394	568	520	240	848	1088
MEAN	232.9	238.1	250.3	253.9	246.8	250.0	235.6	251.9	248.3
ST.DEV.	9.3	12.3	16.2	15.3	16.6	16.1	11.3	15.8	16.4
10 PCTL	225.9	226.4	229.9	233.4	227.4	229.0	226.1	231.0	228.0
25 PCTL	226.8	228.9	236.5	242.1	232.0	236.3	227.6	238.7	233.8
MEDIAN	229.7	233.9	249.3	253.5	244.5	249.6	231.9	251.8	247.3
75 PCTL	235.8	243.8	261.3	264.9	259.0	261.0	239.3	263.3	260.2
90 PCTL	245.1	255.7	272.1	274.6	270.5	271.8	249.5	272.3	271.6
RBI/S.D.	11.166	7.030	3.381	1.773	5.739	3.611	12.044	3.474	6.493
SKEW:RBI	2.562	1.534	0.389	0.219	0.590	0.388	1.904	0.292	0.482
MAX PLGS	0.008	0.020	0.087	0.318	0.030	0.077	0.007	0.083	0.024
KURTOSIS	11.686	5.380	2.322	2.534	2.420	2.417	7.136	2.384	2.386
AVPTL.NN	0.239	0.366	0.618	0.695	0.542	0.615	0.306	0.653	0.577

Table 62-continued

EVANSTON 65 STEP READING 041570 SCHOOL 65 GRADE 4

SCORE	%BOY	%GIRL	G.BOY	G.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
[illegible]			1		1			1	1
[illegible]									
[illegible]									
[illegible]			1		1			1	1
[illegible]									
[illegible]			1	1	1	1		2	2
[illegible]									
[illegible]			1		1	2		3	3
[illegible]									
[illegible]			1	3	1	3		4	4
[illegible]									
[illegible]				4	2	4		6	6
[illegible]									
[illegible]			6	7	6	7		13	13
[illegible]									
[illegible]			4	5	4	9		13	13
[illegible]									
[illegible]									
[illegible]			6	10	6	10		16	16
[illegible]									
[illegible]			12	12	12	12		24	24
[illegible]									
[illegible]		1	9	7	9	8	1	16	17
[illegible]									
[illegible]									
[illegible]			6	10	6	10		16	16
[illegible]									
[illegible]		1	8	6	9	5	1	13	14
[illegible]									
[illegible]		1	8	13	9	14	1	22	23
[illegible]									
[illegible]		1	8	17	9	18	1	26	27
[illegible]	1		7	16-	8	16	1	23	24
[illegible]									
[illegible]		1	6	11	6	11	1	16-	17
[illegible]									
[illegible]			12	12	12	12-		24	24
[illegible]			[illegible]	[illegible]	[illegible]	11	1	[illegible]	[illegible]
[illegible]			6	11	6	11		17	17-
[illegible]									
[illegible]		1	8	7	8	8	1	16	17
[illegible]	1		8	11	9	11	1	16	[illegible]
[illegible]			7	7	[illegible]	7		[illegible]	[illegible]
[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	40	43
[illegible]	1	1	4	8-	5	9	2	12	14
[illegible]		2	4	12	4	14	2	16	18
[illegible]	1	1	7	11	8	12	2	18*	[illegible]
[illegible]		1	6	7	6	8*	1	13	14
249	1	4	11	10	12	14	6	21-	26
[illegible]			7*	[illegible]	7	10-		17	17-
[illegible]		3	8	8	8	11	3	16	19
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	4	8	7	[illegible]	11	4	15	21-
[illegible]	1		7	9	8	9	1	16	17
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
242	7	4	16	10	23-	14	4	20	37
241		4-	7	6	7	10	4	13	17
240		7	8	3	8	10	7-	11	18
239	2	4	12	[illegible]	14	7	[illegible]	15	21
[illegible]			[illegible]	[illegible]	[illegible]	11	7	13	20
237	2	2*	11	[illegible]	13	7	4	16-	20
236	4-	7	7	9	11	15-	11	15	26
235	6	5	12	5	18	10	11*	17	28
234	5*	11-	12-	4	17	15	16	16	32
233	6	2	16	4	22	6	8-	28	28-
232	8-	8	13	2	21-	10	16	15	31
231	7	11	14	5	26	17	12	25	43
230	8	8-	13	9	16	17	11	22	33
229	10	4	8	8	18	12	14-	16	30
228	5-	5	14	4	19	9	[illegible]	[illegible]	[illegible]
227	6	6	7	3	13	9	12	10	22
226	16	20	15	12	31	32	35	27	63
[illegible]	3	1	1	2	4	3	4	3	7
NUMBER	101	142	440	408	541	550	243	848	1091
MEAN	233.7	236.6	248.3	254.0	246.5	249.5	235.4	251.0	247.5
ST.DEV.	7.6	10.5	16.5	14.7	16.7	16.5	9.2	16.5	16.5
10 PCTL	226.1	226.2	229.5	231.3	223.8	228.9	226.2	230.1	228.4
25 PCTL	228.1	231.4	233.9	242.9	232.1	236.5	229.7	237.2	233.3
MEDIAN	231.9	234.1	245.7	253.1	241.8	247.7	233.1	249.4	245.1
75 PCTL	236.4	241.1	259.5	266.3	255.5	260.9	239.8	262.7	259.0
90 PCTL	242.9	248.4	273.5	277.1	270.4	274.6	247.4	275.4	271.9
BRIAN'S	6.246	6.717	5.778	1.911	8.225	4.505	9.651	5.178	8.814
SKEWNESS	1.521	1.381	0.676	0.232	0.946	0.471	1.517	0.436	0.654
MAX PCTL	0.126	0.022	[illegible]	0.274	0.115	0.049	0.011	0.037	0.013
KURTOSIS	5.676	6.321	2.714	2.414	3.314	2.415	5.664	2.447	2.628
AVPTL DEV	0.276	0.341	0.574	0.686	0.517	0.599	0.312	0.629	0.558

Table 62-continued

EVANSTON 70 STEP READING 041371 SCHOOL 0.65 GRADE 4

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
297									
296				1		1		1	1
295									
294									
293			1	4	1	4		5	5
292									
291									
290				7		7		7	7
289									
288									
287			3	3	3	3		6	6
286									
285									
284			3	2	3	2		5	5
283									
282			7	5	7	5		12	12
281									
280									
279			4	13	4	13		17	17
278									
277			9	5	9	5		14	14
276									
275		1	10	13	10	14	1	23	24
274									
273									
272			5	11	5	11		16	16
271									
270			10	16	10	16		26	26
269									
268			7	13	7	13		20	20
267									
266		1	7	15-	7	16	1	22	23
265			15	12	15	12		27-	27
264									
263	2	1	3	9	5	10-	3	12	15
262									
261	1	1	15	12	16	13	2	27	29
260	1		9-	8	10	8	1	17	18-
259		2	15	11	15	13	2	26	28
258									
257			5	10	5	10		15	15
256		1	7	13*	7-	14	1	20	21
255	1	2	8	7-	9	9	3	15	18
254	2	2	16	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
253			6	10	6	10		16*	16
252			5	6	5	6		11-	11
251		2	11	3	11	5*	2	14	16
250		2	8	6	8	8	2	14	16
249	1	4	17*	11	18	15-	3	28	31
248	1	3	7	8	8	11	4	15	19*
247	1	3	7	8	8	11	4	15	19
246	1	4	15	20	16*	24	5	35	40
245		3	4	5-	4	8	3	9	12
244		-	8	6	8	6		14	14
243	2	2	4	7	6-	9	4	13	17
242	4	5	10	11	14	16	9	21	30
241	1	2	9	5	10	7	3	14-	17
240	2	1	9	6	11	7	3	15	18
239	3	5	9	5	12	10	8-	14	22
238	3	2	5		8	2	5	5	10
237	5-	3*	5	5	10	8-	8	10	18
236	5	2	11-	6	16	8	7	17	24
235	9	6	7	4	16	10	15*	11	26
234	6*		4	8	10	8	6	12	18-
233	11-	6-	9	3	20	9	17-	12	29
232	7	7	8	1	15-	8	14	9	23
231	6	11	17	3	23	14	17	20	37
230	9	5	8	1	17	6	14	9	23
229	6	10-	6	1	12	11	16-	7	23
228	5-	10	8	4	13	14	15	12	27
227	10	1	3	4	13	5	11	7	18
226	19	18	24	10	43	28	37	34	71
0	5	2	8	3	13	5	7	11	18
NUMBER	124	128	405	375	529	503	252	780	1032
MEAN	234.0	236.9	249.4	255.9	245.8	251.0	235.4	252.5	248.4
ST.DEV.	8.1	10.3	15.7	15.7	15.7	16.7	9.4	16.0	16.4
10 PCTL	226.2	226.2	229.4	235.1	227.3	228.8	226.2	230.9	228.0
25 PCTL	227.9	228.8	236.2	245.3	232.3	237.1	228.5	240.6	233.9
MEDIAN	232.5	232.8	248.7	254.9	242.7	249.3	232.6	251.9	246.5
75 PCTL	236.5	244.0	260.3	266.4	256.5	263.1	239.4	264.7	259.9
90 PCTL	242.8	250.6	271.8	277.0	268.4	274.8	248.9	275.0	271.7
RBI/S.D.	7.757	5.057	3.068	1.486	5.975	3.379	8.940	3.059	6.624
SKEW:RBI	1.706	1.095	0.373	0.188	0.636	0.369	1.379	0.268	0.505
MAX P(GS	0.017	0.039	0.106	0.453	0.028	0.088	0.013	0.107	0.023
KURTOSIS	6.092	3.752	2.338	2.527	2.514	2.401	4.673	2.404	2.437
AVPTL,NN	0.277	0.348	0.606	0.722	0.529	0.627	0.313	0.662	0.577

Table 63

LVANSTON 67 STEP READING 052069 SCHOOL 0.65 GRADE 7

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
317									
316									
315			1		1			1	1
314									
313									
312									
311									
310				3		3		3	3
309				1		1		1	1
308									
307			2	3	2	3		5	5
306			2	6	2	6		8	8
305			4	10	4	10		14	14
304									
303			8	9	8	9		17	17
302			7	7	7	7		14	14
301									
300			7	16	7	16		23	23
299			16	10	16	10		26	26
298			5	11	5	11		16	16
297									
296			9	15	9	15		24	24
295	1	1	8	16-	9	17	2	24	26
294									
293			8	16	8	16-		24-	24
292			15	14	15	14		29	29
291									
290		3	15-	21	15	24	3	36	39-
289	1		17	15	18-	15	1	32	33
288		3	14	15	14	18	3	29	32
287	1		16	15-	17	15	1	31	32
286									
285			7	14	7	14		21	21
284	2	2	18	12	20	14	4	30-	34
283			6	8*	6	8-		14	14
282									
281	1	1	7	12	8	13	2	19*	21
280		3	13-	10	13	13	3	23	26-
279	1	2	14	11	15	13*	3	25	28
278			*						
277	2	3	13	9	15-	12	5	22	27*
276	1	2	10	12-	11	14	3	22	25
275									
274	1	3	9	7	10*	10	4	16	20
273	1	4-	11	6	12	10	5	17	22
272									
271	3	3	10	6	13	9	6	16	22
270		3	9	7	9	10	3-	16-	19
269									
268		5	2	1	2	6	5	3	8
267	3	7	9	4	12	11-	10	13	23
266									
265	3-	5	7-	7	10	12	8	14	22
264									
263	2	2*	9	5	11	7	4	14	18
262	6	5	6	9	12	14	11	15	26-
261			1		1			1	1
260	3	3	8	8	11	11	6	16	22
259	4	1	12	6	16-	7	5*	18	23
258									

Table 63 - continued

257	2	2	10	5	12	7	4	11	15
256									
255	6*	3	10	3	16	6	9	13	22
254	1	4	4	4	5	8	5	8	13
253									
252	2	3	8	4	10	7	5	12	17
251									
250	2	4-	2	1	4	5	6	3	9
249	4	7	4	4	8	11	11	8	19
248									
247	1	5	4	2	5	7	6-	6	12
246									
245	2	2	7	1	9	3	4	8	12
244	1	3	1		2	3	4	1	5
243									
242	8-	1	2	1	10	2	9	3	12
241									
240	2	2		1	2	3	4	1	5
239									
238	3	2	2	2	5	4	5	4	9
237									
236	3	1	4	2	7	3	4	6	10
235									
234	10	1	1		11	1	11	1	12
233									
232									
231									
230									
229									
228									
227									
226									
0	2	3	3	3	5	6	5	6	11
NUMBER	83	101	394	387	477	488	184	781	965
MEAN	254.9	262.7	278.0	283.5	274.0	279.2	259.2	280.7	276.6
ST.DEV.	15.5	14.3	16.9	15.7	18.8	17.6	15.3	16.5	18.4
10 PCTL	234.4	244.6	254.6	259.9	246.9	252.5	239.2	256.8	249.6
25 PCTL	241.9	249.9	265.0	275.6	259.4	266.6	247.4	270.3	262.3
MEDIAN	255.0	263.3	280.2	287.2	276.7	282.8	259.5	284.1	279.6
75 PCTL	264.6	273.0	290.1	295.2	288.9	292.7	270.2	292.7	290.3
90 PCTL	276.9	280.5	299.0	301.6	298.4	299.9	279.7	299.9	299.1
SKEW:R81	0.5	0.2	-0.5	-0.8	-0.4	-0.5	0.2	-0.6	-0.5
R81/S.D.	1.7	0.5	-3.6	-6.1	-2.9	-4.5	1.1	-6.8	-5.4
MAX PIGS	0.379	1.000	0.079	0.027	0.121	0.051	0.838	0.022	0.036
AVPTL.NN	0.334	0.456	0.693	0.774	0.631	0.708	0.401	0.733	0.670

Table 63 - continued

EVANSTON 68 STEP READING 041371 SCHOOL D.65 GRADE 7

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
317									
316									
315									
314			1		1			1	1
313									
312				2		2		2	2
311									
310			1		1			1	1
309			2	1	2	1		3	3
308									
307			2	2	2	2		4	4
306			2	4	2	4		6	6
305			7	7	7	7		14	14
304									
303			7	6	7	6		13	13
302			6	11	6	11		17	17
301									
300		1	4	13	4	14	1	17	18
299			8	11	8	11		19	19
298			13	11	13	11		24	24
297									
296		1	12	11	12	12	1	23	24
295		1	14	10	14	11	1	24	25
294									
293		1	13	20-	13	21	1	33	34
292		2	10	8	10	10	2	18-	20
291									
290	1		9-	16	10	16-	1	25	26
289		2	14	15	14	17	2	29	31-
288			10	22	10	22		32	32
287		1	17	17	17-	18	1	34	35
286									
285	2	1	10	16	12	17	3	26	29
284	1	2	13	15-	14	17	3	28	31
283	2	2	14	14	16	16	4	28	32
282				*					
281			6	16	6	16		22-	22
280	1	1	16	17	17	18-	2	33	35
279	1		12-	15	13	15	1	27*	28
278									
277	2	3	10	12	12	15*	5	22	27-
276	2	3	14	11	16	14	5	25	30
275			*						
274		2	12	10-	12	12	2	22	24*
273	1	4	12	9	13-	13	5	21	26
272									
271	4	4	9	9	13*	13	8	18	26
270	1	4-	6	6	7	10	5	12	17
269									
268	1	6	[illegible]	[illegible]	13	14	7-	20	27
267	4	2	13	6	17	8	6	19-	25
266									
265	6-	4	8	7	14	11	10	[illegible]	[illegible]
264									
263	2	4	7	12	9	16-	6	19	25
262	2	2	16-	4	18	6	4	20	24
261									
260	4	7*	6	2	10	[illegible]	11	8	19
259	2	7-	9	5	11	12	9	14	23-
258									
257	3	3	3	2	6	5	6*	5	11
256									
255	2	7	12	5	14-	12	9-	17	26
254	6*	5	[illegible]		11	9	11	[illegible]	[illegible]
253									
252	2	4	10	4	12	8	6	14	20
251									
250	4-	5	10	3	14	8	9	13	22
249	6	3		2	6	5	9	2	11
248									
247	3	6-	8	4	11	10	9	12	21
246									
245	4	5	6	2	10	7	9	8	17
244	12	3	6	1	18	4	15-	7	22
243									
242	6-	7	6		12	7	13	6	19
241									
240	6	2	6	3	12	5	8	9	17
239									
238	6	3	3	1	9	4	9	4	13
237									
236	1	3	3	1	4	4	4	4	8
235									
234	8	6	8	2	16	8	14	10	24
233									
232									
231									
230									
229									
228									
227									
226	1		1		2		1	1	2
0	2	2	7	11	9	13	4	18	22
NUMBER	109	129	444	415	553	544	238	859	1097
MEAN	253.6	259.5	275.4	281.9	271.1	276.6	256.8	278.6	273.8
ST.DEV.	14.5	15.8	18.7	15.2	19.9	18.1	15.5	17.4	19.2
10 PCTL	237.6	239.9	247.2	261.6	243.5	249.5	238.0	252.2	244.8
25 PCTL	242.4	247.0	262.1	273.7	254.6	263.3	244.2	267.4	259.4
MEDIAN	249.9	258.9	278.6	284.2	273.1	279.9	254.7	281.1	276.7
75 PCTL	264.8	270.2	289.5	292.8	287.4	289.7	267.6	291.7	288.8
90 PCTL	276.0	283.0	299.2	299.8	296.3	298.8	277.3	299.1	298.0
RBI/S.D.	2.347	1.945	-3.376	-6.121	-1.541	-4.611	3.099	-7.154	-4.471
SKEW:RBI	0.551	0.419	-0.392	-0.736	-0.161	-0.484	0.492	-0.598	-0.331
MAX P(GS	0.182	0.264	0.088	0.027	0.421	0.047	0.104	0.020	0.050
KURTOSIS	2.417	2.546	[illegible]	[illegible]	1.999	2.418	2.548	2.725	2.157
AVPTL,NN	0.312	0.405	0.651	0.754	0.584	0.672	0.362	0.701	0.626

Table 63 - continued

EVANSTON -S STEP READING 041570 SCHOOL D.65 GRADE 7

SCORE	N.BOY	N.GIRL	C.BOY	C.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
317									
316									
315									
314			1		1			1	1
313									
312				1		1		1	1
311									
310				1		1		1	1
309			2	1	[illegible]	[illegible]		3	3
308									
307			5	1	5	1		6	6
306			1	2	1	2		3	3
305			3	9	3	9		12	12
304									
303			5	7	[illegible]	7		12	12
302		1	6	9	6	10	1	15	16
301									
300			10	18	10	18		28	28
299			8	8	8	8		16	16
298			12	9	12	9		21	21
297									
296			17	7	17	7		24	24
295		1	6	14	6	15	1	20	21
294									
293			15	8	15	8		23	23
292		1	15	18-	15	19	1	33-	34
291									
290			10-	17	10	17		27	27
289			10	15	10	15-		25	25
288		2	16	16	16-	18	2	32	34-
287			9	12	9	12		21	21
286									
285			12	7	12	7		19	19
284	1	1	11	14	12	15	2	25	27
283		3	10	17-	10	20	3	27	30
282									
281	1	3	13	9	14	12	4	22	26
280	1		10	12	11	13	1	23-	24
279		[illegible]	11	14	11	15	5	25	30
278									
277	2	1	16-	10	18	11	3	26*	29
276	1	1	3	9	4	10-	2	12	14
275									
274	[illegible]	2	12	13	[illegible]	16	7	25	32-
273		2	10	11	10	13*	2	27	29
272									
271	1	2	13	[illegible]	[illegible]	[illegible]	[illegible]	22	23
270	2	1	12	14-	14*	15	3	26	29
269									
268	2	[illegible]	10	4	[illegible]	[illegible]	4	14	16
267	2	2	[illegible]	7	[illegible]	[illegible]	4	13	17
266									
265	[illegible]	2	3	1	[illegible]	12	[illegible]	13	[illegible]
264									
263	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6	20-	26
262	1	4	9	3	[illegible]	9	5-	14	19
261									
260	1	7	7-	9	[illegible]	16	8	16	24
259	4	7	[illegible]	[illegible]	[illegible]	13-	11	18	[illegible]
258									
257	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
256									
255	1	6*	11	4	12	10	7	15	22-
254									
253									
252	4	5-	8	6	12-	11	9	14	23
251									
250	5	[illegible]	[illegible]	2	12	11	14-	9	23
249	[illegible]	3	7	5	[illegible]	[illegible]	14	12	26
248									
247	4-	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
246									
245	6	11	8	1	14	12	17	5	26
244	8	9-	2	[illegible]	[illegible]	11	17	4	21
243									
242	14-	[illegible]	8	2	[illegible]	[illegible]	[illegible]	[illegible]	32
241									
240	4	3	5	4	[illegible]	7	7	9	16
239									
238	4	3	4	3	[illegible]	[illegible]	7	7	14
237									
236	4	4	9		[illegible]	[illegible]	8	2	10
235									
234	14	14	4	2	[illegible]	17	26	7	35
233									
232									
231									
230									
229									
228									
227									
226									
	1	[illegible]	6	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NUMBER	[illegible]	[illegible]	448	41[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	275.1	[illegible]	[illegible]	273.4	[illegible]	[illegible]	[illegible]
ST.DEV.	12.5	15.5	18.5	[illegible]	[illegible]	19.5	[illegible]	[illegible]	[illegible]
10 PCTL	[illegible]	235.0	247.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25 PCTL	241.6	[illegible]	259.6	[illegible]	[illegible]	256.7	[illegible]	[illegible]	[illegible]
MEDIAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
75 PCTL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
90 PCTL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
KEI/[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SKEWNESS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAX P(C3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
KURTOSIS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AVERAGE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

EVANSTON 70 STEP READING 041371 SCHOOL 0.65 GRADE 7

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
317									
316									
315									
314									
313									
312				1		1		1	1
311									
310									
309			2	3	2	3		5	5
308									
307			3	1	3	1		4	4
306	1		3	7	4	7	1	10	11
305				9		9		9	9
304									
303			4	14	4	14		18	18
302			6	6	6	6		12	12
301									
300		1	9	8	9	9	1	17	18
299			8	9	8	9		17	17
298			6	13	6	13		19	19
297									
296		1	12	15	12	16	1	27	28
295			8	11	8	11		19	19
294									
293			18	16-	18	18		36	36
292		1	11	22	11	23-	1	33-	34
291									
290			14	11	14	11		25	25
289	1		14-	9	15	9	1	23	24-
288		1	10	11	10	12	1	21	22
287	1	1	16	17	17-	18	2	33	35
286									
285		1	10	15	10	16	1	25	26
284	2	1	11	13-	13	14	3	24	27
283			8	7	8	7		15	15
282				*					
281	1	2	15	14	16	16	3	29-	32
280		1	11	16	11	17	1	27	28
279		1	7	13	7	14-	1	20	21
278								*	
277	1		12-	15	13	15	1	27	28
276	1	3	14	10	15	13*	4	24	28-
275									
274	3	6	13*	6	16	12	9	19	28
273	2	1	7	10	9	11	3	17	20*
272									
271	3	2	6	12-	9	14	5	18	23
270	2	1	5	18	7-	19	3	23	26
269					*				
268	3		9	7	12	7	3	16	19
267	1		13	4	14	4	1	17	18
266									
265	3	3	11	9	14	12	4	22	26
264									
263	3		8	6	11	6	3	14	17
262	6-	5-	6	9	12	14-	11-	15	26
261									
260	2	8	3	5	10	13	10	13	23
259	4	4	4	6	8	10	8	10	18
258									
257	7		3	8-	4	15	7	10	12	22-
256			*						
255	5		3	11	5	16	8	8*	16	24
254	4		3	11	4	15	7	7	15	22
253	*								
252	3		10-	12	5	15-	15	13-	17	30
251									
250	5-		2	9	2	14	4	7	11	18
249	4		5	7	3	11	8	9	10	19
248									
247	4		4	4	2	8	6	8	6	14
246									
245	11		7	7	3	18	10	18	10	28
244	8-		6	10		18	6	14-	10	24
243									
242	7		5	9	3	16	8	12	12	24
241									
240	5		6	5		10	6	11	5	16
239									
238	4		6	6	1	10	7	10	7	17
237									
236	4		4	3		7	4	8	3	11
235									
234	9		3	8		17	3	12	8	20
233									
232									
231									
230									
229									
228									
227									
226									
0	2		2	9	12	11	14	4	21	25
NUMBER	120		111	432	412	552	523	231	844	1075
MEAN	253.4		255.7	273.7	282.0	269.3	276.5	254.5	277.8	272.8
ST.DEV.	14.1		15.2	19.1	15.3	19.9	18.7	14.7	17.8	19.6
10 PCTL	236.2		238.2	244.6	260.1	242.2	248.8	237.8	251.6	244.3
25 PCTL	243.6		244.1	257.3	271.1	252.1	262.1	243.8	265.3	256.6
MEDIAN	250.3		252.3	276.7	284.0	270.2	279.4	252.0	280.5	275.7
75 PCTL	262.2		262.3	289.2	293.2	287.0	291.9	262.3	292.0	289.0
90 PCTL	273.0		276.5	296.3	300.5	295.3	299.2	274.4	299.0	297.8
RBI/S.D.	3.757		3.302	-2.822	-4.013	-0.472	-3.602	5.054	-5.549	-2.966
SKEW;RBI	0.840		0.768	-0.333	-0.484	-0.049	-0.386	0.814	-0.502	-0.222
MAX PEGS	0.071		0.092	0.126	0.062	1.000	0.077	0.039	0.028	0.114
KURTOSIS	3.626		2.908	2.044	2.635	1.839	2.211	3.273	2.429	1.967
AVTEL/SK	0.366		0.344	0.627	0.753	0.557	0.666	0.324	0.588	0.610

Table 63 - continued

EVANSTON 67 STEP READING 052069 SCHOOL D.65 GRADE 8

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
317									
316									
315				1		1		1	1
314				1		1		1	1
313									
312			2	2	2	2		4	4
311									
310				5		5		5	5
309			2	3	2	3		5	5
308									
307			5	14	5	14		19	19
306			10	17	10	17		27	27
305			11	10	11	10		21	21
304									
303			9	23	9	23		32	32
302		1	14	20	14	21	1	34	35
301									
300			16	11	16	11		27	27
299	1	1	17	17-	18	18	2	34	36
298			20	22	20	22-		42-	42
297									
296	1	1	17-	18	18	19	2	35	37-
295		3	17	13	17-	16	3	30	33
294									
293		1	16	23	16	24	1	39	40
292		2	21	14	21	16	2	35	37
291									
290	3	2	17	16-	20	20	5	35	40
289		1	11	21*	11	22	1	32-	33
288	3	4	13	26	16	30-	7	39	46
287		3	22-	17	22	20	3	39	42-
286								*	
285	1	4	12	19	13	23	5	31	36
284	1	1	9*	6	10-	7*	2	15	17
283	1	3	17	9	18	12	4	26	30
282									*
281	1	2-	9	9-	10	11	3	18	21
280	3	1	8	11	11*	12	4	19	23
279	1	2	7	8	8	10	3	15	18
278									
277	3	4	20	2	23	6	7-	22-	29
276		4	13	7	13	11	4	20	24
275									
274	3-	2	7-	9	10	11-	5	16	21
273	2	3	5	6	7	9	5	11	16
272									
271	3	5	11	1	14	6	8	12	20-
270	1	3	5	10	6	13	4	15	19
269									
268	1	5*	10	6	11-	11	6	16	22
267	1	5	5	6	6	11	6	11	17
266									
265	2	4	11	2	13	6	6-	13	19
264							*		
263	1	1	10	4	11	5	2	14	16
262	2	4	5	1	7	5	6	6	12
261									
260	2	2	2	2	4	4	4	4	8
259	1*		8	7	9	7	1	15	16
258									
257	3	3	1	2	4	5	6	3	9
256									
255	5-	3	3	2	8	5	8	5	13
254	2	1	5		7	1	3	5	8
253									
252	3	5-	2	2	5	7	8	4	12
251									
250	4	3	3	2	7	5	7	5	12
249	3	3	6	3	9	6	6-	9	15
248									
247	2	2		1	2	3	4	1	5
246									
245	4-	4	2		6	4	8	2	10
244	4	3	5		9	3	7	5	12
243									
242	2		1	2	3	2	2	3	5
241									
240	3	3	1	2	4	5	6	3	9
239									
238	1	1	2	1	3	2	2	3	5
237									
236	5	2	2		7	2	7	2	9
235									
234	3	2		3	3	5	5	3	8
233									
232									
231									
230									
229									
228									
227									
226	2		1		3		2	1	3
0	1		4	3	5	3	1	7	8
NUMBER	84	109	446	441	532	550	193	889	1082
MEAN	259.3	267.7	283.9	268.6	280.0	284.5	264.0	286.2	282.3
ST.DEV.	18.1	17.2	16.3	15.1	16.9	17.6	18.0	15.9	18.4
10 PCTL	236.2	244.5	261.7	267.9	250.1	257.5	240.1	268.3	253.9
25 PCTL	244.8	252.4	274.4	281.5	267.8	274.0	249.4	277.2	270.9
MEDIAN	255.3	268.2	287.3	290.2	284.0	288.2	265.0	289.0	287.1
75 PCTL	273.9	281.4	296.2	299.4	296.1	298.0	277.5	298.3	298.1
90 PCTL	285.1	289.6	302.1	305.4	303.5	303.5	288.2	303.4	302.8
SKEW:RBI	0.3	-0.2	-0.9	-1.2	-0.7	-0.9	0.1	-1.3	-0.8
RBI/S.D.	1.1	-0.5	-7.1	-9.8	-6.6	-8.4	0.2	-11.8	-10.6
MAX PIGS	0.900	1.000	0.021	0.011	0.024	0.015	1.000	0.008	0.010
AVPTL.NN	0.339	0.468	0.733	0.805	0.671	0.738	0.412	0.769	0.736

EVANSTON 68 STEP READING 041371 SCHOOL D.65 GRADE 8

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
317				1		1		1	1
316									
						1		1	1
314									
313									
312			2	4	2	4		6	6
311									
310			3	4	3	4		7	7
309			1	8	1	8		9	9
308									
307			4	18	4	18		22	22
306			11	13	11	13		24	24
305			10	12	10	12		22	22
304									
303			15	24	15	24		39	39
302			13	16	13	16		29	29
301									
300	1	1	17	14-	18	15	2	31	33
299	1	1	12	15	13	16	2	27-	29
298			17-	18	17	18-		35	35
297									
296		1	10	22	10	23	1	32	33-
295		2	22	11	22-	13	2	33	35
294									
293		1	11	21	11	22	1	32	33
292		4	18	24-	18	28	4	42	46
291									
290		4	12	22	12	26	4	34-	38
289	1	1	4	14*	5	15-	2	18	20
288		1	14	15	14	16	1	29	30
287		1	16-	8	16	9	1	24*	25-
286									
285		8	12	13	12	21*	8	25	33
284	1	2	11	10	12	12	3	21	24
283	1	3-	13*	6	14-	9	4	19	23
282									*
281	2	1	11	10-	13	11	3	21	24
280		2	9	8	9	10	2	17	19
279	1	3	12	7	13	10	4	19	23
278				*					
277	2	3	10	7	12	10	5	17-	22
276		5	12	7	12	12-	5-	19	24
275									
274		2	6	6	6	6	2	12	14
273	4	1	9-	6	13	7	5	15	20
272									
271	2	4	4	3	6	7	6	7	13
270	2	4	5	8	7	12	6	13	19-
269		*							
268	3	2	4	4	7	6	5	8	13
267	1	4	5	4	6	8	5	9	14
266									
265	5-	4	7	2	11	7	9	14	23
264									
263	1	3	5	5	6	8	4	10	14
262	1	1	9	3	10-	4	2*	12	14
261									
260	2	6	6	2	8	8	8-	8	16
259	3	4	10	4	13	8	7	14	21
258									
257	2		5	2	7	2	2	7	9
256									
255	6	8-	4	1	10	9	14	5	19
254	4*	2	1	1	2	2	4	4	10
253									
252	5-	5	1	1	6	6	10	2	12
251									
250	1	2	3	2	4	4	3	5	8
249	4	4	5		9	4	8-	5	13
248									
247	2	1	3	2	5	3	3	5	8
246									
245	3	2	2		5	2	5	2	7
244	7	1			7	1	8		8
243									
242	5-	3	2	3	7	6	8	5	13
241									
240	2	2	3		5	2	4	3	7
239									
238	2		4		6		2	4	6
237									
236	6				6		6		6
235									
234	10	1	2	4	12	5	11	6	17
233									
232									
231									
230									
229									
228									
227									
226									
0	3		2	8	7	11	9	5	15	20
NUMBER	93		110	411	419	504	529	203	830	1033
MEAN	254.5		268.9	283.5	289.5	278.1	285.2	262.3	286.5	281.7
ST.DEV.	15.9		16.0	17.1	15.1	20.3	17.4	17.5	16.6	19.2
10 PCTL	234.4		248.7	258.9	268.2	247.0	259.2	239.8	262.2	252.4
25 PCTL	242.1		255.1	273.5	281.5	262.4	275.5	249.0	277.3	269.5
MEDIAN	252.4		269.0	286.9	292.2	282.6	289.3	260.1	289.8	286.5
75 PCTL	265.3		283.3	297.6	300.2	295.1	298.5	276.1	298.9	296.5
90 PCTL	276.8		290.2	302.8	306.0	302.2	305.2	285.5	304.9	303.2
RBI/S.D.	2.624		-0.121	-6.112	-9.469	-4.693	-7.514	1.253	-10.916	-8.952
SKEW:RBI	0.666		-0.026	-0.738	-1.133	-0.512	-0.800	0.215	-0.928	-0.682
MAX P(GS	0.145		1.000	0.027	0.011	0.045	0.018	0.637	0.008	0.012
KURTOSIS	2.875		1.976	2.871	4.428	2.227	3.011	2.092	3.471	2.602
AVPTL,NR	0.258		0.484	0.723	0.815	0.637	0.746	0.380	0.770	0.693

Table 64 - continued

EVANSTON 65 STEP READING 041570 SCHOOL 0.65 GRADE 8

SCORE	N.BOY	N.GIRL	C.BOY	C.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
317			1	1	1	1		2	2
316									
315				3		3		3	3
314				2		2		2	2
313									
312			2	3	2	3		5	5
311									
310			2	3	2	3		5	5
309			4	14	4	14		18	18
308									
307			8	11	8	11		19	19
306			9	8	9	8		17	17
305		1	8	16	8	17	1	24	25
304			1		1			1	1
303	1		21	11	22	11	1	32	33
302			15	14	15	14		29	29
301									
300		2	13	28-	13	30	2	41	43
299		1	29	12	29	13	1	41-	42
298		1	16-	19	16	20-	1	35	36
297									
296		1	13	11	13	12	1	24	25-
295		3	12	21	12-	24	3	33	36
294			2	1	2	1		3	3
293	1		16	19	17	19	1	35	36
292		1	14	20-	14	21	1	34	35
291									
290	3		12	16	15	16	3	28	31
289	1	1	9	16*	10	17	2	25-	27
288	1	4	14	14	15	18	5	28	33
287		2	10	17	10	19-	2	27	29
286			2-	1	2	1		3	3
285		1	13	8	13	9	1	21*	22
284		3	16	11	18	14	3	29	32-
283	4	2	9	12	13	14*	6	21	27
282			2*		2			2	2
281	2	2	11	9-	13-	11	4	20	24
280	2	1	10	11	12	12	3	21	24*
279	2	4	15	9	17	13	6	24	30
278		1	1		1	1	1	1	2
277	6		12	10	18*	10	6	22-	28
276	3	1	9	5	12	6	4	14	18
275				1		1		1	1
274	2	4-	8	8	8	12	6	14	20
273	2	3	6	5	8	8	5-	11	16
272									
271	1	4	3	4	4	8	5	7	12
270		7	5-	7	5	14-	7	12	19
269									
268	1-	6	5	2	11	9	2	[illegible]	[illegible]
267	[illegible]	7	3	[illegible]	[illegible]	[illegible]		[illegible]	11
266									
265	4	2	6	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
264									
263	7	6*	7	3	14	9	13	10	[illegible]
262	3	8	4	5	7	11	9	9	18
261									
260	3	3	5	2	8	5	6*	7	13
259	5	2	7	1	12-	3	7-	8	15
258									
257	4	3	8	4	12	7	7	12	19
256									
255	3-	4	10	2	13	6	7	12	19
254	3	7	4	2	7	9	10	6	16
253									
252	7	5	5	5	12	10	12	10	22
251									
250	7	4-	6	1	13	5	11	7	18
249	6	2	2	2	[illegible]	4	[illegible]	4	[illegible]
248									
247	6-	4	5	2	11	6	10-	7	17
246									
245	4	6	9	2	13	8	10	11	21
244	5	4	6	1	11	5	[illegible]	7	[illegible]
243									
242	7	3	3		10	3	10	3	13
241									
240	3	3	6	1	9	4	6	7	13
239									
238	3	4	3		6	4	7	3	10
237									
236	2	4	1		3	4	6	1	7
235									
234	5	4	3		8	4	9	3	12
233									
232									
231									
230									
229									
228	1				1		1		1
227									
226		1				1	1		1
0	3	2	8	[illegible]	11	10	5	15	21
NUMBER	125	140	465	423	590	563	265	888	1153
MEAN	258.3	263.0	282.2	289.1	277.1	282.6	260.7	285.5	279.0
ST.DEV.	15.9	17.6	19.0	[illegible]	[illegible]	19.2	[illegible]	17.5	20.2
10 PCTL	240.0	239.8	[illegible]	[illegible]	[illegible]	[illegible]	239.9	257.1	[illegible]
25 PCTL	246.7	249.5	270.3	[illegible]	[illegible]	[illegible]	247.2	270.5	264.5
MEDIAN	255.0	262.7	285.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
75 PCTL	268.4	275.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	298.9	[illegible]
90 PCTL	283.7	287.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
REL/S.D.	2.249	1.160	-8.053	[illegible]	[illegible]	[illegible]	[illegible]	-10.576	[illegible]
SKEWNESS	[illegible]	0.240	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAX F(.)	0.198	0.743	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
KURTOSIS	2.460	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AVPTL,A	0.312	[illegible]	0.701	[illegible]	[illegible]	[illegible]	[illegible]	0.752	[illegible]

Table 64 - continued

EVANSTON 70 STEP READING 041371 SCHOOL D.65 GRADE 8

SCORE	N.BOY	N.GIRL	O.BOY	O.GIRL	BOY	GIRL	NEGRO	OTHER	TOTAL
317									
316									
315									
314			1	2	1	2		3	3
313									
312			1	1	1	1		2	2
311									
310			9	5	9	5		14	14
309			6	9	6	9		15	15
308									
307		1	6	5	6	6	1	11	12
306			10	14	10	14		24	24
305			6	14	6	14		20	20
304									
303			13	14	13	14		27	27
302			16	18	16	18		34	34
301									
300			17	17	17	17		34	34
299	1		17	13-	18	13	1	30-	31
298	1	1	11-	13	12	14	2	24	26
297									
296	2	1	17	24	19	23-	3	41	44-
295		2	21	18	21-	20	2	39	41
294									
293		1	15	20	15	21	1	35	36
292		2	8	19-	8	21	2	27	29
291									
290		2	12	12	12	14	2	24	26
289	1	3	17	11*	18	14	4	28-	32
288	2	2	13	12	15	14	4	25	29
287	1	5	11-	12	12	17-	6	23	29
286								*	
285	1	2	12	13	13	15	3	25	28
284	1	1	20*	11	21-	12	2	31	33-
283	1	6	15	14	16	20	7	29	36
282						*			
281	2	3	6	12-	8	15	5	18	23
280	1	3	13	3	14	6	4	16	20*
279	1	1	11	14	12*	15	2	25-	27
278									
277	1	3-	12	7	13	10	4	19	23
276	1	1	9	15	10	16	2	24	26
275									
274	3	1	4-	5	7	6	4	9	13
273	1	3	11	4	12	7	4-	15	19
272									
271	1	2	9	7	10	9	3	16	19
270	2	4	6	3	8	7-	6	9	15
269									
268	4-	6	11	3	15	9	10	14	24-
267	1	4	6	6	7	10	5	12	17
266									
265	2	6	2	3	4-	9	6	5	11
264									
263	3	5*	1	3	4	8	8	4	12
262	2	7-	2	2	4	9	9	4	13
261							*		
260	2	2	3	1	5	3			8
259	1	3	4		5	3	4	4	8
258	*								
257	7	3	7	2	14	5	10-	9	19
256									
255	3	6	4	2	7	8	9	6	15
254	8-	5	5		8	5	8	5	13
253									
252	3	5	4		7	5	8	4	12
251									
250	8	8-	3	3	11	11	16	6	22
249	6	5	3	1	9	6	11	4	15
248									
247	8	6	6	1	14	7	14-	7	21
246									
245	5-	3	2	2	7	5	8	4	12
244	4	2	3	1	7	3	6	4	10
243									
242	4	2	3	2	7	4	6	5	11
241									
240	2	5	3	1	5	6	7	4	11
239									
238	6	6	1	2	7	8	12	3	15
237									
236	2	1	2		4	1	3	2	5
235									
234	3	6	4	1	7	7	9	5	14
233									
232									
231									
230									
229									
228									
227									
226									
0	2	2	3	2	5	4	4	5	9

NUMBER	103	146	434	397	537	543	249	831	1080
MEAN	257.6	263.1	284.0	288.8	279.0	281.9	260.8	286.3	280.4
ST.DEV.	16.3	17.5	17.7	14.7	20.3	19.2	17.2	16.5	19.8
10 PCTL	238.4	239.8	256.6	270.6	247.2	250.2	239.6	263.3	249.1
25 PCTL	245.4	249.6	274.4	280.9	265.1	270.0	247.3	278.5	267.7
MEDIAN	253.7	262.2	287.4	291.9	283.5	286.6	257.3	289.1	284.4
75 PCTL	268.1	277.3	297.9	299.5	295.5	296.1	273.2	298.7	295.9
90 PCTL	283.2	287.7	303.2	305.2	302.4	303.3	287.0	304.8	302.8
RBI/S.D.	3.146	1.160	-7.111	-9.007	-4.842	-6.856	2.846	-11.642	-8.267
SKEW:RBI	0.759	0.235	-0.836	-1.107	-0.512	-0.721	0.442	-0.989	-0.616
MAX PIGS	0.101	0.744	0.020	0.012	0.043	0.021	0.123	0.007	0.015
KURTOSIS	2.716	2.102	3.136	4.472	2.201	2.653	2.240	3.705	2.403
AVPTL.NN	0.302	0.392	0.731	0.808	0.649	0.696	0.355	0.768	0.673

AVPTL, NN	0.239	0.366	0.618	0.695	0.542	0.615	0.306	0.653	0.577

Social Reaction Inventory

Table 65

Frequency of Responses of Social Reaction Inventory
Classified by Sex and Race of Respondent

Sex Race/ Item Response		White Boys	White Girls	Black Boys	Black Girls
1.	A	17	20	1	6
	B	33	48	7	11
2.	A	27	27	4	10
	B	23	30	4	18
3.	A	10	8	2	1
	B	40	49	6	16
4.	A	35	36	4	13
	B	16	21	4	4
5.	A	40	49	4	15
	B	9	8	4	3
6.	A	7	1	1	-
	B	43	56	7	18
7.	A	43	53	7	17
	B	6	4	1	1
8.	A	29	29	5	6
	B	22	28	3	12
9.	A	4	11	1	4
	B	46	46	7	13
10.	A	30	33	5	13
	B	29	22	3	4

KURTOSIS	6.092	3.752	2.338	2.527	2.514	2.401	4.673	2.404	2.437
AVPTL,NN	0.277	0.348	0.606	0.722	0.529	0.627	0.313	0.662	0.577

Teachers' Responses

Table 66

Frequency Distribution of Teacher Responses to Items on Background Characteristics: Evanston Integration Study Teacher Questionnaire Section A, 5-17.

A-5. *Sex and Race of Teacher Respondent*	*Frequencies*
1. White Male	50
2. White Female	301
3. Black Male	10
4. Black Female	39
5. Other Male	0
6. Other Female	6
No Response	3
Total	409

A-6. *What was your age on your last birthday?*	
1. Under 26	96
2. 26 to 35	112
3. 36 to 45	87
4. 46 to 55	72
5. Over 56	40
No Response	2
Total	409

A-7. *What is your highest academic degree?*	
1. Bachelors	191
2. B.A. + 30 but no Masters	43
3. Masters	148
4. Masters + 30	19
5. Masters + 60	6
6. Doctorate	1
7. Other	0
No Response	1
Total	409

A-8. *What subject areas are you now teaching?*	
1. Most or all subjects at my grade level	217
2. Language Arts and/or Social Sciences	59
3. Science and/or Mathematics	44
4. Foreign Language	4
5. Health and Physical Education	17
6. Music, Art or Drama	11
7. Allied Arts	5
8. Other	51
No Response	1
Total	409

Table 66 - continued

A-9. *What was your undergraduate major?*	*Frequencies*
1. Humanities	39
2. Social Science	58
3. Education	189
4. Natural Science	13
5. Mathematics	17
6. Fine Arts	16
7. Foreign Language	6
8. Health and Physical Education	17
9. Other	50
No Response	4
Total	409

A-10. *What type of undergraduate institution did you attend?*	
1. Private non-denominational	118
2. Private Protestant	70
3. Private Catholic	29
4. State Teachers or Normal	34
5. State College	35
6. State University	115
7. Other	6
No Response	2
	409

A-11. *How would you rate the academic level of your college among all the nation's colleges and universities? (Give your best estimate)*	
1. Top 10%	134
2. 11-25%	144
3. 26-50%	92
4. 51-75%	22
5. 76-90%	8
6. Lowest 10%	1
No Response	8
Total	409

A-12. *How many years of full-time teaching experience have you had as of June, 1970?*	
1. 1-3 years =	132
2. 4-6 years =	79
3. 7-10 years =	47
4. 11-16 years =	67
5. 17-20 years =	31
6. 21-30 years =	29
7. Over 31 years=	22
No Response =	2
Total	409

Table 66 - continued

		Frequencies
A-13.	*How many years have you taught in District 65 schools?*	
	1. 1-3 years =	195
	2. 4-6 years =	69
	3. 7-10 years =	43
	4. 11-16 years =	51
	5. 17-20 years =	20
	6. 21-30 years =	20
	7. Over 31 years =	6
	No Response =	5
	Total	409
A-14.	*How many years have you taught in your present school?*	
	1. 1-3 years =	248
	2. 4-6 years =	69
	3. 7-10 years =	35
	4. 11-16 years =	29
	5. 17-20 years =	7
	6. 21-30 years =	11
	7. Over 31 years =	5
	No Response =	5
	Total	409
A-15.	*Did you attend any of the Evanston Summer Institues or comparable training programs that offer special training in communication skills and human relations?*	
	1. No	232
	2. Yes, one	114
	3. Yes, two or more	60
	No Response	3
	Total	409
A-16.	*If you answered "Yes" to the previous question, how much do you feel the Summer Institutes helped you in understanding and teaching your black pupils in the integrated classrooms?*	
	1. It was of great value	82
	2. It helped some	66
	3. It made no difference	24
	4. It made me unnecessarily apprehensive	3
	No Response	234
	Total	409

Table 66 - continued

A-17. *Think of a colleague of a different race with whom you have had contact during your working day. Do you think of him/her the most as:*	*Frequencies*
1. A real friend	157
2. A respected colleague	210
3. A polite but distant coworker	28
4. Someone who fails to be cooperative	4
5. Downright hostile	2
No Response	8
Total	409

Table 67

Frequency of Teacher Responses to Statements in Section B Describing Academic, Social, and Discipline Patterns Among Pupils (N=409 Teachers)

Response	SA*	A	MA	MD	D	SD	NR	TOTAL
Statements:								
Black and white pupils work well together in classroom activities.	97	199	78	14	9	5	7	409
Black pupils have been elected to leadership positions in classrooms.	114	188	60	13	15	5	14	409
Black and white pupils happily play together during free time and recess	77	135	102	38	34	15	8	409
Black and white pupils share tables and socialize during lunch hour.	54	120	97	39	62	13	24	409
Genuine friendships are developing between black and white boys.	75	122	136	34	26	5	11	409
Genuine friendships are developing between white and black girls.	60	116	133	52	31	9	8	409
Integration during the lower grades is an easy way to prevent future polarization between races.	160	121	72	13	24	9	10	409
Teaching is made more difficult by the differences in academic aptitude between black and white pupils.	21	68	65	34	116	94	11	409
The parents of some District 65 pupils fail to show enough interest in their children's school work.	83	152	89	24	34	18	9	409
There is too much parental pressure on some pupils for good grades.	71	144	116	33	28	8	9	409
Some very able black pupils are challenged to perform better in school as a result of desegragation.	65	173	87	20	34	9	21	409
Some black pupils are discouraged by the academic competition of a desegregated school, and give up trying.	28	69	83	45	114	51	19	409

*SA: *Strongly Agree* MA: *Mildly Agree* D: *Disagree*
A: *Agree* MD: *Mildly Disagree* SD: *Strongly Disagree* NR: *No Response*

Table 67-continued

Response	SA*	A	MA	MD	D	SD	NR	TOTAL
Statements:								
Board-superintendent controversies, such as have occurred in Evanston, affect the learning environment for some pupils adversely.	72	107	83	26	71	39	11	409
Black and white children believe they are all treated equally in disciplinary situations.	12	75	45	64	136	63	14	409
I feel there is a dual standard for dealing with black and white pupils in disciplinary matters, with a less requirements for the black pupils.	54	68	74	33	90	79	11	409
I believe a single standard of behavior should be used for both black and white pupils.	184	103	50	33	18	13	8	409
Parents seem to believe their children are treated equally in disciplinary situations.	19	77	72	73	102	42	23	409
Pupils from disadvantaged homes do not follow the same guidelines in work and play as middle class children.	67	137	107	38	38	12	10	409
Black and white pupils do not have the same expectations for how they should behave in school.	54	101	89	36	71	46	12	409
Minority children are less responsive to traditional rewards and sanctions such as praise and being sent to the principal's office.	28	64	69	56	113	65	14	409
Innovative approaches to dealing with special disciplinary problems have been tried by teachers and administrators.	82	162	84	33	21	18	9	409

*SA: Strongly Agree MA: Mildly Agree D: Disagree
A: Agree MD: Mildly Disagree SD: Strongly Disagree NR: No Response

Table 68

Frequency Distribution of Teacher Responses to Semantic Differential, Teacher Questionnaire Section C, Classified by Respondent Race:
"Think of the white pupils you have taught within the last three years in District 65. Rate them on the following qualities."

Bipolar Adjectives*
Hostile-Friendly

Rating/Respondent Race:	White	Black	Other
1	1	-	-
2	4	-	-
3	11	-	-
4	98	8	-
5	54	9	1
6	97	14	2
7	48	13	2
NR	37	5	1
Total	350	49	6

Bipolar Adjectives*
Fair-Unfair

Rating/Respondent Race:	White	Black	Other
1	24	10	-
2	60	11	3
3	51	5	-
4	143	12	1
5	23	2	1
6	9	2	-
7	-	1	-
NR	40	6	1
Total	350	49	6

Composed-Excitable

Rating/Respondent Race	White	Black	Other
1	1	2	-
2	18	8	1
3	44	2	1
4	160	22	-
5	61	5	2
6	24	3	1
7	3	-	-
NR	39	7	1
Total	350	49	6

Group Dependent-Self Sufficient

Rating/Respondent Race:	White	Black	Other
1	7	2	-
2	24	4	-
3	48	2	-
4	137	14	2
5	54	7	2
6	33	10	1
7	8	3	-
NR	39	7	1
Total	350	49	6

*Adjective pairs were randomly assigned positions to avoid response bias during administration: after tabulation, mean values were computed in a uniform direction by assigning 1 to most positive and 7 to most negative ratings.

Table 68 - continued

Cooperative-Contentious

Rating/Respondent Race:	White	Black	Other
1	18	9	-
2	82	13	3
3	66	6	-
4	108	13	2
5	28	0	-
6	9	1	-
7	-	1	-
NR	39	6	1
Total	350	49	6

Indifferent-Involved

Rating/Respondent Race:	White	Black	Other
1	1	1	-
2	7	2	-
3	20	-	-
4	116	13	-
5	67	6	2
6	79	16	2
7	20	6	1
NR	40	5	1
Total	350	49	6

Follower-Leader

Rating/Respondent Race:			
1	2	-	-
2	7	-	-
3	17	2	-
4	174	15	1
5	54	10	3
6	43	10	1
7	14	6	-
NR	39	6	1
Total	350	49	6

Unpopular-Popular

Rating/Respondent Race:			
1	1	-	-
2	1	-	-
3	7	-	-
4	153	18	-
5	74	8	3
6	57	11	2
7	16	6	-
NR	41	6	1
Total	350	49	6

Table 69

Frequency Distribution of Teacher Responses to Semantic Differential, Teacher Questionnaire Section C, Classified by Respondent Race:
"Think of the black pupils you have taught within the last three years in District 65. Rate them on the following qualities:"

Bipolar Adjectives*
Hostile-Friendly

Rating/Respondent Race:	White	Black	Other
1	2	3	-
2	19	3	-
3	57	5	-
4	91	9	1
5	40	3	1
6	63	9	1
7	46	13	2
NR	32	4	1
Total	350	49	6

Bipolar Adjectives*
Fair-Unfair

Rating/Respondent Race	White	Black	Other
1	33	10	-
2	54	11	2
3	59	4	1
4	127	14	1
5	34	1	1
6	9	1	-
7	1	1	-
NR	33	7	1
Total	350	49	6

Composed-Excitable

Rating/Respondent Race:	White	Black	Other
1	-	1	-
2	4	3	-
3	10	3	1
4	100	23	1
5	74	7	1
6	93	4	2
7	37	3	-
NR	32	5	1
Total	350	49	6

Group Dependent-Self Sufficient

Rating/Respondent Race:	White	Black	Other
1	-	1	-
2	4	3	-
3	10	3	1
4	100	23	1
5	74	7	1
6	93	4	2
7	37	3	-
NR	32	5	1
Total	350	49	6

*Adjective pairs were randomly assigned positions to avoid response bias during administration: after tabulation, mean values were computed in a uniform direction by assigning 1 to most positive and 7 to most negative ratings.

Table 69 - continued

Bright-Dull

Rating/Respondent Race:	White	Black	Other
1	7	2	-
2	26	4	-
3	41	11	1
4	165	19	3
5	53	6	1
6	23	0	-
7	3	2	-
NR	32	5	1
Total	350	49	6

Aggressive-Mild

Rating/Respondent Race:	White	Black	Other
1	23	2	-
2	88	7	1
3	91	10	1
4	88	20	1
5	14	3	1
6	12	1	1
7	3	1	-
NR	31	5	1
Total	350	49	6

Conscientious-Casual

Rating/Respondent Race:	White	Black	Other
1	9	1	-
2	17	6	-
3	28	6	-
4	115	18	3
5	69	7	2
6	67	2	-
7	14	5	-
NR	31	4	1
Total	350	49	6

Tough-Sensitive

Rating/Respondent Race:	White	Black	Other
1	10	2	-
2	25	5	-
3	50	5	2
4	129	15	1
5	33	5	1
6	46	6	1
7	24	6	-
NR	33	5	1
Total	350	49	6

Table 69 - continued

Cooperative-Contentious

Rating/Respondent Race:	White	Black	Other
1	22	7	-
2	56	10	1
3	53	3	-
4	106	15	3
5	57	3	1
6	22	5	-
7	3	2	-
NR	31	4	1
Total	350	49	6

Indifferent-Involved

Rating/Respondent Race:	White	Black	Other
1	5	1	-
2	32	4	1
3	54	2	-
4	115	16	2
5	33	10	1
6	62	6	1
7	16	1	-
NR	33	4	1
Total	350	49	6

Follower-Leader

Rating/Respondent Race:			
1	9	1	-
2	21	2	-
3	41	4	2
4	156	18	1
5	40	5	2
6	44	10	-
7	7	5	-
NR	32	4	1
Total	350	49	6

Unpopular-Popular

Rating/Respondent Race:			
1	1	1	-
2	9	2	-
3	14	1	-
4	139	10	1
5	71	8	2
6	68	18	2
7	13	5	-
NR	35	4	1
Total	350	49	6

Mean Housing Value Differential

Table 70

DISTRICT 65 BLACK AND WHITE PUPILS:

DIFFERENTIAL IN MEAN HOUSING VALUE BY SCHOOLS

Differential in mean housing values* of black and white pupils according to 1960 census	School Code
More than $20,000	Q
$15,000 - $19,999	K M T
$10,000 - $14,999	F P S V
$ 5,000 - $ 9,999	G J L N W
Less than $ 4,999	C H

*Mean housing value was estimated by obtaining arithmetic means of the sum of block by block housing values within school boundaries of receiving majority white schools and within boundaries of black pupils' neighborhoods specified in the 1967 integration plan.

Parents' Responses

Table 71

Frequency of Responses to Parent Questionnaire

Part I:	Questionnaire	High Achievers	Low Achievers
1.	Yes	6	9
	No	14	3
	No response	2	
2.	Yes - 65	7	9
	Yes - paid	2	2
	No - walk	9	2
	No response	6	1
6.	Adjusted	6	5
	Weeks	1	3
	Months	-	2
	Still	1	1
	No response	14	2
7.	Enjoys	4	4
	N.D.	2	4
	Incon	1	1
	Drag	-	1
	No response	15	2
8.		3	6
	N.D.	8	5
	Old school	2	1
	No response	9	1
9.	1	-	3
	2	5	2
	3	9	5
	4	1	2
	5	1	1
	No response	7	1
10.	1	12	7
	2	7	5
	3	4	-
	4	1	1
	No response	3	1
Part II:			
1.	1	4	1
	2	18	11
	3	-	-
	4	-	-
	5	-	-
	6	-	-
	No response	3	
2.	1	15	6
	2	19	11
	3	5	3
	4	2	2

Table 71 - continued

10.	1	-	-
	2	2	-
	3	14	7
	4	-	1
	5	-	-
	6	2	4
	response	4	-
Part III:			
1.	Occ.	1	2
	1 or 2	7	2
	Everyday	12	8
	No response	2	-
2.	Occ.	5	4
	1 or 2	10	-
	Daily	8	8
	No response	2	-
3.	Unimportant	-	-
	Fairly important	-	-
	Important	2	2
	Very important	18	9
	No response	2	1
4.	Grade school	1	2
	High school	1	3
	Some college	4	1
	Finish college	10	4
	Grad or prof.	5	3
	No response		
5.	None	-	-
	One	3	2
	Two	11	4
	Three or more	8	6
	No response		
6.	None	6	4
	One	2	1
	Two	5	5
	Three or more	8	2
	No response	1	-
7.	No	12	10
	Yes, one	1	-
	Yes, two	4	2
	Yes, three or more	4	-
	No response	1	-
8.	No	13	7
	Yes, 1st year	1	2
	Yes, 3 years	6	3
	No response	2	-
9.	Yes	15	9
	No	4	3
	No response	3	-

Table 71 - continued

	5	-	2
	6	1	-
	7	3	4
	No response	3	-
3.	1	4	1
	2	2	2
	3	5	4
	4	3	3
	5	4	2
	No response	3	-
4.	1	2	1
	2	5	5
	3	2	3
	4	2	-
	5	3	3
	6	1	-
	7	2	-
	8	4	-
	No response	3	1
5.	Rent	8	7
	Own	12	5
	No response	3	-
6.	Grade	1	5
	Some high school	4	3
	High school graduate	9	5
	Technical	4	1
	Some college	5	1
	College graduate	1	-
	Professional	2	-
	No response	3	-
7.	Dictionary	19	12
	Music Instrument	8	7
	Map, U.S.	18	8
	Newspaper	18	12
	Magazine	14	8
	Encyclopedia	18	10
	No response	3	-
8.	1-10	-	-
	11-50	3	3
	51-100	5	5
	Over 100	11	4
	No response	3	4
9.	1.	-	-
	2.	3	2
	3.	6	1
	4.	3	1
	5.	3	4
	6.	3	2
	7.	-	-
	No response	4	2

Table 71 - continued

Part III:			
10.	No	14	10
	Yes	4	2
	No response	4	-

Percent Returns of Parent Questionnaire

	High Achievers	Low Achievers
N sent	70	71
N returns	22	12
% returns	*31.4*	*16.9*