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ABSTRACT

This document examines the data on changes in the ethnic composition of the schools in Milwaukee, and relates them to student achievement. A consideration of the relationship of ethnicity and academic achievement is said to entail six questions as follows: how ethnic proportions of pupils have changed over a ten-year period; their patterns of achievement in reading and math during an eight-year period; the relationship between percent of minority in school and reading/math achievement; whether the strength of the relationship changes with an increase in proportion of minority pupils; whether the rate of change in ethnicity affects the proportion of the relationship; and the extent to which open enrollment serves as voluntary desegregation or resegregation. Minority subgroups included American Indian, black, Asian, and Spanish-surnamed children. Findings of the study noted an increase in the number of minority pupils with a decrease of non-minority pupils in the ten-year period. Open enrollment is said to have had a slight effect in increasing segregation. Although achievement in reading and math are said to have decreased, a reduced rate of decrease had been found. A double proportion of minority students in the eight-year period had not been found to increase the strength of the relationship between proportion of minority students and achievement, and rate of change in ethnicity not found to show a stable relationship with the variable of student achievement. (Author/AM)

milwaukee public schools

EDUCATIONAL OUTCOMES ASSOCIATED WITH ETHNIC CHANGES IN SCHOOL POPULATIONS

(To be presented at the 1 April 1975 meeting of the American Educational Research Association in Washington, D.C.)

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EDUCATIONAL OUTCOMES ASSOCIATED WITH ETHNIC CHANGES IN SCHOOL POPULATIONS

In this discussion of different aspects of research information needed for policy decisions in relation to minority-majority school populations, I would like to focus upon the situation in one school district that has already been identified, that is, Milwaukee. This approach may help to avoid some of the difficulties which are experienced when one attempts to relate research findings that are developed elsewhere to a local situation. Some of the difficulties of this approach have been pointed out by previous panelists. There is a plethora of racially oriented studies that produce a minimum of useful information. Among other factors the very variety of reasons for and conditions of particular studies of desegregation such as bussing, re-districting, pairing, and establishment of special schools may tend to confuse persons, including lay persons interested in education. Milwaukee, on the other hand does not have bussing to achieve racial balance, and does not have a court mandate for desegregation action. There is, however, one that has been pending for about ten years. On the other hand there has been significant movement of pupils from school to school within the system because of the open enrollment policy.

This movement has changed ethnic proportions within separate schools. It is expected that information presented in this section of the symposium can serve as a data base for our considerations, and explorations. These data may highlight some of the pupil, school, and system characteristics with which we will be concerned.

We shall examine data on changes in the ethnic composition of the schools in Milwaukee and relate this to both the immigration of minority elements from outside the city and to the mobility of ethnic components within the city; movement which is sanctioned and encouraged by the open enrollment policy. The question as to how this mobility may be desegregating certain schools or resegregating others will be raised. Data on academic achievement will be presented and relationships between these two variables, ethnic proportions and achievement will be explored.

The patterns of ethnic composition of the schools over a ten-year period reflect the movement of racial minorities into the large cities of the Northern part of the United States. Since research has shown that the academic achievement levels of minority pupils are usually lower than those of the non-minority segment, an increase in the proportion of minority pupils should tend to reduce the measured achievement levels of the total school population. There are, however, some balancing factors which might attenuate this trend of lower achievement levels accompaning increasing proportion of minority pupils. One factor is the massive program of support for education by the Federal Government. This has been described by Goodlad as "perhaps the zenith in our history of faith in education." The trend of achievement in Milwaukee will be considered in light of these influences, some of which tend to raise pupil achievement levels and others to lower them.

In our consideration of ethnicity and academic achievement, we shall be concerned with questions such as the following:

1. How have the ethnic proportions of the pupil population of the Milwaukee Public Schools changed over a ten-year period?

2. To what extent does the open enrollment policy of the Milwaukee Public Schools serve as a voluntary desegregation plan? -- To what extent does it result in re-segregation?

3. What are the patterns of achievement for this population in reading and math during an eight-year period?

4. What is the relationship in the Milwaukee pupil population between the percent of minority pupils in a school and the achievement level of the students in reading and math?

5. Did the strength of that relationship between ethnicity and achievement change during a period of time in which the proportion of minority pupils has approximately doubled?

6. Does the rate of change in ethnicity affect the strength of relationship between proportion of ethnic minority and achievement?

The ethnic data are in terms of proportions of minority and non-minority elements. The four minority categories of Indian, Black, Asian, and Spanish Surnamed are combined into the total minority classification. School means for the years 1964-1969 and from 1971-1974 will be used. Ethnic data were not available for the year 1970.

We turn to the first question, "How have the ethnic characteristics of the pupil population of the Milwaukee Public Schools changed over a ten-year period?"

During the period 1964-1974, the proportion of an identified ethnic minority in the Milwaukee Public Schools increased from 20 percent to 38 percent, as shown in Table 1 and Figure 1, page 14. However, in the general population of the City of Milwaukee census data show that during the ten-year period 1960-1970 the proportion of ethnic minority increased from nine percent to 16 percent. It is obvious that the proportion of minority elements in the school population is over twice the proporation of minority elements in the general city population. It will be noted from either the table or the figure that the annual increase is fairly even across grade levels and over time. The overall annual increase approximates two percent at each of the grade levels. The evenness of this spread over time can be assumed to have facilitated assimilation of the minority immigrants into the general population through this ten-year period.

It is of interest to note while the increase from year to year in the percent of minority pupils has been fairly even, the population segments have changed markedly during this ten-year period. That is, during the early years of the period there was an increase in numbers of both the minority and non-minority populations with the rate of increase of the minority being greater. There was an annual increase in the total population until 1970. Since then there has been an annual decrease in the total population, a circumstance that is due entirely to the decrease in the number in the non-minority group. The minority group has continued the pattern of annual increase, though at a slower rate.

The decrease in non-minority pupil population began in 1968 and has continued since and at a generally increasing pace. The decrease in the total pupil population began in 1971, and has continued at an increasing pace to this time.

It should be remembered that the overall data are means of school means that reflect but do not specifically show rate of change within separate schools. It has often been informally observed that a significant increase in the rate of change may be associated with an increase in tension in a separate school and in a separate school community. Changes from year to year in the total population and the minority-majority segments of it are shown in Figure 2. It will be noted that the increase in the number of minority pupils from year to year shown on the bottom line of the figure levels off during the ten-year period. Actually, the percent of increase in numbers for the year from 1964 to 1965 was about eight percent but was less than one percent for the year from 1973 to 1974. When the city as a whole is considered, this moderation in the rate of increase from year to year seems to be a stabilizing factor allowing for more regular assimilation of the incoming minority population.

A second question was: "To what extent does the open enrollment policy of the Milwaukee Public Schools serve as a voluntary desegregation plan? Also to what extent does it result in resegregation?"

The overall magnitude of mobility of pupils among schools as allowed by the open enrollment plan is shown in Table 3, "Number Of Students On Transfer On March 4, 1975." These are simply overall transfers listed by ethnic category and do not indicate origin or

destination of movement. The table does indicate that approximately 9.5 percent of the total population attends a school that is not the neighborhood school to which a pupil is assigned. This will vary from 5.5 percent at the elementary level to 15.8 percent at the junior high level and to 13.4 percent at the senior high school level. These figures indicate that transfers are more prevalent at the secondary levels and at that level have the greatest potential for effect on ethnic balance within schools.

It will be noted from Table 3 that in the total number of students transferring the largest movement is by the non-minority group, i.e., the so-called white group, except at the junior high level. However, the white group is also the group that has the greatest enrollment. In terms of percent of within ethnic group transfers, the Blacks show the largest percent, 11.2; followed by American Indians, 10.8; Spanish Surnamed, 10.3; Whites, 8.6; and Asian, 7.1.

The extent to which students of the ethnic groups tend to move into or out of schools having high minority student populations or low minority student populations are indicated in Table 4. The summary of the net city-wide effect of the eleven thousand student transfers is shown in Table 5 to be a differential of 356, a difference that is in the direction of increasing segregation. However, when an adjustment is made for the fact that all students at Milwaukee Trade and Technical High School are on transfer, the net result of the open enrollment policy on the city-wide student population is to establish an approximate balance between desegregation and segregation. It might also be of interest to note that the most intensive movement toward desegregation is at the junior high school level.

The next question was: "What are the patterns of achievement for this population in reading and math during an eight-year period, 1966-1974?"

Achievement data are reading and mathematics test scores obtained annually in the City-Wide Testing Program. Data for grades 6, 8, and 10 are presented for the elementary schools, junior high schools, and senior high schools. At the tenth grade level, the mean standard score for each senior high school is used. Mean grade equivalents for each school are at the sixth grade level for the elementary schools, and at the eighth grade level for the junior high schools.

It should be noted that while ethnic data are presented for a ten-year period, 1964-1974, (with the exception of 1970) achievement data are limited to an eight-year period, 1966-1974. This is because of changes in tests used in the City-Wide Testing Program. The achievement data are shown in Table 6, "Achievement Scores Grades 6, 8, and 10, 1966-1974" and in Figure 3, and in Figure 4.

The first general observation with regard to these data is the general decline in both reading and math over this total time span, (see Figure 3 and Figure 4). Closer examination will reveal a significant change in rate of decrease. The slopes of the curves from year to year are steeper during the first years in this time span than in the later years. As the curves tend to flatten and turn upward there is at least one instance of positive change in each column of the table, and in one column there are three. It was suggested earlier that while there has been an increase in percent ethnic minority over this time span the combination of this factor with the massive Federal Support Programs

might, in Milwaukee as in other places, be associated with some improvement in achievement test scores, so that the scores at least show a reduction in the rate of decline over time. The Milwaukee data do show an initial decline followed by curve stabilization and now what appears to be a small but gradual increase in measured achievement. This change has occurred despite the ethnic minority increase.

Now that some baseline data on ethnicity and student achievement have been presented we will consider the next question: "What is the relationship in this population between the percent of minority pupils in a school and the achievement level of the students in reading and math?"

This relationship is presented in the form of correlations between two factors, ethnicity and achievement over time. Percent of minority population in each school at each of three levels, elementary, junior high school, and senior high school, over the eight-year period was correlated first with reading and then with math for each year. The correlation matrixes were examined to see if there was any pattern of change in these correlation coefficients during a period in which (1) the percent of minority students approximately doubled, and (2) the pattern of achievement showed "improvement"; improvement, at least to the extent that the rate of decline was reduced. The sequence of correlation coefficients is shown in Table 7.

It was hypothesized that a significant change in the relationship between ethnicity and measured student achievement in a school community over time would be reflected in change in the magnitude of the correlation coefficient between the percent of minority students and obtained

test scores over time. The obtained correlations within each year were substantial. However, the differences, either from year to year, or from the beginning of the eight-year period to the end of the eight-year period were small. This is indicative of a relatively stable relationship. I would wish to point out that these data do not say that there is no actual change in the influence of the variable, proportion of minority, on the achievement variable over time; the data only show that the relationships we have obtained from the measures we have used have not been sufficiently sensitive to detect whatever change might exist.

Another hypothesis had been suggested. It is that the rate of change of ethnic proportion within a school would have a greater impact on achievement than the magnitude of the proportion itself. The question was also raised as to whether the rate of change in achievement might show effects that the level of achievement might not. In order to deal with these questions three change variables were generated. They were: change in ethnicity from year to year, change in measured reading achievement from year to year, and change in math achievement from year to year. Correlation matrixes using each pair of variables in turn were obtained for each of the grade levels, elementary, junior high school, and senior high school. Data on two sets of correlations, ethnic change from year to year with reading and ethnic change from year to year with math are shown in Table 8. The contrast of these correlations with those in Table 7 completely refutes the hypothesis that the measured rate of change from year to year would provide additional useful information. It is apparent that the changes from one year to the next are so small as to be unreliable in direction as well as magnitude. This is a limitation of the

data. Thus the answer is no to the last question which was originally asked, did the rate of change in ethnicity affect the strength of relationship between proportion of ethnic minority and achievement? This finding may have implications for those separate schools in which there is a rapid increase in the proportion of minority pupils. While there may be increasing anxieties and social problems of adjustment associated with rapid change, an adverse effect on measured pupil achievement which many seem to expect may not happen to a significantly measurable degree. It did not happen in the data we examined.

Is there an identifiable point on the school ethnicity continuum, at which the relationship between the two variables, percent ethnic minority and student achievement, changes significantly? That is, is there a point which might be associated with the "tipping phenomenon?" To obtain data related to this question the elementary schools were grouped into four intervals on the percent of minority scale. The intervals were: 0-25 percent, 26-50 percent, 51-75 percent, and 76-100 percent. The correlations for these two variables for the elementary schools for the eight-year period are shown on Table 9.

These data show irregular patterns that suggest caution in interpretation. The small N's in two of the groups of schools should be noted. Although the median correlations for the low minority group (0-25 percent) and the high minority group (76-100 percent) are considerably lower than those in the middle range, it seems possible that this may be caused at least in part by the skewed distributions and the restriction in range in the two outside groups. In the first group of schools with the lowest proportion of minority students (0-25 percent)

it is of interest to note the rather consistent increase in the correlations during the eight-year period. If there was, according to these data, a tipping point it would seem most likely to be in the range of 25-50 percent minority pupils.

The question of association between proportion of ethnic minority pupils in a school and measured achievement was examined using regression on junior high school data. When the standardized residuals of regression of achievement on percent minority across schools and within years were plotted by the computer, those schools which were far above or far below the total group were easily identified. The fact that data from this approach corroborate the relationships already found is indicated by a rank order correlation of .67 between the standardized residuals from regression and proportion of ethnic minority. The rank order correlation between these residuals and the rate of change in ethnicity as measured by change in percent from year to year (rate of change) was .57.

In summary we can point out that:

1. The number of ethnic minority pupils in the Milwaukee School population has increased throughout the ten-year period from 1964 to 1974. The number of non-minority pupils has decreased continuously since 1968.

2. Open enrollment at this time has an effect of increasing ethnic segregation slightly. The difference between segregating transfers and desegregating transfers is 711 out of a total of 11276. If transfer data involving the city-wide school in which all students are on transfer, Milwaukee Trade and Technical High School, are eliminated, the open enrollment policy has an equal effect toward desegregation and segregation.

3. Measured student achievement in reading and math shows an overall decrease but also with a significant reduction in rate of decrease. The downward slope of achievement has leveled off.

4. There is no increase in the strength of relationship between the proportion of minority students and student achievement in reading and math over time. The time period is the eight-year period, 1966-1974, during which the percent of minority pupils almost doubled.

5. The rate of change in ethnicity as measured by these data does not show a stable relationship to student achievement. This is attributed to the small and irregular changes from one year to the next in both percent of minority enrollment and in achievement.

These summary statements may be considered for policy implications. It may be important for persons to recognize the fact that an influx of minority children into a school system does not necessarily result in academic disaster. In the case of Milwaukee, the immigration of minority pupils at the system level has been slow enough city-wide so that the initial decline in city-wide academic performance has tended to level off. In fact, there are now some pockets of reversals, i.e., improvement. This suggests that the minority students were assimilated on a city-wide basis in a satisfactory manner. It seems possible that this overall adjustment and assimilation has been facilitated by the massive Federal support directed toward the education of disadvantaged children.

At the separate school level, however, the high rate of increase in minority populations may preclude satisfactory assimilation. This situation raises the question of the appropriateness and wisdom of some form of control over the movement of students from school to school when the effect in a given school is a rapid increase in ethnic minority proportions.

It seems important to note that the patterns of relationships between ethnic minority proportion and academic performance during an eight-year period did not, on a city-wide basis, show an increase in the influence of the ethnic factor on achievement, even though the number of minority pupils approximately doubled during a ten-year period. This fact might tend to allay some of the fears of some professional as well as lay people concerning interaction between minority and non-minority pupil populations.

Table 1

ETHNIC CHARACTERISTICS OF MILWAUKEE PUBLIC SCHOOL POPULATION 1964-1974

Year	Percent Minority Students			
	Elementary	Junior High School	Senior High School	Total All Levels
1964	24.4	16.7	12.7	20.5
1965	24.8	17.1	14.9	21.3
1966	25.8	17.4	17.7	22.6
1967	27.8	18.0	18.7	24.2
1968	31.2	24.0	21.8	27.7
1969	32.3	28.6	23.0	29.4
1971	35.2	30.8	26.4	32.2
1972	37.1	32.3	27.9	33.8
1973	40.3	34.1	29.2	36.3
1974	42.6	36.7	30.6	38.3

Figure 1

Percent of Minority Students in Milwaukee Public Schools 1964-1974

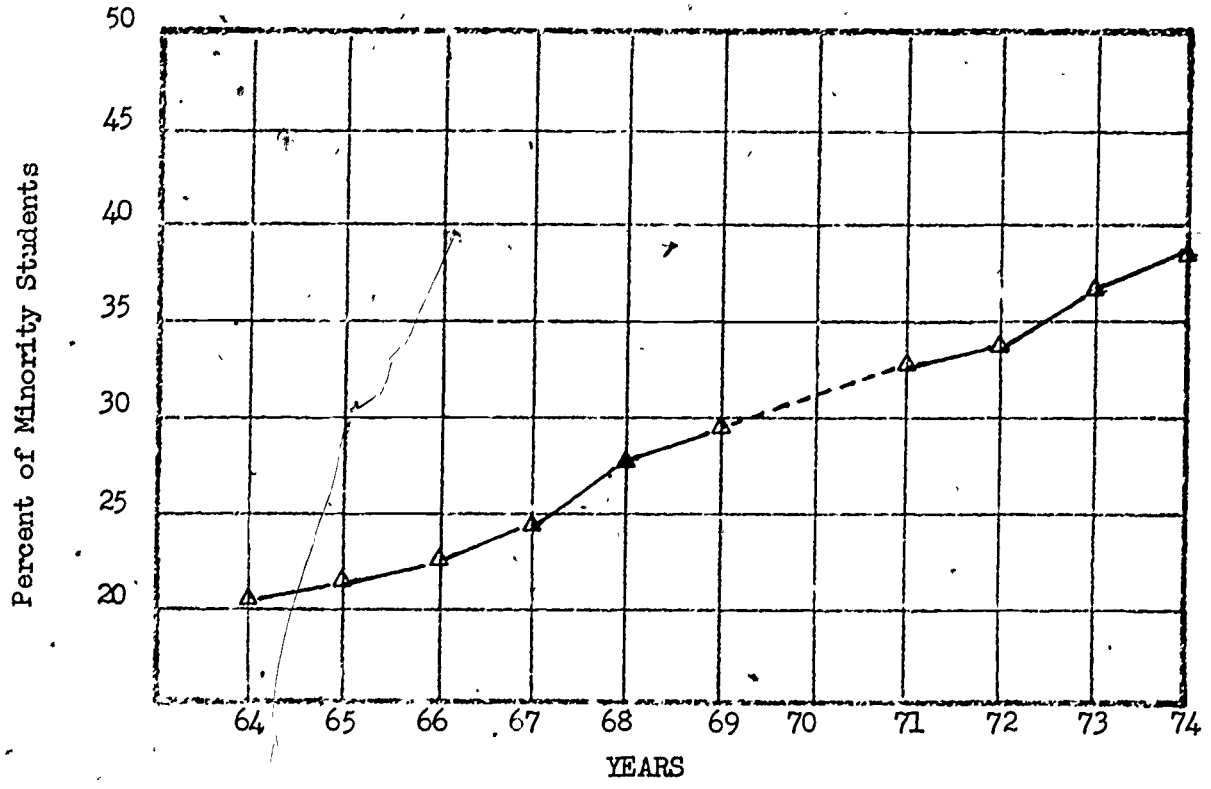

Table 2

ETHNIC AND TOTAL POPULATIONS 1964-1965

Year	Minority	Non-Minority	Total
1964	23014	89475	112489
1965	24972	92439	117411
1966	27128	92857	119985
1967	30881	96701	127582
1968	36154	94269	130423
1969	38989	93834	132823
1970			133456
1971	42386	89279	131665
1972	43496	85042	128538
1973	45013	78983	123996
1974	45312	72858	118170

Figure 2

Ethnic and Total Populations, Milwaukee Public Schools 1964-1974

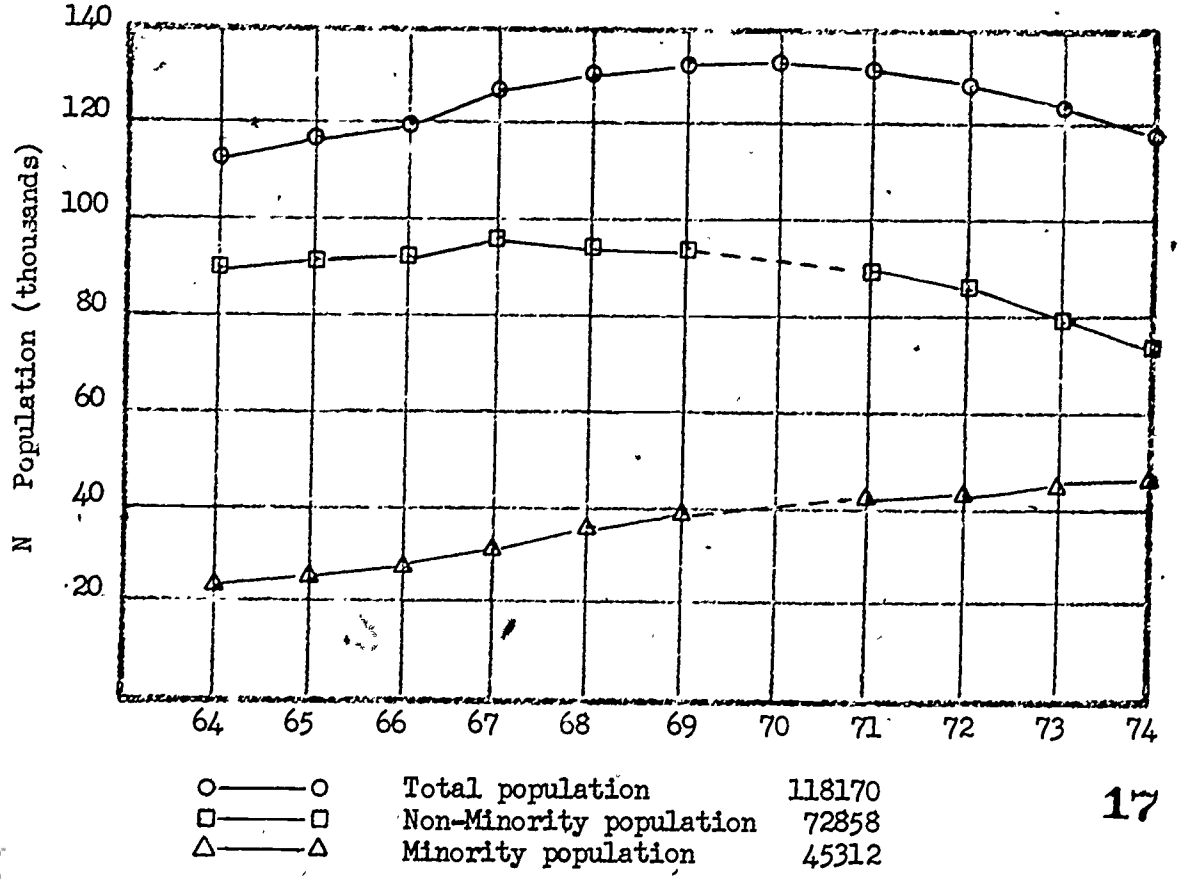

Table 3

NUMBER OF STUDENTS ON TRANSFER MILWAUKEE PUBLIC SCHOOLS
MARCH 3, 1975

Ethnic Category	Elementary	Junior High	Senior High	Total
1-American Indian	52	18	41	111
2-Black	1365	877	1334	3576
3-Asian	12	3	11	26
4-Spanish Surnamed	198	46	222	466
1-4 Minority Total	1627	944	1608	4179
5-White and Other	1776	834	2839	5449
Total 1-5	3403	1778	4447	9628

Table 4

NUMBER OF STUDENT TRANSFERS IN MILWAUKEE PUBLIC SCHOOLS
MARCH 3, 1975

Ethnic Category	FROM SCHOOLS: Greater Than 50% Minority (High Minority)	FROM SCHOOLS: Less Than 50% Minority (Low Minority)	TO SCHOOLS: Greater Than 50% Minority (High Minority)	TO SCHOOLS: Less Than 50% Minority (Low Minority)
Elementary Schools				
1-American Indian	31	19	28	25
2-Black	1080	164	1168	317
3-Asian	7	4	5	7
4-Spanish Surnamed	128	56	136	75
1-4 Minority Total	1246	243	1337	424
5-White and Other	415	1239	226	1672
1-5 Total	1661	1482	1563	2096
Junior High Schools				
1-American Indian	5	15		16
2-Black	795	100	357	859
3-Asian	1	2		3
4-Spanish Surnamed	21	16	20	34
1-4 Minority Total	822	133	377	912
5-White and Other	286	557	5	821
1-5 Total	1108	690	381	1733
Senior High Schools				
1-American Indian	23	16	4	39
2-Black	1327	25	943	373
3-Asian	7	3		11
4-Spanish Surnamed	98	122	50	175
1-4 Minority Total	1455	166	997	598
5-White and Other	893	1865	100	2820
1-5 Total	2348	2031	1097	3418

Table 4 Continued

Ethnic Category	FROM SCHOOLS: Greater Than 50% Minority (High Minority)	FROM SCHOOLS: Less Than 50% Minority (Low Minority)	TO SCHOOLS: Greater Than 50% Minority (High Minority)	TO SCHOOLS: Less Than 50% Minority (Low Minority)
All Secondary Schools				
1-American Indian	28	31	4	55
2-Black	2122	125	1300	1232
3-Asian	8	5	20	14
4-Spanish Surnamed	119	138	70	209
1-4 Minority Total	2277	299	1374	1510
5-White and Other	1179	2422	105	3641
1-5 Total	3456	2721	1479	5151
Totals - All Levels				
1-American Indian	59	50	32	80
2-Black	3202	289	2468	1549
3-Asian	15	9	25	21
4-Spanish Surnamed	247	194	206	284
1-4 Minority Total	3523	542	2711	1934
5-White and Other	1594	3661	331	5313
1-5 Total	5117	4203	3042	7247

Table 5

EFFECT OF STUDENT TRANSFER ON ETHNIC BALANCE

Ethnic Category	Number of Student Transfers						Net Relative Change Toward Desegregation
	High Minority Schools			Low Minority Schools			
	From	To	Change	From	To	Change	
			Elementary				
1-4	1246	1337	- 91	243	424	+ 181	+ 90
5	415	226	- 189	1239	1672	- 433	- 622
Total	1661	1563	- 280	1482	2096	- 252	- 532
			Junior High School				
1-4	822	377	+ 445	133	912	+ 779	+1224
5	286	5	- 281	557	821	- 264	- 545
Total	1108	381	+ 163	690	1733	+ 515	+ 679
			Senior High School				
1-4	1455	997	+ 458	166	598*	+ 432	+ 890
5	893	100	- 793	1865	2820*	- 955	-1748
Total	2348	1097	- 335	2031	3418*	- 523	- 858
			Total Secondary				
1-4	2277	1374	+ 903	299	1510	+1211	+2114
5	1179	105	-1074	2422	3641	-1219	-2293
Total	3456	1479	- 171	2721	5151	- 8	- 179
			Total All Levels				
1-4	3523	2711	+ 812	542	1934	+1392	+2204
5	1594	331	-1263	3661	5313	-1652	-2915
Total	5117	3042	- 451	4203	7247	- 260	- 711

*Including Milwaukee Trade & Technical High School

Table 6

ACHIEVEMENT SCORES, GRADES 6, 8, and 10
FROM 1966 Through 1974

Year	Grade 6		Grade 8		Grade 10	
	Grade Equivalent		Grade Equivalent		Standard Score	
	Reading	Math	Reading	Math	Reading	Math
1966	5.60	5.42	7.36	7.28		
1967	5.52	5.38	7.26	7.21	45.9	45.0
1968	5.34	5.27	7.08	7.01	44.9	44.2
1969	5.36	5.36	7.03	6.96	44.5	43.8
1970	5.35	5.33	6.93	7.00	44.1	43.1
1971	5.28	5.30	6.87	6.87	43.1	43.2
1972	5.29	5.31	6.91	7.03	43.7	42.6
1973	5.20	5.27	6.77	7.01	43.2	42.4
1974	5.15	5.19	6.81	7.04		

Figure 3

Reading Achievement Scores, Grades 6, 8, and 10
From 1966 Through 1974

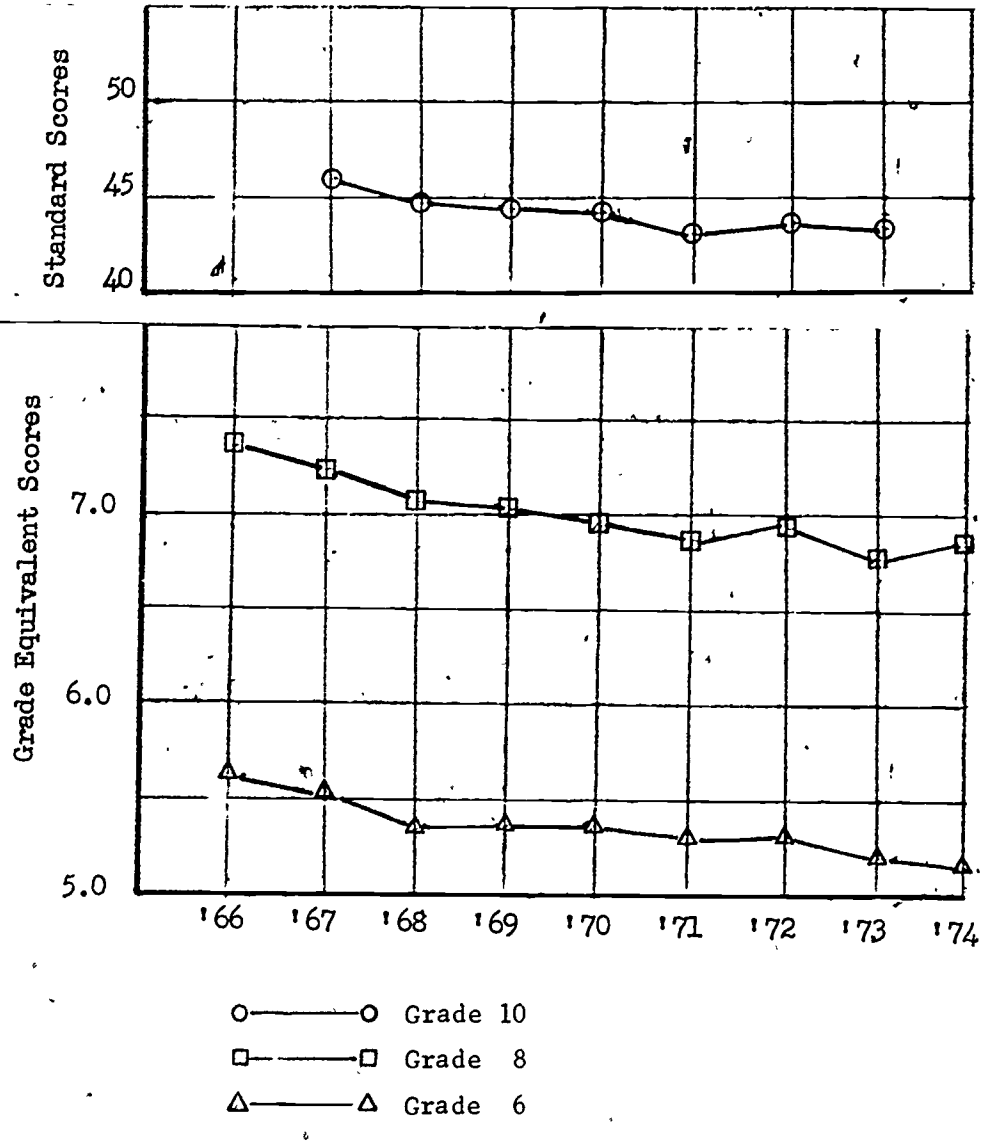

Figure 4

Math Achievement Scores, Grades 6, 8, and 10
From 1966 Through 1974

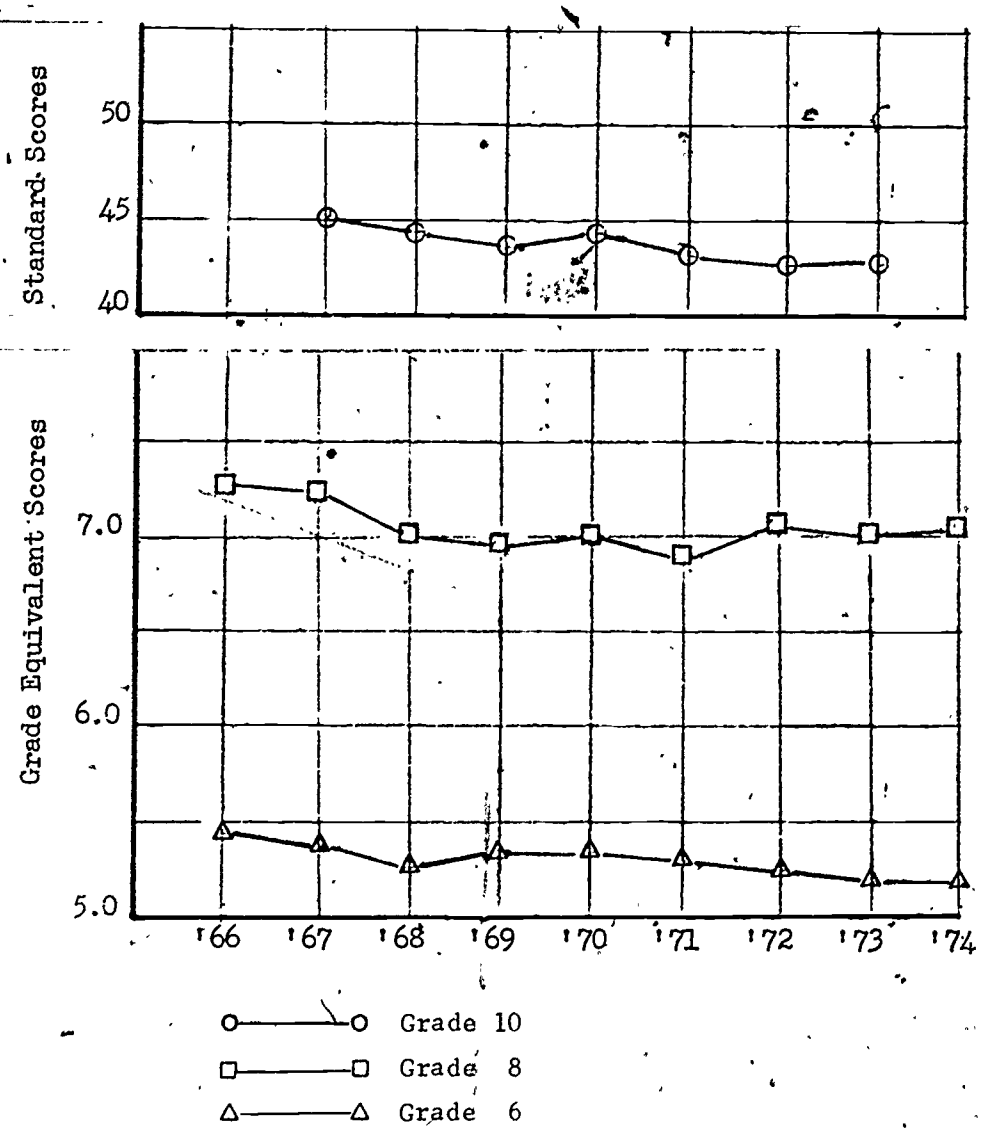

Table 7

CORRELATION COEFFICIENTS BETWEEN PERCENT OF MINORITY STUDENTS IN A SCHOOL POPULATION AND ACHIEVEMENT TEST SCORES DURING AN EIGHT-YEAR PERIOD, 1966-1974

Year	Elementary Level		Junior High Level		Senior High Level	
	Correlation Between Ethnic Proportion and:		Correlation Between Ethnic Proportion and:		Correlation Between Ethnic Proportion and:	
	Reading	Math	Reading	Math	Reading	Math
1966	-.720	-.726	-.871	-.851		
1967	-.810	-.780	-.890	-.836	-.794	-.798
1968	-.814	-.819	-.899	-.878	-.894	-.911
1969	-.854	-.849	-.937	-.888	-.948	-.910
1970	-.871	-.850	-.941	-.910	-.949	-.909
1971	-.856	-.801	-.938	-.913	-.943	-.896
1972	-.840	-.825	-.928	-.920	-.927	-.915
1973	-.833	-.847	-.900	-.933	-.920	-.896
1974	-.725	-.529	-.951	-.937		

Table 8

CORRELATION COEFFICIENTS BETWEEN CHANGE IN PERCENT OF MINORITY STUDENTS FROM YEAR TO YEAR AND ACHIEVEMENT TEST SCORES DURING AN EIGHT-YEAR PERIOD, 1966-1974

Ethnic Change Year to Year	Elementary Level Correlation Between Ethnic Change And:		Junior High Level Correlation Between Ethnic Change and:		Senior High Level Correlation Between Ethnic Change and:	
	Reading	Math	Reading	Math	Reading	Math
1966-1967	-.241	-.260	+.004	+.188	-.252	-.261
1967-1968	-.228	-.254	-.535	-.564	-.356	-.425
1968-1969	-.280	-.249	-.389	-.445	-.438	-.456
1969-1970	+.057	+.042	-.362	-.337	-.117	-.159
1970-1971	-.004	-.013	-.445	-.399	-.179	-.232
1971-1972	-.164	-.140	-.348	-.254	-.173	-.253
1972-1973	-.150	-.188	+.113	+.131	-.010	+.045
1973-1974	+.028	+.077	-.050	-.005	-.282	-.282

Table 9

CORRELATION COEFFICIENTS BETWEEN PERCENT OF MINORITY STUDENTS IN ELEMENTARY SCHOOLS AND READING ACHIEVEMENT SCORES WHEN SCHOOLS ARE GROUPED ACCORDING TO PERCENT OF MINORITY STUDENTS

Year	Percent of Minority Students				All Schools
	0-25 N=61	26-50 N=5	51-75 N=10	76-100 N=25	
1966	-.119	-.681	-.584	-.308	-.781
1967	-.091	-.502	-.300	-.445	-.746
1968	-.312	-.923	-.739	-.282	-.858
1969	-.360	-.930	-.794	-.427	-.916
1970	-.309	-.918	-.520	-.280	-.852
1971	-.304	-.554	-.693	-.279	-.881
1972	-.306	-.913	-.432	-.086	-.840
1973	-.467	-.965	-.376	-.170	-.845
1974	-.475	-.944	-.456	-.219	-.919
Median	-.309	-.918	-.520	-.280	-.852