

DOCUMENT RESUME

ED 106 397

UD 015 133

TITLE Desegregation Report.  
INSTITUTION Clark County School District, Las Vegas, Nev.  
PUB DATE Jul 74  
NOTE 25p.

EDRS PRICE MF-\$0.76 HC-\$1.58 PLUS POSTAGE  
DESCRIPTORS \*Academic Achievement; Bus Transportation;  
\*Elementary Schools; Elementary School Students;  
\*Integration Effects; Integration Methods;  
Metropolitan Areas; Racial Differences; Racial  
Integration; \*School Integration; School  
Organization; Student Transportation; Urban  
Schools

IDENTIFIERS \*Clark County; Florida; Metropolitan Achievement  
Test

ABSTRACT

The purpose of this assessment was to investigate the achievement patterns of black and white students in the Clark County School District since the implementation of the present desegregation plan. For this study, black students who are currently enrolled in the grade levels under study were used for comparison purposes. In addition, a sample of approximately eight percent of the white students was also utilized in order to investigate the effects of desegregation on the white population. Under the current design, sixth grade centers were established in the previously all black schools. Most sixth grade students in the Metropolitan area attended these centers. The remaining elementary schools in the Metropolitan area were converted to K-Five Centers and black students from the previously all black schools were bussed into these schools in order to achieve full integration. This report includes a statement of the problem specific to Clark County, a review of the literature regarding the general effects of desegregation throughout the nation, the procedures used in this study, limitations of the study, findings within the District, and conclusions regarding achievement patterns in the Clark County School District. (Author/JM)

ED106397

CLARK COUNTY SCHOOL DISTRICT  
Las Vegas, Nevada

DESEGREGATION REPORT

RESEARCH AND DEVELOPMENT DEPARTMENT

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July, 1974

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# DESEGREGATION REPORT

## INTRODUCTION

The primary emphasis of this assessment was to investigate the achievement pattern of black students prior to and after two years of desegregation under the current Integration Plan. The 1971-1972 school year marked the end of desegregation under the "open enrollment" Integration Plan. Under the current design, sixth grade centers were established in the previously all black schools. Most sixth grade students in the Metropolitan area attended these centers. The remaining elementary schools in the Metropolitan area were converted to K-5 centers and black students from the previously all black schools were bussed into these schools in order to achieve full integration. Six elementary schools were exempted under the plan for reason of their naturally integrated residential pattern.

This report includes a statement of the problem specific to Clark County, a review of the literature regarding the general effects of desegregation throughout the nation, the procedures used in this study, limitations of the study, findings within the District, and conclusions regarding achievement patterns in the Clark County School District.

## STATEMENT OF THE PROBLEM

The purpose of this assessment was to investigate the achievement patterns of black and white students in the Clark County School District since the implementation of the present desegregation plan. For this study, black students who are currently enrolled in the grade levels under study were used for comparison purposes. In addition, a sample of approximately eight percent of the white students was also utilized in order to investigate the effects of desegregation on the white population.

## REVIEW OF LITERATURE

It is the purpose of this section to review aspects of the literature related to effects resulting from the desegregation actions.

While this desegregation report is basically aimed at reviewing the achievement data of black students, it should be stated that the purpose of a quality integrated education is viewed as embracing other aspects.

Integrated education is one in which the child learns that he lives in multi-racial society, in a multiracial world, a world which is largely nonwhite, nondemocratic, and non-Christian, a world in which no race can choose to live apart. It is one that teaches him to judge individuals for what they are rather than for what group they belong to. From this viewpoint, he learns that differences among people are not as great as similarities, and that difference is a source of richness and value rather than a thing to be feared and denied. (Nyquist p. 304)

This definition is supported by A. Derrick Bell, Jr., a Harvard Law School Professor, who insists that ...

Education is more than achievement scores on standardized tests. Education should prepare students for living. In integrated schools, whatever the academic value of blacks learning with whites or vice versa, the two groups are forced to cope with the problems of racial hostility and ignorance which have been imposed on them by the society in which they will soon take their places. It may not even be too extreme to say that, to the extent education lacks racial conflict, it is insufficient preparation for living in America as it is and as it is likely to be for a long time. (Bell p. 40)

Most assuredly, the desegregation plan, as operated by the District, affords students the interracial experience advocated by the above positions.

A panel of experts, funded by the Kettering Foundation, analyzed contemporary

literature to ascertain indications of the progress that bussing for racial integration has made towards improving the quality of education. Their conclusions were as follows:

1. Bussing affects student performance in a cumulative way.
2. Bussing probably benefits younger pupils more than it does older ones.
3. Scarce is the way to characterize the amount of research available dealing with the effect bussing has upon college aspirations among children.
4. Neither the academic performance nor the aspirations of white students are altered when they are bussed to achieve racial integration.
5. At the root of the entire matter is a fundamental assessment of the presence or absence of high quality school services at the end of the bus ride.

However, the report did caution the readers that, "...it isn't uncommon for test scores to be statistically insignificant for as long as two years before any substantial gains attributable to bussing begin to show." Likewise, the studies show that by the time children reach fifth or sixth grade, those who have been segregated and those who have been recently integrated perform about equal. This is to suggest that when integration occurs for the first time in "mid-stream" it is not particularly helpful in improving academic performance. The report generalized that the "...academic effects of school segregation set in hard and early upon youngsters." (Reagen p. 40)

Ewald B. Nyquist, Commissioner of Education for the State of New York, testifying before a Subcommittee of the Committee on the Judiciary of the U.S. House of Representatives regarding racial integration, stated that:

1. Results of current research clearly indicate that schools isolated on the

basis of race may be decidedly harmful to the academic achievement of their students. It must be said, too, that racial isolation is a part of the broader problem of social class isolation.

2. The studies of more than 50 school integration programs generally substantiate the positive effects of integration reported in the more representative national or regional studies of the issue.
3. When lower-status students are transferred to schools with predominantly upper-status students, the evidence suggests that continued residence in a lower-status neighborhood will not interfere with the achievement gain that is to be expected as a result of attendance in the school with predominantly upper-status students.
4. In integrated schools the aspirations and the self-esteem of black students are positively affected.
5. The findings of national and local studies generally indicate that the integrated school setting improves interracial understanding among Negro and white students.
6. Transfer of the minority child to schools with predominantly majority children is more likely to help his education if certain specific conditions are met. (Nyquist p. 303)

James Coleman (as quoted by Rosenthal), director of the most elaborate research yet undertaken on the effects of integrated education, claims that:

school integration... is the most consistent mechanism for improving the quality of education of disadvantaged children. Integration alone reduces the existing gap between black and white children by 30 percent. All other school factors don't add up to nearly that much.

In spite of the claims for integrated education, there appears to be conflicting evidence to the contrary. The results of a combined study in five Northern cities, as reported by a Harvard social psychologist, David Armor, indicates "...that none of the studies have been able to demonstrate, conclusively, that integration has had an effect on academic achievement as measured by standardized tests." For example, White Plains, New York, showed no statistically significant difference, and moreover, "...when

comparisons were made with white students in the integrated schools, the black-white achievement gap was not diminished during the period of the study." Similar findings in Ann Arbor were underscored by the three-year follow-up study that showed integrated black students were further behind the white students than before the integration project began. The only positive point that Armor found in reviewing his data was that a higher proportion of bussed students went to college than control students, and they went to better schools.

A summary of "The Achievement of Students in Primary Grades After Seven Years of Desegregation" published by the Riverside Unified School District, February 1973, states the following:

The achievement of kindergarten and first grade bussed and receiving pupils has increased steadily and significantly. It is suggested that these increases, which are evident among high, average, and low achieving bussed pupils, are due to greater emphasis on academic skills in the kindergarten and to greater individualization.

The average achievement of second grade bussed pupils has shown no general trend while the average achievement of second grade receiving pupils has increased.

The average achievement of third grade bussed and receiving pupils has decreased.

The achievement of average and low achieving second and third grade bussed pupils has decreased, indicating that the instructional programs have not met their needs. There are some indications, such as increased achievement in 1971-1972 and significant correlations, that second grade instruction might be beginning to meet the needs of low achieving pupils. However bussed pupils' scores are still very low at most schools and the scores must continue to improve for several years before it can be interpreted as a general upward trend.

The achievement of high achieving second and third grade bussed pupils who have been able to enter the "mainstream" of the receiving schools has followed the same general trends as the average achievement of the receiving pupils.



There have usually been significant correlations between the achievement of bussed and receiving pupils attending different schools at those grade levels (kindergarten, first, and second) at which the general trend in the achievement of receiving pupils indicates instructional improvements. This indicates that both bussed and receiving pupils benefit from the improvements.

The gap between bussed and receiving pupils has narrowed only slightly.

San Francisco City School District evaluated their first year integration effort on two grade levels (second and sixth). The report indicates in the sixth grade all racial groups made nearly a year's gain in a year's time. The median score at the end was 5.5 (grade equivalents) compared to 5.3 the year before. But the scores showed that black and Spanish-speaking students still lagged two and three years behind white and Asian students. There was a similar (proportional) lag in the second grade test scores, where the median was 2.5. (Saturday Review p. 361)

In Berkeley, a report based on 1971-72 shows that pupils have improved steadily in the four years since the city instituted their desegregation plan. However, whites and Asians generally continue to do much better than black and Spanish-speaking students. (Saturday Review p. 361)

What seems to become evident from the research conducted is that socio-economic conditions and family circumstances may play a greater role in education than what goes on in the schools. (Ozman p. 35) As this evidence mounts, the idea of speaking of blacks and the disadvantaged as being synonymous requires reappraisal, "...for it remains a shameful reality that the racially isolated school is one which is also isolated on the basis of economic status." (Carlson p. 464)

In summary the following generalizations are prompted by the current research on

desegregated education:

1. Desegregated education can be supported by the mere fact that it is reflective of America's existing multiracial society.
2. Most desegregation studies indicate that academic gains for minorities are more pronounced for the primary grade group.
3. Initial effects of desegregation rarely show statistically significant gains.
4. By the time black children reach fifth or sixth grade, those who have been segregated and those who have been recently integrated perform about equal.
5. Most desegregation studies report that the minority-white achievement gap continues to persist.

### PROCEDURES

Two student populations were identified for this study. All black students who were enrolled in the Clark County School District as of May 1974 in the grade levels under study were used for the black population. For comparative purposes, approximately an eight percent sample of white students in comparable grade levels was employed.

In April 1972, all students in grades two, four, five, and six were tested with the Metropolitan Achievement Test and the Otis-Lennon Mental Ability Test. Since no data was available for third grade students, they were tested in October 1973 as fourth graders. In 1974, the district-wide testing program included grades two and five. Thus, the study was organized to employ test data for these grade levels.

The basic design of this study is to present test data in terms of a cross sectional study (e.g., 2nd grade 1972 vs 2nd grade 1974) as well as a longitudinal study. (e.g., 5th grade 1974 viewed comparatively with their 4th grade 1972 results.) Data for the following comparisons are presented in the "Findings" for both the black and white populations.

A. Cross sectional - Metropolitan Achievement Test

1. Second grade, April 1972 vs second grade, April 1974.
2. Fifth grade, April 1972 vs fifth grade, April 1974.

B. Longitudinal - Metropolitan Achievement Test

1. Present fifth grade students. (3rd graders - April 1972)  
(a) October 1972 vs April 1974

The achievement test scores reported for the Metropolitan Achievement Test are presented in terms of standard scores and stanines. The standard scores for the Metropolitan Achievement Test were developed on a continuous scale which makes comparisons for different leveled tests possible. Derived scores such as percentile ranks and grade equivalents were based on the mean standard scores specified by the administration date of the test.

Stanines are scores that range from a low of one to a high of nine with a mean of 5.0. This score is especially valuable in making longitudinal comparisons since an increase in the mean stanine between two testing dates indicates an increase in the

rate of achievement with reference to the national norm. Likewise, a mean stanine score which remains constant between two testing dates indicates that the population maintained their rate of achievement with reference to the national norm.

### LIMITATIONS

- A. The results of this study are based on the Metropolitan Achievement Test. Therefore, the results of the study only indicate performance as measured by this instrument.
- B. No assessment of attitudes was conducted, consequently, no statements can be implied regarding social adjustment.

### FINDINGS

#### Cross Sectional

The purpose of a cross sectional investigation is to determine if the average achievement level of students in a specific grade is higher, lower, or the same for two or more years. The comparisons provided below are not based on the same students but are comparisons of achievement patterns for specific years. The primary question to be answered by this investigation is to determine if the students in a specific grade level are achieving at a significantly different level than comparable students were achieving two years ago. The first part of this cross sectional investigation deals with the achievement levels of black and white students as measured by the Metropolitan Achievement Test.

Whenever a comparison is made between two groups of students, some change in test scores will exist due to chance or the standard error of measure for a test. Statistical tests are available to determine if the change in test scores is a real change or is due

to chance fluctuations. In this section, a t-test was used to determine if significant differences exist. A significant difference was said to exist when  $P \leq .05$  (one time in 20 the difference could happen by chance). When a significant difference was observed between the mean stanines for the two groups, an asterisk was recorded in the subtest column at the bottom of the table in a column labeled "P." If no significant difference existed the subtest column was left blank. A negative asterisk -\* was used if the later group obtained a mean stanine significantly below the previous group.

### Cross Sectional (Grade 2) Metropolitan Achievement Test

Figures 1 & 2 compare the achievement level of second graders for April 1972 (pre-integration) to second graders for April 1974. Figure 1 presents the achievement level for all black students in terms of standard scores, grade equivalents, percentile ranks, and stanines. All subtests on the Metropolitan Achievement Test, Primary II are presented. Figure 2 presents the same comparisons for the white sample that was utilized in this study.

Figure 1

**Black Student Achievement**  
**Grade 2, April 1972 vs Grade 2, April 1974**  
**April 1972 (Expected G.E. = 2.7)**

	IQ	WK	WA	R	TR	SP	MCP	MCT	MPS	TM
SS	94	50	48	47	48	53	47	48	50	50
GE		2.4	2.5	2.2	2.3	2.6	2.3	2.2	2.4	2.3
%ile	35	26	38	26	28	36	20	18	26	16
S9	4.1	4.0	4.3	4.0	4.0	4.4	3.6	3.5	3.7	3.5
N	661	697	696	693	691	685	696	696	694	688

April 1974

	IQ	WK	WA	R	TR	SP	MCP	MCT	MPS	TM
SS	93	51	50	48	48	55	49	50	50	51
GE		2.5	2.6	2.3	2.3	2.7	2.4	2.4	2.4	2.3
%ile	33	32	44	28	28	42	26	24	26	20
S9	4.0	4.1	4.6	4.2	4.1	4.8	4.0	3.7	3.8	3.8
N	750	757	755	746	741	733	752	750	744	735
P			*			*	*	*		*

**Legend:** WK = Word Knowledge, WA = Word Analysis, R = Reading,  
 TR = Total Reading, SP = Spelling, MCP = Math Computation,  
 MCT = Math Concepts, MPS = Math Problem Solving

SS = Metropolitan Standard Scores, GE = Grade Equivalents,  
 %ile = Percentile Rank, S9 = Stanine, N = Number of  
 Students Tested

\*Statistically significant improvement

-\*Statistically significant decline

Figure 2

White Student Achievement  
Grade 2, April 1972 vs Grade 2, April 1974

April 1972 (Expected G.E. = 2.7)

	IQ	WK	WA	R	TR	SP	MCP	MCT	MPS	TM
SS	107	57	56	55	56	61	55	58	59	59
GE		3.0	3.2	2.8	3.0	3.3	2.9	3.0	3.0	2.9
%ile	67	64	66	60	66	68	58	52	58	58
S9	5.8	5.4	5.9	5.5	5.5	5.8	5.2	5.1	5.3	5.2
N	314	340	340	341	340	338	338	338	336	333

April 1974

	IQ	WK	WA	R	TR	SP	MCP	MCT	MPS	TM
SS	107	58	56	56	56	60	55	58	58	59
GE		3.1	3.2	2.9	3.0	3.1	2.9	3.0	3.0	2.9
%ile	67	68	66	64	66	64	58	52	54	58
S9	5.7	5.5	5.9	5.6	5.6	5.7	5.1	5.1	5.1	5.1
N	391	389	388	387	385	389	390	390	388	387
P	No Significant Difference in Any Subtest									

Legend: WK = Word Knowledge, WA = Word Analysis, R = Reading,  
TR = Total Reading, SP = Spelling, MCP = Math Computation,  
MCT = Math Concepts, MPS = Math Problem Solving

SS = Metropolitan Standard Scores, GE = Grade Equivalent,  
%ile = Percentile Rank, S9 = Stanine, N = Number of  
Students Tested

An analysis of the above results indicates that this year's black second graders scored significantly better in Word Analysis, Spelling, Mathematics Computation, Mathematics Concepts, and Total Mathematics than did the black second graders in the Spring of 1972. There was no significant difference between the two groups in measured IQ.

The white sample, on the other hand, appeared to have nearly the same achievement profile in 1972 as they did in 1974. (No significant difference existed between the IQ scores of the two groups.)

From these data, it could be concluded that the typical second grade black student is achieving better in Word Analysis, Spelling, Mathematics Computation, Mathematics Concepts, and Total Mathematics than the typical black student achieved prior to integration. In addition, the white population remained relatively stable over the same two year interval. Thus, it would appear that black achievement after integration is gradually improving without effecting the test results for the white population at the second grade level.

Additionally, it should be noted that even though the black second grade population is achieving below their white counterpart, their achievement stanine is equal to or exceeds their ability stanine in all subtests except Math Concepts, Math Problem Solving, and Total Mathematics. Inspection of the white sample population indicates underachievement in all mathematics subtests and Total Mathematics.

#### Cross Sectional (Grade 5) Metropolitan Achievement Test

Since the District-wide Testing Program did not include grades three and four in April 1974, the next comparison presented is for grade 5, April 1972 (pre-integration) vs grade 5, April 1974. Figures 3 and 4 present the same format of data as provided previously.



Figure 3

**Black Student Achievement**  
**Grade 5, April 1972 vs Grade 5, April 1974**  
**April 1972 (Expected G.E. = 5.7)**

	TQ	WK	R	TR	LANG	SP	MCP	MCT	MPS	TM
SS	89	67	68	67	71	73	74	70	69	74
GE		4.1	4.2	4.2	4.1	4.8	4.6	4.1	3.8	4.1
%ile	25	18	20	18	18	30	16	20	16	11
S9	3.3	3.2	3.5	3.3	3.3	4.0	3.2	3.2	3.2	3.0
N	588	618	618	618	618	617	618	618	618	618

**April 1974**

	TQ	WK	R	TR	LANG	SP	MCP	MCT	MPS	TM
SS	90	67	67	66	70	72	75	71	72	77
GE		4.1	4.1	4.1	4.0	4.7	4.7	4.2	4.1	4.4
%ile	27	18	18	18	16	28	18	22	22	18
S9	3.4	3.2	3.3	3.1	3.0	3.7	3.2	3.4	3.3	3.1
N	805	772	769	768	763	772	777	770	770	763
P					-*	-*				

Legend: WK = Work Knowledge, R = Reading, TR = Total Reading,  
 LANG = Language, SP = Spelling, MCP = Math Computation,  
 MCT = Math Concepts, MPS = Math Problem Solving,  
 TM = Total Math

SS = Metropolitan Standard Scores, GE - Grade Equivalent,  
 %ile = Percentile Rank, S9 = Stanine, N = Number of  
 Students Tested

\*Statistically significant improvement  
 -\*Statistically significant decline

Figure 4

White Students Achievement  
Grade 5, April 1972 vs Grade 5 April 1974  
April 1972 (Expected G.E. = 5.7)

	IQ	WK	R	TR	LANG	SP	MCP	MCT	MPS	TM
SS	104	78	78	78	82	77	83	82	81	86
GE		5.8	5.5	5.6	5.7	5.2	5.6	5.7	5.4	5.4
%ile	60	52	42	48	44	44	42	50	46	46
S9	5.4	5.2	5.0	5.0	4.9	4.7	4.7	5.0	4.7	4.8
N	360	375	375	375	375	375	375	375	375	375

April 1974

	IQ	WK	R	TR	LANG	SP	MCP	MCT	MPS	TM
SS	105	80	78	79	81	78	83	82	82	86
GE		6.1	5.5	5.7	5.6	5.4	5.6	5.7	5.5	5.4
%ile	62	58	42	52	42	48	42	50	48	46
S9	5.4	5.2	4.9	5.1	4.6	4.7	4.7	5.1	4.8	4.8
N	483	467	467	467	466	462	463	461	463	457
P					-*					

Legend: WK = Work Knowledge, R = Reading, TR = Total Reading,  
LANG = Language, SP = Spelling, MCP = Math Computation,  
MCT = Math Concepts, MPS = Math Problem Solving,  
TM = Total Math

SS = Metropolitan Standard Scores, GE - Grade Equivalent,  
%ile = Percentile Rank, S9 = Stanine, N = Number of  
Students Tested

\*Statistically significant improvement  
-\*Statistically significant decline

Black fifth grade students prior to integration (April 1972) achieved significantly higher in Language and Spelling than did the fifth grade black students this Spring. However, Figure 4 reveals that the white sample also achieved significantly higher in Language in April 1972 than they did in April of 1974.

There are slight fluctuations in other subtests for both the black and the white groups but none of these differences were statistically significant.

The fifth grade data would seem to indicate that black students are achieving at the same level now as they were prior to integration. The exception to this is Language and Spelling in which case the results were significantly lower in 1974. Thus, integration has not improved the test results of typical 5th grade black students when the 1972 population is compared to the 1974 group. This achievement pattern is somewhat reflective of the research literature which has been reviewed.

### Longitudinal Study

The purpose of a longitudinal study is to analyze the achievement patterns of the same group of students over a specified period of time. This section of the report deals with a study of the same black and white fifth grade students from the Fall of their fourth grade year (October 1972) to the end of the fifth grade year (April 1974).

Figures 5 and 6 present the results of this study for the black population and the white sample. It should be noted that the expected grade equivalent for October 1972 is 4.1 and the expected grade equivalent for April 1974 is 5.7.

Figure 5

Fifth Grade Black Students  
October 1972 vs April 1974

October 1972 (Expected G.E. 4.1)

	WK	R	TR	LANG	SP	MCP	MCT	MPS	TM
SS	54	51	51	58	54	56	55	55	58
GE	2.7	2.5	2.5	2.8	2.6	3.0	2.8	2.8	2.8
%ILE	16	14	14	20	14	11	14	11	10
S9	3.2	3.0	3.0	3.3	3.1	3.0	3.0	2.8	2.8
N	656	654	653	647	652	657	650	648	644

April 1974 (Expected G.E. = 5.7)

	WK	R	TR	LANG	SP	MCP	MCT	MPS	TM
SS	67	67	66	70	72	75	71	72	77
GE	4.1	4.1	4.1	4.0	4.7	4.7	4.2	4.1	4.4
%ILE	18	18	18	16	28	18	22	22	18
S9	3.1	3.2	3.1	3.0	3.7	3.3	3.4	3.3	3.1
N	656	654	653	647	652	657	650	648	644
P		*		**	*	*	*	*	*

Legend:

WK = Word Knowledge, R = Reading, TR = Total Reading,  
LANG = Language, SP = Spelling, MCP = Math Computation,  
MCT = Math Concepts, MPS = Math Problem Solving,  
TM = Total Math

SS = Metropolitan Standard Scores, GE = Grade Equivalent,  
%ile = Percentile Rank, S9 = Stanine, N = Number of Students  
Tested

\*Statistically significant improvement

\*\*Statistically significant decline

Figure 6

Fifth Grade White Students  
October 1972 vs April 1974

October 1972 (Expected G.E. = 4.1)

	WK	R	TR	LANG	SP	MCP	MCT	MPS	TM
SS	67	65	65	70	64	64	67	67	70
GE	4.1	3.8	3.9	4.0	3.6	3.7	3.8	3.6	3.7
%ILE	50	46	48	48	40	34	42	36	38
S <sub>9</sub>	5.0	4.8	4.9	5.0	4.7	4.4	4.8	4.6	4.6
N	354	354	354	355	354	352	350	352	348

April 1974 (Expected G.E. 5.7)

	WK	R	TR	LANG	SP	MCP	MCT	MPS	TM
SS	80	79	79	81	78	83	82	82	87
GE	6.1	5.7	5.7	5.6	5.4	5.6	5.7	5.5	5.6
%ILE	58	46	52	42	48	42	50	48	50
S <sub>9</sub>	5.2	4.9	5.1	4.6	4.7	4.7	5.1	4.8	4.8
N	354	354	354	355	354	352	350	352	348
P				-*		*			

Legend: WK = Word Knowledge, R = Reading = TR = Total Reading,  
LANG = Language, SP = Spelling, MCP = Math Computation,  
MCT = Math Concepts, MPS = Math Problem Solving,  
TM = Total Math

SS = Metropolitan Standard Scores, GE = Grade Equivalent,  
%ile = Percentile Rank, S<sub>9</sub> = Significance, N = Number of Students  
Tested

\*Statistically significant improvement

-\*Statistically significant decline

An analysis of this data reveals that black students made significant gains with reference to the norming population between the beginning of their fourth grade year and the end of their fifth grade year in the following subtest areas: (1) Reading, (2) Spelling, (3) Math Computation, (4) Math Concepts, (5) Math Problem Solving, and (6) Total Mathematics. The only significant decline was in the Language subtest.

White students on the other hand, made positive gains in all subtests except Language. However, the only statistically significant gain was in Mathematics Computation. A significant decline was also observed in Language for the white sample.

It would appear that both groups improved their position with reference to the National Norm. However, the black population registered significant gains in six of the nine subtest areas.

#### SUMMARY OF FINDINGS

Basically, the results of this study seem to indicate that some accomplishments are evident in improving the achievement patterns of black students. However, a wide gap still exists between the achievement of black and white students. This gap probably cannot be expected to be decreased substantially or eliminated in two years of integration. As mentioned in the research of literature, many school districts are finding that significant growth in achievement by black students cannot be obtained in a two year time span.

An analysis of the data supports the following points:

A. Cross Sectional Analysis

1. Black students who were enrolled in the second grade during the 1973-74 school year have improved their achievement profile when compared to black second graders prior to integration. Significant improvement was observed in Word Analysis, Spelling, Math Computations, Math Concepts, and Total Mathematics.
2. A sample of white second grade students (1973-74 school year) indicated the same achievement pattern two years after integration as was observed prior to integration.
3. Black fifth grade students obtained an achievement profile in April 1974 that was nearly identical to the achievement profiles of black fifth grade students in April 1972. There was a significant decrease in the Language and Spelling subtests.
4. White fifth grade students obtained an achievement profile in April 1974 that was nearly identical to the achievement profile of white fifth grade students in April 1972. As was true with the black population, the white sample also declined significantly on the Language subtest.

B. Longitudinal Analysis

1. Results of a longitudinal study for 1973-74 fifth grade black students indicated significant improvements in Reading, Spelling, Math Computations, Math Concepts, Math Problem Solving, and Total Mathematics between the beginning of Grade 4 (October 1972) and the end of Grade 5 (April 1974).

6. Results of a longitudinal study for 1973-74 fifth grade white students indicated a significant improvement in Math Computations and a significant decline in Language between the beginning of Grade 4 (October 1972) and the end of Grade 5 (April 1974). Other subtest areas remained constant.

### CONCLUSIONS

Since all statistical tests were based on stanine scores for the Metropolitan Achievement Test, it must be remembered that the findings indicate achievement as compared to the National Norm that is used. Although a group of students improves their mean stanine between two testing dates, they will continue to fall further below grade level if the mean stanines are below 5.0. However, the stanine does provide a growth rate factor which is an important concept. The gains that are indicated as statistically significant do represent a positive growth. Statistically speaking, the possibility of these changes taking place as a result of errors in measurement are less than 1 in 20.

In a considerable number of instances, black students made significant increases when pre-integration scores were compared to post-integration scores. These improvements coincide with rather stable results on the part of the white sample.

The results of this study indicate a substantial difference between white and black achievement. It would appear that this difference will not be overcome in a short period of time. Although the achievement profiles of the black population are still low, the study does suggest a positive trend.

Continued evaluation should be encouraged to determine the subsequent affects of desegregated education for the students in the Clark County School District.



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