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## ABSTRACT

The 1993-94 school year marked the first year of the federally-assisted magnet program implemented by Charlotte-Mecklenburg (North Carolina) Schools (CMS). This paper presents the program's goals, the measurable objectives developed to meet the goals, and first-year outcomes. The goals were to reduce, eliminate, or prevent minority group isolation and to ensure academic excellence in each of the magnet schools while not adversely affecting the minority and nonminority population at other schools. Results of the first-year evaluation show that each of the 25 magnet schools made major progress toward achieving the goals set forth in the magnet grant. They reduced racial isolation, implemented diverse strategies that fostered interaction among different ethnic groups, improved academic achievement, and increased parental involvement in their children's education. However, magnet and middle schools need new strategies to increase the percentage of black students performing at or above grade level in mathematics, reading, and social studies. In addition, the number of feeder schools not in compliance has grown even though the proportion of black students attending predominantly black schools is smaller than would be the case if magnet schools were not in place. (LMI)

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ED 381 907

# CHARLOTTE-MECKLENBURG SCHOOLS

Charlotte, North Carolina

Magnet Assistance Program Performance Report

First Report on Accomplishments in Achieving Other Project Objectives

September 7, 1994

Grant # S165A30043-94

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## 1993-94 MAGNET REPORT

**The first year of the federally funded magnet program has been a big success. Each of the 25 magnet schools made major strides in achieving the goals set forth in the magnet grant. Magnet schools were pivotal in reducing racial isolation, implementing diverse strategies that fostered interaction among different ethnic groups, improving academic performance, and increasing parental participation in their children's education.**

The just completed school year (1993-94) was the first year of the federally assisted magnet program implemented by Charlotte-Mecklenburg Schools (CMS). The overall intent of the magnet program is to enable CMS to solidify the integration gains made in schools that were magnetized prior to the federal grant and to implement a broader based and more robust magnet school program to help eliminate racial isolation in all CMS schools. The elimination of racial isolation includes not only improving the racial balance in the district's schools, but also increasing the use of educational practices that encourage meaningful and regular interaction among diverse ethnic groups.

The federally funded magnet program is an integral part of CMS's five year Student Assignment Plan (Plan). This plan was designed to be more equitable than previous student assignment plans by promoting voluntary busing as a way to reduce racial isolation within schools and school groupings.

In line with the objectives of the Plan, the goals of the magnet program were set to reduce, eliminate, or prevent minority group isolation and to ensure academic excellence in each of the magnet schools while not adversely affecting the minority and non-minority population at other schools. The specific magnet goals are:

1. To reduce, eliminate or prevent minority isolation, by race and gender, at magnet schools and feeder schools.
2. To develop and implement strategies that foster interaction among culturally diverse populations at each of the magnet schools.
3. To provide high quality educational programs in integrated learning environments as a means of significantly improving both the academic and vocational skills of students.
4. To increase parental decision making and school involvement with a special emphasis on the varied needs of diverse ethnic and socioeconomic groups.

As a means of providing a way to evaluate the magnet program, the following set of measurable objectives was developed. These objectives represent the measurable and quantifiable outcomes that will serve as the yardsticks for judging the extent to which the

program is successful. These objectives apply to all magnet school programs. While each school may have used different strategies to address these goals, the overall outcomes, goals and objectives will apply consistently to every each magnet school.

### **GOAL #1**

**OBJECTIVE #1**--To recruit sufficient minority student participation to enable Magnet schools/themes to have populations that reflect the ratios established by the court order<sup>1</sup>. This will be demonstrated by school enrollment applications and waiting list data. The targets will be met in the first year for each new magnet school, and maintained annually in each existing magnet school. In addition, gender participation will also be monitored to ensure 50/50 male/female enrollment pattern.

**OBJECTIVE #2**--To reduce the number of feeder schools that have a black population in excess of the court ordered limits as demonstrated by enrollment data in feeder schools. In the first year, the percentage of such schools will be reduced by 20%, by 60% by the end of the second year, and 100% by the third year. Gender participation will also be monitored to ensure 50/50 male/female enrollment patterns in feeder schools.

**OBJECTIVE #3**--To phase out the use of pairing of elementary schools and associated excessive mandatory busing. Of the schools paired prior to the implementation of the magnet program, 50% will be de-paired by the end of the 93-94 school year.

### **GOAL #2**

**OBJECTIVE #1**--To increase the participation and involvement of minority group students and meaningful interaction between minority and majority groups, in key academic outcomes and groupings, within school as determined by the extent to which membership in these groups approximates the schoolwide racial enrollment goals.

**OBJECTIVE #2**--To increase the participation and involvement of minority group students, and meaningful interaction between minority and majority groups, in key social and non-academic groupings and activities as determined by the extent to which membership in these groups approximates the schoolwide racial enrollment goals.

**OBJECTIVE #3**--To require the development and full implementation of multicultural education plans that emphasize (a) increased interaction among minority and majority students and (b) the use of diverse instructional strategies to ensure that all students benefit equally from the teaching and learning process. These plans will be developed in accordance with Board policy and will be subject to external auditing on a semi-annual

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<sup>1</sup> As a result of the court order, students are classified as black and other. The district is 40% black and 60% other. Elementary schools have an allowable limit of 55% black and secondary schools have an allowable limit of 50%.

basis to determine the extent to which groups' membership are diverse and teachers are employing a wide range of appropriate instructional strategies.

### GOAL #3

**OBJECTIVE #1**--To ensure that minority and non-minority students in magnet schools meet equally high achievement standards in all core subjects as measured by: (a) performance on state and locally required achievement tests in all core subjects, report card grades, and readiness inventories for K-2nd grade students. On the achievement tests, it is expected that students in magnet schools will meet or exceed the CMS average scores on the tests and that the gap between minority and non-minority students will be reduced by 20% per year, and (b) the extent to which students' progress during the school year, as determined by criterion-referenced tests that are given in the beginning, middle and end of the school year. It is anticipated that 65% of the students will meet 75% of all grade appropriate objectives at the end of the first year and 75% of all students will do so at the end of the second year without regard to minority or majority group membership.

**OBJECTIVE #2**--To ensure that teachers are provided with the required inservice to help them teach higher level curricula to diverse groups of students as evidenced by classroom observations of teacher performance, and teachers' perceptions of the effectiveness of the training received as measured by the annual teacher survey. It is anticipated that by the end of the 1993-94 school year that 80% of the classroom observations will indicate that instructional strategies presented in staff development are appropriately and sufficiently implemented.

**OBJECTIVE #3**--To enhance students' interests in Magnet themes implemented in each of the Magnet schools as evidenced by (a) the extent to which students reapply for the same magnet school or program in subsequent years, (b) anecdotal information collected as part of focus group activities held with students throughout the year, and (c) responses by parents on the annual Family survey.

**OBJECTIVE #4**--To ensure that sufficient resources are available to Magnet schools as determined by a school-by-school resource audit that will be conducted and annually updated by school principals and central office staff.

### GOAL #4

**OBJECTIVE #1**--To increase meaningful parental involvement and key decision making roles in magnet schools as demonstrated by there being no differences in information and participation levels between minority and non-minority parents and measured by the extent to which parents (a) perceive that they are valued members of the school community and (b) actually serve in meaningful decision making or instructional support roles. These data will be collected as part of the annual Family survey. It is anticipated that by the end of the first year, 75% of the parents will respond in a positive manner.

**OBJECTIVE #2**--To improve the capacity of parents to help their children as evidenced by (a) 75% of parents having positive perceptions of their ability to help their children; and (b) the extent to which the actual performance of their children improves. The relationship between these two variables will be analyzed to determine the degree to which parental involvement impacts student achievement.

**OBJECTIVE #3**--To improve parents' ability to participate in the education of their children by (a) providing transportation to parent conferences and/or holding conferences in parent's neighborhood and (b) providing easily understood information about schools and school programming. Evidence of this will be determined through detailed school-by-school logs of parent attendance at conferences and school events, and parents' perceptions on the annual Family survey of how well they understand the school's program.

**OBJECTIVE #4**--To identify and eliminate barriers that stand in the way of parents' meaningful involvement in the education of their children as evidenced by responses to "barriers" questions from the annual Family survey. School-specific barriers identified by parents, and related action taken by principals and staff to eliminate the barriers, will be documented. It is anticipated that 70% of all barriers identified by parents will be acted on within six months of identification.

## METHODS

The information used in this report was gathered from several sources. Measures of academic outcomes were obtained from the CMS K-2 Assessment of Readiness for the Next Grade, North Carolina End-of-Grade Tests, and North Carolina End-of-Course Tests. Parent, teacher, and student attitudes were assessed with the CMS Family, Teacher, and Student Annual Surveys respectively. In addition, anecdotal information was obtained from qualitative evaluations of four magnet schools by University of North Carolina at Charlotte (UNCC) and from magnet school principals. Focus groups and interviews with teachers and parents were used by the UNCC consultants, and principals provided school logs and other anecdotal information.

## RESULTS

### GOAL #1

**CMS was successful in beginning to reduce minority isolation by race and gender. Enrollment in the magnet program was within court ordered guidelines for blacks and others. In addition, the ratio of males to females was close to 50/50. Magnet schools were successful in reducing the proportion of black students who would have attended schools that were in excess of 50% black. There is clear evidence that student demographic changes in the community will require**

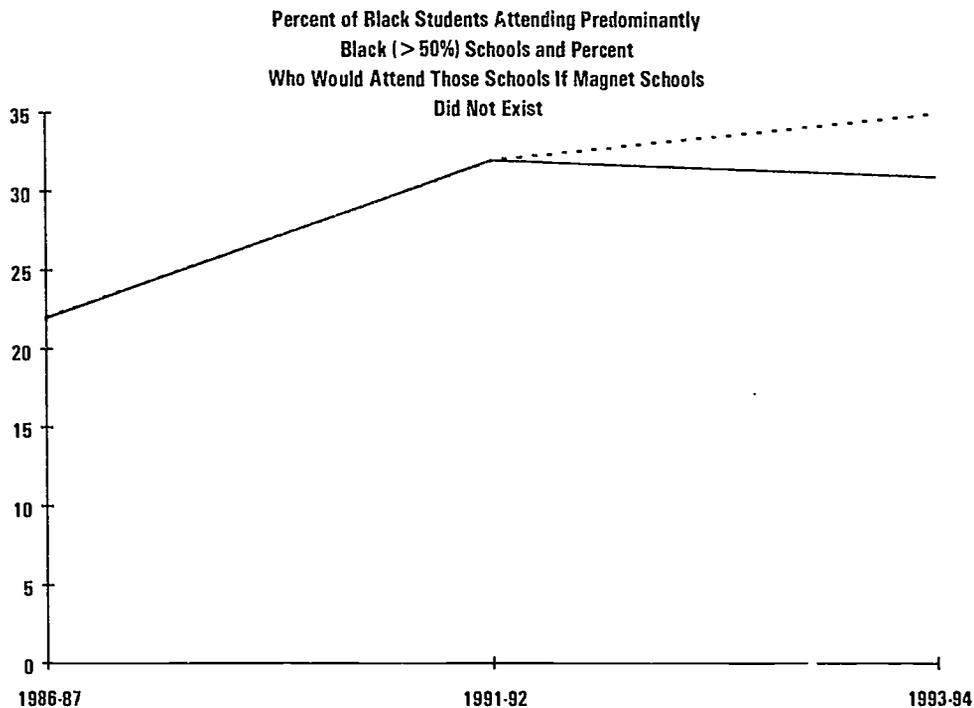
**modifications to the current student assignment plan and to the location of new schools to ensure that this trend continues and is intensified.**

Objective #1/Goal #1

The data that provide information regarding Objective #1 was primarily contained in the Enrollment and Participation Report submitted by CMS to the federal government in February 1994. To summarize that information, at the end of the 1993-94 school year CMS' magnet school population was approximately 43% black and 57% other. These figures are well within the court ordered guidelines. In addition, almost 49% of the magnet students are female which reflects the proportion of females throughout the district.

Objective #2/Goal #1

From 1992-93 to 1993-94 two additional elementary schools fell into the "out-of-compliance" category. This increase at the elementary level is accounted for by the fact that the black elementary population has grown at a greater rate (approximately 8%) over the past three years than the white elementary population (approximately 6%). It should be noted that in 1993-94 the percentage of black students attending elementary schools that were in excess of 50% black was 31% (5,816 students). **However, if magnet schools had not been in place, then 35% (6,524 students) of all black students would have attended elementary schools that were in excess of 50% black** (see graph below).



\*Solid line is actual. Dotted line is percent who would attend predominantly black schools without magnet schools.

### Objective #3/Goal #1

The reduction in the number of paired schools (K-3 and 4-6) was covered primarily in the Enrollment and Participation report. To review, of the 19 elementary schools that were paired in 1992-93, approximately half (9) were de-paired in 1993-94 plus calls for the balance of the schools to be de-paired by the 1996-97 school year.

### GOAL #2

**All the magnet schools were able to develop and implement strategies that enabled them to foster interaction among the culturally diverse populations that attended magnet schools. The proportion of black magnet high school students enrolled in higher level courses was much higher than the district average. All magnet elementary schools reported that school clubs and student governments reflected the ethnic make-up of the individual schools. All magnet schools reported implementing multicultural education plans and using a variety of instructional strategies designed to foster meaningful interaction.**

### Objective #1/Goal #2

Districtwide black enrollment in Advanced Placement courses has increased both numerically and proportionally in the past year. In 1991-92 black enrollment was barely 6% (77) of all Advanced Placement enrollment (1,317). By 1992-93 black enrollment was 10% (254) of all Advanced Placement enrollment (2,620). In 1993-94, black enrollment was 12% (376) of all Advanced Placement enrollment (3,125). In addition, black enrollment in higher level courses (e.g., Chemistry, Physics, French III, Latin, and Calculus) increased numerically and proportionally as well. In 1991-92 black enrollment was 18.2% (3,849) of all higher course enrollment. It was 20.5% (5,477) of all higher course enrollment (26,697) in 1992-93 and grew to 21.6% (6,613) of all higher course enrollment (30,667) in 1993-94.

As stated in the Enrollment and Participation Report, magnet themes at the high school level reside as within-school programs at regular high schools. Currently, there are only three magnet themes with 791 students at the high school level--International Baccalaureate (IB), Math, Science and Technology (MS&T), and Open (see Enrollment and Participation Report for ethnic distribution). Both IB and MS&T programs are very rigorous and require students to enroll in higher level courses. There are 590 students enrolled in either the IB or the MS&T programs, of which 229 (38.8%) are black. For example, 34% of the IB and MS&T students enrolled in Algebra 2 are black. In addition, 30% of the IB and MS&T students enrolled in Chemistry are black. In both examples the proportion of black students enrolled in higher level classes at magnet schools greatly exceeds the district average.

#### Objective #2/Goal #2

Social and non-academic groupings in magnet schools consisted of three forms--clubs, student government, and sports teams. At the elementary level there were no organized inter-school competitive sports teams. Thus, the primary method of non-academic grouping was clubs (including Band and Chorus) and student government. Most schools had Chess clubs, Science clubs, Math clubs, Band and Orchestra. Student governments performed a variety of functions, such as, safety patrols, student councils, and various advisory committees (e.g., Youth Advisory Council). In some instances club or student government participation was mandatory and school time was used to facilitate student participation in these activities. In other instances, student participation was voluntary.

All elementary magnet schools reported that student government and club participation was integrated with the ethnic participation closely resembling the racial make-up of the school. For example, at Ashley Park Elementary School (46% black), a Mathematics, Science & Technology magnet, the Safety Patrol was 33% black (7 of 21 students), the Chess club was 36% black (12 of 33 students), and the Band was 42% black (18 of 43 students).

At the secondary level, in addition to clubs and student government, students were also involved in sports teams. However, ethnic balance at this level was more problematic because students engaged in these activities voluntarily. These teams included basketball, football, baseball, softball, track, soccer, cross country, and several others. For example, at Hawthorne Traditional Middle School (39% black), a Traditional Classical magnet, the varsity football team was 63% black (12 of 19 students), the boys' basketball was 64% black (9 of 14 students), the girls' basketball team was 50% black (5 of 10 students), the softball team was 43% black (6 of 14 students), and the student council was 64% black (25 of 39 students). The higher black representation in these voluntary after-school activities is typical of magnet middle schools. One likely explanation is that white/other students usually lived farther away from the magnet schools than black students, thus making transportation problematic especially at middle school where students are too young to drive.

As noted above, no high school was exclusively a magnet school, rather, magnet themes operated within the confines of the regular school similar to the "school within a school" concept. Thus, the magnet programs tended to be more racially balanced than the rest of the school. Therefore, school teams, clubs, and student government racial balances are not indicative of the magnet program but rather of the school as a whole and are not valid for analysis in this instance.

#### Objective #3/Goal #2

CMS in conjunction with the School Board developed a districtwide multicultural educational plan during the 1993-94 school year to be implemented in 1994-95. During the 1993-94 school year, individual multicultural education plans were implemented at the school level by all magnet schools.

School implemented multicultural plans generally included three components: minority achievement program, international or multicultural events for the entire school, and multicultural in-service training for teachers and staff. For example, Piedmont Middle School, an Open magnet, used a minority achievement plan titled "Eyes on the Prize," held an International Day for students, parents and staff, and held staff workshops and activities that centered on cultural sharing and training for the minority achievement program.

Another example is Villa Heights Elementary School, a Learning Immersion and Academically Gifted magnet. This elementary school used a minority achievement plan that incorporated peer tutoring where all minority students in kindergarten through grade 2 were paired with an older student for tutoring and friendship, Family Night Orientation and three subsequent workshops during the year centering on minority achievement, and a multicultural curriculum which included publishing cooking recipes from around the world.

In order to estimate the variety and frequency of instructional strategies, CMS staff designed an instructional checklist for magnet school principals. The table below contains the percentage of magnet schools whose teachers were observed using these strategies. It is readily apparent that all magnet school employed a variety of instructional strategies.

<u>Strategy</u>	<u>% of Magnet Schools</u>
Cooperative Learning	100
Homogeneous Grouping	100
Heterogeneous Grouping	100
Individualized Instruction	100
Whole Class Instruction	96
Crisis Meetings	84
Peer Tutoring	96
Jigsaw Grouping	68
Teams, Games, Tournaments	68
Multi-aged Groups	72
Learning Centers	100

### GOAL #3

**Although improvement in academic and vocational skills take time to develop, CMS was partially successful in improving the academic and vocational skills of its students. Magnet students, both black and other, in grades K-2 and high school outperformed their district peers on the vast majority of academic measures. Data from reading and mathematics tests indicate that the magnet schools need to focus more on these areas. In addition, magnet teachers, students, and parents graded the magnet schools higher than the district average and were overwhelmingly pleased with the magnet school program.**

### Objective #1/Goal #3

### **PRIMARY GRADES (K-2)**

In CMS, K-2nd graders are evaluated on an instrument called the Charlotte-Mecklenburg Schools Readiness Assessment. This instrument is used for both Mathematics and Communication Arts. The instrument is completed by the student's teacher after observation of appropriate activities, such as a writing sample (grades 1 & 2), an oral reading sample, and a 20-30 item checklist of literacy and mathematics skills. The results indicate whether or not the student is ready to begin work in Mathematics or Communication Arts at the next grade level. As is evident from the tables below, magnet students as a whole scored consistently higher on all the assessment measures except 2nd grade Communication Arts.

### KINDERGARTEN

% Ready to begin work in first grade instructional materials

**COMMUNICATION ARTS**

	All Students	Black	Other
Magnets	88.8	85.6	91.6
District	81.7	71.7	88.5

**MATHEMATICS**

	All Students	Black	Other
Magnets	89.1	85.8	91.9
District	81.1	70.7	88.3

**FIRST GRADE**

% Ready to begin work in second grade instructional materials

**COMMUNICATION ARTS**

	All Students	Black	Other
Magnets	74.1	63.4	84.7
District	73.0	57.6	83.4

**MATHEMATICS**

	All Students	Black	Other
Magnets	79.7	71.1	88.3
District	79.6	66.1	88.7

**SECOND GRADE**

% Ready to begin work in third grade instructional materials

**COMMUNICATION ARTS**

	All Students	Black	Other
Magnets	71.7	57.8	84.8
District	73.6	58.6	83.4

**MATHEMATICS**

	All Students	Black	Other
Magnets	79.2	65.2	92.4
District	78.8	62.9	89.2

**ELEMENTARY & MIDDLE GRADES (3-8)**

Prior to the implementation of the magnet program but after the Magnet Grant was awarded to CMS by the federal government, the school administration changed the context in which CMS criterion-referenced tests (CRT) could be used. The new policy was that CRTs could not be used for student comparisons or accountability measures but only for diagnostic purposes. In the place of CRTs, for comparison purposes, standardized North Carolina Achievement Tests are used. In CMS, grades 3-8 are evaluated by state End-of-Grade Tests (EOG) in Reading, Mathematics, and Social Studies. These tests have an average correlation of .8 with the CRTs. Below are tables that show the percentage of district and magnet students who scored at or above grade

level (level 3 or 4) for each subject except science. Students who perform at grade level are meeting at least 75% of all grade appropriate objectives.

The proportion of black and other magnet students who scored at or above grade level in reading was consistently higher than the district proportion and mostly above the 65% objective for all magnet students in the first year.

**PERCENT OF STUDENTS IN ACHIEVEMENT LEVEL 3 OR 4 (LVL)  
ON EOG READING TESTS**

Grade	<u>Magnet</u>		<u>CMS</u>	
	LVL	LVL	LVL	LVL
3	61		56	
4	67		60	
5	70		60	
6	73		63	
7	68		59	
8	74		69	

Grade	<u>Magnet Black</u>	<u>Magnet Other</u>	<u>CMS Black</u>	<u>CMS Other</u>
	LVL	LVL	LVL	LVL
3	40	77	32	72
4	45	81	35	76
5	49	83	36	76
6	57	83	43	77
7	51	80	37	75
8	62	83	48	82

The proportion of black and other magnet students who scored at or above grade level in mathematics was consistently higher than the district proportion and well over the 65% objective for all magnet students in the first year.

**PERCENT OF STUDENTS IN ACHIEVEMENT LEVEL 3 OR 4 (LVL)  
ON EOG MATHEMATICS TESTS**

Grade	<u>Magnet</u>		<u>CMS</u>	
	LVL	LVL	LVL	LVL
3	68		60	
4	67		65	
5	75		63	
6	77		68	
7	71		60	
8	69		60	

Grade	<u>Magnet Black</u>	<u>Magnet Other</u>	<u>CMS Black</u>	<u>CMS Other</u>
	LVL	LVL	LVL	LVL
3	48	83	34	75
4	45	81	40	81
5	54	88	40	79
6	60	88	47	82

7	55	83	36	78
8	52	80	35	76

The proportion of magnet students who scored at or above grade level was consistently higher than the district proportion and except for 8th grade were above the 65% objective for the first year.

**PERCENT OF STUDENTS IN ACHIEVEMENT LEVEL 3 OR 4 (LVL)  
ON EOG SOCIAL STUDIES TESTS**

Grade	<u>Magnet</u>		<u>CMS</u>	
	LVL	LVL	LVL	LVL
3	66	82	36	75
4	66	81	33	76
5	67	82	33	72
6	73	85	38	71
7	66	77	37	72
8	64	75	37	74

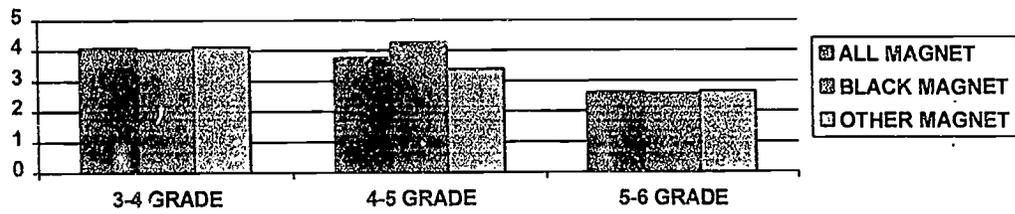
  

Grade	<u>Magnet Black</u>		<u>Magnet Other</u>		<u>CMS Black</u>		<u>CMS Other</u>	
	LVL	LVL	LVL	LVL	LVL	LVL	LVL	LVL
3	45	82	36	75	36	75	36	75
4	43	81	33	76	33	76	33	76
5	45	82	33	72	33	72	33	72
6	59	85	38	71	38	71	38	71
7	49	77	37	72	37	72	37	72
8	48	75	37	74	37	74	37	74

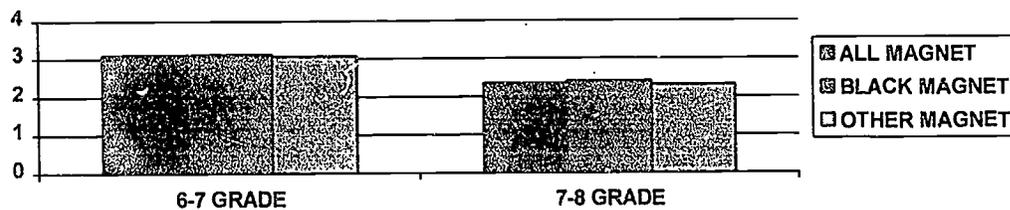
Because magnet students were not matched by socioeconomic status with non-magnet students it was not valid to make direct comparisons of EOG scores. This is due to the fact that the black population comes from mostly lower socioeconomic neighborhoods and the other population comes from a more middle-class environment while the district as a whole is more mixed. In the future, this comparison will be accomplished by matching students by race and socioeconomic status in an analysis of covariance (ANCOVA) design. At that time direct comparisons will be feasible.

In addition to the percentage of students who scored at or above grade level, test gains in Reading and Mathematics for magnet students were measured for 3rd to 4th grade, 4th to 5th grade, 5th to 6th grade, 6th to 7th grade, and 7th to 8th grades. The purpose is to achieve a partial understanding of the effect of each grade's academic program on the rate of learning rather than making judgments based upon group averages. Even though a group may score below average in a subject two years in a row, their rate of gain may be twice that of a group that scored above average in the same subject over the same time period, thus, that program may be considered more effective for that group than the higher performing group. The figures below show the average gains for magnet students in grades 4 through 8. (Depending upon the grade, a gain of 2 to 5 points is considered a year's growth)

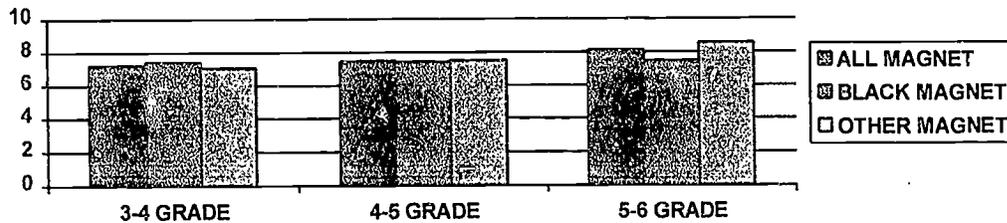
**END-OF-GRADE READING TEST GAINS FROM 1993 TO 1994**



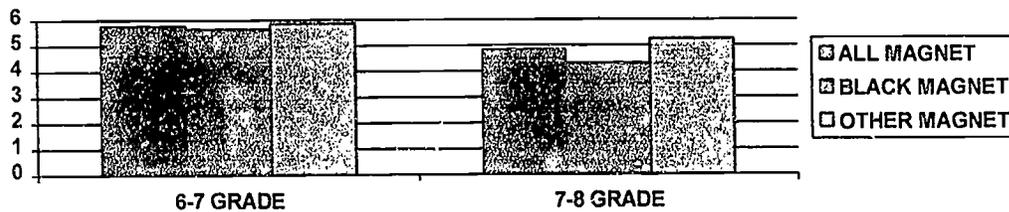
**END-OF-GRADE READING TEST GAINS FROM 1993 TO 1994**



**END-OF-GRADE MATHEMATICS TEST GAINS FROM 1993 TO 1994**



**END-OF-GRADE MATHEMATICS TEST GAINS FROM 1993 TO 1994**

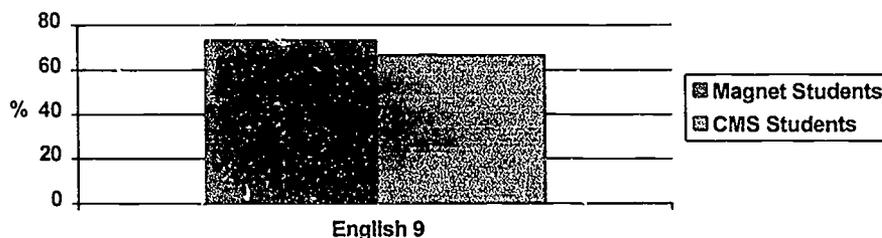


**HIGH SCHOOL GRADES (9-12)**

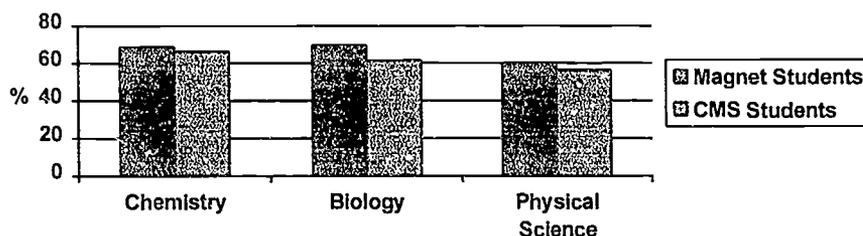
End-of-Course Tests (EOC) are used at the high school level rather than grade level tests. The reader should remember that currently there are only three magnet programs at the high school level. As stated above, two of the programs--Math, Science

& Technology and International Baccalaureate--are extremely rigorous academically, thus performance comparisons between students in these programs and the district as a whole are somewhat spurious. However, it is readily apparent in the figures below that on average magnet students perform consistently better than the rest of the district in English 9, Chemistry, Biology, Physical Science, Algebra 1, Algebra 2, Geometry, U. S. History, and Economic, Legal and Political Systems.

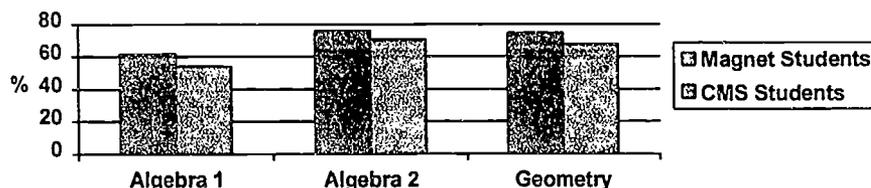
**Average % of Core Items Correct on State End-of-Course English 9 Test**



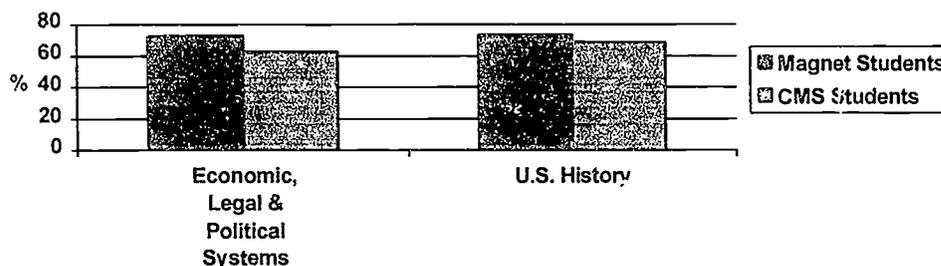
**Average % of Core Items Correct on State End-of-Course Science Tests**



**Average % of Core Items Correct on State End-of-Course Mathematics Tests**



**Average % of Core Items Correct on  
State End-of-Course Social Studies Tests**



The table below is showing the EOC English 9, Chemistry, Biology, Physical Science, Algebra 1, Algebra 2, Geometry, U.S. History, and Economic, Legal and Political Systems average scores by race. It is readily apparent that both black and other magnet students scored well above their district peers on a majority of the tests.

**AVERAGE % OF CORE ITEMS CORRECT ON STATE END-OF-COURSE TESTS BY RACE**

	<u>Magnet Black</u>	<u>Magnet Other</u>	<u>CMS Black</u>	<u>CMS Other</u>
English 9	67.5	76.5	57.1	72.4
Chemistry	60.6	72.0	58.3	68.7
Biology	61.1	76.3	52.0	66.8
Physical Science	48.1	62.8	47.2	63.0
Algebra 1	57.3	66.0	48.9	56.3
Algebra 2	67.2	80.4	60.1	73.6
Geometry	65.4	79.0	58.5	71.2
U.S. History	64.1	78.5	53.3	68.8
Economic, Legal & Political Systems	64.8	78.8	60.0	73.0

Objective #2/Goal #3

On the annual Teacher Survey, teachers (n=609) graded their individual schools on a scale of A to F(fail). These grades were converted to a scale of 4 to 0, respectively. Magnet teachers (n=596) graded their individual schools slightly higher (3.0) than the rest of the District's teachers (2.9) graded theirs. In addition, 63% (n=601) of magnet teachers agreed that the inservice training they received was helpful and 63% (n=609) of magnet teachers agreed that they had been adequately trained to teach in the magnet theme of their school. Finally, 69% (n=606) of magnet teachers agreed that they had received adequate assistance from administrators regarding ways to teach to the new performance standards. (These results may be low estimates as the surveys were completed anonymously.)

Objective #3/Goal #3

Interest in Magnet themes was very high in CMS. The rate of reapplication by magnet students for the same magnet school or program was 97%. In addition, the waiting list for magnet schools is 4,622 students long, of which 46% (n=2,137) are black.

Magnet students in grades 5 (n=974), 7 (n=1,055), and 11 (n=252) were surveyed via the annual Student Survey (n=2,435). Students graded their schools on a scale of A to F(fail). These grades were converted to a scale of 4 to 0, respectively. On average, these students graded their schools as a 2.77 (B-), compared to a district average of 2.49 (C+). Black students graded their schools slightly lower at 2.57 (n=933) and other students graded their schools slightly higher at 2.91 (n=1,348). The table below shows the distribution of school grades by grade level, ethnicity, and gender.

	Grade 5			Grade 7			Grade 11		
	All	Black	Other	All	Black	Other	All	Black	Other
Female	3.08	2.91	3.20	2.64	2.42	2.79	2.37	2.10	2.70
Male	3.02	2.85	3.12	2.57	2.46	2.65	2.48	2.05	2.72

The responses by parents on the annual Family Survey were overwhelmingly positive and generally exceeded the district average for school grades. Surveys were received from 446 magnet high school parents, 1,672 magnet middle school parents, and 6,408 magnet elementary parents. Parents of magnet students graded their children's schools on a scale of A to F(fail). These grades were converted to a scale of 4 to 0, respectively. Overall, parents of elementary students graded the magnet schools the highest at 3.3 (B+) (n=6,037), compared to the district average of 3.2 (B+) for elementary schools. Black elementary parents graded the schools 3.3 (n=2,425). Other elementary parent graded their schools at 3.4 (n=3,612).

Middle school parents graded magnet schools next highest, giving the schools a grade of 2.9 (B-) (n=1,072), compared to the district average of 2.6 for middle schools. Black middle school parents graded the schools at 2.8 (n=596). Other magnet parents graded magnet schools at 2.9 (n=1,076).

High school parents gave magnet schools a grade of 2.9 (B-) (n=446), compared to the district average of 2.7. Black high school parents graded the schools slightly lower at 2.6 (n=141). Other parents graded magnet schools at 2.9 (n=305).

The Family survey also contained items specifically about the magnet program and for the parents of magnet students. Below is the table with the percent of those who agreed with the survey questions (percentage rates are only of those who responded to the questions, only 75% of elementary, 45% of middle, and 53% of high school parents who returned surveys responded to these questions). As is evident from the table, most parents were pleased with the magnet program and the positive effect it had upon their children.

	Elementary	Middle	High
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Survey Questions	All	Black	Other	All	Black	Other	All	Black	Other
I understand the magnet program choices available to my child.	93.0	90.3	95.0	90.1	86.8	92.0	92.4	90.5	93.2
This magnet program is what I expected it to be.	83.7	81.4	85.3	72.1	68.4	74.2	75.6	66.7	79.6
This magnet school has had a positive effect on my child's learning.	89.4	87.7	90.6	79.1	76.9	80.4	83.0	73.8	87.1
I am pleased with the magnet program at this school.	87.7	86.1	88.4	76.3	73.2	78.0	79.8	73.8	82.5
This magnet program has had a positive effect on my child's attitude towards school.	85.2	82.4	87.0	72.5	69.7	74.0	74.9	65.9	78.9

Objective #4/Goal #3

To ensure that sufficient resources were available to magnet schools a school-by-school resource audit was conducted. All federal magnet funds were spent in accordance with the federal grant. The table below depicts the budget categories and funds spent.

<u>Class Categories</u>	<u>\$</u>
Personnel	546,965
Fringe Benefits	133,170
Travel	29,800
Equipment	490,780
Supplies	1,253,594
Contractual	117,425
Construction	32,500
Other	322,965
Indirect Charges	<u>352,063</u>
TOTAL	3,279,262

GOAL #4

**CMS was able to increase parental involvement for all magnet parents. This was primarily the result of magnet schools placing a special emphasis on improving parental participation and reducing time and location barriers for parent meetings. A greater proportion of magnet parents said they were involved with the children's education and felt that they were valued members of the school community than the district average. Parents of magnet students agreed that magnet schools provided them with ideas about how to help their children.**

Objective #1/Goal #4

Measures of meaningful parental involvement and key decision making roles in magnet schools as well as parent perceptions of whether they believed they were valued

members of the school community were measured by the Family Survey. As is evident from the table below, the percentage of parents who agreed with the survey questions that assessed these perceptions was mostly above 75% except for the last question. Thus, magnet parents generally believe that they are involved in their children's education and that they are valued members of the school community.

Survey questions	Elementary				Middle			High		
	CMS	All	Black	Other	All	Black	Other	All	Black	Other
The principal of this school is available to parents when needed.	75	83.1	80.8	84.8	73.7	70.0	75.7	68.6	63.1	71.2
Parents are expected to participate in school activities at this school.	82	90.3	89.8	90.7	78.4	83.2	75.6	71.3	75.9	69.2
Parents are warmly welcomed when they visit this school.	87	91.0	91.3	90.9	85.3	86.8	84.5	78.5	83.7	76.1
I feel welcomed to participate in parent activities at this school.	85	91.3	90.6	91.9	85.3	86.1	84.6	77.9	77.3	78.0
School staff listen to ideas I have about my child's education.	57	66.7	63.8	68.8	52.2	50.0	53.6	44.2	34.8	48.5

Parent involvement in decision making and instructional support roles was measured via the Family Survey by asking parents how often they participated in the following seven school activities for their child, responses were: Never, Once, 2 to 3 times, 4 to 10 times, and more than 10 times. Below is a table of the percentage of parents by school level and ethnic group who said they did the following 3 of the 7 activities at least four times a year.

Survey Questions	Elementary				Middle			High		
	CMS	All	Black	Other	All	Black	Other	All	Black	Other
PTA meeting or open house	13	21.5	17.4	24.3	13.2	15.0	12.2	11.9	11.9	11.8
Assisting with homework	80	85.8	80.1	89.6	70.3	70.3	70.4	51.7	50.0	52.5
Attending a program, special event or game	31	32.5	26.3	36.7	46.0	45.8	46.1	44.6	44.4	44.7

Below is a table of the percentage of parents by school level and ethnic group who said they did the following 4 of the 7 activities at least once a year.

Survey Questions	Elementary				Middle			High		
	CMS	All	Black	Other	All	Black	Other	All	Black	Other

Parent/Teacher conferences	84	92.4	90.7	93.5	72.4	74.2	71.4	56.4	62.7	53.6
Volunteer work at school	45	55.9	42.9	64.7	37.2	35.3	38.4	26.9	23.2	28.2
Visiting the student's class(es)	74	85.1	85.0	85.2	49.7	59.4	44.2	38.2	39.6	37.5
Visiting the school's parent room/area	60	60.9	63.8	58.9	47.7	54.7	43.8	35.4	39.7	33.6

It is evident from the tables above that parents of magnet students are very much involved in decision making and instructional support roles.

Objective #2/Goal #4

Parents' perceptions of their capacity to help their children were estimated by parents' responses to questions on the annual Family Survey . The table below contains the survey questions and the percentage of parents by school level who agreed. In order to estimate whether there was a relationship between positive parental perception and academic performance a correlational analysis was made between Reading and Mathematics EOG and the first survey question in the table below. No correlation ( $p > .05$ ) was found among those variables for magnet students (this lack of correlation is reflective of the impact of parent involvement at school not at home). However, magnet parents responded positively that schools gave them ideas about how to help their children.

Survey Questions	Elementary				Middle			High		
	CMS	All	Black	Other	All	Black	Other	All	Black	Other
This school has given me ideas about how to help my child.	66	79.5	82.2	77.5	52.3	58.1	48.9	43.7	45.4	43.0
I have been told what my child is expected to learn in each subject area this year.	78	86.3	88.0	85.1	71.9	74.0	70.7	65.9	63.1	67.2
Between report cards I frequently get information about my child's progress.	73	82.6	86.0	80.1	57.6	63.9	54.0	53.4	63.1	48.9
I feel free to express my concerns c.: make suggestions to staff at this school.	75	83.2	80.8	84.7	73.3	72.1	73.9	67.7	66.0	68.5
I work closely with my child's teachers to help my child succeed in school.	72	85.4	84.8	85.8	60.0	63.8	58.0	46.7	48.9	45.6

### Objective #3/Goal #4

To facilitate parental participation in the education of their children some magnet schools provided transportation for parents to the school. For example, Harding University High School, which contained an International Baccalaureate and Math, Science & Technology Magnet, recruited a volunteer coordinator who in turn recruited parent volunteers who provided transportation for those who needed it. Olde Providence Elementary School, a Communications Arts magnet, regularly provided a school employee to transport parents to and from school for meetings when it was necessary.

Principals and teachers at other magnet schools improvised solutions to the transportation problem. When it was not possible to provide transportation for parents to come to the school, teachers and administrators traveled to the parent's residence or place of work. All magnet schools reported efforts to improve parental participation.

Parents' perceptions of how well they understood information about their child's school program was assessed from the annual Family Survey. Below is a table containing survey questions that relate to these perceptions. It is apparent that the majority of magnet parents who responded believed that they understood information about their child's school program.

Survey Questions	Elementary				Middle			High		
	CMS	All	Black	Other	All	Black	Other	All	Black	Other
This school does a good job of teaching basic skills such as reading, writing and math.	83	90.2	91.1	89.6	80.3	79.7	80.7	80.8	80.2	81.0
This school does a good job at teaching thinking and reasoning skills.	79	89.4	88.3	90.2	75.5	73.7	76.4	74.9	69.5	77.3
My child's homework is always about things that have been covered in class.	75	81.1	82.3	80.4	67.5	69.3	66.6	57.1	68.8	51.8

### Objective #4/Goal #4

Location and time of day of school conferences and meetings were identified as barriers to parents' involvement in the education of their children. All magnet schools reported that every effort was made to reduce these barriers (see above). To further estimate whether these barriers stood in the way of parents' involvement, two survey questions on the annual Family Survey were constructed. Below is a table with the percentage of parents who agreed with the survey questions.

Survey Questions	Elementary				Middle			High		
	CMS	All	Black	Other	All	Black	Other	All	Black	Other
School meetings are held at convenient places for me.	79	81.2	80.9	81.4	74.2	77.2	72.6	72.9	69.5	74.5
School meetings are held at convenient times for me.	72	75.1	73.1	76.6	68.7	68.0	69.0	67.7	58.9	68.6

### SUMMARY

- Overall, magnet schools are fully integrated--43% black and 57% other.
- Magnet schools have reduced the number of black students who would be attending predominantly black schools.
- Nine of 19 paired schools have been de-paired this past year.
- The proportion of black magnet students enrolled in higher level courses is substantially higher than the rest of the district.
- All magnet elementary schools report that non-academic grouping is fully integrated.
- All magnet schools implemented multicultural education plans.
- All magnet schools report using a variety of instructional strategies.
- Magnet primary students (K-2) scored higher on all but one measure on the CMS Readiness Assessment than the district average.
- The proportion of magnet elementary and middle school students who score at or above grade level is consistently higher than the district and well above the 65% objective for the first year.
- On average, magnet high school students out perform their district counterparts in English 9, Chemistry, Biology, Algebra 1, Algebra 2, Geometry, U. S. History, and Economic, Legal and Political Systems.
- Magnet teachers graded their schools higher than the district average.
- All magnet grant funds were spent in accordance with the federal grant.
- The majority of magnet parents reported that they were pleased with the magnet program.
- The majority of magnet parents believed that they were involved in their children's education and that they were valued members of the school community.
- The majority of magnet school parents reported that time and location were not barriers to their involvement in their child's education.
- Magnet schools made efforts to provide transportation to parents or visit the parents to ensure that they were involved with their children's education.

### CONCLUSIONS

Overall, the first year of the federally funded magnet program has been very successful. Major strides were made in achieving the goals set out in the magnet grant.

Magnet schools were pivotal in reducing minority isolation in CMS. The magnet schools are integrated within court ordered guidelines and they were successful in reducing the proportion of the black student population attending predominantly black schools.

Magnet school teachers and administrators were able to implement many diverse strategies that fostered interaction among different ethnic groups in both academic and non-academic environments. A greater proportion of black magnet secondary students were enrolled in higher level courses than the district average. Black elementary students were proportionally represented in school clubs and student governments. Additionally, all magnet schools implemented schoolwide multicultural education plans with the intent of promoting interaction among different ethnic groups.

The academic performance of magnet students was generally good. A greater percentage of magnet elementary and middle students were achieving at or above grade level as compared to the rest of CMS. Primary and high school magnet students outperformed their CMS counterparts in virtually every subject, with grade 2 Communication Arts being the only exception. In addition, essentially all magnet students and their parents are pleased with the program as evidenced by the grades the students and parents gave their schools and by the high proportion of students who continued in the program.

Teachers and administrators at magnet schools made extraordinary efforts to make parents feel like they were valued members of the school family and include them in the education of their children. Magnet personnel tried to reduce barriers to parental participation by providing transportation or visiting parents when necessary. These efforts appear to have been appreciated as evidenced by the responses on the Family survey.

CMS recognizes that not all of the magnet goals have been achieved. This is particularly true for the academic performances of black students. In the long run, those students who are currently in grades K-2 will bring their superior performance abilities to bare in elementary and middle school. In the mean time, new strategies must be created to increase the percentage of black magnet elementary and middle school students performing at or above grade level in mathematics, reading, and social studies. It is also true that the number of feeder schools out-of-compliance has grown even though the proportion of black students attending predominantly black schools is smaller than would be the case if magnet schools were not in place. This is primarily the result of demographic forces that were unanticipated when the magnet grant was written. The reader must remember that this is only the end of the first year of the federally assisted magnet program and that CMS is endeavoring to continually improve the magnet program. The few number of objectives not met in the first year is a reflection of the high standards and goals CMS has set for itself and the magnet program.