

DOCUMENT RESUME

ED 380 888

EA 026 600

AUTHOR Barnes, Alice; Wesson, Linda  
 TITLE Contrasting the Forrest City School District's Magnet Program Operating with Federal Funding and without Federal Funding.  
 PUB DATE [Dec 94]  
 NOTE 32p.  
 PUB TYPE Reports - Research/Technical (143) --  
 Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS \*Academic Achievement; Elementary Education; \*Federal Aid; \*Magnet Schools; Nontraditional Education; \*Racial Integration; School Desegregation; Teacher Attitudes; \*Voluntary Desegregation  
 IDENTIFIERS \*Forrest City School District AR

ABSTRACT

This paper presents findings of a study that examined the effect of termination of funding on a magnet-school program. The federally funded program was implemented in Forrest City, Arkansas, to eliminate racial imbalance in the elementary schools. The program was based on the assumption that with enough time and financial assistance, racial integration would significantly improve academic achievement and close the gap between minority and nonminority students, especially among black males. The study analyzed achievement differences in five cohorts among minority and nonminority third- and fourth-grade students for a period of 2 years, 1992-93 and 1993-94. The cohorts included reading, language arts, math, science, and social studies. Teachers completed a questionnaire that assessed their attitudes toward the program. Findings suggest that funding had a significant effect on achievement gains and the revitalization of public education through choice. Student performance showed a decline after funding ended. Although not statistically significant, gain scores were somewhat higher for white females than any other group. Magnet school teachers overwhelmingly endorsed their programs. The program also resulted in a reduction in the number and percent of ethnically isolated schools. The effectiveness of magnet schools can be enhanced by additional staffing, a restructured curriculum, and adequate funding. Two figures and a copy of the teacher questionnaire are included. (LMI)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED 380 888

CONTRASTING  
THE FORREST CITY SCHOOL DISTRICT'S  
MAGNET PROGRAM  
OPERATING WITH FEDERAL FUNDING  
AND WITHOUT FEDERAL FUNDING

---

ALICE BARNES  
ASSISTANT PRINCIPAL,  
STEWART ELEMENTARY SCHOOL

LINDA WESSON  
ASSOCIATE PROFESSOR  
ARKANSAS STATE UNIVERSITY

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

*L. Wesson*

---

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC) "

A 026600



TABLE OF CONTENTS

	Page
Abstract . . . . .	4
Chapter One: The Problem . . . . .	5
Introduction . . . . .	5
Statement of Problem . . . . .	7
Purpose of Study . . . . .	8
Limitations of Study . . . . .	9
Chapter Two: Review of the Literature . . . . .	10
Overview . . . . .	10
Desegregation . . . . .	10
Achievement . . . . .	12
Financial Support . . . . .	12
Program Comparisons to Non-Magnets . . . . .	13
Summary of Literature Reviewed . . . . .	14
Chapter Three: Methods and Procedures . . . . .	15
Design of Study . . . . .	15
Target Populations . . . . .	15
Sampling Procedures . . . . .	15
Instrumentation . . . . .	16
Data Collection and Recording Procedures . . . . .	16
Analysis of Data . . . . .	16
Chapter Four: Results . . . . .	18

	<b>Magnet Program</b>	
		<b>3</b>
Findings . . . . .		18
Achievement . . . . .		18
Teacher Questionnaire . . . . .		20
Discussion . . . . .		21
Chapter Five: Summary . . . . .		22
Conclusions . . . . .		22
Recommendations . . . . .		23
References . . . . .		24
Appendixes		
Questionnaire . . . . .		26
Figures		
Figure 1 . . . . .		27
Figure 2 . . . . .		28

Abstract

This study reviews the federally funded program of racial integration in the Forrest City, Arkansas Public Schools. The integration program was based on the assumption that with enough time and financial assistance, racial integration would significantly improve academic achievement and close the gap between minority and non-minority academic achievement especially among black males. This report addresses the program cost in relation to academic results. The study analyzed achievement differences in five cohorts among minority and non-minority third and fourth grade students for a period of two years. The cohorts were reading, language arts, math, science, and social studies. A teacher questionnaire helped to gather information concerning attitudes towards the programs success. Findings suggest a significant difference in the achievement scores during the year the district had funding compared to the year the district was without funding. Because additional research is necessary conclusive findings are not reported. The report includes figures and a list of references.

## Chapter One

The Problem

Introduction. As a part of the desegregation court decree of 1970 and a citing of racial imbalance in the Forrest City elementary schools by the Arkansas Department of Education in 1988, the magnet program was implemented in all of the district's seven elementary schools: Caldwell, Central, Forrest Hills, Lincoln North, Lincoln South, Madison, and Stewart. The district's racial balance was 67% black and 33% white. Schools cited by the department as being imbalanced were Stewart Elementary School (96% black) and Madison Elementary School (87% black).

The purpose of the magnet schools was to create a program that would eliminate imbalance at all elementary schools. Based on the results of a parent survey, the majority of the parents favored the Math/Science and Montessori programs. In order to attract white students to Stewart and Madison, the District decided to place the favored Math/Science and Montessori programs in those schools respectively. There were other themes found to be popular also. Central became a Communications/Foreign Languages Magnet School; Caldwell, a Computer Technology/Electronics Magnet School; and Forrest Hills, a Fine Arts/Performing Arts Magnet School. Lincoln North and Lincoln South were organized as fifth and sixth grade centers continuing the Math/Science, Computer Technology/Electronics, Fine Arts/Performing Arts, Communications/Foreign Languages themes of the K-4 grades.

In order to operate a successful magnet school program and meet the goals, start-up funds were required. The District pursued a Consultant who would oversee the grant writing process. The search ended, and Phale Hale was hired to assist the District in

the writing of the grant. After much research, dedication and endurance the District was awarded a two-year grant in June 1991 for \$4,721,582.

The goal of the plan was to develop and maintain elementary magnet schools that would result in voluntary desegregation, improved academic achievement of all students, and particularly improved academic achievement of African-American students (Hale, 1991). The plan would meet expectations and criteria set forth by the Arkansas Department of Education. Each elementary school in the magnet program would comply with the Arkansas Department of Education guidelines for racial balance, which are  $\pm 20\%$  of the District's elementary schools average minority enrollment, and minority percentages at Stewart and Madison Elementary schools will be reduced to 78 percent or less.

In March 1993, the program was in its second year of operation. According to Rodney Echols, Deputy Superintendent, achievement gaps and disparities on the Stanford Achievement Test among students at particular magnet schools, showed gains in NCE (Personal Communication, March, 1993). Rodney's duties included an array of things including supervising the overall magnet program, insuring that the program was efficiently administered, while providing leadership in developing, achieving, and maintaining the best possible magnet programs and services. These duties gave him the opportunity to make observations about the magnet program's impact. He felt this increase could be contributed to the fact that the student make-up was racially balanced, which was different from the previous year when the magnet program had not been put into effect. More reliable and valid findings were found using comparative data from the 1993 and 1994 school years. The 1993-1994 school year was the first year the District operated on its own resources without any additional funding from the Federal Government. Because of the

lack of Federal Assistance, a reduction in force was necessary if the District was to operate within its budget guidelines.

Both Deputy Superintendent Rodney Echols and Magnet Director Russell O'Banion shared some of the same concerns relative to the program's success. In March 1993, they felt those themes requiring additional support staff, such as Foreign Language, Dance, Drama, Music, and Art teachers, would suffer the most because they would not be able to deliver the same quality of service without the use of these persons. As far as training, supplies, and maintenance was concerned, changes were minimal.

Because of concerns on how to maintain racial balance at Stewart Math/Science magnet school and Madison Montessori magnet school, the two schools originally cited for racial imbalance and other concerns, i.e., increased academic achievement, increased parental involvement, and better social relations among students and staff, there was a growing need to seek additional funding to help maintain these two schools' programs. With these concerns in mind, a two year grant application was submitted in February, 1993 to the Federal Government for approval. Unfortunately the District was denied the additional funding and had to operate on its own resources.

#### Statement of the Problem

The Forrest City School District's magnet schools funding was awarded for a two-year cycle, which ended in June 1993. The success of the program rests on the basic assumption that with enough time and financial assistance, racial integration would significantly improve academic achievement among all students especially African-American pupils.

Most educators agree to the importance of financial assistance for a district's



success. Based on prior research (New York State Magnet School Research Study, 1985), funding is needed to advance the magnet concept.

Chabotar (1988) found significant positive correlations between total costs per pupil in magnet schools and the project's measures of quality of education and quality of integration. Estes, Levine, and Waldrip (1990) found magnet schools do cost more than non-magnet schools, but the differences show a decline over time as start-up costs are absorbed. The need for funding after start-up cost is a great concern for the magnet school's survival.

The magnet school concept is considered by some to be critical to the future of public education in the United States. These educators believe they will become an enduring part of American education (Hale, 1991). Magnet schools have unique ideas and changed the school setting from the 1950s. Since this time, students have changed; parents have changed; and the world has changed. The magnet concept is another method for schools to consider in their pursuit to help children survive in an ever changing society, and at the same time magnet schools help create equitable and effective teaching and learning environments.

#### Purpose of Study

The purpose of the study is to discover how a magnet school program, such as the Forrest City School District Elementary Magnet School Program, fairs after funding ends. This study will contrast the 1992-93 school year, when the Forrest City School District was funded with \$2,360,791 from the Magnet Schools Assistance Program, with the 1993-94 school year, after funding ended and the district was left to supply its own resources.

The current study will assess the effectiveness of the magnet program in terms of

achievement outcomes as measured by statistical analysis of students' test scores on the Stanford Achievement Test. Data will be disaggregated by school, grade, sex, and race. This data may suggest achievement domains where magnet schools with funding have students whose performance differs from their non-funded magnet peers. The use of periodic surveys to determine staff's perceptions of the overall picture of the magnet school will also be used. These surveys will help to determine the success rate of a program that received over four million dollars from the Federal Government and then was suddenly left to its own resources.

Is it possible for a school district to maintain the same standards and quality of education without necessary funding? This question comes to mind when one considers the monumental task the district has if it is to continue instituting new and innovative academic programs, such as computer assisted instruction, peer tutoring, and extended day programs without substantial financial assistance. Inservice training for teachers and additional support staff are also needed.

Another question is will there be gains in academic achievement at the end of the two-year cycle? There is some evidence that indicates that when positive effects on student achievements occur in educational reform programs, gains in achievement do not show up until the third year (Easton, 1987).

#### Limitations of Study

The study was limited to those schools that had K-4 students. In these schools all of the third and fourth grade school population was targeted for testing.

## Chapter Two

Review of the Literature

Overview. Most studies of magnet schools are largely anecdotal case histories of single schools or districts. However, much of the desegregation research is applicable to magnet schools.

A number of recent studies call for more research in the area of relationship between the magnet school experience and its benefits to students. Estes, Levine, and Waldrip (1990) state the magnet concept may well play a starring role in the melodrama of current public education. In fact, it may turn out to be a key factor in helping restore public confidence in public schools. Studies of contemporary magnet schools show them to be fairly successful.

At the beginning of this decade, there were more than 1,000 elementary and secondary magnet schools in the United States. These schools have concepts that are not new but has simply expanded and modified the application of alternative education over the years. Estes, Levine, and Waldrip (1990) suggest the magnet school is the wave of the future, both in terms of its academic excellence and the hope it offers youngsters of every race and background.

This study will examine the effects funding has on a magnet program in terms of academic achievement and teacher perceptions. The review of the literature will examine how magnet schools incorporate sound approaches to education and the roles financial assistance plays in helping to meet program goals.

Desegregation

Magnet schools are intended to promote desegregation by permitting parents to

make voluntary choices among schools, rather than through busing or other student assignment plans. According to Larson (1991) the magnet-cluster design was not optimal for promoting desegregation in the Takoma Park Cluster, because not enough low-minority schools were with the high-minority schools in the composition of the cluster. He feels if magnet programs are to be used for effective desegregation, they must be carefully located and may have to be coupled with other desegregation strategies or made much more attractive than existing school programs.

Contrary to what was found in Takoma Park, a New York State Research Study (1985) found magnet programs reduce racial isolation in schools. After the inception of the magnet program, the schools reflected the district-wide average, even though there were very large discrepancies prior to the magnet school development. These findings were also found to be true in the Forrest City School District Magnet program. Estes, Levine, and Waldrip (1990) provide data that suggest magnet plans can have a great desegregative impact if they were intended to have it and if the school board and administration make a strong effort to carry through on this intention. Magnet policies can be adopted alternatively as a "shell game" in order to create the appearance of desegregation; to introduce a stall or a stop in the course of litigation; to set up havens for selective subgroups of parents and students; to advance elitist objectives espoused by some school board members and parent constituents; or to admit minority students but then fail them or counsel them out or remand them to inferior schools, thus providing a new source of discrimination. Alternatively, magnet plans can revitalize equity in a district, contribute to the build-up of public confidence in the system, diversify opportunities for students, and redistribute both staff and students district-wide in desegregative ways (Chobator, 1988).

### Achievement

Magnet schools have been found to be associated with positive student achievement. In the New York State Magnet Schools Research Study (1985), following the introduction of magnet programs, student performance increased dramatically in magnet schools. The gains did not appear to be due to concomitant changes in racial composition or to student enrollment procedures. Rather, magnet programs seemed to be a major contributing factor to the achievement gains.

The results from a study by Easton (1987) indicate schooltype does not have a significant effect on reading achievement gain over a three year period for three different cohorts of students. Another study by Clay (1991) found during the fourth implementation year for the original foreign language elementary magnets, reading and language achievement showed mixed results, with foreign language students having higher scores in some instances and non-foreign language students having higher scores in some instances. In math achievement, foreign language students out-ranked non-foreign language students in almost every instance.

In a report by Atwater (1991), it was stated in a program where the target content area is science and math, science achievement scores demonstrated positive program effects on student performance. When the target content area is science and math, it is believed performance in these areas would be a valuable outcome for examination of the effects of a specific program.

### Financial Support

It may be necessary to increase costs if a qualitatively superior program is to be offered which is capable of overcoming the allegiance to neighborhood schools. According

to Mitchell (1989) when the Milwaukee Public School integration program began, officials and proponents said its success depended in part on two financial requirements:

- More spending to: (a) finance busing; (b) help pay for improvements in educational programming; and (c) provide suburbs with financial incentives to accept minority students.
- New dollars primarily from the State of Wisconsin, because: (a) education is a state-local responsibility; and (b) Milwaukee Public Schools did not believe it feasible or appropriate to increase property taxes substantially.

In sum, spending increased, more state dollars were received and the district relied less on property taxes.

In an evaluation by Stolar (1983) monies spent on "excess teachers" and instructional assistants increased over 1981-1982. When adding additional staff to support new programs, expenses are expected to increase. But, these changes found to be due to an increase in salary and not to the change in number of staff.

Some districts have opted to use other ways to increase funding as in the study by Spain (1984) where the Wilson Magnet School in Rochester, New York offers computer facilities to the local business and educational community on evening, weekends, and summers to raise money for the purpose of new program implementation.

#### Program Comparison to Non-magnets

Magnet schools, by definition, offer special programs not available at other schools. Various research found magnet school programs are unique and responsive to student needs. Stolar (1983) found in an attitudinal survey comparing alternative and non-alternative students, teachers, parents, and local administrators, that alternative groups

gave more positive responses to items concerning alternative programs. At the D. M. Pinkerton Latin Grammar Magnet Middle School in a paper by Robinson (1991), teachers in magnet schools endorse their school programs more highly than do non-magnet teachers. Magnet school parents rate their schools more highly than do non-magnet school parents.

According to Stanley (1984) 336 of 361 proposed performance objectives of the Houston Independent School District were met by magnet schools. This proved to be a successful program in comparison with non-magnets.

Findings presented by Mikel (1981) indicate the first year of desegregation, using the magnet school concept, in Saint Louis Public Schools seems to have had no differential effects on students' achievement although the results cannot be considered conclusive. This suggests that some magnet schools may be more effective than others in facilitating programs to help improve student achievement.

#### Summary of Literature Reviewed

The literature on magnet schools basically states the goal of implementing magnet schools is to provide high quality alternative educational programs which attract students from all geographic and ethnic sectors of the district (Haie, 1991). Data indicate that a Magnet School Plan has in some instances been successful in accomplishing its stated goals and in other instances it was not. Most data pertaining to academic achievement were positive. A number of recent studies calls for more research in the area of the relationship between the magnet school experience and its benefits to students. For districts turning to voluntary integration programs, magnet schools are proving viable and successful ways to provide quality academic and specialized programs in an integrated school setting.

### Chapter Three

#### Methods and Procedures

Design of Study. This is a comparative study of the statistical analysis of student achievement and the perceptual responses of teachers on how they perceive the success of the magnet program. A randomized control group pretest posttest design was used. The study was designed to determine if there is a significant difference in the achievement level of students and the perceptions of teachers on the success of the magnet program after funding ended.

Teacher questionnaires were delivered to each school by the researcher. Instructions were discussed in a meeting of third and fourth grade teachers at each individual school. The surveys were completed at this time; respondents were asked to mark the appropriate response on a scale.

Standardized achievement battery test scores were taken from Stanford Achievement Test 8th edition. Tests from the Spring of 1993 were used as the pretest and tests for the Spring of 1994 were used as the posttest.

#### Target Populations

The target populations are third and fourth grade students in the Forrest City Public Schools. Elementary schools having both third and fourth grade students are Caldwell, Central, Forrest Hills, and Stewart Elementary magnet schools. All third and fourth grade teachers from the schools previously mentioned were asked to participate in the survey.

#### Sampling Procedures

Students were randomly selected from Caldwell, Central, Forrest Hills, and Stewart magnet schools. In order to obtain a systematic random sample of third and fourth grade



students, a random selection of every seventh child was chosen from an alphabetized teacher roster. Prior to selection, classrooms were randomly assigned. The teacher sample included all third and fourth grade teachers.

#### Instrumentation

A teacher questionnaire was developed to help assess the teacher's perception of the success of the magnet program. The questionnaire asked teachers about a number of characteristics of the class they taught to help analyze the educational quality for subject areas of math, reading, language arts, social studies, and science. Other factors, such as special instructional materials, resources, levels of staffing in various classroom and support positions, and teachers' reports about what they like or dislike about their schools were also included in the survey.

#### Data Collection and Recording Procedures

Stanford Achievement Test results were obtained by the researcher from each school. In order to assess the attainment of the study's objectives, standard scores for the Stanford Achievement Tests were used for both 1993 and 1994 test administrations for the students used in this study. The data was disaggregated by school, grade, sex, and race. Data responses for the surveys were tallied and the percentages calculated using a computer.

#### Analysis of Data

For achievement evaluation, standard scores based on reading, language arts, math, science, and social studies subtests of the Stanford Achievement Test were reported for minority and non-minority students at the third and fourth grade level for the 1993 and 1994 school years. Data was compiled using school, grade, gender, and ethnic

background for third and fourth grade students comprising the study group.

The dependent t-test was used to assess and evaluate any significant difference in achievement after funding had ended. The SPSS computer software was utilized to analyze the data yielded by the surveys.

## Chapter Four

## Results

Findings

Achievement. The results of this study indicate that funding does have a significant effect on achievement gains among third and fourth grade students attending the Forrest City School District in reading, language arts, math, science, and social studies. In the assessment of differential effects based on achievement data the year the district operated without Federal funding was found to be not as successful as when the District operated with Federal funding. Student performance showed a decline after funding ended.

For this achievement evaluation, percentile ranks based on mean scores for the reading, language arts, math, science, and social studies subtests of the Stanford Achievement Test are reported for minority and non-minority third and fourth grade students for the years 1993 and 1994 from the following schools: Caldwell, Central, Forrest Hills, and Stewart. These data are found in figure 1. Percentile ranks are reported by years for the district.

---

Insert Figure 1

---

The Stanford Achievement Test is an overall measure of achievement in reading, language arts, mathematics, science, and social studies. The test is designed to measure student achievement in relation to the performance of a national sample selected to be representative of the nation's students in each of the grades tested. National percentile ranks indicate the relative standing of a student in the same grade in the norm group who took the test at a comparable time. Percentile ranks range from a low of 1 to a high of 99,

with 50 denoting average performance.

Reading percentile ranks (Figure 1) showed a decline of .38 percentage points from the year 1993 to 1994. Third grade students had a decline of two percentage points in reading with fourth grade students having a slight increase of 1.25 percentage points.

Language arts, math, and science overall percentile ranks (Figure 1) also showed a decrease in gains from 1993 to 1994 while social studies remained the same. Third and fourth grade students had mixed results in these cohorts.

In order to see if significant differences (at the .05 level) exist among the district's third and fourth grade test scores for the school years 1993 and 1994, a dependent t-test was conducted. Significant differences were found in four of the five areas. Significant decreases were found among the black males in comparison to the district's overall scores. Figure 2 shows this decrease, comparing third and fourth grade black males with third and fourth grade black females, white females, and white males.

---

Insert Figure 2

---

The non-minority students had significantly higher scores than any other group. The scores of white females were significantly higher than all groups. Out of a total of 38 white females 15 scored between the 76th and 99th percentile, 11 between the 51st and 75th, and only 5 between the 26th and 50th for the 1993 school year in reading. During 1994, 43 third grade white females were tested. Seventeen of these scored between the 76th and 99th percentile, 7 between the 51st and 75th, 7 between 26th and 50th, and a dramatic change between the first and 25th with a total of 12 falling within this range. This data supports the finding which shows a significant difference in scores for 1993 and 1994.

Teacher Questionnaire. The teacher questionnaire gathered background information about teacher perceptions on the general characteristics of the magnet school's instructional program, including inservice training, communication, supplies and equipment, and the learning climate. Additionally, the questionnaire asked teachers to state what they liked most about the program and what they would recommend to improve the program. Teacher questionnaires were given to all third and fourth grade teachers in the schools included in the study; 33 (100%) were returned.

A summary of findings pertaining to the pre-test are presented below.

- Theme related inservice was rated very good. Sixty-nine percent of the teachers gave positive responses.
- Equipment available for instruction and academic support services (e.g., dance, drama, foreign languages, computer labs) were also among those items on the questionnaire receiving positive responses.
- Maintenance of equipment was rated to be very good with fifty-four percent (54%) of the teachers giving it a positive response.

Those areas on the questionnaire receiving negative responses included: availability of resource personnel, reflection of District's racial balance within classrooms, parent involvement, improved academic achievement, and classroom supplies. Among those things teachers liked most were equipment and student recognition and involvement. Concerning their thoughts about what they wanted to improve, teachers felt an increase in support personnel would contribute substantially to the success of the magnet program.

Findings from the post-test support the findings from the pre-test. In both tests teachers favored equipment and student involvement. Their suggestions for improvement

Included personnel as their number one concern.

Discussion

Other studies have looked at academic achievement and teacher perceptions in relation to magnet schools. A review of magnet school research and evaluation studies reveal some of the same findings as does this report data. Thus, there is strong evidence that some magnet schools do improve student learning. The Kansas City, Missouri School District showed a gain in achievement test scores over a five year period. Teacher perceptions from this same district showed positive responses in reference to the influence of the theme on achievement. They gave moderately high marks about parental commitment.

## Chapter Five

Summary

Magnet schools have become a major part of American public education, especially in urban school systems. In fact, magnet schools have been one of the key vehicles of innovation in urban schooling over the last several decades. Magnet schools were created as a voluntary alternative to forced busing in order to decrease racial isolation. The basic strategy for achieving this goal was to offer special curricula that would attract students from different racial/ethnic backgrounds and therefore promote voluntary integration. Although this data is not conclusive because of the fact that little is known about the effects of magnet schools on the quality of education in our schools, the Forrest City School District's program provided evidence of the educational and desegregative impact of magnet programs.

Conclusions

The results of this study suggest that funding does have a significant effect on achievement gain and the revitalization of public education through choice. Government funding provides monies which enables schools to purchase equipment and materials and allows them to provide better teacher training. Although not statistically significant, gain scores were somewhat higher among white females than any other group.

Magnet school teachers overwhelmingly endorsed their magnet programs. They expressed high levels of satisfaction with the theme related inservice, high level of student involvement, equipment and maintenance of equipment.

The Forrest City School District's magnet plan, along with other District effects, has resulted in a reduction in the number and percent of ethnically isolated schools. The ratio

of minority versus non-minority is equally comparable in all seven of the elementary schools in the Forrest City School District. The findings from this analysis are informative because they can be used as a guide for other schools who are facing similar problems.

#### Recommendations

A number of recommendations for enhancing the effectiveness of the magnet school's instructional program can be offered here as potential guidelines for future planning. First, additional staffing is necessary for a successfully implemented program. Secondly, restructuring of curriculum is a necessity. Thirdly, funding is necessary to adequately maintain a program's effectiveness.

Thus, some studies demonstrate positive relationships between magnet schooling and student outcomes. It is difficult to control statistically for all differences between funded and non-funded schools. Consequently it cannot be said conclusively that outcomes, especially those involving student performance, were attributable to magnet school funding. No firm judgement about the effects of funding on attitudes and academic achievement can be made.

The results of this study are limited by the use of a small sample size from a single school district. Further study is recommended with an expanded population and a wider range of school districts that are representative of the nation's geographical areas.



## REFERENCES

- Atwater, J., & Moore, W. (1991). Achievement and Enrollment Evaluation of the Applied Learning Magnet Elementary Schools. Kansas City School District, MO. (ERIC Document Reproduction Service No. ED346967)
- Chabotar, K. (1988). Survey of magnet schools: Analyzing a model for quality integrated education. Report prepared for the U. S. Department of Education, Washington, DC: James H. Lowry & Associates.
- Clay, P. (1991). Achievement and Enrollment Evaluation of the Original Elementary Foreign Language Elementary Schools. Kansas City School District, MO. (ERIC Document Reproduction Service No. ED346716)
- Easton, J. (1987). The Influences of Schooldtype, Race, and Economic Background on Reading Achievement Gains. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC, April 16-20, 1987.
- Estes, N., Daniel, L. U., & Waldrip, D. R. (1990). Magnet Schools Recent Developments and Perspectives. Austin, TX: Morgan Printing.
- Hale, P. (1991). Application for assistance under the magnet school Assistance Program. Forrest City Public School, Arkansas.
- Larson, J. C. (1981). Takoma Park Magnet School Evaluation: Part II. Final Report. Montgomery County Public Schools, Rockville, MD: MD Dept. of Educational Accountability.
- Mikel, E. (1981). An Analysis of the Achievement of Black and White Students in Various School Settings. St. Louis Public Schools, MO. (ERIC Document Reproduction Service No. ED220556)

Mitchell, G. (1989). An Evaluation of State-Financed School Integration in Metropolitan

Milwaukee. Wisconsin Policy Research Inst., Milwaukee. (ERIC Document

Reproduction Service No. ED314515)

New York State Magnet School Research Study. (1985). Larchmont, NY: Educational

Services, Inc.

Robinson, L. (1991). D. M. Pinkerton Latin Grammar Magnet Middle School. Kansas City

School District, MO: (ERIC Document Reproduction Service No. ED346719)

Spain, T. (1984). A School that Markets its own Resources. Electronic-Learning, 3, 32-34.

Stanley, C. (1984). Magnet Schools: Ninth Annual Final Report. Houston Independent

School District, TX. (ERIC Document Reproduction Service No. ED259058)

Stolar, M. (1983). Evaluation of Alternative Programs. Cincinnati Public Schools, OH.

(ERIC Document Reproduction Service No. ED257905)

Appendix  
Questionnaire

### Magnet School Teacher Questionnaire

**Directions:** Based on your classroom teaching experience this school year, rate the following items concerning your educational program. Please indicate your choice by checking the appropriate response.

	How would you rate:	very good	better than adequate	adequate	less than adequate	very poor
1.	Theme related inservice					
2.	Equipment available for instruction					
3.	Classroom supplies					
4.	Academic support services (e.g., dance, drama, foreign languages, computer labs)					
5.	Educational experiences beyond the classroom (e.g., field trips, extended day programs)					
6.	Publicity about school and educational programs					
7.	Parent involvement					
8.	Improved academic achievement					
9.	Availability of resource personnel					
10.	Maintenance of equipment					
11.	Infusion of theme into curriculum					
12.	Reflection of District's racial balance within classrooms					
13.	What do you like most about the program?					
14.	What would you recommend to improve the program?					

Figure Caption

Figure 1. Comparison of District's Stanford Achievement Test scores for 1993 and 1994.

# Stanford 8 Test Scores

District 3rd & 4th Grade

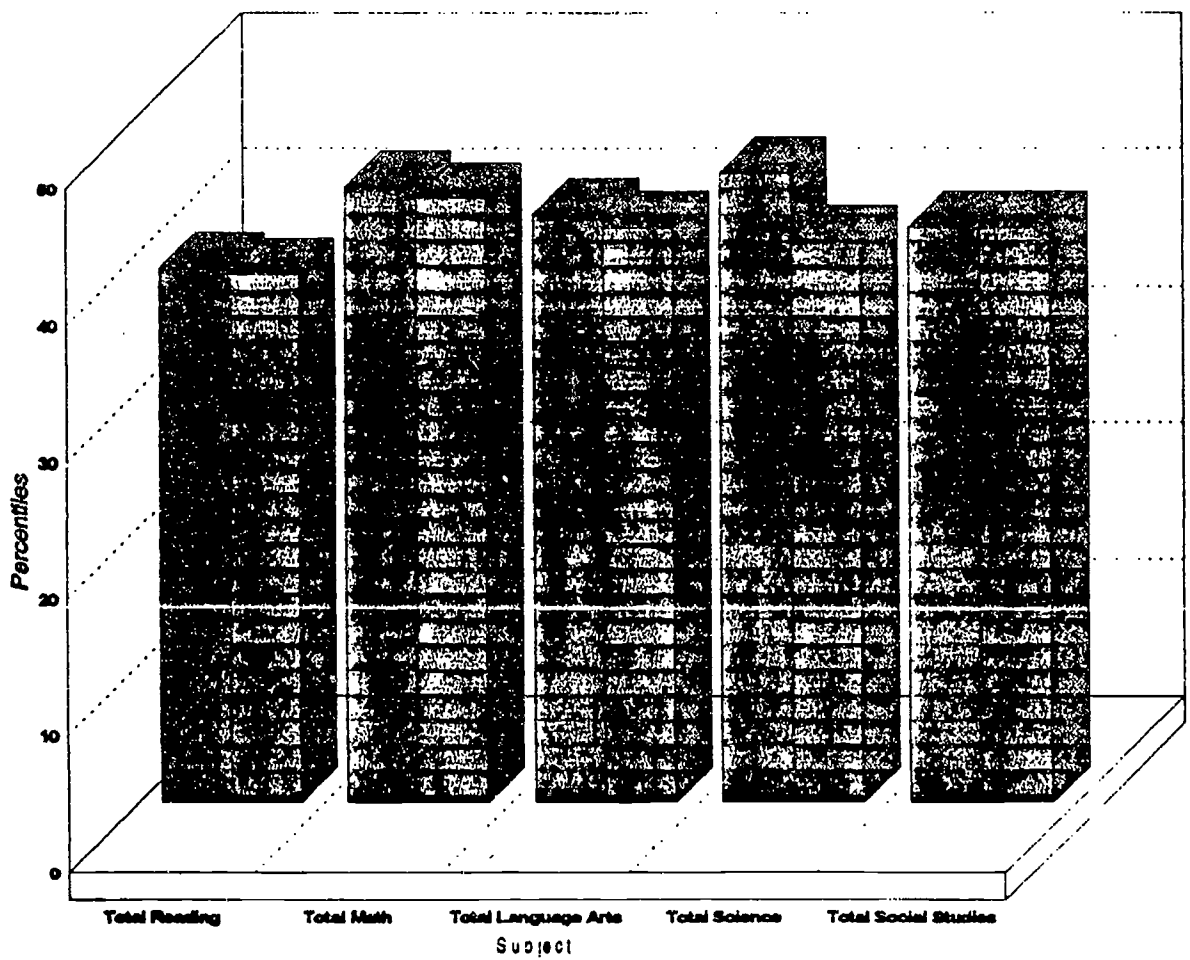
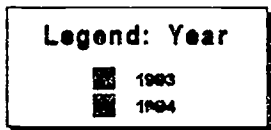
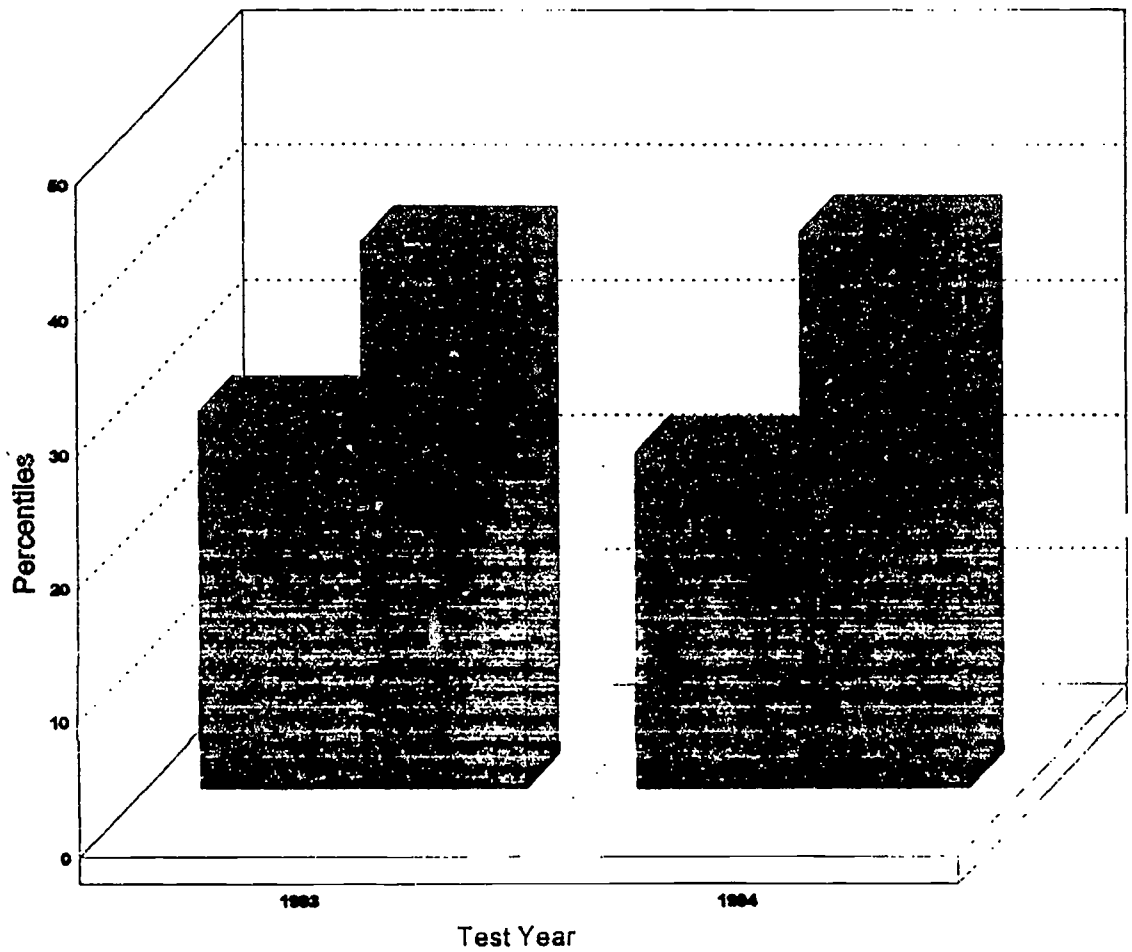


Figure Caption

**Figure 2.** Comparison of black males Stanford Achievement Test scores with the District's Stanford Achievement Test scores.

# Stanford 8 Test Scores

Reading, Math, Language Arts, Science, Social Studies



BEST COPY AVAILABLE