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University of Massachusetts Amherst

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EQUITY AND MONTESSORI MAGNET SCHOOLS:
AN HISTORICAL STUDY OF BENNETT PARK MONTESSORI CENTER,
BUFFALO, NEW YORK

A Dissertation Presented

by

MAGGIE M. FULLER

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

February 1994

School of Education

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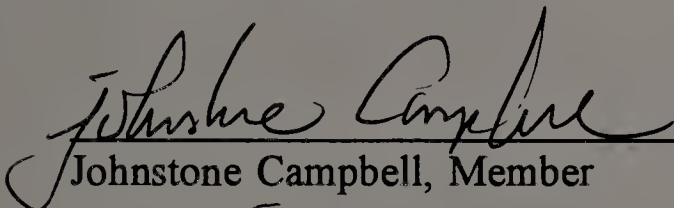
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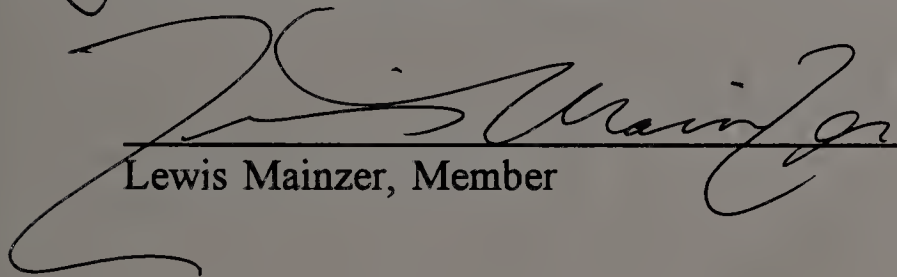
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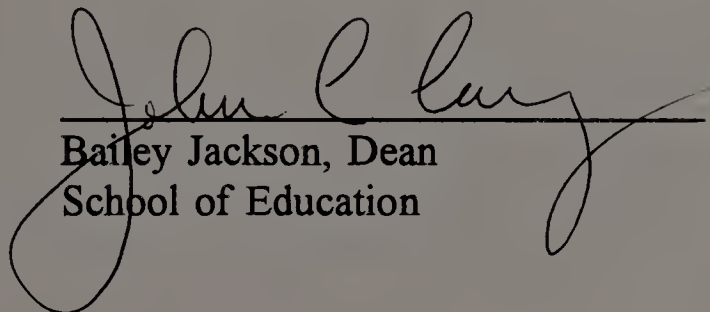
Patricia Anthony, Chair



Johnstone Campbell, Member



Lewis Mainzer, Member



Bailey Jackson, Dean
School of Education

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ABSTRACT

EQUITY AND MONTESSORI MAGNET SCHOOLS: AN HISTORICAL STUDY OF BENNETT PARK MONTESSORI CENTER, BUFFALO, NEW YORK

FEBRUARY 1994

MAGGIE M. FULLER, B.A., MUNDELEIN COLLEGE

M.Ed., XAVIER UNIVERSITY

Ed.D., UNIVERSITY OF MASSACHUSETTS AMHERST

Directed by: Professor Patricia Anthony

The study was designed to explore three principle equity factors at Bennett Park Montessori Center (BPMC), Buffalo, New York. The three factors, access/selection, program processes, and outcomes, were used as a conceptual framework. This framework guided the data gathering process as well as the analysis and presentation of the school's relationship to equity through its first 15 years.

The data gathering techniques employed in the design of the study were documents gathering, interviews, and on-site observations. Data analysis, a continuous process occurring within all phases of the study, was guided by the research questions.

With respect to access/selection data has shown that BPMC consistently has enrolled approximately 50% majority and 50% minority students through the annual lottery. The district adopted a controlled lottery which gave preference to students from racially identifiable schools. Unique to BPMC is the early entrance age of its students, two years, nine months. Age eligibility is the only requirement for BPMC.

With respect to program processes, data has shown that mixed-age grouping, cooperation rather than competition, and a sense of community characterized the learning relationships at BPMC. These qualities have been defined as essential elements of authentic Montessori schooling by Rambusch and Stoops (1992).

With respect to outcomes, data has shown that BPMC consistently enrolled a high percentage of students who participated in the free lunch program. Achievement outcomes indicated that BPMC students scored at higher percentages above the mean than district students in the majority of instances. However, BPMC and the Buffalo School District have not reported data by ethnic group.

The study presented these conclusions: the founding of BPMC was influenced by an extraordinary level of cooperation among the Court, school administrators, community and parents. Shared adherence to Montessori philosophy created and maintained a unity of purpose for BPMC leadership and staff.

Recommendations noted the need for school districts to aggregate data in ways which yield information about the effectiveness of programs for each of the diverse ethnic groups represented. Montessori practitioners need to examine the distribution of learning opportunities for majority and minority students within their environments.

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CHAPTER 1

INTRODUCTION TO THE PROBLEM

Introduction

Implied in the American ideals of free public education is the compelling belief of equal educational opportunities for all children. Notions of equity suggest that every child, including the least advantaged, should be afforded the educational benefits of good schooling. Legal battles, court settlements, and mandated school district plans through several decades have attempted to make these ideals a reality in American education.

Magnet schools were designed and implemented to help create equal educational opportunities for minority students. From their inception and earliest development, these schools faced a complex challenge. The equality challenge is to develop educational programs which will attract and maintain voluntary enrollments of students from racially diverse backgrounds. The demands of equity challenge magnet schools to implement philosophies and practices which afford access, positive educational experiences and successful outcomes to the least advantaged children.

In the 1954 Supreme Court decision *Brown v. Board of Education of Topeka*, 349 U.S. 294, equal protection of the law as it applies to schools was given a new, compelling meaning. The Court ruled that segregation of children in public schools solely by race deprived minority children of equal educational opportunities. Since that decision, interest in educational equity as a field of inquiry has been growing. However, problems in examining equity relationships and in measuring progress toward equity persist (Harvey & Klein, 1985).

Several problems involving equity research are evident in the literature.

Consensus about the meaning of the concept of educational equity is lacking. Research discussions frequently interchange the words equity and equality. The meaning of the concept of equity shifts according to the groups compared in the research such as groups characterized by race, class, handicapping conditions, sex and age. Yet, the literature does suggest several avenues for the pursuit of equity research.

Research suggests that educational equity provided by magnet schools may be explored and judged through a variety of indicators (Willie, 1984; Glenn, 1985; Grant, 1989; Secada, 1989). These explorations focus on admissions policies and practices of school districts to determine how selectivity influenced enrollment patterns. Promotion of magnet schools through community outreach programs within low income minority areas of the school district is considered a practice which encourages enrollment of the least advantaged students. This practice may be considered progress toward equity of access to the magnet schools in the district.

Another area for examination concerns what happens to students once they are enrolled within the magnet program. How students are grouped, promoted, retained, and chosen for advanced classes may be studied to compare treatment of minority and majority students. For example, a magnet school which enrolled most of its minority students in basic classes and its majority students in advanced classes would be resegregating its students by race and denying them equitable schooling experiences. This illustration emphasizes the need to examine within school processes because a magnet school enrollment of 50% minority and 50% majority is not of itself an indicator of equal educational opportunities.

A third area suggested for study examines educational outcomes for majority and minority students. A schooling experience which meets the specific learning needs of individual students will result in comparable achievement levels for majority and minority groups. Increasing achievement levels of minority students may be a goal of magnet schools. Yet, school districts frequently do not analyze their achievement data by race. Through this omission they fail to document specific results which would indicate progress or lack of progress toward equitable outcomes for majority and minority groups from magnet schooling.

Some researchers emphasize that issues of equity in a pluralistic society should not be limited to a single success criterion such as achievement (Montero-Sieburth, 1988; Secada, 1989). In sum, they believe that multifaceted examinations which incorporate the three areas of study, selectivity/access to magnet schools, within school and classroom practices, and outcomes, are vital to the understanding of the relationship of magnet schools to equity. This research on the relationship of Bennett Park Montessori Center to equity utilized this multifaceted approach of examining selectivity/access, within school processes, and outcomes.

Statement of the Problem

School districts have established magnet schools as a voluntary approach to desegregation and equal educational opportunities for minority students. However, the methods utilized by districts to implement magnet schools have been identified as problematic. How students gain access to magnet schools, resegregation within the schools and unequal achievement levels are problems related to equity. This study will

investigate in detail one Montessori magnet school to document implementation practices affecting equity.

Purpose of the Study

The salient practices of magnet and Montessori magnet schools are investigated in this study. The purpose of the study is twofold. First, the study presents case study and survey literature concerning access, classroom processes, and outcomes of magnet and Montessori magnet schools. Second, it focuses in detail on the history and development of one Montessori magnet school, Bennett Park Montessori Center, Buffalo, New York, and the school's relationship to equity. This relationship is examined through the three areas of selectivity/access, within school processes, and outcomes for majority and minority students.

Bennett Park Montessori magnet was chosen because of its history as one of the earlier established Montessori magnets (1978-79). Bennett Park is considered a successful magnet in a city which is well regarded for its school integration (Goldman, 1990). Researchers have judged Buffalo's school desegregation as comparatively successful noting that the "schools have been effectively desegregated, enrollment is stable, resources are fairly distributed, and schooling has been improved" (Rossell, 1987, p. 328).

Research Questions

The following questions are addressed in the study:

1. What are the principle aspects of equity which describe magnet and Montessori magnet schools?

2. What are the critical influences which shaped the founding of Bennett Park Montessori magnet school?
3. What are the specific selectivity patterns which determined the enrollment of majority and minority students at BPMC?
4. How do Montessori instructional technologies and classroom processes affect majority and minority students differently at BPMC?
5. What are the outcomes for majority and minority students at BPMC?

It examines this relationship for the qualitative property of equity through three areas of study: selectivity/access, within school and classroom processes, and outcomes. This is an historical study which seeks to depict the critical influences which have shaped practices constituting equity at this school.

Significance

This research is of interest to those who are concerned with the issues of equity in the broad context of desegregation. It is also pertinent to the field of inquiry which studies processes contributing to resegregation or integration within schools.

This research is of immediate interest to those who are concerned with magnet and Montessori magnet school policies and practices which affect equity. Policy and practice may benefit from this study. Enrollment in public school Montessori programs has grown by almost sixteen percent in the 1990 school year. Thirty-six programs have added at least one grade level and ten new Montessori sites have been started ("Survey: Public Montessorian," 1991). Issues of equity permeate the policy decisions made by school boards and practices promoted by administrators. By documenting a detailed explanation of the forces shaping equity during the founding

and continued life of Bennett Park Montessori Center, the study yields a framework from which others may analyze their relationships to educational equity.

Limitations

This study has both general and specific limitations. General limitations inherent in the qualitative approach apply to these methods. They include constraints experienced by the researcher regarding the availability of information, the order in which information is gathered and its subsequent framing effect on further data analysis (Lincoln and Guba, 1985).

A more specific limitation of the study flows from its focus and scope. The study is not designed to examine many important influences at BPMC such as the roles of parents, teachers, administrators and students in shaping the school's curriculum and culture. Investigation of these important influences would warrant other comprehensive and evaluative studies.

Another limitation of the study stems from the possible intrusion of bias on the part of the researcher, a Montessori educator. Data collection and analysis rest on the informed judgment of the researcher. These activities are undertaken with the awareness of the need to strive for impartiality.

A final limitation acknowledges the specific nature of the study which prohibits generalizations to other magnet and Montessori magnet schools.

Assumptions

The following assumptions are made in the design of this study.

1. Identification and description of influences interacting during the origins of BPMC are essential for understanding the functions of equity at this Montessori magnet school.
2. Important information about admissions and enrollment of majority and minority students may be obtained through document analysis.
3. Insights concerning the influence of the Montessori method on equity processes may be gained through interviews with individuals involved with BPMC during its formative stages.
4. BPMC provides a Montessori magnet worth investigating.

Definition of Terms

The following definitions apply to terms used in this study.

Equality Quantitative property of minority access to and participation in public schools providing desegregated education.

Equity Qualitative property of concern with individual, as well as group, access, participation and outcomes in public schools.

Magnet school School or educational center which offers special curriculum, innovative programs or activities capable of attracting substantial numbers of students of different racial backgrounds.

Majority In the Buffalo plan for integration this term refers to white students. In other school districts the term frequently refers to the numerical racial majority.

Minority In the Buffalo Plan for integration this term refers to African American, Asian American, Native American, and Spanish surnamed students. In other school districts the term frequently refers to the numerical racial minority.

Montessori An educational philosophy and method originating with Maria Montessori, physician, scientist and educator.

Montessori magnet school A magnet school characterized by its adherence to Montessori philosophy and methods.

Summary

This dissertation is an historical study of one Montessori magnet school, Bennett Park Montessori Center, and its relationship to equity. This study applies the facets of equity and empirical evidence found in the literature to the implementation of Bennett Park Montessori magnet.

This dissertation contains six chapters organized in the following way.

Chapter One provides an introduction to the problem, limitations of the study, and significance of the study.

Chapter Two presents a review of the literature beginning with an historical perspective of magnet schools. It includes an elaboration of the concepts of equality and equity as well as empirical evidence of the role of magnet schools in effecting equal educational opportunities. In addition this chapter includes a description of Montessori philosophy and methods and reviews research on Montessori schools related to facets of equity.

Chapter Three presents both the legal foundation and community influences leading to the establishment of Bennett Park Montessori magnet. Resources for this presentation include document and interview data gathered during site visits.

Chapter Four presents a description of the research design and methodology utilized in this study.

Chapter Five presents the historic relationship of Bennett Park Montessori Center to equity. Document and interview data provide the primary material for the presentation of this relationship.

Chapter Six summarizes the equity history of Bennett Park Montessori magnet as presented through this study. It presents conclusions and implications for further research.

CHAPTER 2

REVIEW OF THE LITERATURE

Magnet Schools

The first magnet schools were developed in urban districts as a means of reducing racial isolation and complying with district orders and decrees. The schools were designed as a voluntary alternative to mandatory assignments. Models for magnet schools were based on the well-known specialty high schools that offered programs to selected students.

Several researchers acknowledged the alternative school movement as the educational foundation for magnet schools. Fantini (1977) described the magnet schools as an outgrowth of the alternative schools of the sixties and early seventies. In concept magnet schools resemble alternative schools sharing common elements of "voluntary participation, curriculum built around a theme and a student body drawn from a wide attendance area" (Erwin, 1987, p. 24).

The magnet concept allows that students are not assigned to schools on the basis of their residential areas. Rather parents and students choose from a variety of specially designed magnet schools which feature unique curricula or instructional opportunities (Barr, 1982). The distinct difference between magnet and alternative schools is that magnet schools are designed specifically to draw from a broad area for the purpose of attracting a "racially heterogeneous mix of students" (Blank, Baltzell, Chabotar, & Dentler, 1983, p. 11).

Magnet schools grew and expanded with monetary support provided through grants (Emergency School Aid Act, 1976). Federal regulations offered grants to

districts having magnet schools that would reduce racial isolation by a minimum of five percent. In the Survey of Magnet Schools (1983), final report of a national study conducted for the U.S. Department of Education, Rolf Blank reported that in the first year of ESAA magnet funding, 1976, only fourteen districts applied. By 1980 more than one hundred districts applied with 65 programs awarded funds totaling more than thirty million dollars per year.

By the early eighties, the number of districts implementing magnet schools had increased beyond the scope of federal monetary support. Data collected by Blank (1983, p. 13) showed that 74 districts had developed magnet schools without federal support as contrasted with 64 districts awarded ESAA magnet grants in the final funding year, 1981-82.

States also supported the development of magnet schools. Within New York State, support for magnet schools was implemented in 1983-84 when the legislature appropriated seven million dollars in grant awards to eight school districts. In 1984-85 awards were increased to more than thirteen million dollars. Buffalo Public Schools operated almost half of the state supported programs with eighteen magnets enrolling twelve thousand students (MAGI, 1985).

Effecting Equal Educational Opportunities

Questions concerning the effectiveness of magnet schools in providing equal educational opportunities have been considered by several researchers. Findings and conclusions of these studies offered a mixed review of the significance of magnet schools as effective desegregation tools. One recent study (Rossell, 1990)

demonstrated successful indicators for school districts implementing magnet voluntary plans.

The national survey of the early magnet schools (Blank, et al., 1983) indicated that a limited amount of desegregation can be attributed to magnet schools. Districts which had reorganized their systems around magnet schools for purposes of meeting desegregation mandates and settlements had reported varying degrees of success and failure. On average, only five percent of a district's total enrollment participated in magnet schools.

Although this survey seemed to indicate mixed results for school districts implementing magnet plans, it has been cited in the literature as supporting magnet schools' contribution to desegregation (Raywid, 1987). The survey has been criticized by researchers. Rossell (1985) stated that the survey's "measure of desegregation success, however, is so strange as to render the entire chapter unintelligible" (p. 20).

Studies conducted during the early years of magnet school implementation in several large cities, Chicago, Detroit, St. Louis, suggested that these programs were failures for not achieving the "desired or planned desegregation objectives" (Blasie, 1984, p. 15). In 1977 McMillan reported that a magnet program begun in 1975 in Boston showed "racial enrollment levels were achieved" (p. 159). However, in 1982 Boston's superintendent reported that the schools were more segregated than before the magnet plan was implemented (Blasie, 1984, p. 161).

A different analysis of the role of magnet schools was offered by Metz (1986). Metz studied a mid-western school district's magnet plan which was rated successful in desegregating the schools without mandatory reassignments. However, Metz

concluded that closing and reducing enrollments in central city schools and bussing black students to neighborhood (nonmagnet) white schools played the major role in the desegregation process. The role of magnet schools in Metz' judgment was to "defuse resistance to desegregation and to provide an upward mobility for white students to a superior magnet school" (Metz, 1986, p. 54).

Two comparative studies (Rossell, 1979; Royster, Baltzell and Simmons, 1979) cited frequently in the literature concluded that mandatory desegregation plans with magnet schools were more effective than voluntary plans with magnet schools. Each of these studies was conducted with data following one year of magnet implementation by the school districts. However a follow-up study by Rossell (1990) using the same twenty school district sample as the Abt study (Royster, Baltzell and Simmons, 1979) reported dramatically different findings.

Rossell (1990) judged both types of magnet plans successful on four indicators of effectiveness. However, the nine school districts characterized by voluntary plans, Buffalo, Cincinnati, Houston, Milwaukee, Montclair, Portland, San Diego, San Bernardino, and Tacoma, produced higher measures of effectiveness than the mandatory plans. Magnet schools in the voluntary category, representing on average thirty-six percent of the schools in their districts, achieved the following: fifty-two percent minority students in schools in white locations; thirty-six percent white students in schools in minority locations; an average deviation of seventeen percentage points from fifty percent white enrollment (Rossell, 1990, p. 127).

In addition to this analysis of the success of the magnet schools, the study also presented data on the school districts' racially identifiable schools, the standard most

commonly used by the courts to assess progress toward equal educational opportunities. A school is racially identifiable when its "racial composition is greater than a twenty percentage point deviation from the school district's racial composition" (Rossell, 1990, p. 79). Data are reported for the tenth year of magnet implementation and for two categories, greater and less than thirty percent minority populations.

Rossell (1990) reported that districts having a minority population greater than thirty percent and using mandatory plans had approximately twenty-five percent of their students in racially identifiable schools. Similar districts using magnet voluntary plans had approximately nineteen percent in racially identifiable schools. Districts with a minority population less than thirty percent and using mandatory plans had approximately thirteen percent of their students in racially identifiable schools while districts with magnet voluntary plans had nine percent of their students in these schools.

A study of magnet schools in New York State reported favorable results for magnet schools on measures of how magnet schools reduce racial isolation (MAGI, 1985). Buffalo and seven other school districts composed the sample. Enrollment from 1973-83 showed a change in enrollment for all magnet schools toward racially heterogeneous composition. The majority of magnet schools were within ten percent of their districts' majority-minority enrollment (MAGI, 1985, p. 59). Yet some magnets differed from their districts by over thirty percent.

This study also reported that magnet schools had a correspondingly positive effect on district-wide desegregation efforts. However, this conclusion may be unwarranted since it is based solely on the responses of magnet school principals and

parents to the question, "Do you feel that the magnet school has helped to promote racial desegregation in your school district" (MAGI, 1985, p. 58).

As suggested by this review of the literature the success of magnet schools in promoting equal educational opportunities has had variable results related to the types of plan, voluntary or mandatory, the proportion of minority population, and the year of implementation when the research was conducted. The Rossell (1990) study provided the strongest evidence of the success of magnet voluntary plans in equalizing educational opportunities in city school districts. The evidence has led Rossell to reverse her previous position and to recommend magnet voluntary plans as the most effective policy.

While research surmised the effectiveness of voluntary magnet plans as the most successful policy toward equalizing educational opportunities, it remains insufficient for understanding the full import of magnet schools. How magnet policy is implemented falls within the domain of equity. A review of the research in this domain will examine the relationship of magnet schools to equity beginning with a consideration of the concept of educational equity.

The Educational Equity Debate

Within the field of education the concept of equity has been debated among researchers, policy makers and educators. Debate has centered around the distinctions between equality and equity and the relative importance of equity dynamics, namely access, participation and outcomes. Charles Willie (1984) distinguished equality and equity in two ways. He stated that it is the state's function to assure access and participation to groups. "Equality issues are group centered" (Willie, 1984, p. 38).

Analogously, it is the local system's function to distribute resources equitably, basing decisions on the needs of individual students. "Matters of equity are situational, not universal" (Willie, 1984, p. 37). Willie presumes that "different individuals have different needs"; therefore, school systems where equity prevails will have schools with varying resources (p. 38). Others (Glenn, 1985; Green, 1983; Parker, 1987; Secada, 1989) maintain the link between equality and equity while they seek to articulate the distinctions.

Campbell and Klein contend that "most definitions of educational equity focus only on a singular aspect of equity, that is either equity regarding access to schooling, equity regarding the process of schooling or equity regarding the outcome from schooling" (1982, p. 583). This review disclosed several positions in support of the process dynamic as a preferred method for assessing equity in schools. This preference is concerned with several research areas: tracking and ability grouping (Bell, 1981; Oakes, 1985; Sizemore, 1978), student teacher interactions, classroom organization, curriculum materials and student learning styles (Grant and Sleeter, 1986; Harvey and Slatin, 1975; Montero-Sieburth, 1988; Schofield, 1982).

Several positions acknowledge the need for outcomes studies in equity research (Harris and Kendall, 1990; National Urban League, 1984). This research focuses on the criteria of achievement, attitudes, attendance rates, drop-out rates, and representation in advanced classes.

The equity dynamic of access/selection holds unique application for magnet schools for two reasons. By definition the number of magnet schools within a district

is limited, and student applications are characterized by self-selection factors in conjunction with school district constraints.

This literature review provides perspectives on magnet schools' relationships to equity through three dynamics: selection/access, processes and outcomes. Selectivity and access have been considered in the national survey of magnet schools; consideration of equity dynamics has been found in case studies. However, it may be noted that most of the research on magnet schools did not focus on equity; rather, data pertaining to equity seemed to take a minor place in the majority of these studies.

Selectivity/Access and Equity

Popular belief assumes a certain "elitist" image or quality inherent in the magnet school concept. Several researchers have discussed the seeming contradictions in a school district's policy which creates a dual structure of schools: magnet and nonmagnet (Foster, 1973; Metz, 1986). The magnet school structure may contribute to desegregating schools by attracting white students. Yet the central issue of equity, namely which students benefit from this magnet structure, warrants scrutiny. Which students benefit depends primarily upon the complex interaction of selectivity factors and access practices of the magnet schools.

In the comprehensive Survey of Magnet Schools sponsored by the Department of Education, Blank, et al., (1983) identified four types of selectivity occurring in varying degrees and combinations in the magnet schools studied (p. 47):

- *student self selection, which is inherent in the magnet concept;

- *market focus, which is expressed in the ways in which magnet schools are marketed to the community and the consumers;

*applicant screening, which may include both behavioral and academic standards for admissions;

*post-entry mechanisms for transferring students who do not perform or behave in accordance with the magnet school's standards.

Blank, et al., (1983) reported that most magnets were selective to some degree. Only eleven percent of magnet schools were nonselective in that they did not employ eligibility requirements. Yet the survey concluded that the schools did "not appear to be rejecting the average student" (Blank, et al., 1983, p. 51).

While Blank's survey findings acknowledged degrees and combinations of selectivity in most magnet structures, case studies disclose selectivity unique to each system. Market focus, the dissemination of information and communication with parents about magnet schools, is notable in two ways. It is within the control of the school district's implementation practice, and it is the first step in determining which students will attend magnet schools.

Empirical evidence about the levels of marketing practiced by school districts has been discussed in several case studies (Davis, 1984; Archbald, 1988). Davis (1984) presented the results of parent surveys in his case study of the Kankakee schools. Parental responses to the survey indicated that 24.2% of parents felt that the public had not been provided adequate information about magnet school programs (Davis, 1984, p. 193). The majority of parents indicated that prior to enrolling their children they received most of their information from schools, meetings, counselors, principals, teachers and from mailed materials or school flyers (p. 194).

Awareness of magnet schools and programs was also reported by Larson (1981) as quoted in Archbald (1988, p. 143). In a telephone survey of parents in the Tacoma

Park, Maryland, school district, Larson found that only 27% of the nonmagnet parents surveyed had heard of the magnet schools; 73% of the magnet parents had. Twenty-four percent of black parents and 48% of white parents surveyed were aware of the program specialization of the magnet schools in which their children were enrolled.

Archbald (1988) reported that the findings of the telephone survey in his Milwaukee Public Schools (MPS) study showed that five out of six MPS families had heard of the magnet schools and programs (p. 143). He continued (p. 143):

of the parents in these seven schools, 93% of the white parents, and 75% of the minority parents (of which about 93% are black, and most of the rest Hispanic) had heard about the magnet schools and programs; 93% of the non-low-income, and 74% of the low income (less than \$15,000/year household income) had heard about the magnets.

Data from these three studies raise questions about the market focus of these districts. Effectively marketing magnet schools to minority and low income families may require more than information distribution through customary school channels of communication. Effective communication may be considered a requisite for equity for two reasons. First, it may be assumed that information about magnets is vital to parents' informed participation in the applications process for magnet admissions. Second, information about the magnet program is important to parents of neighborhood children attending magnet schools so they may benefit from the program's unique offerings.

While marketing by the school districts directly determines access to magnet schools, self-selection related to socioeconomic differences contributes to the interaction pattern of selectivity. In his conclusions Blank, *et al.*, (1983) stated that self-selection based on ethnic and socioeconomic values shapes the constituency of

magnet schools. Popular claims assert that students from higher educational and socioeconomic levels participate in magnet schools. This issue is presented in several studies.

An early report by Levine and Campbell (1977) acknowledged the "lack of systematic information on the socioeconomic composition of the enrollment in magnet schools in Cincinnati, Houston or other cities that are developing fairly large scale magnet programs" (p. 259). Yet they noted that the Cincinnati "magnet programs have been credited with drawing one thousand seventy-six students back from private schools for the 1975-76 school year" (p. 259). Levine and Campbell (1977) believed that selective magnet schools attracted a large percentage of middle-class families.

Rossell (1990) reasoned that the literature on class differences in racial attitudes and educational preferences would be applicable to magnet schools. In two separate surveys of white parents conducted in Yonkers and Savannah, Rossell concluded "greater willingness among parents of higher social class to enroll their children in a magnet school regardless of the racial composition of the school and neighborhood" (p. 116). Rossell reported (1990, p. 117)

the Yonkers and Savannah surveys found twenty-five percent and thirty-two percent respectively of white parents with more than a high school education were willing to enroll their children in a magnet program in a fifty percent black school in a minority neighborhood. In contrast only eleven percent and twenty-four percent of white parents with less than a high school education were willing to do so.

These two surveys were conducted prior to the implementation of magnet plans. As such they may reflect how parents perceived they would respond to magnet offerings at a future date. Whether or not parents would actually enroll their children in these percentages cannot be accurately predicted from the surveys. Other studies of

selectivity related to class differences have discussed the phenomenon of skimming, a term which describes the removal from neighborhood schools of students from wealthier and better educated backgrounds.

Evidence presented by Metz (1986) through three case studies of magnet middle schools in a mid-western city compared the magnets to middle schools citywide on the criterion of free and reduced price lunches. Two magnet schools had a higher percentage of free and reduced price lunches, seventy-one percent and fifty-nine percent, compared to the citywide middle schools' fifty percent. The third magnet, a gifted and talented magnet housed with another program, had an estimated twenty-five percent free and reduced price lunches (Metz, 1986, p. 159).

Metz' findings showed with certainty that two of the three magnets did not enroll from predominantly middle-class, well-educated families. These schools did not contribute to the skimming effect. However, the findings also emphasize the differences among magnet schools and suggest other factors may contribute to each school's enrollment.

An illustration of this point may be drawn from Metz' commentary that "middle class families were more likely to choose magnet schools than were working class families" (p. 22-23). Also, the "middle class was especially drawn to a few schools, for example, at the elementary level, a Montessori school, a creative arts school, and a gifted and talented school" (Metz, 1985, p. 23). Such reporting raises another question about skimming: Is there a hierarchy within a city's magnet schools which fosters socioeconomic homogeneous enrollments.

A case study by Erwin (1987) addressed some of the socioeconomic variables of families enrolled in a district's elementary magnet school compared to the district as a whole. Erwin described the magnet enrollment as representative of the district's population, 76% white, 19% black and 4% other (Erwin, 1987, p. 64). Erwin compared numbers of students participating in free and reduced price lunch programs finding only "6.3 percent of students at the magnet school qualified for reduced cost or free lunch; whereas 17 percent [of students] district-wide qualified" (p. 91).

Erwin (1987) then compared average family income utilizing zip code demographic data (p. 90). She found that income distribution at the magnet school was somewhat higher than the distribution district wide. "Noticeable differences occurred at income levels equal to or higher than \$36,000" (p. 91). The magnet school showed 40% of its families at this level, while the district wide percentage was 24% at this level. Both types of data seem to indicate a skimming effect at this magnet school.

Another case study which found selectivity through class differences was conducted by Archbald (1989) in his analyses of the Milwaukee Public Schools (MPS). Archbald found that almost fifty percent (48.9%) of students from the college educated, higher income area attended magnet middle schools (p. 196 & p. 341). This contrasted with the approximately 17% of black inner city attendance area students enrolled in magnet middle schools (Archbald, 1988, p. 290).

An understanding of the magnet middle school enrollment process was provided by Archbald (1989). Students in the final grade of their schools, fifth or sixth elementary grades and eighth grade, must apply for a place in a middle, junior or

high school. Archbald reported interview findings which indicated that "return rates on application forms" are as low as "fifty percent" in some inner city schools (Archbald, 1989, p. 159). At these transitions, it is the principal's responsibility to obtain the applications from parents. When no application is returned by the deadline, the principal "assigns" the student to a neighborhood school.

Archbald's explanation serves to illustrate the complexity involved in the interaction of selectivity factors. While some might contend that unreturned applications reflect self-selecting ethnic and class values, it may also be argued that improved return rates are the responsibility of the school district. Therefore, facilitating measures would be implemented by the district.

A case study by Borba (1984) of a rural California school district compared several socioeconomic indicators of magnet, nonmagnet and independent school parents. Borba's data showed that nonmagnet public schools had a higher percentage of parents who had not graduated from high school. Nonmagnet public school parents had lower incomes and rented rather than owned their homes. Magnet parents were almost comparable to independent school parents in higher levels of education and higher incomes.

Most of the discussion presented in these pages indicates complex interaction of selectivity factors and access practices in determining enrollments for magnet schools. As noted earlier most of the data reviewed here was extrapolated from case studies which did not have the investigation of selectivity phenomena as their main purpose. However, a recent quantitative study by Timothy Duax (1988) investigated skimming as it affects a black inner city neighborhood of the Milwaukee Public Schools (MPS).

Duax (1988) investigated socioeconomic differences between parents of magnet school and neighborhood school students residing in a predominantly black inner city neighborhood. Statistical analysis of the three hundred six returned surveys, 70% return rate, showed differences between magnet and nonmagnet parents on two measures: education and employment.

Significant findings indicated that magnet schools "had a higher proportion of target area mothers with higher levels of education than neighborhood schools" (p. 156). Duax noted, however, that "even for families in magnet schools, the mean level of education was below that of a high school graduate" (p. 170).

Other significant findings showed a larger percentage of employed parents in the magnet schools than in the neighborhood schools. However, the rates of unemployment were high for families in magnet schools as well. Parents in the target area reported unemployment ranging from forty percent in the magnet program for academically talented to seventy-nine percent in the neighborhood schools (Duax, 1988, p. 165).

Of special interest to this study are the findings presented for the early entrance magnet, identified by Duax (1988) as a Montessori magnet (p. 71), which enrolls children at age four, a year earlier than other schools. Compared with other schools, the Montessori magnet showed the highest level of mothers' education with a mean of 5.96 as reported in a table (p. 123) or 6.06 as reported in the text (p. 122). Both means corresponded to completion of twelfth grade and high school graduate as shown in the coding table.

The mean level of education for target area mothers with children in neighborhood schools was reported as 4.65, corresponding to the middle of junior year of high school. This data suggests real life differences beyond the statistical means reported by Duax. It is reflective of the key difference between completing high school and dropping out.

A review of the unemployment percentages presented by Duax (1988, p. 165) showed differences in the employment levels of Montessori magnet parents and neighborhood school parents, 52% as compared to 21% employed. Taken together these findings indicate a skimming effect by the Montessori magnet school. This is the first study to present evidence of skimming by magnet schools and to a greater degree by specific magnets in a predominantly black inner city neighborhood.

Summary

In this review case study material and analyses of three surveys have been considered in terms of the two types of selectivity described by Blank, et al., (1983) in the national survey of magnet schools. This review indicates that selectivity specific to the magnet schools' structure produces complex interaction patterns of selection through socioeconomic factors and access practices. Case material has suggested the unique interaction of selectivity in each district as well as its relationship to equity.

A clearer understanding of the relationship of magnet schools to equity requires study of the implementation process. Duax's (1988) study of skimming in a minority inner city neighborhood prompted him to conclude that (p. 178):

The point of focus for equal educational opportunities within schools need not be on the establishment of nonselective magnet schools, but on the manner in which they are established. How nonselective magnet schools are made available to the city's population, how the school

system promotes registration . . . all impinge on equal educational opportunities for all of the city's children.

The actions which implement magnet schools, school locations and renovations, lotteries, application processes, distinctive themes and curricula, funding expenditures, staff training and pupil-teacher ratios, constitute the central issue of equity. The orchestration of these actions will be studied in this research as the relationship of three dynamics, selectivity/access, processes, and outcomes, to one Montessori magnet school.

This literature review has focused upon the dimensions of equality and equity demonstrated by magnet schools generally. Attention is focused in the following pages on a specific type of magnet school, Montessori magnets. Since the early sixties, Montessori schools in the United States have been synonymous with the image of excellence and elitism associated with independent education. However, the development of Montessori magnets during the seventies and eighties has brought Montessori education into the mainstream of public education.

This review will briefly sketch the biography of Maria Montessori and the early history of Montessori in the United States. The philosophy and practices which define and characterize Montessori schools will be described. Equity dynamics of selectivity/access, internal processes and outcomes will be discussed through Montessori magnet schools' literature. This review will provide the context for the research undertaken in this study, the relationship of Bennett Park Montessori magnet to equity.

Montessori Magnet Schools

Nationwide, Montessori magnets are one of the most successful types in attracting applications at the elementary level (Royster, et al., 1979). This observation continues to reflect the powerful attraction of Montessori in today's world of magnet options. Of course, since Royster's study the proliferation of various types of magnet options has greatly increased. There are indicators that Montessori continues to attract even in the midst of this wide array of options.

For example, Cincinnati public schools report that of the twenty-four unique programs offered, Montessori magnets received the second highest number of applications during the 1989-1990 school year (Evaluation Report, 1990, p. 12).

Another illustration of the high demand for Montessori is recounted in Education Week (January 30, 1991, p. 3). A United States district judge ordered that a Dallas middle school be converted to a Montessori magnet in order to relieve the one thousand child waiting list. The opening of the second Montessori magnet in Dallas seeks to accommodate the increased parental demand for Montessori programs.

Other researchers, including Gillenwaters (1986) have concluded from their reviews of the literature that Montessori programs are widely utilized at the elementary level (p. 37). However, researcher Rossell (1990) reports that in her Yonkers and Savannah parent surveys (1986) Montessori magnets were among the less popular ones with 38% support among Yonkers white parents and 42% support among Savannah white parents (p. 119). Rossell suggests these findings may be reflecting "lack of understanding of what a Montessori education is" (p. 119). Also, these two surveys do not reflect parental practices but rather parental concepts about educational programs.

Biographical Sketch of Maria Montessori (1870-1952)

Maria Montessori was born in Chiaravalle, Italy, August 31, 1870. When Montessori was five years old, her family moved to Rome because her father, Allesandro, sought better employment (Kramer, 1976). Her biographers, Standing (1957) and Kramer (1976), describe Montessori as a strong-willed, self-confident and aggressive personality among her peers. She was adamant about not pursuing a teaching career. Montessori chose the technical course of study to pursue mathematics.

During her teen-age years, Montessori successfully pursued mathematical studies at technical school. Upon completion of this course of study, she attended an advanced technical school for four years. During these years, her interest in biology became primary. Montessori determined to pursue a career in medicine. This decision met strong societal opposition.

In 1892 Montessori entered the school of medicine at the University of Rome. As the first female student, she was subject to persecution and derision by fellow students. Undaunted, Montessori persevered winning a series of scholarships and graduating in 1896 with a double honors degree in medicine and surgery (Standing, 1957).

Montessori's perseverance through medical school may be viewed as an outstanding example of courage in a situation fraught with great inequities. Biography recounts that she was forced to work alone at night in the labs because male students refused to work on cadavers in her presence. It is possible to speculate about the significant effects of this experience on Montessori's understanding of equity in education.

Upon graduation Montessori assumed several posts including assistant physician at the University of Rome Psychiatric Clinic. One of her duties was to visit asylums to seek patients for the clinic. Social conscience and attitudes toward mental illness were still at primitive levels. It was during one of these visits that Montessori was deeply moved by the plight of young children housed in the adult asylum.

Montessori became convinced that these children's mental deficiencies were related to their environment as much as to heredity. Her biographers, Standing (1987) and Kramer (1976), report that Montessori was asked to serve as director for the newly established orthophrenic school for children. Montessori worked all day with children; at night she stayed up late to make notes, tabulate, compare, analyze, reflect and prepare new materials. Standing (1957) quotes her remark "Those two years of practice are indeed my first and only true degree in pedagogy" (p. 48).

The children made remarkable progress under Montessori's guidance with many of them achieving success on a public examination designed for school pupils. Montessori continued her own studies, reentering the University to study philosophy and anthropology. These are described as productive years by Montessori's biographers, Standing (1957) and Kramer (1976). Montessori continued to practice medicine in the clinics and hospitals of Rome, publish the results of her study of the nervous diseases of children, visit and observe children in other European countries and complete her first volume, Pedagogical Anthropology.

The development of Montessori schools had its beginnings in 1907 when Montessori was asked to head a school for normal children. The school located in the San Lorenzo quarter of Rome was housed in one of several tenements in an area

known for crime and poverty. Preschool age children were left unattended during the day while their parents worked. Casa dei Bambini (Children's House) was founded to care for and educate these children.

The brief sketch of Montessori's initial success in educating special and poor children highlights several important implications for equity. Both her philosophy and practice demonstrate extraordinary vision and commitment to several truths which form the basis for equity as discussed earlier in these pages.

These truths may be summarized in the following statements. For Montessori all children can be successful learners; the child learns best in a well prepared environment designed to meet his/her developmental and individual needs; each child has unique personal interests which are supported in the environment; the child is not preparing for the next educational level but is engaged in the subjective and personal work of construction of the self (Montessori, 1963).

It may be concluded from discussions in earlier pages and from general texts that these principles are part of the currency of today's educators, at least, in the theoretical and articulation phases. However, Montessori developed and practiced this philosophy of equity in the early decades of this century. She was successful in establishing international teacher training courses and an international support organization. In addition, she published numerous educational titles. See references for a brief listing.

As noted by Rambusch (1977), Montessori quickly gained celebrity during these early years both for her accomplishments as Italy's first woman physician and as a successful educator. During these years, "Montessori acted as a personal 'magnet'

for her ideas, staying in Rome where people from all over the world came to see her work" (Rambusch, 1977, p. 76).

Early History of Montessori in the U.S.

The early history of Montessori in the United States may be characterized as full of promise. However, that promise failed to reach potential. A review of the literature yields some research on this chapter of Montessori's initial phase in the United States. A brief sketch is included here.

A history of early Montessori in America presented by Nancy Curran (1985) and included in her historical case study shows many initial adopters in the public sector of the Montessori method. Public schools using the Montessori method are recorded in the U.S. Bureau of Education's bibliography of Montessori in 1914. Public schools included Augusta, Maine; Cincinnati and Cleveland, Ohio; Des Moines and Dubuque, Iowa; Falconer, New York; Indianapolis, Indiana; Johnstown, Pennsylvania and Minneapolis, Minnesota (Curran, 1985, p. 157).

In addition, several American educators participated in the first International Montessori Teacher Training Program held in Rome in 1913. Notable educators who returned to positions in which they would influence American public school teachers included Clara Craig of the Rhode Island Normal School, Grace Barnard of the Barnard Kindergarten Training School and Elizabeth Harrison of Chicago's National Kindergarten College (Curran, 1985, p. 158).

When Curran (1985) discusses the Montessori method in its early years in the United States, she notes that this first wave of enthusiastic reception failed to promote widespread, lasting adoptions within the public schools in the early part of the

twentieth century. Curran (1985) theorizes that rejection on the part of three key groups, teachers, administrators and educationists, prevented the adoption of Montessori. According to Curran (1985) each of these groups resisted the adoption of this new "instructional technology" because of the perceived risks and consequences (p. 243). Curran (1985) states that perceived risks to "power, prestige and economic position" were associated with the paradigmatic innovation of the Montessori method (p. 286).

Rambusch (1977) also comments on the initial promise of Montessori in the United States. In 1912, The Montessori Method was published in the United States as a translation of her work, The Method of Scientific Pedagogy Applied to the Education of Young Children in the Casa Dei Bambini. The first edition of this book was sold out in four days (Rambusch, 1977, p. 77).

While enthusiasm for Montessori as an "education wonder worker" (Kramer, 1976, p. 137) grew, potential was not realized in the establishment of Montessori schools. Rambusch cites the required teacher training course conducted in Rome by Montessori as one of the reasons for limited American growth. It may be concluded that American teacher training colleges were not eager to send their students to Rome for training (Curran, 1985; Rambusch, 1977).

Other barriers to the growth of Montessori following an initial enthusiastic reception include those associated with the context of the era. With the outbreak of war in Europe, American possibilities for involvement with the magnet center of Montessori in Rome were greatly diminished (Kornegay, 1981).

The re-emergence of Montessori in America is credited to Nancy Rambusch, founder of the American Montessori Society. A thorough and interesting account of the complex process of rediscovery of Montessori in the nineteen sixties is detailed by Rambusch (1977). In summary, American Montessori of the sixties was launched on the dissatisfaction of parents with available schooling and the ability of these parents to finance an alternative. It was not until the mid-seventies that American Montessori began its involvement in public education as an attractive magnet.

Philosophy, Practice, Characteristics

Montessori philosophy engendered through teacher training informs the unique methodology and identifiable practice of Montessori schools. A review of the literature demonstrates an increased awareness among researchers of the significance of the link between teacher/school philosophy and practice/effectiveness of schools for children's learning.

Ron Edmonds (1979), Lawrence Lezotte (1985), and other researchers have suggested that all educators desiring to operate effective schools should operate from one major premise: "all children can learn" (Davenport, 1987, p. 5). Researchers are agreeing with Good and Brophy (1975) that successful teachers have philosophies which reflect positive attitudes that they can teach and that students can learn. Davenport (1987) emphasizes the "connection between philosophy, teaching and learning" (p. 5).

In the conclusions section of her comparative study of three outstanding educators, Montessori, Neil and Collins, Davenport (1987) notes that an important key

to their success was a personal and educational philosophy. Davenport (1987)

recommends that present and future teachers (p. 99)

- *Understand the importance of adopting a personal and educational philosophy that will enhance rather than detract from the teaching/learning process.

- *Believe in and respect the potential of students, and reinforce that potential.

- *Protect and preserve the individuality of students.

In addition, Davenport (1987) notes that Montessori insisted upon "a classroom environment that facilitated learning" (p. 98). Davenport's (1987) findings showed that Montessori environments (p. 98)

- *Encouraged students to be active.

- *Emphasized the uniquely personal and subjective nature of learning.

- *Promoted the idea that differences are good and desirable.

- *Allowed students to accept and respect self and others.

- *Provided an environment that changes in line with individual needs and tolerance for freedom.

Davenport (1987) concludes that having a philosophy which supports an unshakable belief in the intrinsic capability of the learner promotes the social and intellectual growth of both the teacher and learner.

Another researcher emphasized the importance of philosophy informing practice with respect to magnet schools. A recommendation made by Davis (1984) in his comprehensive study of the magnet programs at Kankakee District II, states that it is important for each school district to assure that the controlling philosophy of each magnet program is maintained. Davis (1984) further recommends that one philosophy

should prevail in the design and implementation of each individual magnet. He suggests that parents, teachers and students find a "stabilizing effect in one single philosophy" (Davis, 1984, p. 131).

It may be suggested that a fully articulated philosophy informing practice creates a qualitative difference and an intangible resource in those magnet schools which operate with such a foundation. Montessori magnets, by their self-definition, proclaim their mission and adherence to philosophical principles and practices which seek the best learning environments for each individual child.

As noted bySizer (1984) good schools, effective schools, are clear on their mission. They are informed by their philosophy. And they are demanding but not threatening places of high expectations.

Selectivity/Access and Equity

In prior discussions in these pages three significant equity junctures, selectivity, internal processes, and outcomes, were considered for magnet schools. Montessori magnets form part of the data in these magnet school surveys and studies. However, there are data specific to Montessori magnets.

A survey of Montessori magnet schools was conducted by the North American Montessori Teachers' Association (NAMTA) in 1988 (Kahn, Boehnlein, Villegas, 1988). Survey questions sampled information about admissions to Montessori magnet schools. Results yielding some indicators of selectivity are considered here.

Survey results indicate that there are many different practices regarding enrollment in Montessori magnets. Approximately twenty-five percent of the Montessori public schools surveyed utilized a screening process including teacher

interviews. Forty-seven percent operated on a first-come-first-served basis. Another thirty percent used a lottery (Kahn, 1990).

Vincent (1990) acts as a recruiter for magnet schools in the Kansas City, Missouri Public Schools. In describing her recruitment role, Vincent (1990) states that "students are admitted to the program only after an interview with the principal or teaching staff" (p. 335). In this district selectivity plays a role although high demand for few places may create a larger problem. During the Montessori magnet's opening year over one thousand applications were received for 180 student places.

It may be suggested that one of the admissions criteria, prior Montessori experience, constitutes a controversial issue within the Montessori community. This criterion has significant implications for equity.

An illustration of the implications of this criterion is evident in the promotional literature of Montessori education in the Prince George's County Public Schools, Maryland. The primary program is described as serving children aged three through six. "Children are accepted into the program at the age of three or four. Children of kindergarten age or older must have at least one full year of Montessori schooling during the school year prior to entering the program" (Brochure, 1990).

The brochure further indicates that "preschoolers are transported by parents" (Brochure, 1990). Since the preschool program is half-day, additional school day hours are offered as child care for "a nominal fee" (Brochure, 1990).

Two conditions, transportation provided by parents and fees for additional day care hours, diminish possibilities of admissions for low income families. A more powerful equity dimension is the level of educational awareness required of parents

who must be plotting their child's elementary schooling before the child reaches his/her third birthday.

The controversy over "prior Montessori experience" and the corresponding necessity of a child beginning Montessori education at age three or four is an issue of long standing in Montessori circles. Rambusch (1977) reports opposing viewpoints on this issue during the planning period for the opening of the Children's House Magnet School in Cincinnati in 1975. Rambusch (1977) recounts that she forcefully advocated admissions at kindergarten level with no prior Montessori experience.

Others have discussed the need for non-selective enrollment resulting in equitable, quality magnet schools (Duax, 1990; Blank, et al., 1983). Duax advocates a lottery process which is designed to work equitably with programs having high demand. He further notes that an active outreach program is essential to inform parents about innovative programs such as Montessori which have early childhood components. Duax states that "public Montessori magnet schools have already been established which are nonselective . . . demonstrate strong academic achievement and educate . . . a broad spectrum of diverse children" (Duax, 1990, p. 334).

Other researchers have characterized Montessori as one of the magnet themes having admissions criteria. Pechmann (1987) notes that "language immersion programs and Montessori programs at the upper levels assume prior experience at an earlier level" (p. 36). Bennett (1984) also emphasizes that some programs are designed to be extensions of the program at an earlier school level.

Pechmann (1987) also considered another selectivity aspect of the Montessori magnet school. Pechmann suggests that some magnet programs by their design and

implementation accommodate the existing attendance area population and other programs do not. Pechmann cites as an example the Montessori magnet which is "often implemented developmentally" (1987, p. 32). These Montessori programs initially begin with pre-kindergarten, kindergarten and possibly first grade with a new grade added incrementally each year. Pechmann believes this implementation displaces the attendance area population having implications for equity.

From the wide variety of practices reviewed through survey and case studies, selectivity may be considered an equity issue for Montessori magnet schools. Even the apparently innocuous first-come-first-served policy may diminish opportunities for poor and minority students to attend Montessori magnets. Cincinnati Public Schools (1990) reports that 321 applications for Montessori magnets from African American students were rejected in 1989-90. Another one hundred were placed on the waiting list. Intensive outreach to parents and increased numbers of places in Montessori magnets may increase opportunities for minority and low income families.

Program Processes and Equity

A second equity juncture, the internal processes of a school which define instructional technologies, has been considered in the literature. Recent research has given attention to internal processes such as ability grouping and tracking. Some authors question whether such groupings create unequal access to valued resources within the classroom such as instructional time, interesting texts (Gamoran, 1990; Sorensen & Hallinan, 1986).

What happens to students within the school and the classroom is for some researchers the most fundamental issue of equity (Gamoran, 1990; Dreeban &

Gamoran, 1986; Oakes, 1985). Earlier discussion in these pages considers both resegregation at the instructional level and instructional technologies, both simple and complex, which affect equity in magnet schools. It is important to take a closer look at these internal processes at Montessori magnet schools. A review of the literature yields little direct data on this issue. However, several important fundamental practices of Montessori instructional technology may be reviewed for equity considerations.

What are some of the technologies of Montessori education which promote equity? In a short sentence, "Montessori education is really very different from traditional elementary education" (Rambusch, 1977). Indeed these differences are readily evident and their implications are clear. A case study of magnet schools provides a clear example. Davis (1984) researched magnet schools in Kankakee and described descriptive instructional practices which informed the Montessori magnet school (p. 143).

1. Learning was in a multigraded environment that allows the children to exercise maximum choice and develop self-discipline skills within a carefully prepared structure.
2. The teacher and instructional assistants served as a link between the child and the classroom materials. The teacher determines what was to be learned during the year, while the child has the freedom to choose what areas he/she wished to explore first.
3. Pupil independence and self-confidence were fostered through freedom of movement from one learning area to another, using a wide variety of stimulating materials, mastering tasks which gradually increased in difficulty, while working individually or in small groups on projects of special interest.
4. Children learned concentration skills by being allowed to work undisturbed and being encouraged to complete all projects.

5. Pupils left the self-contained classroom to participate in music and physical education.

One of the key principles, multiage groupings in the classrooms, profoundly affects the learning environment for the child and the Montessori practitioner. Indeed, the teacher is not engaging multigrades in the classroom, but preparing an environment for a community of individual students of various ages three through six years, six through nine years or nine through twelve years.

Many important teaching/learning processes flow from this principle of multiage grouping. Absent are homogeneous grouping for reading and math; absent are whole classes of children attending to the teacher's lecture at the chalkboard; absent are whole classes of children performing the same tasks at the same time according to the same standard. Indeed Montessori is very different from traditional elementary practice.

These differences are seen by researchers as promoting equity in the classroom. Classroom practices which incorporate small groups working together promote cooperation (Metz, 1986; Oakes, 1990). Montessori practice distributes learning opportunities throughout the prepared environment affording access to each child. Each child in the classroom has full access to the Montessori materials, other children, and the adults.

Several Montessori classroom practices which are quite unlike traditional elementary classroom practices are noted here. Cooperative learning with other students in a noncompetitive mode is a significant classroom dynamic. Research suggests that minority children tend to succeed better in classrooms featuring this type of learning (Slavin and Oickle, 1981; Slavin, 1985).

A second Montessori classroom practice, the child interacting with concrete materials in the environment, provides equal learning opportunities for each child. Recent research supports the practice of experience-based, hands-on learning for all students and especially for minority and low-income students (Cohen, 1981; De Avila, 1988).

A third Montessori classroom practice, focus on the child as individual, independent learner, further extends equal educational opportunities. Educators recognize the need for developing self-directed learning among their students (Feltin, 1987; Johnson, 1975). Montessori environments are designed to promote independent learning (Orem, 1971). Montessori practitioners are trained to facilitate this self-directed learning.

A review of the literature yields a study of independent learning in four Montessori elementary classrooms. Through direct classroom observations and questionnaires, Feltin (1987) conducted a descriptive study which examined independent learning. Feltin's finding that a high degree of independent learning was observed in the four Montessori elementary classrooms studied provides a case of empirical evidence of this classroom practice. How well this practice succeeds in each Montessori classroom depends on several factors including the teacher's levels of training and experience.

From this short summary of the basic principles and practices of Montessori classroom environments it may be suggested that Montessori magnets offer illustrations of quality learning environments which demonstrate many of the characteristics associated with equity.

Educational opportunities at Montessori magnets are considered here.

Outcomes analysis at Montessori magnet schools has an implication for the measure of equalizing educational opportunities. Rossell's study (1990) found an average percentage of 34% white enrollment in Montessori magnet programs in minority locations (p. 129). This study also found an average percentage of 53% minority enrollment in nonminority locations (Rossell, 1990, p. 131).

Rossell (1990) states that the early childhood Montessori magnets are differentially successful in the magnet-voluntary and mandatory plans. These magnets are more successful in enrolling minorities under the voluntary plans than under mandatory plans. Rossell (1990) comments that "it is difficult to say why this is the case" (p. 132).

A Montessori magnet's role in equalizing educational opportunities may be seen in a case study of St. Paul's magnets. Pechmann (1947) studied magnet schools in St. Paul, Minnesota, comparing them to Blank's (1983) ideal characteristics of magnet schools. In 1975 St. Paul, under the mandate of the State Department of Education, designated its first magnet school located in an area of the city with a low income African American population. By 1987, St. Paul was operating thirteen magnet programs which reflected a wide range of minority enrollment from 18% at the newly opened Montessori magnet pre K, K and 1st grade to 51% at the original magnet school. (Pechmann, 1987, p. 87) After one year of operation the Montessori minority enrollment increased to 32%.

Another example from the literature of the Montessori magnet's role in equalizing educational opportunities may be seen in Archbald's (1988) discussion of

Montessori magnets in the Milwaukee public schools. In discussing the differences between school applications, Archbald describes applications to two magnets situated a few miles outside the inner city. One, a Montessori magnet received 103 applications from inner city African American students while the other, environmental education, received only 24 applications. Archbald concludes that Montessori has more appeal to these inner city parents (1988, p. 225).

Outcomes analyses for minority enrollment in magnet schools in Cincinnati Public Schools are reported in their November 1990 Evaluation Report. Montessori magnets, three schools, enroll 49.1% black students for 1989-90. Five prior years black enrollments are reported as 48.4%, 52.5%, 53.4%, 54.0% and 50.7% (CPS, 1990, p. 54). Total numbers of Montessori magnet students, 1989-90, are reported as 1365. These data suggest that Cincinnati Montessori magnet schools are meeting the magnet requirement of enrolling approximately 50% black students and are thus equalizing educational opportunities. However, it should be noted that first come, first served is the selection criteria, one which may favor middle and upper income applicants.

Outcomes: Achievement Levels

Outcomes analyses of levels of achievement are the second level of consideration at this juncture of equity. A review of the literature demonstrates that there have been no published comprehensive studies of Montessori achievement in magnet elementary programs. There are, however, smaller studies which report achievement for Montessori students. A summary of these findings is presented here.

Early studies of Montessori students (Karlson, 1973; Brophy, 1973) indicate better achievement gains for Montessori students in most cognitive areas. However, these two studies do not analyze data in terms of equity outcomes by race or income.

Another small study conducted by Banta (1968) evaluated Montessori education and included socioeconomic and race variables. Subjects for this study were six year olds having had Montessori preschool experience. Banta's findings indicate that regardless of socioeconomic status and race, children in Montessori classrooms having had preschool experience showed the best results on standardized tests.

In an evaluation of the effects of the Montessori school program in the District of Columbia's Public Schools, Wilson (1974) reported positive outcomes for Montessori students. Montessori students performed in the top 25% on standardized tests during recent consecutive years.

Longitudinal studies conducted by Louise Miller supported positive outcomes for students having Montessori preschool experience. In evaluations conducted on students in grades six and seven, it was found that Montessori students maintained superior performance on standardized tests (Miller, 1983, p. 185).

The descriptive study of the Kankakee Public School District III conducted by Willie Lee Davis (1984) indicates that "Montessori magnet students performed significantly higher than their nonmagnet counterparts" on the reading, language, and math tests of the Comprehensive Test of Basic Skills (p. 89). Davis' findings show that of the five different magnet programs Montessori students' performance showed the highest achievement levels in these comparisons.

A larger study of achievement outcomes of Montessori magnet and traditional elementary students in Houston was conducted by Dawson (1988). In addition Dawson sought to analyze data for equitable outcomes through variables of race and sex.

It is noted by Dawson (1988) that the Montessori magnet utilizes "mildly selective" criteria in its admissions policy (p. 58). Such selectivity has an influence, although not quantifiable, on the meaning of the achievement outcomes. However, Dawson (1988) contends that the Montessori subject population was academically representative of the district-wide population (p. 59).

Achievement scores for the years 1984-1988 in reading and math for 175 Montessori magnet students constitute the data for Dawson's comparison. Magnet scores were compared to the Houston district mean grade equivalents as well as other subgroups such as other district magnet programs.

Results of data analysis show statistically significant achievement levels at the .001 level in favor of Montessori magnet students. Findings indicate this superior performance on all subtest topics and at all grade levels (Dawson, 1988, p. 122). Dawson (1988) suggests that the uniformity of the superior results indicates that "something about the Montessori program itself is an important factor" in this success (p. 122).

Findings with a specific implication for equity are also discussed by Dawson (1988). Statistically significant differences occurred in 50% of the cases in her analyses of achievement levels of white, black and Hispanic students. However,

Dawson (1988) suggests that the magnet program is effective in that achievement levels for the three groups continue to improve throughout the program.

Achievement levels for magnet programs are reported in the 1990 Evaluation Report of the Cincinnati Public Schools. Data show that 65% of the Montessori magnet students perform at or above the national norm in total reading, total language and total math. Thirteen percent of Montessori magnet students score below average norms (stanines 1-3) in total reading, language, and math.

While this data is impressive toward creating a positive view of the Montessori magnet's equitable outcomes for achievement, two significant cautions apply. The data is not specific to achievement outcomes for minority and nonminority students. Nor is the data specific to achievement outcomes for low income, free or reduced lunch, students. Also, selectivity criteria such as Cincinnati's first-come-first-served criterion, further affect the equity meaning of this achievement data.

Summary

In summary, this discussion suggests that Montessori magnets implement equitable practices from the perspective of internal processes. Prepared environments emphasizing hands-on learning experiences in a cooperative setting characterize Montessori classrooms. Mixed-age groupings facilitate individual and independent learning. These are the strengths of Montessori philosophy and practice. They also suggest a strong equity practice.

Outcomes data showing high achievement levels must be viewed cautiously. These data are influenced by the selectivity of Montessori enrollment practices. Admissions practices which require children to begin at age three or four may diminish

significantly low income enrollment. Selected admissions practices need to be investigated further.

CHAPTER 3

MONTESSORI MAGNET SCHOOL: EQUITY FOUNDATIONS

Introduction

This chapter presents a brief history of the legal foundation for equal educational opportunities at the Montessori magnet school. It traces the significant decisions, board proposals and court orders which created the Buffalo Plan for integration.

It is beyond the scope of this study to present a comprehensive review of the voluminous material which documents the reciprocal interactions of the United States District Court and Buffalo Public School System. The history of this desegregation case, begun with the initial suit filed in 1972, continues through the present. A final decision has not yet been rendered by the court. Plans and decisions which directly shaped the Montessori magnet are considered in this study.

In addition, this chapter presents the critical community influences which shaped the establishment of the Montessori magnet school. It portrays some of the significant interactions among community, parents and school administrators in preparation for a Montessori magnet school.

Arthur v. Nyquist, 473 F Supp. 830, 1979

In July 1972, the plaintiffs, consisting of a number of African American parents, including George Arthur, the Citizens Council for Human Relations, the N.A.A.C.P. and others, filed a complaint against Ewald Nyquist, Commissioner of Education, the Board of Regents of the state of New York, the Superintendent and the Board of Education of the city of Buffalo, and the Mayor and Common Council of the

city of Buffalo. The suit claimed that the defendants had deprived the plaintiffs of their "class of rights guaranteed by the Fourteenth Amendment of the U. S.

Constitution by creating, maintaining, permitting, condoning and perpetuating racially segregated public schools in the city of Buffalo" (Arthur v. Nyquist, CIV-1972-325, Transcript, July 9, 1972, p. 1).

Four years after the initial filing, April 30, 1976, Judge John Curtin ruled in support of the plaintiffs' claims. The findings in the April 30, 1976, opinion shaped the future course of the Buffalo desegregation case.

April 30, 1976 Opinion

The Court found that the defendants did act in ways which resulted in segregative patterns of attendance in the Buffalo School System. The Court denied the plaintiffs' request for a "metropolitan remedy" which would have included compulsory bussing arrangements between the Buffalo School District and the surrounding suburban districts.

Judge Curtin directed the defendants to come forward with a realistic plan to remedy the unconstitutional segregation. He placed the responsibility for fashioning an appropriate remedy for the constitutional violation with the School Board and its administrators. Judge Curtin clarified the Court's role in the process when he wrote:

the Court is not nor does not want to be a school administrator. It does not have the specialized training, the knowledge or the experience that belongs to the defendants. It is therefore the responsibility of the defendants to come forward with a plan that comports with the Constitution (Arthur v. Nyquist, CIV-1972-325, Transcript, April 30, 1976, p. 151).

July 9, 1976 Decision Inaugurates Remedial Phase

During the weeks between the April 30, 1976 opinion and the July 9, 1976 decision, school officials, Eugene Reville and Joe Murray, gained approval for a voluntary desegregation plan from the Buffalo Board of Education. The Buffalo Plan, presented at one of several hearings held prior to July 9, 1976, earned praise from the local newspapers and rejection by the plaintiffs (Goldman, 1990).

The plaintiffs submitted a counter proposal during these hearings. The mandatory plan, crafted by John Finger who had developed plans for Denver and Dayton, proposed to desegregate all of Buffalo's schools. It required the bussing of 56,000 students, approximately 80% of all students. Finger argued that cross bussing and pairing majority and minority schools would guarantee desegregation (Buckham, 1976, July 10). However, the Court in its July 9, 1976 decision refused to endorse the Finger plan.

As with all of the many orders issued by the Court throughout the desegregation case, Judge Curtin's July 9, 1976, school integration directive was widely circulated through Buffalo's print media (Curtin, 1976). This decision accepted part of the proposed Buffalo Plan while ordering the defendants to formulate and submit a new comprehensive plan by October 15, 1976. Also, the July 9th order required all parties to review the impact of the plan and report to the Court for an August 17th hearing (Arthur v. Nyquist, CIV-1972-325, Transcript, July 9, 1976).

A review of the twenty-three points in the court order of July 9, 1976, finds more than ten points which emphasized parent and community participation. Point eight, which addressed the closing of certain elementary schools in September 1976,

directed the Board and its staff to meet before August 17th with parents and others involved so that transportation plans and difficulties in adapting to the closing of certain schools would go smoothly. Point twenty-two directed the superintendent and the commissioner to have their representatives meet before August 17th with the parents in each of the affected districts (Arthur v. Nyquist, CIV-1972-325, Transcript, July 9, 1976).

The Court's emphasis on parental and community involvement was evident in other points of the decision. The Court ordered the city and state defendants to include the community in the planning process for further integration:

It is imperative that the defendants solicit the view of parents and community leaders in each school district, elementary school, junior high school and high school at each step of the planning process . . . These meetings shall be held in each school during the preparation stages with adequate notice to parents and community so that a truly representative meeting may be held (Arthur v. Nyquist), CIV-1972-325, Transcript, July 9, 1976, pp. 53-54).

Judge Curtin concluded his July 9th decision with a reemphasis on the importance of community involvement in the preparation of the desegregation plan:

The Board and the Commissioner's staff and the Court have a responsibility to listen to the common sense practical views of the parents and the teachers and other people who are involved in this very complicated process. It is one thing to make decisions . . . and it is another to be a parent of a small youngster or a teenage youngster going off to school. They have insights which we cannot know about until we listen and it is not only within the spirit of the law, but it is in the spirit of the United States as a democracy to listen to the views of all individuals in the Community (Arthur v. Nyquist), CIV-1972-325, Transcript, July 9, 1976, p. 74).

This planning process was to have yielded a comprehensive desegregation plan by the Court's scheduled date of October 15, 1976. However, the School Board later

requested (October 7, 1976) and received (October 15, 1976) an extension of the deadline until January 1977.

In sum, Judge Curtin's complete dedication to the involvement of parents and community in the fashioning of the comprehensive desegregation plan critically influenced the direction toward magnet schools and in particular the Montessori magnet school. His rejection of the mandatory plan and support of voluntary methods provided the direction for the Buffalo Plan.

Buffalo Plan: Phase I, September 1976

This first phase of the desegregation plan was implemented in September, 1976. As reported in the print media, school superintendent, Eugene Reville, expressed optimism on the opening day of school, "All indications point to a smooth and orderly implementation of the Buffalo Plan" (Stranges, 1976, September 8).

Stranges (1976, September 8) wrote that the only demonstration witnessed by news reporters at any school was at School 81 on Tacoma Avenue. Parents "protested the loss of a special progress class for gifted pupils" (Stranges, 1976, September 8, p. 1). The conversion of elementary School 17 to a City Honors Program had resulted in the elimination of the gifted program from School 81.

The Court had approved the establishment of two magnet schools as part of the integration plan. Waterfront, a new facility, was opened as an elementary magnet school. Elementary School 17 was converted to a City Honors Program, grades 5-12. With the exception of the parental demonstrations at School 81, issues surrounding the opening of these two magnets received little media attention. Program loss at one neighborhood school with the resulting parental demonstration on the first day of the

Buffalo Plan may be judged illustrative of equity issues inherent in the creation of magnet schools within the system of neighborhood schools.

Also, the Court had approved the closing of 10 elementary schools, five predominantly majority schools and five predominantly minority schools. Students were reassigned to 16 other schools. Whereas the Board recommended these school closings primarily as economical decisions, the closings did result in the bussing of some minority students to majority schools as well as majority students to predominantly minority schools. In all, approximately 3,500 of the city's 56,000 students were reassigned to new schools under the plan (Stranges, 1976, September 4).

Print media coverage of the first day of the integration plan emphasized the positive, human stories and view points. The Buffalo Evening News, September 4, 1976, headlined, "Plan Begins Peacefully." A front page story, written by Ray Hill, described the thirty-minute bus ride of African American children from the East Side to a predominantly white school on the Far East Side. Hill reported that the front seats of the bus were occupied by a minister, Reverend Krweschinski, of the Lutheran Church and by the regularly assigned bus driver (Hill, 1976, September 4). For the first few days of the integration plan, ministers accompanied children on the buses, in an effort to dispel tensions. However, opposition to the bussing did not materialize.

In sum, the Buffalo Plan Phase I successfully implemented both mandatory and voluntary integration in September, 1976. Through school closings and subsequent reassignment of students and through the opening of two magnet schools, the first phase of equalizing educational opportunities was initiated. During the fall semester,

1976, the defendants organized community involvement for the purposes of preparing a comprehensive plan for integration subsequently entitled Buffalo Plan, Phase II.

Montessori Magnet: July 1976 - April 1977

The genesis of the Montessori magnet is sketched briefly in the document submitted by the Buffalo Board of Education for the Court on January 5, 1977:

Shortly after the July 9th court order, a group of parents with children presently enrolled in a Montessori school approached the Associate Superintendent about the feasibility of the opening of a Montessori school in Buffalo. The parents were concerned that they had to pay for the teachers and the program if they wanted their children to receive the benefits of the Montessori method. The concepts of independence and self development could begin with children as young as 3 years of age (Buffalo Public Schools, January 5, 1977, p. 3).

This short summary, presented by the Board to the Court, provided a succinct introduction to a primary influence that shaped the Montessori proposal: a well founded and highly committed existing Montessori preschool community of parents, children and teachers. A second critical influence, the Montessori teacher recruitment and training program, involved the Montessori preschool, Montessori educated faculty at a Buffalo college, and Buffalo school district administrators. A third dynamic shaping this proposal, the positive community response, is also noted.

The document continues: "within the first two weeks of the community meetings, there was enough interest evident to recruit teachers for special training toward certification" (Buffalo Public Schools, January 5, 1977, p. 3). Presenters at these community school meetings consisted primarily of the director and parents from St. Mary's Montessori preschool and Buffalo supervisory staff assigned to this magnet development. The patterns of interaction among these participants created the foundation for the Montessori magnet. This creative interval occurred from September

through December, 1976. The significant aspects are presented in this section of the study.

Parents of St. Mary's Montessori preschool children had selected an integrated preschool. They had rejected the option of other Buffalo area Montessori preschools which enrolled mostly white, middle class families. African American children from the St. Mary's neighborhood constituted approximately 50% of the enrollment. White parents from various parts of the city and suburbs transported their children to St. Mary's not only for the Montessori experience but also for the experience of racial diversity. They actively supported an educational setting which promoted racial equity.

Interview data from Montessori parents and teachers involved at the St. Mary of Sorrow Montessori School as well as administrative staff assigned to magnet development indicates a timely coincidence of interests. Parents desirous of elementary Montessori education for their children became active proponents at a time when the administration sought to identify magnet programs for purposes of integration. The following interview comments illustrate this alliance of interests:

we like to say that the parents really designed the plan. They did. So the idea of the magnet schools and in particular the Bennett Park Montessori Magnet came from parents and groups of parents (Administrator Interview 1).

When the idea of magnet schools was broached in the public arena, it immediately seemed to me a wonderful idea to make a Montessori school in the public system . . . one day I said to the woman who was the directress of the program, do you suppose that Montessori could work in the public schools? And she just looked at me and said that's always been my dream. So from that point on we started to work on the idea (Parent Interview 8).

In the spring of 1976, the St. Mary's Montessori parents presented a written proposal to school officials for a Montessori magnet school. Parents cited their record of commitment to "high quality education and to the idea of a racially balanced student body" as the impetus for their interest in making a contribution to easing the current desegregation crises in the public school" (Parent proposal, Spring 1976, p. 1). Although modest in scope, the proposal included recommendations for Montessori teacher training and an initial enrollment of two classes of 3 to 5-year-olds and one class of 5 to 7-year-olds. It allowed that "children be accepted in the order that their applications for admission were received, with selection made in a racially balanced manner" (Parent proposal, Spring 1976, p. 4). Similar admissions practices in Cincinnati and Minneapolis magnet programs were cited as models.

With the encouragement of the superintendent, a nucleus of St. Mary's Montessori parents and its preschool director became deeply involved in planning and promoting a Montessori magnet. This group formed a working team with school system supervisory personnel.

Supervisory personnel began to consider the idea of a Montessori magnet during the three weeks in September, 1976, of the Buffalo teachers' strike. Initial prompting for the idea was a media article about the superintendent's visit to a Montessori magnet in another city. Before the end of September, they held a meeting to explore the possibilities of a Montessori magnet with Montessori educated faculty from Buffalo State College. Aware of the significance of that meeting, one of its participants remembered remarking:

By the end of the conversation. . . we said what a dynamite idea. Here's the college, here's the parents, here's the public schools, here's the court order. What more do we want (Administrator Interview 2).

During the Montessori magnet planning process, two preliminary proposals and one formal proposal were submitted to the Board by the associate superintendent. The Board's approval allowed the planning, publicity and teacher recruitment to proceed during October and November, 1976. Also, teacher selection and training were begun in October and November, 1976. One of the teachers who applied for the Montessori school acknowledged she was unaware initially that Montessori would be a magnet school. She believed, based on the existence of two alternative schools in the Buffalo system, that Montessori would be an alternative school.

When the strike was over, we all got notices, and I went to a first meeting. There were about thirty people there and a couple of parents. I was not happy in the school I was teaching in. It was very traditional, and I wanted something different. I had no experience; I had not seen a Montessori classroom so it was really that meeting. I had never seen anything where parents testified and talked about specific things their children had learned. The director showed slides of her room, and it looked like it might be happening in the public schools. I was very aware of the desegregation movement in the city, but I still didn't see this as that. There hadn't been a final order coming through so in my mind it was an alternative being proposed (Teacher Interview 5).

This impression was shared by another early participant in the promotion of the Montessori school.

We were going through the motions of all this. We were putting in time and energies not knowing where it was going to go. There was no court order (Teacher Interview 4).

Although these initial perceptions of Montessori as primarily an alternative school existed, early proposals submitted to the Board applied the magnet identification

(Preliminary Proposal, September, 1976; A Proposal for a Magnet School, October, 1976).

Commentary made by a Montessori parent leader verifies the magnet identification. She stated "that it was very clear from the start that this was going to be a racially balanced school" (Parent Interview 8). During initial meetings with school officials Montessori parents had recognized the need to attract a racially diverse student population. Parents articulated the qualities inherent in Montessori education which they judged important to majority parents:

Eventually, the argument that we used and we used it with other white parents as well . . . that the major drawback for a lot of middle class professional whites in putting their kids in an integrated setting was the fear that their children would be held back by other children who were not as prepared to learn, who came from backgrounds that did not prepare them for academic accomplishments. It seemed to us that a Montessori classroom answered this dilemma perfectly because it made it possible for children of all kinds of backgrounds to work harmoniously in a single classroom with each child progressing according to his or her own needs and abilities. So that you could assure parents that if high achievement and rapid progress was their goal, this could be met at the same time in a setting that was racially and socioeconomically diverse. And this seemed to me the very strongest argument you could make, more for Montessori than for any of the other magnet programs which relied on more traditional methods of teaching (Parent Interview 8).

The Montessori team of parents and school personnel became involved in their campaign to interest the community of parents and teachers in the Montessori school. In November, 1976, a series of six informational meetings, one in each school district, informed parents through slide presentations and discussions about Montessori. Minority parents from St. Mary's Montessori participated in these presentations. One of the Montessori parents remembered these meetings in these words:

Parents of all kinds were excited throughout the city. This was a very well planned campaign that convinced people very quickly that here was a chance for something better for their children. Occasionally at meetings we would have parents who would express concern about the bus ride, "Isn't this an awful thing to do to a three year old or a four year old? Put him or her on a bus to go across the city." There was that kind of concern but by and large I think people felt that this was such a wonderful opportunity to do something better than the ordinary neighborhood school that it was worth it (Parent Interview 8).

A parent who attended one of these informational meetings and whose children were later chosen for the Montessori magnet recalled her response:

I remember going to an initial meeting. All this was in the planning stage. And thinking, they're never going to get something so remarkable off the ground. Because I was attracted to it instantaneously, and I knew that's what I wanted for my child if in fact it were to become a reality (Parent Interview 9).

During the first stage of discussions on the concept of a public Montessori school, it became evident to the participants that teacher training would be a critical part of the effort to create an authentic Montessori school. Buffalo supervisors and university faculty discussed and acknowledged the teacher training requirement in a September, 1976, meeting. As recalled by one of the participants, "the other thing that we realized at the end of that conversation is that we were really talking about a training program . . . and that we had potentially a whole training staff among us" (Administrator Interview 2).

Success in designing and implementing a Montessori teacher training program depended upon approval by the Board. In October the Montessori team presented the Board with a detailed proposal for a Montessori magnet which included teacher training costs, teacher selection process, and training program content including the academic and internship components.

The training components were designed in three temporal phases: November 1976--June 1977, six-week summer program, and September, 1977--June 1978. The presenters emphasized the need to "begin the training now if you are serious about developing a Montessori magnet school for September, 1977" (Administrator Interview 2).

The Montessori plan received front page media attention when it was presented to the Board for approval on November 10, 1976. The Buffalo Evening News reported that the "Montessori school would become another of the 'magnet' schools whose specialized program would attract children of all races from all parts of the city" (Ernst, 1976, November 10, p. 1). The preparations for the Montessori magnet were described as more advanced than those of other magnets because of the intensive teacher training requirements. The Board approved the continuation of the Montessori plan.

Presenters to the Board had described the essentials of a Montessori school utilizing the teacher requirements of the approved teacher training programs of the American Montessori Society. They successfully argued in the words of one participant:

if you want this to be a real Montessori school, a real Montessori school is a school that is (A) staffed by a real Montessori teacher and (B) has a real set of Montessori materials (Administrative Interview 2).

The requirement that 3-year-olds participate in the Montessori magnet was based on the need for teachers in training to intern in classrooms having children aged three in order to qualify for Montessori teacher credentials. This provision to include

3-year-olds, unique to the Montessori magnet, was accepted as part of the proposal by the Board.

The teacher recruitment process, conducted in October and November, involved several stages. Teachers who responded to the Montessori team's presentations were screened on criteria of previous Montessori or early childhood education or experience. Teachers were interviewed by a panel which included Montessori parents of children attending St. Mary's, as well as other members of the team, and school district administrators. The teachers were observed in their own classrooms before final selection by the Montessori team leaders (A proposal for implementation, October, 1976).

In discussing specific equity aspects of the teacher recruitment program one participant noted that

every attempt was made as well to make the staff racially balanced. Unfortunately Buffalo had relatively few African American teachers or Hispanic teachers to draw upon. So that the pool we were recruiting from was very small but in the end in the first group we had seven or eight teachers and one was minority which given the proportion in the city ranks as a whole was not bad (Parent Interview 8).

In reflections upon the number of minority teachers recruited for the Montessori staff, one minority participant attributed minority aspirants' loss of interest to feelings of conflict with the method:

They didn't in the beginning agree with the method because it is so different. The same thing happened to me. I was in conflict with the method for at least a year. When I did my training there were things about the method that were in conflict with what I believed, but I stuck with it and kept at it, and I really did not internalize the method and the philosophy until I had been working here a year. So you really had to plug along and stay with it and some people couldn't do that (Teacher Interview 6).

Teachers participated in the Montessori selection process for a variety of reasons. Approximately thirty teachers formally entered the process, with a final selection of eight teacher interns. One of the original interns expressed her motivations:

I almost left teaching because I felt that the adults in the system were not sensitive to the needs of children. So when magnet schools came into existence, I knew that it would be a place where teachers really wanted to be. And they like kids, and they want to teach. So that's a selfish reason (Teacher Interview 6).

Passing recruitment hurdles and gaining acceptance into the Montessori training program engendered feelings of uniqueness in selected teachers. This chosen status was compared by one participant to that of parents and children selected for the school, "this whole notion of selection. Teachers feeling they had been selected. Parents feeling they had been selected. That's what magnet schools can do. You have this sense of something special" (Teacher Interview 4).

Magnet planning and teacher training continued through the spring of 1977. Hearings were conducted during the months following the Board's submission of its Desegregation Plan on January 5, 1977. Negotiations among the parties preceded the consensus agreement reached in April, 1977 (Buckham, 1977, April 8; Buckham, 1977, April 15; Buckham, 1977, April 28). The parties agreed to the voluntary plans for integration, namely minority students transported to majority neighborhood schools and majority students transported to magnet inner city schools.

Whereas the Montessori magnet did not meet opposition from the plaintiffs during these hearings, the early childhood feature of the proposed school did receive critical comment. One of the Montessori participants at the hearings recalled an

exchange with the plaintiffs' attorney. He had questioned how old the children would be at the Montessori school. Upon hearing the response, 3 to 5-years-old, he remarked "would you please tell the court how that's going to contribute to desegregating the schools?" The spontaneous response "well, you see it's a very long-range plan," both captured the incremental nature of the enrollment plan and satisfied the inquiry (Administrator Interview 2).

In effect, intensive planning and interactions among the key participants of several communities, Montessori preschool community, public school supervisors and teachers, and Montessori educated college faculty, created the foundation for a distinctly Montessori school eligible for recognition as an authentic Montessori program by the standards of the national Montessori organization. Montessori philosophy and method were identified as the essential standard.

Extraordinary advantages accompanied this definite identification. These advantages, mentioned earlier in this study, are associated with the characteristics of good schools. The stabilizing effects of one single philosophy informing mission and practice have been acknowledged by researchers (Davis, 1984;Sizer, 1984). Shared teacher training in the Montessori philosophy and method provided a unique base for creating and implementing the new school.

Accompanying the Montessori identification was the magnet requirement for racial diversity. Montessori parents, convinced by their positive experiences of integrated education at St. Mary's preschool, volunteered their energies toward recruiting a racially diverse enrollment. These actions, performed during the spring of

1977, shaped the genesis of the Montessori magnet. Legal authority acknowledged the success of these Montessori magnet endeavors in the Court's decision of May 4, 1977.

May 4, 1977 Decision

After the conclusion of five weeks of hearings, the Court issued an order on May 4, 1977, which detailed in 13 points the actions to be implemented by the Board in September, 1977. The order recognized that important issues between the parties remained unresolved:

one of the most important and difficult of these issues is plaintiffs' demand that the remaining all-minority elementary schools be desegregated by pairing these schools with predominantly majority schools (Arthur v. Nyquist, CIV-1972-325, Transcript, May 4, 1977, p. 1)

The Court was reluctant to delay its decision until this issue was resolved, because preparations for the opening of school in September needed to begin.

Point One of the May 4, 1977 decision ordered the Board to proceed with its plan to institute eight city-wide magnet schools. It acknowledged the plaintiffs' opposition to the location of City Honors and the Creative and Performing Arts Magnets, but deferred to the Board's judgment. Judge Curtin reiterated the Court's insistence that these magnet schools must open as desegregated schools

The Board is directed to file a detailed report to the Court not later than July 15, 1977 explaining the number of applications received, the projected enrollment, and the expected racial composition for each of the magnet schools. The Board shall also detail in this report the progress made on any plant renovation, teacher and staff training and transportation plans required for each magnet school (Arthur v. Nyquist, CIV-1972-325, Transcript, May 4, 1977, pp 2, 3.).

In Point Six of this order, Judge Curtin directed the plaintiffs and defendants to reach an agreement on the formation of planning councils which would represent

various areas of the city and would provide the Board with broad based information and advice on such issues as school closings and utilization. The Court's interest in continuous community involvement in future plans was evident in Point Five as well. This point endorsed the formation of a monitoring commission which would be "representative of all segments of the community, including parents, teachers, students, business and labor leaders, educators, religious leaders and taxpayers" (Arthur v. Nyquist, CIV-1972-325, Transcript, May 4, 1977, p. 4).

Notification of parents of children in schools affected by the Board's Phase II Plan was required by Point 13. The notices, distributed to children in the schools, required parental signatures of receipt. "The notice shall clearly state that the changes approved by the Court were designed by the Board of Education . . . it should be made clear that no magnet school will be allowed to open unless it is integrated" (Arthur v. Nyquist, CIV-1972-325, Transcript, p. 8). This notice also informed parents of their right to bring their objections to the Court by filing a written application to intervene in the lawsuit.

Another point of the decision included the continuation of the Quality Integrated Education Program with a provision for detailed reporting by the Board on the resultant racial composition by grade level of the receiving schools. Other points ordered the Board to submit plans for increasing affirmative action in non-instructional positions and for continued staff integration and minority recruiting in instructional positions.

In sum, the decision of May 4, 1977, directed the school system to launch an integration effort which focused resources and attention on the eight new magnet

schools. During the ensuing months, every effort was attempted to promote the successful opening of Buffalo's integrated magnet schools. The fact that segregated elementary schools continued without remedy was obscured by magnet enthusiasm. Media attention to elementary segregation was minimal. However, the plaintiffs' resolve to continue to seek integrated education was noted (Plaintiffs' reactions, 1977, May 5).

In successive rulings, June 6, 1979, November 15, 1979, July 10, 1980, January 27, 1981, and May 19, 1981, the Court approved modifications to Phase II and implemented Phase III and Phase IIIx of the Buffalo Plan. Phase IIIx implemented fixed assignment clusters consisting of early childhood centers paired with academies to integrate elementary students. The Court has continued to direct the system's efforts towards a complete integration remedy.

Buffalo Plan: Phase II, May - September 1977

With the Court's approval of the Buffalo Plan Phase II, the School Board launched a city-wide publicity campaign to generate applicants for the eight magnet schools. Racially integrated magnet enrollments were the Court's precondition for the opening of these schools. School officials immediately opened an information center for the purpose of answering telephone queries and mailing magnet school applications to those who requested them (Buffalo Public Schools, May 10, 1977, News Release).

District officials succeeded in obtaining intensive publicity from Buffalo's radio stations and print media. In the judgment of one administrator, credit for the most effective publicity belonged to the radio deejays led by a popular deejay, Shane.

Shane got all the deejays in Buffalo and we gave our presentation.
Well you couldn't turn on the radio that these folks didn't just pound

away at the magnet schools. Something like, do you play the horn, call 842-3662, the Performing Arts Magnet School. It was just wonderful. I can't say enough about the publicity the deejays gave and all the ethnic radio stations too (Administrator Interview 1).

In remarks quoted in the media, Judge Curtin praised the level of community and Board involvement in the magnet publicity and recruitment efforts:

The cooperation between the schools' administration, parents, the media, Chamber of Commerce, labor unions, sports teams and others has been commendable (Buckham, 1977, August 2).

Based on the progress report submitted to the Court, Judge Curtin ruled on August 3, 1977, that six magnet schools could open in September. These schools had generated sufficient majority applications to meet the Court's racial balance requirements. Decision on the opening of two proposed magnets was postponed pending the results of further recruitment efforts.

As shown in the July report (Board of Education, July 15, 1977) the Montessori magnet had been highly successful in obtaining majority and minority applications. The report counted "560 black applications, 320 white applications and 42 other" for a total of 922 applications for 261 places at the Montessori Magnet (Board of Education, July 15, 1977, p. 4). As of July 12, 1977, the Board had enrolled 130 minority and 131 majority students, the full complement for the school.

Buffalo's print media reported positively on the peaceful opening of schools on September 7, 1977. Comments from the superintendent emphasized the voluntary nature of integration and the options for parents and students created by the eight new magnet schools.

However, the success of this Phase II magnet schools' integration effort was partial in numbers and effect. These magnets collectively enrolled only "2,000 of

Buffalo's 53,000 school children" (Magnet Schools, 1977, September 6, p. 13). Sixteen elementary schools remained totally segregated, enrolling all minority or nearly all minority students (Ernst, 1974, October 2).

As a group, Buffalo's first magnet schools did offer a positive focus for the public schools' integration effort. Because they promised unique curricula and voluntary enrollments, the magnets succeeded in attracting majority parents who understood the values of special programs and resources. The Board continued to increase the number and variety of magnet programs. In the estimation of one Board leader, Florence Baugh, "The court order gave to the Buffalo Board of Education an opportunity to do a complete overhaul of our school system" (Matlack, 1984, May 14, p. 1). Voluntary magnets provided the primary vehicle for this success.

In particular, the Montessori magnet enrolled active parents who had campaigned and supported the Montessori magnet for more than a year. Montessori had succeeded in attracting more than a thousand applications before the school opened. The school's earned reputation has consistently resulted in high numbers of applicants each year. What constituted equity practices in the areas of access, development of instructional and internal processes and outcomes for students are considered significant dimensions of the history of this magnet. They are examined in one of the following chapters.

CHAPTER 4

METHODOLOGY

Research Design

This study was designed to explore the relationship of one Montessori magnet school, Bennett Park Montessori Center, to equity. Principal equity factors derived from the literature review of magnet and Montessori magnet schools were utilized as a conceptual framework. The three main concepts of this framework were identified as access/selection, program processes and outcomes. This framework guided the data gathering process as well as the analysis and presentation of the school's relationship to equity through its 15-year history.

Bennett Park Montessori Center, Buffalo, New York, was established in 1977-78 as one of eight magnet schools initiated during Phase II of the Buffalo Plan to desegregate schools. Enrollment at BPMC has grown from its opening year of 261 students to 560 students during the 1990 school year.

Several determinants contributed to the selection of BPMC as the site for this research. Because BPMC originated in the magnet phase of Buffalo's desegregation plan, the school held a high probability of varied experiences related to majority and minority access/selection. The school's development through eighth grade assured that it offered a sample of the full range of Montessori magnet instructional technologies and program processes. Because BPMC was founded in 1977, it offered a history of 15 years replete with examples of outcomes. BPMC was one of the first Montessori magnet schools. BPMC supported one of the largest Montessori magnet student enrollments. Also, BPMC has been affiliated with a nationally recognized Montessori

professional organization, the American Montessori Society. Taken together these characteristics contributed strength to the selection of BPMC as a significant site for study.

Documents gathering, interviews and on-site observations at BPMC were the three data gathering techniques employed in the design of this study. Primary source documents relating to the origins and development of BPMC were examined. These documents included legal decisions and orders issued by the Court and reports generated by the school department during the desegregation process. Other documents examined include reports and evaluations by administrators, reports and publications of the magnet school placement office, private files of the original principal, school handbooks, pamphlets and flyers as well as newspaper accounts and histories. A strength of historical analysis, as noted by Marshall and Rossman (1989), is its usefulness in establishing relationships, determining the direction of cause-effect relationships and enhancing the trustworthiness and credibility of a study.

In conjunction with document analysis, interviews were employed in the design of this study as a research method. Tape recorded interviews were conducted with 10 persons involved in the story of BPMC from its inception. These individuals included district and school administrators, teachers, parents and a former BPMC student.

The protocol followed during the interviews was one suggested by Patton (1980). This protocol acknowledged several essential characteristics of the interview process. These characteristics recognized that the persons interviewed "respond in their own words to express their own personal perspectives" (Patton, 1980, p. 205). A second characteristic recognized that the response format was open-ended in that the

interviewer did not predetermine the phrases or categories to be used by respondents (Patton, 1980). In sum, the protocol sought to assure the fundamental principle of qualitative interviewing which is to "provide a framework within which respondents can express their own understandings in their own terms" (Patton, 1980, p. 205).

In conjunction with documents gathering and interviewing, on-site observations were employed in the research design of this study. Several characteristics of this data gathering technique have been acknowledged in the design. Through on-site observations, the researcher gained knowledge about the current program at BPMC. Direct observations enabled the researcher to "move beyond the selective perceptions of others" (Patton, 1980, p. 125) thus providing another perception and a more comprehensive view of the school.

This research design afforded the utilization of several research methods in the data gathering process. A combination of research techniques, document gathering and analysis, interviews and observations, assured a variety of different data sources. Data from different sources were compared, cross-checked and placed in context. In this way, weaknesses inherent in any one of the data gathering techniques were minimized (Patton, 1980). In combination, the three data gathering techniques offered a more complete and true description of the school's relationship to equity.

Data Gathering

The process of data gathering began with an initial telephone call (June, 1991) to the current principal of BPMC. The purpose of this call was to introduce the researcher, describe briefly the goals of the proposed study, and to gauge the school's responsiveness to the proposal. Positive interest and a high degree of receptivity on

the part of the principal resulted in a follow-up letter requesting permissions to conduct the study of BPMC. Copies of these letters of correspondence with the principal are included in Appendix A.

Subsequent to these communications, arrangements were made for the researcher to schedule a site visit in July, 1991, to BPMC, Buffalo, New York, a site located approximately 400 miles from the researcher's home. The purpose of the site visit which consisted of five working days was to gather data in the form of documents and interviews. A second site visit was made in May, 1992, to BPMC. This visit occurred over a four-day period and involved observing classrooms, conducting interviews and gathering documents.

Conversations with the principal during the initial site visit helped the researcher identify key individuals who had been involved with BPMC from its inception. The names of these key individuals were also volunteered in conversations with others as the study progressed. Also, offices and departments most likely to maintain significant documents were identified by the principal and the school program coordinator. Through information gathered during these initial contacts, the researcher was apprized of significant information necessary to begin the process of data gathering and was assured an entry level acceptance to the field work site.

Document Collection

The process of document collection occurred primarily during the first and second site visits and involved a search for materials to construct an historical record of BPMC. Focus was directed initially to documents concerning the school's founding and first enrollments of majority and minority students. Primary sources, namely

newspaper accounts, especially the Buffalo Evening News, provided a wealth of information contemporary to the Montessori magnet school's opening. The Buffalo Public Library housed a detailed catalogue of the city newspapers, microfilm copies of newspapers from 1976 and beyond, and film copying machines. The researcher copied articles which treated court decisions, school board decisions, Montessori magnet stories, district policy announcements and public involvement in magnet plans as well as other articles deemed significant to the record.

The collection of newspaper accounts from copies of microfilm was inherently a process of selection. The researcher made decisions about which articles were to be read and saved as contrasted with which articles were to be read but not saved. Selective judgments by the researcher were continuous throughout the data gathering process. Specific criteria used by the researcher in documents gathering involved the value of the materials as basic sources of information and as prompters of questions to be pursued through further document collection and interviews.

In addition to the Buffalo Public Library, departments of the Buffalo Public Schools located at City Hall housed significant documents relating to the historical relationship of BPMC to equity. The researcher visited three departments for purposes of collecting documents.

The three Buffalo Public School departments contacted by the researcher were the Magnet Placement Office directed by Vera Morton, the Department of Finance, Personnel and Research staffed by Carol Herwood, Ph.D., and the Department of Instruction's Liaison to the Court, Kathy Shriver, legal assistant. In the interests of clarity and confidentiality it is noted that these three staff members were not

interviewed for this study. It became evident during conversations with each of these staff members that the researcher needed to pose specific questions in order to obtain documents. Information gained from newspaper accounts and concurrent interviews conducted during the site visits enabled the researcher to construct specific questions pursuant to obtaining data.

Titles of documents collected during the data gathering process have been recorded in the references section. In addition to documents collected from the school departments, other information was obtained from records filed at BPMC. These included attendance records from the school's first years as well as from later years. Data concerning the school's development through the years were also obtained at BPMC, for example, school graduation programs, handbooks, pamphlets, letters. Another source of documents was the personal files of the school's original principal which were made available to the researcher. Finally, the process of collecting documents continued throughout the study in the form of telephone requests for specific information made by the researcher to BPMC administrators and school department staff.

Interview Procedures

Interviews were conducted during the two on-site visits made by the researcher. Selection of participants for the interviews resulted from conversations with current and former key participants in the life of BPMC. A total of 10 participants were interviewed by the researcher. Each of these participants had a particular involvement with BPMC in its early stages of development. Many continued to have a direct relationship to the school. Participants included administrators at the building level

and school district level, BPMC teachers, BPMC parents, a former BPMC student and a legal staff member from the office of the plaintiffs' attorneys.

Each interviewee was invited to participate in the interviews by the researcher. Confidentiality was assured to each participant. An Interview Consent Form was signed by each participant. The consent assured that the interviewee would not be identified by name in the published report. Consent also acknowledged that the interviewee could withdraw from the interview at any time. A copy of the Interview Consent Form is included in Appendix B. Each interview was tape recorded by the researcher and later transcribed by the researcher. Full transcriptions were typed for each interview.

The technique utilized by the researcher during interviews was the general interview guide approach. As described by Patton (1980) this approach required that the researcher outline a set of issues to be explored with each respondent. The guide then served "as a basic checklist during the interview" assuring that all pertinent topics were explored (Patton, 1980, p. 198). A copy of the Interview Guide is included in Appendix C. Flexibility of questions within the general framework accurately described the strength of this technique.

Each interview was scheduled at the convenience of the participant. Interviews varied in duration from approximately 40 minutes in length to approximately 90 minutes. Interviews were conducted in various settings to accommodate the interviewees. Settings included current workplaces of the interviewees, homes of the interviewees, and administrative offices at BPMC. In each setting, the researcher

assured that the interview approach allowed each participant the opportunity to express his/her personal perspective.

Observations

In addition to document collection and interviews, on-site observations by the researcher constituted another data gathering method utilized in this study.

Observations at BPMC occurred during a four-day site visit by the researcher in May, 1992. Activities were observed in several settings including classrooms, lunch rooms, hallways, playground areas, principal's office, bus departure areas and a faculty meeting led by the principal.

BPMC frequently welcomes visitors to its programs. For example, during the month prior to the researcher's visit, a group of educators from Japan spent several days observing in BPMC classrooms. The on-going frequency of visitors has created a climate which allows observers to easily enter classroom settings and to informally become part of the day's activities. This informal climate characterized the researcher's school visit.

The researcher visited classrooms at each age level and observed students and teachers engaged in productive activities. Observation journal entries recorded that students worked in racially heterogeneous groups. In some classrooms where teachers conducted test preparation reviews, students sat in large circle formations on the floor. In these instances, students chose their own places and sat in small groups composed of either minority or majority students. At the 11 to 13 level, students sat at tables in small groups. Some of these groups were racially homogeneous, for example, four

African American students sitting at a table, and some groups were composed of majority and minority students.

In one environment of 9 to 11-year-olds, students sat in a circle when they entered the classroom. Observation notes indicated that the teacher explained to the researcher in a soft voiced comment, "this is the rougher group." As she began review activities, the teacher invited several students to sit in different places in the circle. Students cooperated with the teacher's directions. This activity resulted in a circle where African American and white students were sitting next to each other. It may be suggested that the teacher had utilized this group management technique to increase group and individual learning opportunities by reducing distractions which may occur when friends are near each other.

During this site visit, the researcher conducted formal interviews as well as observations of the daily school activities. Informal comments volunteered by teachers and parents were noted in an observation journal. Essentially, the researcher obtained a first-hand experience of current BPMC history enacted in the daily life of the school.

Data Analysis

In qualitative research, data analysis is a continuous process which begins with initial data gathering activities. This premise applied to the data gathering methods employed in this study, document collection, interviews and observations.

The five research questions proposed in the study served to guide both the collection and analysis of data. The formal process of data analysis required several distinct activities performed in a thorough, comprehensive way (Marshall and Rossman, 1989; Patton, 1980). The first phase required systematic reading and

reviewing of all documents, transcribed interviews, and notes. After reading and reviewing the complete data several times, the researcher identified and labelled sequences of the data. This first phase of data analysis created a product, an indexed copy of the collected data which was used in further classification. Through this first step of the process, the proposed research questions provided the focus for examining the data.

The second phase of the data analysis process involved coding the material into categories and patterns. This coding process included sorting, sifting, organizing, and reorganizing data in efforts to discern relationships. Categories utilized in this analysis related to the research questions. Categories related to the research question which sought to describe the principal aspects of equity inherent in magnet and Montessori magnet schools included philosophy and methods.

Categories related to the question of critical influences which had shaped the founding of BPMC included legal decisions, school district plans and actions, community involvement, and parental involvement. Selectivity patterns as posed by the third question were coded in categories of school district actions related to access and parental and community dispositions toward access. Categories related to the fourth question concerning program processes included Montessori instructional technologies and school climate. Categories related to the question of outcomes for majority and minority students included district level information, such as attendance rates and achievement scores, as well as school level information about participants in various programs such as Chapter I and graduation choices.

In the third phase of the data analysis process the researcher considered and interpreted the coded data. Illustrations from source documents and quotations from interviews provided the basis for the researcher's inductive thinking which required "carefully considered judgments about what is really significant and meaningful in the data" (Marshall and Rossman, 1989, p. 116).

The fourth phase of analysis required a process of verification. The researcher considered competing explanations supported by the data and compared them to the preferred explanations to assure greater credibility. Draft copies were reviewed by two BPMC administrators to assure accuracy.

Through these phases of data analysis, the research questions provided the focus for organizing, describing, interpreting and verifying the data. Historical documents pertaining to BPMC, material obtained through interviews, and information gained by observations constituted the data for analysis. Inductive and logical reasoning led to meaningful explanations of the historical relationship of BPMC to equity.

Summary

The methodology utilized in this study was described as research design, data gathering, and data analysis. Data gathering techniques included document collection, interview procedures, and observations. Individual perceptions, recalled in interviews through memories and reflections, provided reflections on the personal, subjective experience at BPMC. These recalled understandings complemented the historical documents creating a fuller picture of the BPMC equity story. The story of the historical relationship of BPMC to equity is presented in the following chapter.

CHAPTER 5

RELATIONSHIP OF BENNETT PARK
MONTESSORI CENTER TO EQUITY

Inequity for the Sake of Equity

Bennett Park Montessori Center began as one of eight newly designated magnet schools in the Buffalo school district in September 1977. These magnet schools and the two magnets which opened a year earlier, September 1976, contributed to the process of equalizing educational opportunities in several ways. First, they focused public attention in a positive direction by emphasizing unique programs of excellence symbolic of magnet schools. Second, the schools succeeded in attracting majority students and creating integrated student bodies in compliance with the Court's decisions. Third, parental and public involvement in the process diffused racial tensions and prevented organized opposition to the schools' integration.

Active public leadership and involvement in formulating the Buffalo Plan resulted in integration efforts very different from those in other cities, for example, Boston. A Buffalo school administrator remembered the comparisons made at that time to Boston's integration experience.

In fact the Justice Department came in and thought that Buffalo was going to be worse than Boston. That's the prediction they had. Of course we didn't have any problem at all, we didn't even have a picket out in front of any of the schools (Administrator Interview 1).

This success has been attributed to the essentially voluntary nature of the early phases of the Buffalo Plan.

Positive judgments about the visibly successful magnet schools extended to the Buffalo Public Schools as a whole. Minority School Board member Florence Baugh surmised that the court decision enabled the city to completely redo the public school system (Matlack, 1984, May 14). Whereas the school system in its entirety experienced the effects of the integration process, magnet schools benefitted from selected, integrated enrollments and enhanced financial resources.

Distribution of financial resources which created magnet programs composed of voluntary majority enrollments resulted in two classes of schools within the Buffalo public school system: magnet and non-magnet. Perspectives about the relationship of equity to these two classes of schools were shared by administrators, teachers and parents during interviews.

From the perspective of one school administrator, magnet schools greatly benefitted all students. The chief benefit to the system was the immediate infusion of federal monies, 7.2 million dollars (1977 dollars) which continued annually through 1982. Without the magnet schools, Buffalo would not have been eligible for these federal funds under the Emergency School Aid Act (ESAA). ESAA funds enabled the district to create magnets and to utilize local funds for the non-magnet schools (Administrator Interview 1).

Another monetary advantage accrued from the school department's successful suits against the city council for additional funds. The school department won four of its five suits which awarded large "amounts of money for all the children of the city's schools" (Administrator Interview 1). Substantial state support obtained through grants enhanced the whole school district. One administrator recalled that the district

used those monies as a direct supplant for the classroom teachers which we would have to provide whether we had a Montessori school or we didn't have a Montessori school. So when you add that into the mix of funding the school system is solvent because of the magnet schools (Administrator Interview 1).

From his position of responsibility for the total system, this administrator concluded that additional monies generated through the magnet schools maintained the fiscal soundness of the non-magnet schools.

Issues of fairness in the distribution of resources among magnet and non-magnet schools have become increasingly salient during recent years. From the perspective of one parent, the reasons for this are complex, involving increasingly limited budgets for all schools, more restricted access to magnet schools from some of the city's school districts, and the generally acknowledged success of the magnets for purposes of integration and education.

During the initial years of the Buffalo Plan Phase I through Phase III, many parents maintained a cautious wait-and-see attitude toward magnet schools. Some remained skeptical about bussing their children and doubtful about the magnet schools' future. However, analysis provided by a Montessori parent noted that

after several years when the system became clearly established, and there was no violence and it was harmonious . . . an increasing number of people began to express resentments . . . and these became much more outspoken (Parent Interview 8).

Currently, the Buffalo Public School system budgets monies to schools on a per-pupil basis, the same amount for every child for every school. However during the first years of the Buffalo Plan, the system allowed schools to individually lobby for the amounts of their school budgets based on their identified needs. Records for the allocation of monies during the 1978-79 school year, Table 1, show that BPMC

Table 1

Per Pupil Expense of Instructional Services
Buffalo Board of Education Elementary Schools*
1978 - 1979

1	School 42	\$2536	34	School 40	\$1037
2	Campus West	1769	35	School 77	1031
3	School 22	1766	36	Waterfront	1016
4	School 75	1388	37	School 43	1012
5	Campus East	1329	38	School 70	1005
6	Academic Challenge	1298	39	School 72	1004
7	School 64	1292	40	School 51	999
8	School 82	1274	41	School 66	998
9	School 56	1254	42	School 60	995
10	School 69	1253	43	School 3	982
11	School 63	1252	44	School 78	981
12	School 31	1237	45	School 45	979
13	School 52	1188	46	School 81	974
14	Follow Through	1172	47	School 27	974
15	School 59	1152	48	School 12	964
16	School 37	1142	49	School 57	962
17	School 67	1133	50	School 62	962
18	School 54	1122	51	School 71	960
19	School 19	1116	52	School 76	952
20	School 28	1080	53	School 23	947
21	School 48	1074	54	School 74	943
22	School 4	1072	55	School 65	938
23	School 18	1072	56	School 90	926
24	School 68	1070	57	School 38	919
25	School 11	1066	58	School 88	917
26	School 21	1063	59	School 86	917
27	School 61	1061	60	School 33	899
28	School 36	1058	61	School 49	895
29	Martin Luther King	1048	62	Montessori	**878
30	School 80	1048	63	School 26	876
31	Build Academy	1047	64	School 49	855
32	School 29	1043	65	School 53	819
33	School 44	1039	66		

*Based on Individual School Operating Budgets, 1978-1979 and ethnic Census of the Buffalo Public Schools 1978-1979

**Does not include start-up costs for materials, furniture shelving.

received \$878 per-pupil. Ranked among 65 public schools, BPMC was sixty-second or fourth from last in its per-pupil allocation. This ranking appears in Table 1.

Although this data has been cited as evidence of how BPMC and other magnets have been held to a budget similar to non-magnet schools, one Montessori parent reasoned that the situation among magnet and non-magnet schools was not the same. Attempts to make financial resources appear equal among these schools is "in fact just playing with words" (Parent Interview 8).

Per-pupil allocation figures do not reflect the start-up costs for the Montessori program: learning materials, shelf-units, furniture, carpet and other items. Continued costs, such as additional personnel, are also not reflected in the per-pupil allocation. Distribution of special resources was apparent to teachers and administrators in non-magnet schools from the beginning of Phase I.

A Montessori parent recalled participating in budget meetings and hearing charges of unfair and inequitable distribution of resources from non-magnet teachers. Specific comparisons included statements about teacher-child ratios, technology resources, library resources:

people from the neighborhood schools would come and say, "this isn't fair. They have two adults in every classroom, we have one teacher for 35 kids. They have computers for everyone. We have no computers. They have a librarian. We have no librarian" (Parent Interview 8).

The class of magnet schools, including BPMC, benefitted from the additional financial resources allocated to create and continue the magnet programs. Justification for this inequitable distribution of financial resources was phrased by one administrator as follows:

what we were able to do was to attract back into the school system thousands and thousands of parents who sent their children to parochial or private schools and wouldn't even think of sending their kids to the public school. Now all of a sudden, there is an option for them (Administrator Interview 1).

This administrator's rationale reflected his concern for the success of the school system's integration as a whole. It may reflect tolerance for inequity for the sake of equity (Phrase used in personal communication, Nancy Rambusch, October 1992). Unequal distribution of financial resources among magnet and non-magnet schools is tolerated because of the results of majority/minority integrated schools.

Another justification allowed that this inequity in distribution of financial resources was a temporary condition of the Buffalo Plan for integration. Teachers and administrators recalled their developing perceptions about the equity issue of two classes of schools created by the unequal distribution of financial resources. One teacher described her beliefs as follows:

when they started these magnet schools that they intended to replicate them . . . so that the entire system would be fully integrated using magnet schools. It took me a long time to realize that they never intended to do that (Teacher Interview 5).

A similar perception was shared by a Montessori parent who stated her current belief that "every school should be a magnet" (Parent Interview 9). In this parent's view the financial resources available to BPMC should be available for every school.

During its first years, BPMC earned a distinctive reputation for fiscal resourcefulness within the class of magnet schools. Chiefly, BPMC became known as a school that responded quickly and efficiently to unanticipated opportunities for increased funds. A Montessori parent recalled a dramatic incident which helped earn BPMC its reputation.

I remember it must have been the end of March. The fiscal year closes on the first of April. The principal got a call from downtown one day saying "there is \$5,000 in such and such an account." It was federal money. "Can you spend it in two days?" The principal turned to me and said, "What do we need in the library?" I immediately ordered a whole slew of books, records, tapes, all kinds of stuff relating to Africa (Parent Interview 8).

This effective response by the BPMC leadership assured this Montessori magnet consideration for the distribution of future funds.

Another area in which BPMC furthered its reputation for fiscal responsibility involved the annual budget. From its earliest inception, BPMC leaders argued that specific resources were required in order for the school to be identified as an authentic Montessori program. This rationale was utilized by teachers and administrators during subsequent years when superintendents required budget cuts. This argument was recalled by several members of the BPMC community and summarized by a teacher this way:

Important decisions in the early years set a tone . . . when that first notion of budget cuts came up this year, and the superintendent called principals together and said "Identify where you would make cuts," our response was again that idea of a Montessori school. Do you want to call this a Montessori school? Then these are the things that must be here (Teacher Interview 5).

Three Facets of Equity at BPMC

This chapter now focuses on the functional relationship of Bennett Park Montessori Center (BPMC) to equity. The study considers three main components of equity as defined in these pages in the review of the literature. These three components, selectivity/access, program processes, and outcomes are considered for the first 15-year period of Bennett Park Montessori Center (BPMC), 1977 through 1992. Multifaceted examinations which incorporate the study of access and program

processes as well as outcomes have been described in the literature as vital to equity research of magnet schools.

Within this three-faceted approach, researchers have emphasized the unique influences of selection criteria on the pattern of magnet access created for majority and minority students. Some criteria are described as within the domain of the public school boards, namely eligibility requirements, school locations, information distribution, transportation, methods of selection, for example, lotteries, and management of waiting lists. Other influences, described as within the community domain, relate to self-selection factors, namely the socioeconomic levels of the districts' families. This chapter considers selectivity/access data gathered by this researcher in the form of documents and interviews.

The second equity facet, program processes, is considered within the Montessori philosophy and method. Authentic Montessori practice requires multi-age groupings, environments abundantly supplied with hands-on learning materials, and a focus on the individual child as an independent learner. How BPMC translates the Montessori method into its unique practices and the effects of these practices on the daily lives of the majority and minority students form the focus for this investigation. Second, the study investigated the ways in which the Montessori environment consciously sought to create a climate which supported integration of majority and minority students. A fundamental, guiding question directs this data gathering and analysis, "Do all students of BPMC enjoy equal participation in the Montessori magnet program in accord with its original design?" A corollary question considers what

changes may have occurred during the implementation of these practices during the school's history.

The third equity component, outcomes, is presented through a consideration of several ways through which the Montessori magnet influences educational results for majority and minority students. Achievement levels, high school choices, and attendance profiles are studied as significant indicators of equitable educational outcomes.

Access to BPMC

Access to Bennett Park Montessori Center in particular and to the class of magnet schools in the Buffalo Public Schools is a major equity issue. The central question is how do parents and students gain access to BPMC. The issue has many subquestions including: how do parents learn about the options available; what methods are used by the school district to disseminate pertinent information describing the magnet options; what means are made available to assure that all parents have the information necessary to make a wise choice about BPMC. And finally, what evaluations are conducted by the district to assess how minority and poor parents are utilizing the magnet access system. In sum what pattern of access to BPMC has been created through its 15-year history? As posed in this study the research question asked: what are the selectivity patterns which determined the enrollment of majority and minority students at BPMC?

Marketing Patterns

A significant influence on the access pattern to magnet schools researched and reported in the literature (Blank, 1983) is the manner in which the magnet schools are

marketed to the community. Information distribution and community perceptions about this distribution have an effect on which parents may participate in the magnet selection process (Archbald, 1988; Davis, 1984).

The opening of BPMC and seven other magnets in 1977 demanded an information distribution campaign of mythical proportions. Judge Curtin's directive required integrated majority and minority enrollments in order for the magnets to open in September 1977. During several months, May through August, the airwaves, especially disc jockey and ethnic stations, responded to the advertising requests of the superintendents with continuous information about the soon-to-be-opened magnet schools.

During the spring and summer of 1977, the people of Buffalo were deluged with information about the magnet programs. Parents and students were encouraged to telephone the magnet placement office for applications and assistance in applying to the magnets. Reflecting upon the success of this first magnet schools information campaign, an administrator stated: "There isn't anyone who can look you in the eye and tell you that they don't know anything about the Buffalo magnet schools" (Administrator Interview 1).

In conjunction with the media campaign, the Board held meetings in each school district for purposes of communicating information about magnets. A nucleus of Montessori parents, teachers, public school supervisors and university professors presented their vision of a public school Montessori magnet at each of these meetings.

Information distribution for the Montessori magnet created a numerically successful result among majority and minority parents. By mid-July, 922 applications

had been submitted for only 261 places. Numbers of majority and minority applications have been steady through the 15-year history of BPMC. These applications resulted in full enrollments for each year's admissions class of 3-year-olds.

This continuous supply of both majority and minority applications through the years may have influenced the recent information distribution practices of the Buffalo Public Schools. In some ways, "the school system doesn't need to advertise anymore" (Plaintiffs' Legal Staff Interview 3). Yet, parents, teachers and administrators at BPMC have noted that the lack of information "is a real problem" (Teacher Interviews 4, 5).

A teacher noted that she had not seen advertisements about BPMC or the other magnets in any of the media, print, radio or television. She reported that the school system does not initiate or sponsor magnet information events in the school districts. However, during the previous year one community group attempted to inform parents through an "education night" which featured BPMC and other magnet schools (Teacher Interview 5).

In its defense, the magnet office does publicize some magnet information through newspaper and radio announcements, namely the mid-February deadline for applications. However, lack of comprehensive information about all the magnets, their admissions' ages and application deadlines has been chronicled in a recent article by BPMC parent, Andrea Szalanski, entitled "The magnet sweepstakes, a how-to guide to placing your child in Buffalo schools" (Szalanski, 1990, December 23).

Szalanski emphasized two important guides for parents: the right school for their child and the right time to apply. Openings in magnet schools tend to dwindle with succeeding grade levels. Each magnet has an entry-level year which admits the greatest number of students. BPMC parent Helene Raichilson emphasized this point "That's the biggest long-term pressure parents face--trying to get their kids in the right place early on because there are not a lot of options later" (Szalanski, 1990, December 23, p. 11).

Szalanski (1990, December 23) chronicled her personal difficulties in obtaining timely information about magnet admissions. She noted that "two previous attempts to enroll our older son, Jacob, in a magnet school failed because we were too late" (Szalanski, 1990, December 23, p. 10). Comments made by other parents for this article included those of Charles Carr, a law professor at the University of Buffalo: "I'm a regular newspaper reader, and I never saw anything about it. They ought to do a better job of letting parents know what is available. If you know, your child gets a bite of the apple. If not, you're out of luck" (Szalanski, 1990, December 23, p. 10).

Current information distribution practices by the school system are in sharp contrast to the public media campaigns of the first years of the magnet schools. The continued high level of application to BPMC may partially account for the system's lack of attention to media coverage of the magnet applications process. Yet, the lack of information has been deplored by many BPMC teachers, parents and administrators in interviews for this research as well as in the recent article in Buffalo's Sunday magazine.

In an interview one parent expressed the need for the system to advertise and distribute information about BPMC and the other magnets. She felt that some "minority parents don't understand that the magnet schools are public schools. They think they are private" (Plaintiffs' Legal Staff Interview 3). The current lack of information distributed to minority parents and to all parents raises serious concerns about how equitable is access to BPMC and other magnets. This concern was expressed by one of BPMC's faculty, "You're getting a select population. The ones that know about it; that hear about it; that get the information" (Teacher Interview 5).

Data gathered through this research presented findings quite different from those reported by Bennett (1984). Bennett reported that initial lack of awareness about magnet schools is overcome with succeeding years. For BPMC and other Buffalo magnets initial information distribution through a comprehensive media campaign resulted in high initial awareness. Decreased distribution of information in succeeding years has led to expressions of frustration on the part of parents in general and of the staff at BPMC. Comprehensive distribution of information is considered a primary requisite to the creation of equitable conditions for parents and students to apply for magnet schools.

Information distribution is one part of the complex process of selectivity researched by Blank (1983) and considered in the literature. Other aspects of selectivity identified in Blank's (1983) study and considered in this history of BPMC include: eligibility requirements, methods of selection, post-entry mechanisms for transferring students and student self-selection. Additional influences on the access pattern identified in the literature and considered here include school location and

transportation. Taken together these influences create a pattern of access for any magnet school, in this case for BPMC. The access pattern changes over time as ascertained by this study.

Eligibility Requirements

The first year pattern of admissions to BPMC was the most critical for it involved the largest number of students to enter the school in any given year, 261 students. The pattern influenced future admissions in subsequent years through selection policies such as siblings' preference and self-selection through information sharing among friends and relatives. Of the students enrolled in 1977, 130 were minority students and 131 were majority students (BPMC Magnet Placements, 1991, July 10).

One of the important factors within the domain of the school system is the setting of eligibility requirements (Blank, 1983). As the BPMC nucleus of leaders, parents, supervisors and principal, prepared for the opening of the Montessori magnet, they successfully argued for an "incremental approach" to enrolling the school. This meant the school would open with the youngest students, 2 years 9 months and 3 years 9 months. Each year succeeding classes of 3-year-olds would be enrolled. This has continued as the BPMC enrollment process.

These leaders also made a successful argument for giving preference to children with previous Montessori experience. This eligibility stipulation was significant to the St. Mary's Montessori parents who had supported and promoted a public Montessori magnet. They were eager to have their children enrolled in this Montessori magnet.

One of the superintendent's responsible for implementing the magnets in 1977 credited the success of BPMC to these eligibility requirements. He stated that the

principal convinced the superintendents early on that we had to start with a seed population. We started with youngsters 2 years, 9 months old and we took 3 years, 9 months old youngsters into the program. Half of the youngsters that we took in had to have some Montessori experience. And then we evolved up to the 13 and 14 years range and that is really why we were successful (Administrator Interview 1).

In conjunction with starting with a seed population which had Montessori experience, BPMC leadership also affirmed that they would enroll children without Montessori experience (Administrator Interview 2). This was an important stipulation for creating the initial classes and for succeeding years when openings occurred at older age levels. One BPMC administrator judged in retrospect that the school had very good success in its practice of enrolling children up to age 12 as openings occurred.

However, others at BPMC voiced some concerns about the practice of admitting students without Montessori experience to upper levels. One teacher attributed difficulties with these students not so much to their lack of Montessori experience but to the fact that "very often we are getting students where it's not working out in other places and so they have their problems with us as well" (Teacher Interview 5).

Another teacher supported the thesis that prior Montessori experience was necessary for a child to be successful at BPMC. She felt that

It's better to have the children at 3 to 5 years when all the groundwork is laid. As the child gets older, beyond 5 to 7 years, I would say that it is difficult for a child to come here and learn Montessori. I find the older the child, the harder the transition (Teacher Interview 7).

In sum, specific eligibility requirements for BPMC are currently limited to the age requirement of 2 years 9 months for each year's new class of students. Openings at upper age levels are filled by the magnet placement office from its annual waiting list. Prior Montessori experience is not a requirement for these students. In the first year, 1977, half of the places at the 3-5 years age level were filled by students having prior Montessori experience, at the 5-7 years level 17 of 26 children had prior Montessori experience.

It is significant to note the interactive effect of the age eligibility requirement and the magnet school application deadline. The application deadline is scheduled each year for a date in mid-February. Parents of children as young as 2 years 2 months in February must file applications if they wish their children to attend BPMC. Each year the largest number of children enrolling in BPMC is the entering class of 3-year-olds. According to age eligibility requirements, these children may be as young as 2 years, 9 months.

In current practice, the largest number of openings is 60 openings for the class of 3-year-olds. If parents miss the 3-year-old application deadline, their children's chances of entering BPMC are greatly diminished. For example, one BPMC teacher noted that "very often we don't have any spaces for 5-year-olds. This year we took three children out of hundreds of applications for 5-year-olds" (Teacher Interview 5). The effect of this February deadline and early entrance age to BPMC may place a heavy burden of responsibility on parents of very young children. These parents must manage a sophisticated public school applications process many years before their

children are of school age. Probabilities for success lie with the most resourceful, better equipped and forward looking parents.

Methods of Selection

In addition to eligibility requirements, the methods or process of selection is an equity consideration within the action parameters of the school system. Since the inception of the magnet schools in 1977, changes in the method of selection have been instituted through the guidance of the Court working with the plaintiffs and the School Board. The selection method has become a responsive process which enrolls students for BPMC within the desegregation context of each elementary public school in the Buffalo system.

In the first selection of students for BPMC in 1977, a lottery procedure was conducted. Through the court order, Judge Curtin directed the Board to hold a lottery for the magnet school applications. This was considered the most equitable method of selecting students from among the applicants.

During the months of May, June, July, 1977, parents desirous of enrolling their children in magnet schools had completed the Magnet School Application forms. A copy of the 1977 magnet school application appears in Appendix D. Parents were invited to list three magnet schools in their order of preference on the Magnet School Application. All parents from all school districts in Buffalo were invited to apply. Every child's application was eligible for the lottery. As noted by a BPMC administrator, "the lottery says it all. We get everybody" (Administrator Interview 2).

The nucleus of Montessori leaders, led by the principal, strongly supported the lottery as a method of selection. These leaders successfully argued that the Montessori

magnet be a city-wide magnet with no neighborhood population. An administrator recalled their reasoning:

That it only be a lottery. That there be no neighborhood population. We wanted it to be choice. Otherwise, you are not opting for Montessori. You are going because it's your neighborhood school (Administrator Interview 2).

A teacher at BPMC from its first year felt strongly that the lottery assured a measure of equity. The lottery seemed to be the best method of selection when compared to other methods.

At least we don't have people waiting in lines. We don't have first come, first served. We don't have screening procedures. At least it's wide open from our end (Teacher Interview 4).

Whereas the lottery assured equity in the process of selecting students from among the applicants, it was not without risk for some of the St. Mary's Montessori parents who had promoted the Montessori magnet. One parent recalled her feelings about the chances of admission for the St. Mary's Montessori children.

We had hoped that providing this facility, St. Mary's Montessori preschool, to the school system would permit any of our children to enter the public system. But there was never any guarantee given. In fact when it came to the lottery there was one (St. Mary's) family that wanted to enter that did not get in. I do remember that there was some bitterness at that point because we felt we had put ourselves out for the school system, that the least they could do was to provide places for these kids (Parent Interview 8).

A policy of sibling preference was announced with the drawing of the first lottery. This meant that if one child's name was selected from the lottery, the child's siblings would automatically be given preference for entry into BPMC. Parents, teachers and administrators commented upon the importance of this policy. An

administrator noted that "It is a staying power at BPMC--working with families" (Administrator Interview 2).

Parents appreciated the security provided by the sibling preference policy. A parent of five children whose first preschool child was selected in the 1977 lottery commented that once "my preschooler was set, then my other children didn't have to go through the lottery again" (Parent Interview 9). In practice, siblings' names are drawn first in the annual lottery. This sibling preference rule continues to guide the lottery selection process.

As a result of the initial lottery, BPMC enrolled five classes of 3 to 5-year-olds and one class of 6 to 7-year-olds. Three and 4-year-olds attended half-day sessions. Children 5 years and older attended full-school-day sessions. The 5 years and older children were selected through the policy of sibling preference and/or previous Montessori experience at St. Mary's Montessori preschool or other Montessori preschools.

The role of the magnet school placement office is primary in the selection of students for BPMC and the other magnet schools. The office holds complete responsibility for following the directives of the Court in conducting the lotteries and managing the waiting lists. The responsibility of the BPMC administrators is to identify majority and minority spaces at the school each January for the incoming class for the following September. BPMC updates the magnet office on majority and minority openings as they occur at all age levels throughout the school year.

As noted earlier, the method of selection by the Magnet Placement Office has become a responsive process over the years. The factors which have contributed to the

fluidity of this process have influenced enrollments at BPMC and the other magnet schools. What has evolved through the years is a controlled lottery which aims to maintain racial balance at sending schools, for example, attendance area schools, as well as racial balance in magnet enrollments.

During the first years of the magnet enrollments (1976, 1977, 1978 and 1979), focus was directed toward equal majority and minority enrollments at each magnet school. During the first phases of the desegregation plan, Buffalo had many schools which enrolled either all majority or all minority students. Therefore, the sending schools' racial balance was not a factor in magnet applications and selections.

However desegregation efforts through Phase III and Phase IIIx of the Buffalo Plan created a larger number of schools with integrated enrollments. In the 1981-82 school year Phase IIIx designated eight early childhood centers (Pre-Kindergarten - Grade 2) and 14 Academies (Grades 3 - 8). These schools were paired as cluster schools for purposes of integration. Through these successful desegregation efforts more schools met the Court requirements for integration.

In June, 1980, Judge Curtin issued an order which specified the percentage requirement for a school to be considered racially balanced. His directive follows:

With respect to the magnet schools, I find that the defendants should achieve a student population of approximately fifty percent (50%) minority and fifty percent (50%) majority. With respect to all other schools, I find that a school shall be desegregated when it has no less than thirty percent (30%) and no more than sixty-five percent (65%) minority students. The latter goal is subject to reconsideration upon further analysis. The defendants are of course encouraged to make all efforts to exceed these percentages (Arthur v. Nyquist, CIV-1972-325, Transcript, June 19, 1980, p. 5).

It became necessary for the School Board to maintain the Court ordered percentages for non-magnet schools when it conducted the lottery for BPMC and other magnet schools.

In response to the demand for maintaining the racial integration percentages at the sending or attendance area schools, the magnet placement office developed annual placement procedures. These procedures comply with the District Court Orders. A sample of the types of qualifications placed on the lottery may be read in "Magnet School Placement and Procedures, 1983-84 School Year" which appears in Appendix E. Sections 5G and 5H are included here.

5. In compliance with the June 29, 1978 U.S. District Court Order the following policies will apply with respect to filling vacancies in the Magnet School.

G. Minority pupils from the following schools will be given preference for placement in the Magnet Schools: 3, 36, MLK, 53, 59, 68, 74, 76.

H. Majority pupils from the following schools will be given preference for placement in the Magnet Schools: 27, 28, 33, 43, 45, 51, 60, 64.

As may be seen from the qualifications of the controlled lottery, points 5G and 5H, students from certain schools are given preference in the drawing. This control attempts to preserve or increase the racial balance at the sending schools. The schools included in points 5G and 5H are subject to change each year dependent upon information from the ethnic census. This stipulation also means that students' applications from other schools which are striving to maintain 30% or 65% minority enrollments will not be drawn in the lottery.

The need for the controlled lottery was discussed in an interview with one of the plaintiffs' legal staff. She noted that the plaintiffs had submitted information to the Court showing the "negative impact magnet admissions were having on the naturally integrated sending schools" (Plaintiffs' Legal Staff Interview 3). In particular she observed that School 68 through a combination of factors including majority magnet school admissions had changed from an integrated school to a minority school within the first three years of the lottery.

An analysis of the students selected by the lottery for BPMC during its first year determined the number of majority and minority students from attendance area School 68. Data was abstracted by the researcher from enrollment records and school attendance area records. This analysis showed that two minority students and one majority student left School 68 attendance area for BPMC in 1977-78. However, it is acknowledged that the analysis studied 226 enrollment records, 35 fewer records than the total 1977-78 enrollment of 261 students. Available records for 22 majority students and 13 minority students contained incomplete data.

It may be noted that a few students accepted at BPMC and other magnets do make a significant difference to the sending school. Legal staff commented that "It isn't one student out of a whole school that makes a difference, but it is two or three students out of a particular grade level and that breaks down to classes, and the impact is felt then" (Plaintiffs' Legal Staff Interview 3).

Whereas the complexity and fluidity of the controlled lottery are designed to promote integration at schools throughout the system, knowledge of the controls does not seem general among parents. A BPMC parent reported changes in perceptions

among both majority and minority parents about how equitable the lottery truly is.

She summarized this trend in the following way:

In the early years people were very convinced that this was fair, and it was done publicly. In the early years you heard very little about favoritism and unfair selection. There are two things that have happened. One, I think there actually has been an increase in the number of back-door arrangements: People getting into schools through pressure by board members or by other administrators. Then there is the additional complication that there are schools where they won't allow the children to leave. Their sending schools will not allow them to leave (Parent Interview 8).

Increased feelings of unfairness about the methods of selection were confirmed by other BPMC parents and teachers (Teacher Interviews 4, 5).

In her reflections upon the perceptions of inequity surrounding the selection process for BPMC and other magnets, one BPMC parent stated that these feelings are common to both majority and minority parents. "I believe that neither group realizes the extent to which the other group feels it also is being treated unfairly" (Parent Interview 8). She reported that many minority parents would like to send their children to the Science Magnet. However, the Science Magnet and many others have a neighborhood minority population of students which fills the minority enrollment. Minority students from other parts of the city have no opportunity to attend school there.

In sum, the method of selection for magnet schools has undergone several transformations during the 15-year history of BPMC. The lottery began as an "open to every child's application" process. Gradually under the U.S. District Court Orders the lottery became qualified by requirements to maintain majority/minority balance at the sending schools. What has emerged is that many of these controls on the lottery

which give preference to applications from racially identifiable sending schools are not known to the parents. Therefore parents from schools which are seeking to maintain racial balance repeatedly find that their children are not selected by the lottery.

Explanations about the lottery controls are not offered to parents. As a result parents express dissatisfaction and judge the magnet lottery as unfair. As noted by a BPMC parent, "This whole issue of selectivity and access has become a very important focus of peoples' attention. The universal perception is that the system is not fair. That maybe once it was fair. But that it is no longer fair" (Parent Interview 8).

Enrollment Patterns, 1977-1978

This study examined attendance area and enrollment records for BPMC for its first year, 1977-78. The examination sought to determine patterns of enrollment from specific sending schools. The researcher utilized the Handbook on School Districts, 1977-78 (1977, July 19) to determine the corresponding school attendance area for each student's residential address. Twenty-two records for majority and 13 records for minority students contained incomplete data. Records for 226 students showed that students enrolled at BPMC from 48 different elementary school attendance areas. Numbers of students from individual attendance areas ranged from one student to 15 students from School 45 attendance area.

Fifteen students, three minority and 12 majority, enrolled at BPMC in 1977 from School 45. In 1975, School 45 enrolled 75.9% majority students. In 1983-84 School 45 continued to enroll a high percentage of majority students. Majority pupils from School 45 were given preference for placement in magnet schools (Magnet

School Placement and Procedures, 1983). Through succeeding years, School 45 has become more diverse in its enrollments with increases in its Asian and African American enrollments. In 1990, School 45 enrolled 45.7% majority students, 27.9% African American students, 12% Asian students, 12.3% Hispanic students and 2% Native American students (Ethnic Census, 1991).

Fourteen majority students from School 56 attendance area enrolled at BPMC in 1977-78. In 1975, School 56 enrolled 55.5% majority students; In 1990 School 56 enrolled 52.9% majority students (Ethnic Census, 1991). This school has continued to maintain racially integrated enrollments. The largest number of minority students, 11 students, enrolled at BPMC in 1977 from School 62 attendance area. In 1975, School 62 enrolled 96.1% African American students; in 1982, School 62 was closed (Ethnic Census, 1991).

Nine minority students enrolled at BPMC, 1977-78, from School 59 attendance area. In 1975, School 59 enrolled 98.2% African American students; in 1990, School 59 enrolled 67.4% African American and 32.3% majority students. Increased numbers of majority students resulted from the designation of School 59 as the Science Magnet. BPMC also enrolled nine minority students from School 61 attendance area. In 1975, School 61 enrolled 91.6% African American students; in 1990, School 61 enrolled 52.9% African American students. School 61 was designated an Early Childhood Center (Pre-Kindergarten - Grade 2) and paired with an Academy (Grades 3-8) for purposes of integration.

A summary of the enrollment patterns from the five school attendance areas from which the greatest numbers of students enrolled at BPMC is shown in Table 2.

Other school attendance areas had from one to seven students enrolled at BPMC in 1977.

Table 2
BPMC 1977-78 Enrollment Pattern*

<u>School Attendance Area</u>	<u>Numbers of Students**</u>	
	<u>Majority</u>	<u>Minority</u>
45	12	3
56	14	0
62	0	13
59	0	9
61	0	9

*BPMC, 1977-78, enrolled the highest numbers of majority and minority students from these five school attendance areas.

**Data is based on 226 records, 35 fewer than 261 students enrolled.

Post-Entry Transfer Mechanisms

Another type of selectivity researched by Blank (1983) involved the "post-entry mechanisms for transferring students who do not perform or behave in accordance with the magnet school's standards" (Blank, 1983, p. 47). Teachers and administrators at BPMC stated that this type of selectivity has not been an issue at BPMC (Teacher Interviews 4, 5, 6; Administrator Interview 2).

However, there have been some instances when the BPMC staff have worked with families "to counsel them out of BPMC" to another school. In most cases, this counseling has involved older students who enrolled in BPMC at the upper age levels. As noted by a teacher, "In a few cases we have gone back to the parent and said 'this isn't working out, and do you want a conference to figure out what you are going to do'" (Teacher Interview 5).

In response to these conferences, some parents have enrolled their children in other schools. Some parents have requested that the BPMC staff continue to work with their children. As a result, these students continued in their classes. In a few instances children were withdrawn from BPMC through the process of formal suspension.

In addition to the informal process for encouraging student transfers, there exists a formal mechanism for transfers. The magnet procedures recognize that "No pupil should be 'locked' into, a program if an inappropriate placement was made." Magnet School Placement procedures also stipulate that "where the welfare of a pupil is concerned, the Pupil Personnel Department may effect a transfer at any time" (Magnet School Placement and Procedures, 1983-84 School Year, p. 1). These transfers at BPMC occurred through formal suspension and reassignment by the superintendent.

School Location

Another factor which has shaped the access pattern to BPMC is school location. This equity related factor has been considered in the literature (Archbald, 1988; Fleming, et al., 1982; Larson, 1980; Pechmann, 1987; Royster, Baltzell, and Simons, 1979; Rossell, 1990). Research has noted that an inner city school location positively influences the probability of participation for inner city students. Research also suggests that it is difficult for districts to enroll white students in voluntary magnet programs located in African American neighborhoods.

BPMC is located in an inner city African American neighborhood. It is in close proximity to a cluster of five story, red brick, partially abandoned federal

housing projects. Currently, these buildings are undergoing restoration through federal financing. When Buffalo established its magnet schools, they were placed in minority neighborhoods. Some magnets automatically enrolled the minority neighborhood population. BPMC does not have a neighborhood component. All students apply and are selected through the lottery. As the history of the school has demonstrated, BPMC continued to receive an excess of applications from both majority and minority parents. In this instance, the location of BPMC did not detract sufficiently to depress majority applications.

Other considerations which may have influenced parents are those reflecting the limited geographic area of the city. BPMC is located near the downtown area of Buffalo. BPMC is also approximately four to five miles from the northern neighborhoods of the city which house the State University, its faculty and staff. In addition, a short bus ride of three to four miles brought students from the majority neighborhoods of South Buffalo. The effects of these short distances may have been to soften magnet parents' concerns about the school's inner city location.

Included in the school location factor is the issue of displacement of the minority neighborhood population (Pechmann, 1987). This factor has direct implications for BPMC, a city-wide magnet. A brief sketch of the use of school building 32 delineates specific equity points.

BPMC is located in a school building formerly known as School 32. In September 1969 BUILD Academy for children from kindergarten through fourth grade was opened at School 32. It was an alternative school proposed by the community organization, BUILD, an acronym for "Build Unity, Independence, Liberty and

Dignity." The school attracted a city-wide population. It was open to African American and white students. However, the school's enrollment was mainly minority students. BUILD Academy emphasized a philosophy of community control and parent involvement. BUILD also designed a strong African American history curriculum for its students.

When the School Board attempted to establish eight new magnets in 1977, it considered various space configurations for the proposed programs. In 1977, BUILD Academy was a minority enrolled school. In order to continue as a magnet school, BUILD needed a larger building to increase its majority enrollments. At the close of the 1976-77 school year, BUILD Academy was moved to a larger facility. Building 32 was designated as the Montessori magnet (Administrator Interview 2, Teacher Interview 5). In this instance, the city-wide Montessori magnet did not replace a neighborhood school. The program in the building had attracted students from all areas of the city. However, it must be noted that minority children from the neighborhood who attended BUILD Academy were affected by this change.

Transportation

Another factor in the issue of access considered in the literature is available transportation. Researchers have found that majority parents are discouraged from enrolling their children in magnet schools when transportation is not readily available (Bennett, 1984; Metz, 1986; Pechmann, 1987). From the beginning, staff at BPMC and school officials responsible for implementing the magnet program were keenly aware of the importance of this issue.

The issue of safe transportation for all students received attention from the superintendent. Additional funds were allotted to place aides on the buses. As recalled by one administrator:

There was one other significant thing that was different from other cities. That is from the very first we felt it was important to insure the safety of the youngsters when they were being transported from their neighborhood to their new school . . . We didn't bus them. We transported them. We hired people from the neighborhood, and they were paid to monitor the buses. When they got off the buses, they went right into the school house. They were teacher aides at the Montessori school. We had people from the neighborhood staying with the youngsters right in the school and then bringing them home. They were our best ambassadors for safety in the school (Administrator Interview 1).

In the judgment of this administrator and others (Administrator Interview 2, Teacher Interviews 4, 5) this sensitivity to parents' concerns about safe transportation was greatly responsible for successful majority and minority enrollments at BPMC and the other magnets.

From a parent's perspective "the fact that there was an aide on the bus helped" (Parent Interview 9). During the first few years, children from the Montessori magnet and another nearby magnet rode the same buses. The bus aides provided assistance to young children, aged 2 years, 9 months, in boarding and debarking the buses at their appropriate stops.

However, transporting very young children was a new effort for the Buffalo schools' transportation department. One administrator recalled numerous difficulties in her efforts to impress the department with the need to pick up and drop off young children near their homes. She argued that "three blocks away from home did not meet the criterion for safety" (Administrator Interview 2).

The problems during the first year of bussing demanded patient response on the part of parents, bus aides, and staff at BPMC. One parent recalled a particularly harrowing incident from the first winter, January 1978. Her young son, 4-years-old, was dropped off at the wrong bus stop at the end of the day. He managed to find his way home, despite the high snow banks. This parent attributed the mistake to the fact that there was a new aide on the bus. In retrospect she felt she had been concerned about bussing her child, but "I knew what was at the end of the bus ride, and I trusted the people. I've never had to retract that at all" (Parent Interview 9).

This transportation story has been retold by many BPMC staff and parents. It has become part of the school's history. The willingness of the first Montessori parents to undertake the risks involved with transporting young children is made palpable in this tale.

Self-Selection

Self-selection factors, including income and educational levels have been reported in the research as strong influences in the access/selection of students for magnet schools (Blank, 1983; Metz, 1986; Rossell, 1990). Parents, teachers and others interviewed for this study volunteered their perceptions about the self-selection factors which they felt influenced families enrolled at BPMC.

One parent believed that the first parents who applied for and enrolled their children at BPMC may have possessed some distinctive qualities which were not necessarily required of parents in succeeding years. These first parents may be characterized as more aware, more involved and more willing to take risks (Parent Interview 8).

As a result during its first years, BPMC benefitted from the particular strength of this student and parent enrollment. As noted by this parent, the uniqueness of these parents may not be measured by income or educational levels but by personal characteristics.

We are not talking elite in the ordinary sense of the children of doctors and lawyers. But what you are talking about more is a very subtle kind of creaming off of families that take the initiative. More so that you have a lot of mothers who have the energy and leadership skills concentrated in a dozen (magnets) of the 77 schools in the city (Parent Interview 8).

Several teachers offered their perspectives on the self-selection process involved in the application/enrollment of families at BPMC. Teachers and administrators indicated that the free child care and transportation at the young age of 2 years, 9 months was an important influence in the self-selection process (Administrator Interview 1; Teacher Interviews 5, 6, 7). They believed that the free child care attracted many parents to BPMC.

In addition to the attraction of free child care for pre-school children, teachers also cited parental perceptions about magnet schools in general as well as BPMC in particular. They indicated that parents "want to get their children into any magnet" because they believe that the "magnet program is a better program" (Teacher Interviews 5, 7; Plaintiffs' Legal Staff Interview 3).

As described by the legal staff interviewed, it is the attraction of "magnet" and not the particular program which motivates many parents. She argued that parents complete an application for a child which selects programs that are at "opposite ends of the educational spectrum" in their philosophy and practice (Plaintiffs' Legal Staff

Interview 3). These parents want their children enrolled in a magnet; the type of magnet program is of secondary importance.

A similar perspective was expressed by one of the teachers at BPMC who felt that the school enrolls a percentage of students whose "parents don't know about Montessori" (Teacher Interview 7). They simply want their children in a magnet.

Teachers and administrators also acknowledged that parents definitely were selecting the Montessori program for their children. Minority parents frequently apply to the program because they "know other parents who have children in the school" (Teacher Interview 6). Recommendations about BPMC to friends and family have been described as a strong influence on the school's enrollment by several teachers (Teacher Interviews 4, 5, 6).

Generally, teachers and administrators expressed the views that parents did select a "magnet" program; yet, they acknowledged that other parents selected "Montessori" because of several influences including recommendations from family and friends, free child care for their 3-year-olds, and their appreciation/understanding of the Montessori approach to education.

At least one person interviewed felt that the educational and professional levels of the parents influenced their self-selection and the consequent enrollment at BPMC. Legal staff for the plaintiffs contended that many of the "early applicants to Montessori were precisely from the North Buffalo areas where there was a heavy university faculty and staff concentration" (Plaintiffs' Legal Staff Interview 3). She believed that these parents acted upon their knowledge about Montessori education and successfully enrolled their children.

In response to this contention, this study conducted a review of the school attendance districts from which the Montessori students originated. This study reviewed the first year of BPMC enrollment. Each student's residential address was identified by its attendance area school. Records were studied for 226 of the school's initial enrollment of 261 students.

Schools located in the university neighborhoods of North Buffalo were identified as Schools 56, 64, 66, 81, 86. Residents of these neighborhoods are described as having attained higher income levels and higher levels of education. In 1977, a total of 23 majority students from these school attendance areas enrolled at BPMC. Table 3 summarizes this enrollment.

Table 3

BPMC Enrollment, 1977-78
North Buffalo University Neighborhoods

<u>School</u>	<u>Number of Majority Students*</u>
56	14
64	1
66	0
81	3
86	<u>5</u>
Total	23

*Data is based on 226 records, 35 fewer than 261 students enrolled in 1977 at BPMC.

Twenty-three students reflected 10.1% of the 226 enrollment records. The fact that the school attendance area for 35 student records was not identified or included in the examination limits the use of this percentage. Mathematically, it may be calculated that no less than 8.8% and no more than 22.2% of the total students enrolled at BPMC, 261, enrolled from North Buffalo university neighborhoods. These

calculations are based on the greatest and smallest possible numbers of students from these school attendance areas who would have enrolled at BPMC. In the unlikely but possible occurrence that all 35 students resided in these school attendance areas, the percentage would be 22.2%; in the possible occurrence that none of the 35 students resided in these school attendance areas, the percentage would be 8.8%. In fact, it may be concluded definitely that 23 or more students from North Buffalo university neighborhoods enrolled at BPMC in 1977.

Summary

Data presented here addressed the research question, what are the selectivity patterns which determined the enrollment of majority and minority students at BPMC. Data gathered in this study showed that an evolution in the access process to BPMC has occurred. This process has been influenced by the Court's directives. The inauguration of the magnet schools in 1977 was accompanied by an extensive information campaign which promoted BPMC and the other magnet schools. BPMC opened with an enrollment of 131 majority and 130 minority students. Throughout the school's history, an enrollment of approximately 50% majority and 50% minority students has been maintained.

Ample numbers of majority and minority applications to BPMC have continued annually at the magnet office. However, there has been a decrease in dissemination of information to parents about BPMC and other magnet schools. Subsequent to 1980, Court directives have assured the racial balance of the sending schools by setting priorities on applications for magnet schools.

The pattern of access to BPMC has appeared to be equitable in several ways. Annual lotteries have assured opportunities for equal consideration of all applications. Court directives have secured a process which guarantees racial balance at attendance area schools. Adequate bus transportation with bus aides has contributed to the steady numbers of majority and minority students.

However, certain influences specific to BPMC admissions appear to have favored singularly assertive parents. Admission to BPMC occurs for very young children. Applications are filed in February for the following September resulting in applications for children as young as 2 years, 2 months. Teachers and parents have judged that information dissemination about BPMC, as well as other magnets is less than adequate. Therefore access and selection appear to favor parents who seek and manage pertinent information affecting their children's schooling.

Parents whose children are admitted through the lottery are rewarded with the guarantee of sibling preference in admissions for their other children. In fact, there are students currently enrolled at BPMC whose older siblings were admitted through the initial lottery in 1977. Also, BPMC parents are in a unique position to recommend the program to their relatives and friends and to guide them through the applications process. Each of these dynamics further influences the selectivity patterns for both majority and minority students.

Program Processes at BPMC

The second equity factor considered in this study, program processes, focused attention on salient aspects of the BPMC program. Recent research has indicated that several variables contribute toward equity. Research in the area of school climate factors (Borba, 1984; Brookover, 1978; Schofield and Sagar, 1977) demonstrated that student, teacher and principal's perceptions of each other's levels of expectations influenced the learning process for all students. In particular, school principals affected equity through their insistence upon heterogeneous classroom grouping. In addition some magnet school principals have been perceived as fostering equity through their clear articulation of specific magnet goals.

Other variables which influence equity have been identified as curricular in nature. The way in which schools organize students, specifically homogeneous grouping of students, influences their opportunities for learning (Metz, 1984; Moran, 1987). Metz (1984) reported that traditional grouping of students highlighted the relatively weaker academic skills of some minority students. This grouping discouraged interracial cooperation and intensified differences in status.

Moran (1987) found that a magnet gifted/talented school enrolled equal numbers of majority and minority students. Yet, majority students were enrolled in "advanced courses" while minority students were enrolled in "basic courses." Moran concluded on the basis of her curriculum analysis that the school functioned as a gifted/talented magnet for the majority students only.

As indicated by the research, the specific levels of curricular offerings and classroom practices as well as the global level of school climate influence the total

learning opportunities for majority and minority students. This study now focuses on the unique ways in which BPMC described its Montessori goals and philosophy and translated them into processes which affect majority and minority students. As posed in this study the research question asked, how do Montessori program processes affect majority and minority students at BPMC?

BPMC Philosophy

A review of documents indicated that the Montessori philosophy of education is articulated in the BPMC Handbook (1989). Three paragraphs in the Handbook (1989) summarize Montessori teachings about the child, the role of the teacher, and the overall emphasis of the Montessori program. This articulation of philosophy is also published in the informational literature about each of Buffalo's magnet schools (Magnet Schools: . Building a Sound Future, undated, p. 10).

The BPMC description of Montessori philosophy identified Dr. Maria Montessori's belief in the powerful dynamism for learning that is natural to children, especially young children. Montessori "believed that children, even as young as three, could become the agent in their learning and could become responsible for their behavior" (Handbook, 1989, p. 2).

In a brief sketch of the role of the teacher, the Handbook (1989) emphasized the "radically altered" mission of the teacher. The teacher (Handbook, 1989, p. 2)

becomes the facilitator, rather than the arbiter of learning. Each child progresses according to his/her own unique way. The teacher respects the child's right to work undisturbed and uninterrupted . . .

The Montessori teacher is charged with the responsibility of preparing a learning environment which meets the developing needs of each child.

In describing the program's philosophy, the school portrayed the "essentially child centered approach that emphasizes the total development of the child" (Handbook, 1989, p. 2). Nurturance in a warm supportive atmosphere is described as an essential characteristic of the program.

The statement of philosophy is indicative of several characteristics of the BPMC program. First, the philosophy is common to all the members of the faculty. Each teacher has participated in a full program of training for Montessori teachers at the appropriate age levels. This philosophy forms the basis for each teacher's practice. Second, the statement is generic in its content and tone. Specific mention of magnet philosophy with its implications for racial equity is notably absent.

However, recognition of the magnet composition of the school's enrollment is reflected in the BPMC mission statement. The mission statement was created as a component of the school's improvement plan.

Bennett Park Montessori Center consists of children aged 3 to 13 who are multi-age grouped which reflect a variety of abilities and talents who come from various racial and ethnic backgrounds. As we live together in our school community, we learn to respect each other and to value our many differences. The children actively participate at their level within a structured environment with freedom of movement, choice and thought. They develop confidence as they become agents in their own learning, as they work at their developmentally appropriate level and on their physical, social and emotional needs. As they grow, the children develop life long learning habits and become responsible members of the world community. (Mission Statement, 1987)

Recognition of diverse racial backgrounds and the subsequent need for respecting differences are specifically incorporated in the self-concept of the BPMC program. The mission statement is the product of a cooperative effort of the staff and is reflective of consensus among the staff.

The ways in which BPMC philosophy and mission statement are translated into practice in the form of instructional technologies are described in this study through review of documents, interviews, and on-site observation by the researcher. Narration of the essential qualities of Montessori instructional technologies is contained in The Authentic American Montessori School which was prepared by Nancy Rambusch and John Stoops (1992). This work provides a codification of the major characteristics of Montessori education. It offers a recognized guide to schools engaged in processes of self-evaluation and accreditation. For this study, the essential qualities defined by Rambusch and Stoops provided a basis for comparison with the instructional technologies implemented at BPMC.

Instructional Technologies

The instructional technologies implemented at BPMC are informed by Montessori philosophy and accepted Montessori process. Essentials of this implementation are reviewed here under three descriptors: BPMC learning relationships, BPMC learning activity, and the descriptor of BPMC teachers' activity (Rambusch & Stoops, 1992). Throughout this consideration the unique relationship of the school's Montessori descriptors and public school district policy and practice are examined. Taken together they affect the school's ability to respond to the developmental needs of its majority and minority students.

Montessori Learning Relationships. The descriptor, Montessori learning relationships as implemented at BPMC, consists of three essential characteristics of Montessori education: mixed-age grouping, cooperation not competition, and social setting as community. These characteristics are recognized generally as central to

Montessori education and are elucidated by Rambusch and Stoops (1992) in their guide to the authentic Montessori school.

The characteristic mixed-age grouping is implemented fully at BPMC. Typically, Montessori programs group students in three-year age spans, 3 to 6 years, 6 to 9 years, 9 to 12 years. These age groupings correspond to progressive developmental planes of children as described by Montessori and refined by other theorists including Jean Piaget.

BPMC developed a grouping pattern which organized classes in the following ways: 3 to 5 years, 5 to 7 years, 7 to 9 years, 9 to 11 years, and 11 to 13 years. During its first year, 1977-78, BPMC inaugurated five 3 to 5-year-old classes and one 6 and 7-year-old class. Through incremental expansion, the school developed to its full capacity which included 23 classes organized in the following way: four classes of 3 to 5-year-olds, four classes of 5 to 7-year-olds, five classes of 7 to 9-year-olds, four classes of 9 to 11-year-olds and four classes of 11 to 13-year-olds. Also, there are two special education classes. Every level is racially heterogeneous with approximately 50% majority and 50% minority students (Administrator Interview 2; Teacher Interviews 4, 5; Observations, May, 1992).

Mixed-age grouping, a key element of Montessori learning relationships, responds to the unique developmental profiles of each child. This grouping openly recognized differences among children and within each child's development. Traditionally organized schools attempt to meet the uneven developmental needs of chronologically grouped classes in one of two ways. Classes direct all pedagogy to the average child. Classes are subgrouped on measures of ability. BPMC professes

mixed-aged grouping and no ability grouping (Magnet Schools: Building a Sound Future, undated, p. 10).

This professed mixed-age grouping without ability subgrouping has been successfully implemented and sustained in the 3 to 5 and 5 to 7-year-old classes. Teacher interviews and observations by the researcher support this evaluation. In mixed-age grouping, each child's developmental needs are respected and responded to in the Montessori environment.

Beginning with the 7 to 9-year-old mixed-age grouping through the 11 to 13-year-old grouping the Montessori learning relationships must respond to the exigencies of the public school district curricula and assessments. BPMC has created several responses to this challenge. One response has been subgrouping within the mixed-age grouping. Various subgrouping has been organized for each level.

A second characteristic of the Montessori learning relationships has been described as that of cooperation and collaboration rather than competition (Rambusch & Stoops, 1992). Students working and sharing together in small groups are in evidence throughout the BPMC program. During any one time students are engaged in different activities rather than a singular activity. Therefore, immediate comparisons of students' work are less likely to occur. Over time each student is expected to master the learning requirements.

The school's responses to several district requirements have affected this cooperation not competition aspect of the Montessori learning relationships. One of the significant influences has been the cycle of district assessments. These assessments have been state and/or district mandated. They generally take the form of pencil and

paper tests. In the process of integrating tests into the Montessori learning relationships, accommodations have been implemented.

One accommodation has been the adjustment to test preparation time. Whereas cooperation not competition characterizes the learning environments from September through March, test preparation defines the classrooms from April through June. These test activities increase opportunities for comparisons among students because students engage in the same activity at the same time. Increased class time is devoted to the teacher's test preparation agenda. Students' performances in response to the teacher's whole-class method emphasize minority students' lesser skills. This accommodation begins with students in age levels 5 to 7 years and continues through 11 to 13 years. Annually, this test preparation time has the potential to affect equity by increasing invidious comparisons among majority and minority students and by disrupting the comparable status levels achieved earlier in the school year. Also, test preparation disrupts the developmental program by focusing attention on grade levels of students (Teacher Interview 4).

The third characteristic identified as essential to the Montessori learning relationship is the social setting as community (Rambusch & Stoops, 1992). This element as described by Rambusch and Stoops (1992), refers to the students sharing their newly acquired competencies with one another and with the whole group. Observations by the researcher in classrooms at every level at BPMC offered illustrations of these types of activities.

Incorporated within class times are on-going sharing activities by children with one another. Some examples observed included racially mixed small groups of

students working with concrete materials such as multiplication and division materials, land and water forms, maps of the world and continents, and reading materials.

During these interactions majority and minority children appeared to work in mutually cooperative ways (Observations, May 19-22, 1992).

Another accommodation resulting at least in part from mandated testing has been the identification of students as first, second, third, fourth, fifth, sixth, seventh and eighth graders. This nomenclature has not been accepted universally by the staff. At least one administrator commented, "they should never be referred to as second graders, third graders. That's the problem" (Administrator Interview 2). In fact, BPMC staff function in two language systems: a Montessori educational mode and a traditional testing mode. Staff work to balance the requirements of each mode.

Students are tested at specific grade levels, not developmental levels. Teachers and administrators are responsible to assure each child's test record. Problems have occurred around testing and mixed-age levels as illustrated in the following example.

Here's Mary. She was kept at the 5 to 7 level as an 8-year-old but called a third grader. When she went to the 7 to 9 level, we called her a third grader again. She did catch up with herself. She needed that. But she wouldn't have, if we had called her a fourth grader. When she got to the 7 to 9 level we had to make a determination, is she taking the PEP Test now. She would have been considered a fourth grader and never have taken the PEP. She needed to be considered a third grader (Teacher Interview 5).

In this illustration, the child's placement in the most appropriate developmental level was coordinated successfully with her test identification as a third grader. However, these cyclical tests encourage the identification of individual students by grade level. Thus, they directly affect the mixed-age grouping. At some levels the child's grade has become part of his/her identification in the mixed-age group. This

was illustrated during the researcher's observation of a 9 to 11-year-old class. The teacher stated this direction to the entire group, "I'd suggest that if you are in sixth grade, you put in your paper no matter what" (Observation, May 20, 1992).

Another adaptation made to accommodate school district policy is in the curricular areas of science and social studies. With the full vertical expansion of BPMC in the mid 1980s came the necessity to integrate the Montessori cosmic education materials with the public school curricula in science and social studies. A solution which has prevailed though not without some disadvantages implements the sixth, seventh and eighth grade science and social studies in a three-year cycle (Teacher Interviews 4, 5). The chief advantage is the maintenance of the Montessori mixed-age grouping. Staff also felt this focused cycle resulted in better planning for science and social studies and reasonable amounts of preparation time for teachers.

Difficulties have occurred on those occasions when BPMC students are recommended for summer school. In practice all the students in levels 11 to 13 study all the school district content. However, the sequence is not attached to grade level. Therefore, a student referred to summer school at the end of seventh grade may not have completed seventh grade science and social studies. For example, if the BPMC 11 to 13 level is studying in the third year of the cycle, then the student will have completed eighth grade science and social studies. Although this accommodation maintains mixed-age grouping at BPMC, it may contribute to academic difficulties in summer school for those students referred for the extra course work.

Numbers of students recommended for summer school are shown in Table 4. Some students are recommended twice for summer school, following seventh and

eighth grades. Although they have been recommended, some students do not participate in the summer school program. Table 4 shows that most of the students recommended are minority students.

Table 4

BPMC Seventh and Eighth Grade Students
Recommended for Summer School*

<u>Year</u>	<u>Majority Students</u>	<u>Minority Students</u>
1990	4	10
1991	0	20
1992	4	17

*Data contained in End of Year Student Information, 1990, 1991, 1992.

Another illustration of students sharing newly acquired information and skills occurred during whole group meeting times. Students as young as 5 years in the 5 to 7 level classes presented examples of their research. This observer witnessed several different students reporting their research on animals as pets to their peers. These presentations resulted from several explorations including work in the school library. Minority and majority students volunteered and presented during the times of these observations.

Whereas these examples illustrated the predominantly positive social setting prevalent in the classrooms at BPMC, recognition is made of practices which may create less than positive effects. These practices involved the implementation of the Chapter I and resource room programs. Both programs served students who have been referred for special help in academic subjects such as reading and mathematics. Through the years the Chapter I program combined in-class and pull-out models when

serving eligible students. At BPMC Chapter I teachers work in the classrooms with students. Also, students leave their classrooms at scheduled times each day to participate in programs in the Chapter I room. Chapter I and resource room programs had not been implemented during the first years of BPMC. However, they have been incorporated in succeeding years. In effect the programs serve all BPMC children; however, the greater percentage of children served are minority students (Administrator Interview 2; Teacher Interviews 4, 5).

Compensatory programs, such as Chapter I and Special Education Resource Room, which provide special services to low achieving students judge that these students are performing below standards and expectations. This judgment has social consequences in that a negative connotation is ascribed frequently to these programs by other students, especially students at upper age levels. This negative connotation may be intensified when the compensatory programs serve mostly minority students. In addition to social consequences, placement in compensatory programs may affect students' beliefs about their own competence in the learning environment. Also, these students may question their status in the classroom community.

Socially negative connotations and students' doubts about their competencies and social status may be unintended effects of compensatory programs which enroll primarily minority students. These effects may be described as antithetical to Montessori learning relationships which emphasize cooperation not competition, the social setting as community and mixed-age grouping.

Montessori Learning Activity. A second instructional technology contributing to school practice at BPMC may be described as Montessori learning activity. Among

the essential elements composing this descriptor are those involving the students' first-hand experiences with materials and the students' self directed active learning (Rambusch & Stoops, 1992). BPMC has implemented these elements in ways which also enable the school to satisfy district and state requirements.

Observations conducted in classrooms at several levels at BPMC yielded evidence of environments well equipped with Montessori materials which provided firsthand concrete experiences for children. Materials have been displayed in attractive arrays which invite exploration by individual students and students working in small groups. Clearly these materials are not aids to be used by the teachers but hands-on manipulatives to be explored by the students.

Students interacting with concrete materials characterized the 3 to 5-year-old and 5 to 7-year-old classrooms most accurately. Classroom interactions at 7 to 9, 9 to 11, and 11 to 13 years involved fewer illustrations of hands-on activities. For example, a teacher in the 11 to 13 classroom utilized an overhead projector to demonstrate math concepts as students sat at tables. This illustration is representative of the types of learning activities engaged in by students in the older age grouping (Teacher Interviews 4, 5, 6). Commenting upon this a teacher stated:

Now I feel that the upper level is not like that. It is state mandated. You are doing it because the state says you have to do your program in a certain way. It is less hands-on and more academic (Teacher Interview 6).

In fact the BPMC program has continued the Montessori concrete learning materials on the shelves through 5 to 7, 7 to 9 and 9 to 11-year-old levels. At the older levels, Montessori materials may have become ancillary to the curricular demands of district and state mandates. It is accepted in Montessori education that

older students are encouraged to work at the level of abstraction. Yet, the need for a wealth of concrete materials demonstrating abstract concepts is generally recognized. Some research suggests that minority students profit from interactions with concrete learning materials (Slavin & Madden, 1979). Fewer concrete materials at older age levels may adversely affect minority students' learning opportunities.

In conjunction with available concrete learning materials, the active pursuit of learning activities constitutes informed practice at BPMC. This encouragement of individual pursuits has been judged a strength of BPMC by parents and teachers (Parent Interviews 8, 9; Teacher Interviews 4, 5, 7). A former student recalled this Montessori strength at BPMC. Recently graduated from college and currently substitute teaching in the school district, this former student believed that this pursuit of learning activities greatly contributed to racial equity in his BPMC classes. He reflected upon his experience at BPMC in the following ways:

We were encouraged to do a lot of projects. You know the Montessori system is based on our individual personal initiative that supersedes any racial inequalities. For example, I was interested in zoology. If you have students who are interested in something like zoology, it's not going to matter really what color they are or where they come from or what their families are like because the kids are going to find their own interests (Former Student Interview 10).

Another observation made by one of the parents highlighted the wealth of materials about Africa (Parent Interview 8). During the first year many students in the 5 to 7 class created projects utilizing these materials. Some produced books about Africa.

A parent who has been involved with the program at BPMC since its inception commented favorably about the significance of having students pursue their learning interests.

Even in this school when there are difficult children, I don't think they are as difficult here as they might be in a different setting. I think this is because of how they are treated. They are allowed to pursue their interests (Parent Interview 9).

This parent felt that this was especially true for one of her sons. She described him as "having so many talents and so many gifts." Yet she believed that he would have experienced behavioral difficulties conforming to a traditional school setting with predominantly teacher-led instruction. She commented that "even today as an adult, he has so much energy, and he's got to be doing something" (Parent Interview 9). At BPMC he had been supported in his active pursuit of learning.

Active learning methods included pursuit of varied interests. During the early years of BPMC, playing chess was one of many options for students. As recalled by one former student this opportunity resulted in racially mixed groupings of students.

We had lots of nonacademic activities. I used to play chess all the time. That was a lot of fun . . . when a kid has an interest he's not going to be worried about what color the skin is of another person or of himself. So they follow those interests, and I think that gave a good mixing (Former Student Interview 10).

BPMC continued through the years to provide students with opportunities to pursue a wide array of interests. African drumming has become a popular choice for majority and minority students. As described by teachers and administrators, pursuit of these activities is considered vital to student learning.

Equity comes up for us with all the choices that kids have--like the African drumming. Kids are able to choose those activities not because

they can afford to be out of other classes but because those things are valued and important (Teacher Interview 5).

More recently, eighth grade students have been offered additional opportunities to pursue their interests in math and in the arts through participation in the high school programs at the Academy for Visual and Performing Arts located across the street from BPMC.

In addition to these pursuits students have been invited in recent years to participate in a peer mediation program conducted on several Saturday mornings by a human resources agency. As recalled in teacher interviews (Teacher Interviews 4, 5, 6), this opportunity was presented at an assembly for all 9 to 11 and 11 to 13-year-old students. The teachers described the program and invited those students who were interested to pick up application forms at the school office. Throughout this process administrators and teachers sought to make the opportunity possible for all interested students by providing transportation to and from the program for students needing rides and by encouraging "some of those difficult kids by saying we think that this is something that you would really enjoy" (Teacher Interviews 4, 5)

BPMC teachers had decided that they would not select the highest achieving or best behaving students for this activity. The administrator had been willing to support the consequences of this decision, and she had the occasion to exercise this confidence. This occurred when the mediation center reported that a BPMC student had tipped a candy machine and stolen candy bars.

Montessori Teacher Activity. The third instructional technology contributing to school practice may be described as the Montessori teacher's activity. As portrayed by Rambusch and Stoops (1922), the Montessori teacher is engaged in assisting the

individual student's cognitive development by facilitating a match between the child and his/her need to learn. The teacher accomplishes this activity through her organization and design of the learning environment and the continuous response to the developing child. Teacher activity informs practice in each Montessori classroom. Effective teacher, child, environment interactions vary according to the unique configuration of each class.

Each BPMC classroom is staffed by a Montessori trained teacher and an assistant teacher. The Montessori practice of children addressing teachers by their first names has been incorporated since the school's opening. This practice is in evidence at all age levels. It serves to create an atmosphere of trust and to facilitate communication among students and teachers. The effectiveness of teachers' activity in classroom interactions may be viewed through interview comments expressed by teachers and parents.

Both teachers and parents remarked upon the high level of involvement and concern demonstrated by teachers toward the school community as a whole and toward individual students in their classes. A parent associated with BPMC from its conception noted these qualities.

I think from the start it was clear that this was a different kind of place, even just the conversations that took place in the lunch room . . . always astonished me by their seriousness. Teachers were talking 99% of the time about the materials they were working with or about the children. There was constant conversation focused with the concern of this child or that child who wasn't doing well. Why was that happening. Who was having a bad day today, and what can we do about it. A lot of the children who were most at risk were African American children and the level of involvement and concern and caring always seemed to me remarkable (Parent Interview 8).

The fact that individual children and teachers are together in the classroom environment for a period of two years and occasionally for three years allows time for relationships to develop which facilitate the learning process. One teacher commented on the quality of teacher involvement in the following way.

There is that tremendous nurturing . . . and that is true throughout to the point where teachers don't want to send the students on to the next level. It's the difficult kids they want to hang onto. We say, "you know they are really okay at the next level" (Teacher Interview 5).

By definition the teacher's role is one of facilitating learning rather than teaching content. This focuses the teacher's responsibilities on understanding the needs of individual students and adapting the learning materials to meet these needs. A former BPMC student attributed this concept and practice of teacher as facilitator in the environment to the promotion of integration among the students. The former student made this judgment about BPMC in its early years as well as in its current form.

It does seem pretty integrated to me, and I praise the Montessori system for this. It's tough to foster inequities when the teacher is playing a less dominant role (Former Student Interview 10).

As recalled by this former student and substantiated in his current experience at BPMC, the students cooperate and work together at least in part because the teacher is not the authoritarian leader of the class. However, he also acknowledged that some African American students, especially African American male students, may hang back rather than exercise initiative in their learning relationships (Former Student Interview 10). In general this former student felt that the students worked together in well integrated groups even at the older age levels.

The BPMC program supported the teachers in their Montessori roles as facilitators of individual student's learning in its reporting system to parents (BPMC Handbook, 1989). The school staff realized the significance of the reporting system to students and their parents. The customary practice of issuing report cards with numerical and/or letter grades was not adopted. Teachers designed a home-school communication system which involved parent conferences three times a year. Each year parent conferences are scheduled on a conference day arranged by the school district and on two additional occasions later in the school year when substitute teachers release the classroom teachers for this purpose. In the final written communications for the year, the teachers' narratives describe the students' social, emotional and cognitive development. At the 11 to 13 age level, reports indicate grades on school district examinations and final subject examinations as well as the written narrative. The purpose of grade reporting at this level is to make it possible for students to enter high schools having admissions requirements.

Many participants have reported appreciation for this home-school communication method partially because it affects a high level of parent involvement (Teacher Interviews 4, 5, 6). Although most parents participate in these conferences, occasionally parents have not attended. As noted in the Handbook (1989) and stated by teachers, the school then telephones the parents to schedule a home visit. As recalled by teachers and administrators in interviews there are both majority and minority parents who have not participated in these conferences. However, a greater number of non-participants are minority parents (Teacher Interviews 4, 5).

The particular strengths of the teacher's role as facilitator of the individual child's learning have been noted. However, the BPMC program has experienced the responsibilities of assuring optimal learning for each child in its unique way. These experiences have raised concerns which relate to equity.

One area of concern for teachers and administrators involved learning activities at the younger age levels, 3 to 5 years and 5 to 7 years. One of the major accomplishments for children at these levels is learning to read. The teachers' role in facilitating this learning to read process may be pivotal. Within BPMC teachers espouse different viewpoints about this teacher-child relationship.

One teacher of young children felt strongly that the teacher's function is to follow the child's lead. She stated her beliefs in the following ways:

I think that learning to read and learning in school should be something that kids feel good about. How can a kid feel good when he or she is pressured. I think that kids here learn at their own pace. We have had kids who go in this building until age eight. They could care less about reading. They didn't have a need until age eight, but when the alarm clock did go off, there was an explosion into reading. Nothing could stop them (Teacher Interview 7).

An opposing viewpoint was voiced by another BPMC teacher. This teacher summarized her understanding of the teacher's responsibilities to each child and to the community in the following way.

Having the children choose work that they would like to use, I can see that happening and working with minority children who are 3 and 4-years-old. But once they reach five and are still just walking around and not choosing challenging work, then I feel as a teacher you have to come in and get more direct. I feel that you have to give more direction to the minority children because once they get behind they can never catch up. Some kids do catch up, but minority kids do not catch up. So what happens to them when they don't catch up? They get further and further and further behind, and they feel less and less good about themselves, about their work (Teacher Interview 6).

Teachers at BPMC have continued to struggle with the pragmatic implementation of this aspect of the philosophy which demands that teachers facilitate learning in ways that demonstrate children's timely accomplishments. Several teachers agreed that "those difficult fives still need concentrated academic work which you can't do when you have 3 and 4-year-olds in the environment" (Teacher Interview 5). In contrast to practices at some independent Montessori schools, at BPMC 5-year-olds do not have afternoons in the classroom environment without the 3 and 4-year-olds. At BPMC, the 5-year-olds participate in a full school day sharing their mixed-age group environments with morning and afternoon half-day 3 and 4-year-old students.

The discussion around this issue has sought to "achieve some kind of balance of having this developmental program allowing the child to grow at his or her own pace but also being able to meet the standards" (Teacher Interview 7). Some suggestions made by teachers included instituting a program for some 5-year-olds. This option was noted by one of the teachers as follows:

There is nothing formal, but we have been talking about it. We have been talking about it for a long time. We are thinking right now of maybe having some type of formal program for those children, especially those 5-year-olds, who we feel are not progressing. We are still trying to figure out what works best for them. And also how we can continue to maintain the integrity of the program. Still make it Montessori (Teacher Interview 6).

This discussion concerning the teacher and child learning process for 5-year-olds has significance for students at other age levels also. One teacher felt that there is an important question which frames informal and formal interactions in the classroom environments.

So the question is how much do you adapt? What is Montessori or when do you say that the child isn't working here or how much do you change so that it is working for the child (Teacher Interview 5)?

In connection with this issue the program has received some comments from the school psychologist who was available to do preliminary screening of students referred by teachers. One teacher quoted the psychologist as suggesting that the teachers "were not intervening enough with individual kids" and that they "should be providing more structure" (Teacher Interview 5).

In her discussion of the varying views at BPMC on the nature of teacher-child relationships, one teacher felt that some differences occur in teacher motivation.

There are those teachers who are bringing Montessori into the public sector and that's really their mission. Montessori is the answer in and of itself. Children should come to it. Others see Montessori as a way to reach difficult children. So that is a whole different emphasis. And others are not there for that reason. They are there to do Montessori and get paid appropriately (Teacher Interview 5).

As noted earlier in this chapter, two key factors have been cited in the literature as having an effect on equity practices within schools. These factors are instructional technologies and school climate. The first part of this chapter focused on the specific instructional technologies which influence the daily learning processes at BPMC. These technologies have been described as Montessori learning relationships, Montessori learning activity, and Montessori teacher activity. These descriptors have been elucidated by Rambusch and Stoops (1992) and have been considered essential components of an authentic Montessori school. At BPMC each element has been influenced by school district and state requirements. These elements have been examined in this study for their effects on the learning experiences of minority and majority students.

School Climate

In conjunction with instructional technologies, school climate variables have been identified as significant components shaping internal processes and affecting equity. Commitment to clearly articulated goals and a perceived sense of community have been found to characterize effective schools (Brookover, 1978; Edmonds, 1979; Borba, 1984). School climate variables include student, teacher and principal's perceptions of each other's levels of expectations.

BPMC opened in September 1977 during a time of tremendous changes for the Buffalo School District. Phase I of the Buffalo Plan introduced eight new magnet schools that fall. Because they had a year to prepare for the opening of the school, BPMC staff had been educated through a Montessori teacher training program. All but one of the BPMC faculty members had been teachers in the district. Therefore, in addition to commanding the basic New York State teacher training and certification, they had experienced the renewal and redirection associated with Montessori teacher training. BPMC teachers had become conscious of a different philosophy and different methods for facilitating children's learning. Furthermore, they had been given the opportunity to create a new school community using this training. Also, the teachers had the support of parents whose children had participated in a 3 to 6-year-old Montessori program. The former director of this program assisted with training BPMC teachers, taught a morning 3 to 5-year-old class at BPMC and supervised teachers during the school's first years. As an experienced Montessori director, she influenced the school climate through her continuous advocacy of Montessori principles and

methods. In succeeding years, this teacher was designated the BPMC program coordinator.

All of these factors in addition to the leadership qualities of the principal contributed to a positive school climate which generated tremendous energy and clear focus during the foundation years of BPMC. Reflections upon the unique can-do spirit at BPMC were made during several interviews with those involved at BPMC from its origin.

The idea that anything was possible. The notion that we might be in a public school setting, but we could do anything. The sky is the limit in terms of thinking, deciding. And we do that still. Others are astounded at what we assume we have the right to do because they assume that they don't (Teacher Interview 4).

Other dynamics helped create a positive school climate during the early years at BPMC. Both teachers and parents partially attributed the high degree of positive community spirit to the relatively small size of the student body, approximately 200 families, the first year. Enrollment increased gradually so that new families were integrated into the school community. Also, fiscal resources were available to BPMC in the form of federal grants for magnet schools. Lastly, the force of the court order provided legitimacy to the school's mission and practices.

Undoubtedly these factors influenced the positive school climate existent at BPMC during its formative history. In addition the fact of the small staff size, 15 members during the first year, may be considered a significant influence on cohesion and community spirit. One of the staff has utilized the organizational analysis concept of "missionary configuration" to describe BPMC especially during its first years. She (Buermann, 1989) felt that key to the school's organization was the members' zealous

support of the Montessori model in the magnet program. This support of common philosophy and ideals generated a level of missionary zeal and purposefulness. Subsequently, this zeal affected a positive, dynamic school climate.

Other teachers have concurred with this assessment of the strong commitment to BPMC made by its first teachers and parents (Teacher Interviews 5, 7). Through the years student enrollment and staff increased. Presently, the staff numbers 65. A teacher commented that this increase in staff "has its pluses and minuses. You get new blood, but you also get people who don't own the project as those original people did" (Teacher Interview 5).

However, staff involvement has remained at high levels. One illustration of this positive commitment is staff participation in weekly meetings. These meetings are scheduled mornings before official school hours. Attendance is voluntary because these meetings supersede the requirements of staff duties. Administrators and teachers have reported that staff attendance rates have remained consistently high through the years (Administrator Interview 2; Teacher Interviews 4, 6).

Administrative and teaching staff as well as parents have commented upon the critical importance of the building leadership in the early years for creating a favorable school climate. One administrator judged the selection of the individual as principal to have been very important for BPMC.

She was the person we chose as the principal. And I have made my share of mistakes over the years. That was one of the best appointments I ever made. She was a brilliant and is a brilliant person, and someone that the parents really had faith in (Administrator Interview 1).

Parents also concurred in comments about the significant contribution of the first principal at BPMC toward a positive school climate. One parent spoke about the

principal's willingness to welcome all parents as partners in the work of establishing the Montessori magnet. This parent described her perceptions in the following way:

The associate superintendent for instruction was very receptive to having parental help and that translated at the next level down into an enormously open attitude on the part of the principal which I think was also part of her natural disposition. I mean she was a very flexible person who was not frightened to involve people who were not professional educators. She was a person secure enough in her own self esteem and her own sense of professional competence that she was quite happy to accept the help of volunteers like me who came in with a desire to give a lot of time and energy but without any professional background in education (Parent Interview 8).

In addition to the influence of these factors, principal, parent and staff qualities, formal measures affecting school climate were instituted during the first years of the Montessori magnet. In recognizing the potential problems associated with the racial integration of the school's enrollment, the school district and the Court prompted the formation of human relations committees at each magnet school. The committee at BPMC was a racially integrated group composed of parents and staff. The group met regularly, approximately every two months, to discuss ways to foster and develop community at BPMC (Parent Interview 8, Teacher Interviews 4, 5). Also, in-service sessions were conducted for staff at BPMC. These sessions focused on issues of racism and prejudice as well as the study of African history. Both of these activities, human relations committee discussions and staff in-service training, sought to build positive attitudes and relationships among all ethnic groups at BPMC.

BPMC initiated several activities designed to foster positive school climate and community among all its members. These activities had the financial support of federal magnet school monies. Key activities noted by staff and parents included occasional curriculum workshops for parents, special cultural events, gym and swim

nights, parent work evenings, school community outdoor workdays on Saturdays, and family camping trips. The success of these activities in fostering community and positive school climate may be understood through the descriptions of the participants.

A key activity which promoted parental involvement in the life of the school community was the institution of several evenings each year for parents to become more informed about their children's learning materials. A parent who participated in these events recalled them as follows:

We had evenings where staff would basically give parents lessons on the curriculum. They would lay out all the materials, say having to do with math, covering the entire range. Then parents could walk down the hall and get lessons at each of these different stops . . . and at the same time that promoted community and sharing and parents could talk to each other about what their kids were doing in common. One very successful part of these meetings was having kids do presentations. We had kids do story telling. We had kids do presentations on Africa and on the history of China. There were some very sophisticated things that the kids were able to do (Parent Interview 8).

The school was conscious of its responsibility to involve African American parents in these evenings. Administrators, parents and staff remarked upon the emphasis on teachings about Africa through African history and cultural materials. These evenings have evolved into an African market place which is celebrated during one week each year. In the words of a parent:

People see it. People who do not come from African American backgrounds have a chance to learn about the history of Africa and civilizations there. I'm sure that this makes a difference in terms of their perceptions. And for the kids who are African American, of course, it's an invaluable part of their heritage (Parent Interview 8).

Another activity which fostered family involvement and positive community was school sponsored gym and swim nights. During these evenings the school pool was open and a paid lifeguard was on duty. The school gym was open for basketball.

Active participants in the swim program included the principal, staff members and their children, parents and students. Reflecting upon the significance of these gym and swim nights, a parent stated:

There was a realization that many African American families, many of the adults in the families, had poor experiences in school, had certain reservations about coming to the school building. These kinds of social events did a great deal, I think, to making them feel comfortable in that setting. Somehow people being in the same swimming pool together is really, I think, the ultimate expression of being willing to share and accept other people. And changing together in the locker rooms under these horrendous conditions. It's very personal, and it broke down barriers in a way that hours of conversation could never have done (Parent Interview 8).

Financial support for parent evenings at BPMC promoted the involvement of all parents especially parents who may not have afforded the expenses associated with child care and transportation costs. During the school's first years there was money available for these two expenses, child care and transportation. This resulted in greater numbers of minority parents participating in work evenings "where parents came together to make materials for the school" (Parent Interview 8). In addition to producing learning materials for the classroom environments, these evenings provided the opportunities for parents to become involved in the school community.

Another opportunity for developing community occurred during the outdoor clean-up projects. On several Saturdays families worked together to remove the debris from the area surrounding the school building and to plant grass, trees and flowers. Subsequently parents formed a playground committee. Parents worked for several years to raise the funds to build the playground. They succeeded in involving the school community, including the students, in the design of the playground.

Family camping was another activity designed to promote community and positive school climate. Family camping has been described as highly successful by parents and teachers. It was considered one of the school's most creative relationship-building activities. Two or three times a year the school rented a lodge in the woods owned by Buffalo State College. During the first years, there was no charge to BPMC families for camping. In later years, there was a nominal camping fee which was waived for families who could not afford the fee. The importance of these camping overnights may be understood through the descriptions of one of the participating parents.

It was a very pleasant setting in the woods yet not so rustic that people who were opposed to camping would not go, indoor plumbing and a place to keep warm at night. We would go and spend two days and an overnight and do all kinds of activities together: fishing, hiking, playing ball, frisbee. At night square dancing, singing. All the kinds of usual things people would do in trying to create a group spirit, working together in the kitchen, preparing the meals, doing the cleanup, staff as well as families and staff families. There was a genuine sense of community there that I think was powerful and very important in getting the school off on the right foot (Parent Interview 8).

Many of these family and community activities have been eliminated or reduced because of the reduction in funds available for magnet schools. The school district provides only five evenings during the school year when the school building is open for activities. Family camping has been eliminated due both to lack of funds and unavailability of the lodge. Overnight camping has continued for students starting with students in the 7 to 9-year-old level. The current camping fee is \$15 per child. BPMC has provided the fee for children whose families cannot pay the fee. As noted by one teacher, "We've always had this policy that every child should go, and we'd

either pay the fee out of our pockets, or we invited parents to pay double fees" (Teacher Interview 5).

The willingness on the part of the staff to assist individual students in times of particular need may be considered an indicator of community and positive school climate. Another instance of this supportive action by staff occurred just prior to an eighth grade trip to Washington, D.C. Students financed the trip, at least partially, through their own contributions. As recounted by one parent, a student's money was stolen by a family member two days before departure. The amount was approximately \$150. This parent recalled that "It didn't take half the day to put that money together from the staff. As soon as it became known there was no question that this was the right thing to do" (Parent Interview 8).

A teacher commented on the supportive atmosphere which characterized BPMC especially during its early years. One of the activities which created community spirit and positive school climate was the daily, morning meeting. This teacher believed that the whole school community, principal, staff, students, parent volunteers, sitting together in the alcove for sharing and singing greatly enhanced positive attitudes. She also lamented the cessation of this activity by stating, "I think we lost a little bit of ourselves when we stopped that" (Teacher Interview 7).

An annual event which was initiated during the school's first year and continued for many years, through 1991, was the preparation and celebration of the Thanksgiving feast (Teacher Interviews 5, 7). All members of the school community were involved in various culinary activities such as cutting vegetables and stuffing turkeys. One teacher judged that this was one of the activities which strengthened the

extended family identity at BPMC. She stated, "It was an extended family and that's the way the children saw the school, especially in the early days" (Teacher Interview 7).

Teachers who have spoken warmly in interviews about the community spirit and positive school climate have recognized various developments which have influenced these school qualities through its history. Increase in size, although undertaken gradually, has resulted in a large student enrollment spanning ages 2 years 9 months through 13 years. One teacher stated her perceptions in the following ways:

Sometimes I have the feeling that we are three different schools. That's a negative. We have downstairs, the youngest children, the middle aged children and the oldest children. Sometimes I feel we have different standards for our young children than for our older children. Some adults have the attitude that 13-year-olds are going through hormonal bombardment, making it an excuse for negative behavior (Teacher Interview 7).

In order to address some of the issues faced by staff and students at upper age levels in an integrated student body, the school recently sponsored discussion groups for 11 to 13-year-olds. Students have the option to become part of the discussion group or not. The discussions focused primarily on racism and stereotyping. In assessing responses to these discussions, one teacher reported that there was some anxiety among the staff about "letting kids discuss these things openly" (Teacher Interview 5). There were occasions when students accused different teachers of being racist. This teacher noted that at a recent graduation ceremony, one of the African American students who had begun at BPMC when she was 3-years-old, spoke and said, "you know sometimes I said things that I am really sorry for, you know attacking people. You have to understand. I'm just a kid" (Teacher Interview 5). Staff and

students continue to assess the value of these discussion groups in addressing student attitudes about racism which affect school climate.

Summary

Data presented here addressed the research question, how do Montessori program processes affect majority and minority students at BPMC. BPMC philosophy, instructional technologies, and school climate have been presented in descriptive data reflecting the school's history.

Montessori philosophy has provided the educational foundation at BPMC from its inception. This philosophy shaped the development of the school as a Montessori school by defining the admissions policies which opened this public school with an enrollment of predominantly preschool aged children, 3 to 5-years-old. Admissions policies guaranteed the incremental growth of BPMC by defining the 3-year-old level as the primary entry level to BPMC.

Montessori philosophy described the school's beliefs concerning the nature of the child and the child's capacity for learning. Philosophy emphasized the child-centered approach of the Montessori method and the role of the teacher as facilitator of the child's learning. At BPMC this philosophy was honored by each teacher through his/her participation in Montessori teacher training and was shared with the school's parents.

Instructional technologies at BPMC have been viewed through descriptors elucidated by Rambusch and Stoops (1992) in their guide, The Authentic American Montessori School. Three descriptors, BPMC learning relationships, BPMC learning

activity, and BPMC teachers' activity have been considered in the context of their relationship to the public school district policy and practice.

Data suggested that elements of these three Montessori descriptors typically characterized the program processes of students at the younger age levels. School district policies and practices exerted influences at the upper age levels in the areas of curriculum, assessments, compensatory programs, summer school recommendations and graduation requirements. These influences affected different levels of participation for majority and minority students. For example, most of the students recommended for summer school have been minority students. Also, most of the participants in Chapter I have been minority students.

Data presented as indicative of the BPMC school climate through its history suggested that attention to the creation of community was a primary activity. Parents, staff and students were involved in a wide variety of activities which were designed to build positive attitudes and relationships among all ethnic groups. During the early years at BPMC, some of these activities received financial support through magnet monies. Lack of funds and other constraints appear to have reduced the number and variety of these activities in more recent years.

Parents and teachers agree that there continues to be a high level of involvement by parents in the school. One teacher noted that "parents know that you are going to listen to them and that they are welcome any time" (Teacher Interview 6). Interview comments agree with the perception of one parent, "there was great effort made to be equitable and respectful and by and large I think it succeeded" (Parent Interview 8).

Outcomes at BPMC

How successful is BPMC in implementing its mission as a Montessori magnet school? This question may be considered through a presentation of several elements related to outcomes. These elements include numerical data collected by the Buffalo Public Schools. Numerical data indicative of the numbers and/or percentages of students participating in the free lunch program as well as daily average attendance rates and transiency rates provide significant information related to outcomes.

Student achievement as measured by standardized test scores and reported by the Buffalo Public Schools provides an indication of the effectiveness of BPMC as a Montessori magnet school. In addition several elements unique to BPMC such as numbers of graduates from eighth grade and numbers of students participating in compensatory programs further define the school's adherence to its mission. Perspectives offered during interviews provide context and meaning for some of the quantitative data. As posed in this study the research question asked: what are the outcomes for majority and minority students at BPMC.

Student Demographic Data

Data reported by the school district compares the percentage of free lunches served at BPMC with the percentage served in the district. This data is presented in Table 5.

As Table 5 indicates for each of eight years, 1982-1989, BPMC enrolled a high percentage of students participating in the free lunch program. Whereas the district's total enrollment of magnet and non-magnet schools exceeded BPMC in its annual percentages of participants in the free lunch program, these percentage differences

range from less than 1% in 1987 to 13.4% in 1982. Although BPMC consistently had lower percentages of students participating in the free lunch program, the school definitely has enrolled high percentages of students from low income families. BPMC genuinely reflects the socioeconomic levels of all students enrolled in the district. BPMC has not enrolled a socioeconomically selective student body.

Table 5
Percentage of Free Lunches Served*

<u>Year</u>	<u>BPMC Percentages</u>	<u>District Percentage</u>
1982	76.3	89.7
1983	85.3	91.2
1984	82.6	87.6
1985	80.6	85.5
1986	75.4	82.6
1987	80.7	81.5
1988	71.6	81.0
1989	62.0	75.2

*Percentage of free lunches served, on average, is a percentage of total lunches for the school year.

Source: Annual Report on Testing, Buffalo Public Schools.

Another element which is considered a significant outcome measure is the school attendance rate. As Table 6 shows the percentage of students in attendance at BPMC compared favorably to the percentage reported for the school district. For each year reported, 1982-1989, BPMC showed higher attendance rates, approximating two to four percentage points.

Generally, the attendance rate at BPMC may be described as high. In its reporting system of attendance rates as well as achievement and other data, the Buffalo Public School District has not analyzed or reported its data on the basis of ethnic

Table 6

Percent of Students in Attendance

<u>Year</u>	<u>BPMC Percentage</u>	<u>District Percentage</u>
1982	92.5	89.8
1983	94.5	90.6
1984	96.1	91.5
1985	95.9	91.6
1986	95.5	91.8
1987	95.2	91.7
1988	95.1	92.4
1989	94.1	92.0

Source: Annual Report on Testing, Buffalo Public Schools

groups. In comments volunteered to the researcher, an administrator explained that the School Board did not request information based on ethnic groups. Therefore the evaluation and research department did not aggregate data in this way (Observation Journal, July 1991).

Transiency rates are reported annually by the school district. Data in Table 7 show that the rate of transiency for BPMC ranges from 4.1% to 20.1%. The average transiency rate for the eight-year period, 1982-1989, is 11%.

The BPMC transiency rate compares favorably to that of the district. The average rate for the district elementary students during the 1982-1989 period is 26%. This average was calculated based on transiency rates reported in the Buffalo Public Schools' document, Report on Pupil Transiency. BPMC annually has a more stable student enrollment with a high percentage of its students, on the average 89%,

Table 7

BPMC Transiency Rate*

<u>Year</u>	<u>Enrollment</u>	<u>Tranciency Percent</u>
1982	509	20.1
1983	526	7.0
1984	536	12.3
1985	542	12.3
1986	580	12.1
1987	590	9.6
1988	593	4.1
1989	567	12.9

*Transient pupils are defined in this report as pupils who enter a school any time after the fifth week of the school year and as pupils who leave a school any time after the fifth week but prior to the close of the school year.

Source: Report on Pupil Transiency, Buffalo Public Schools.

completing the full school year. What is not evident from this data is the transiency rate of minority and majority students because the district does not aggregate data based on ethnic groups.

This review of data reported for BPMC for an eight year period (1982-1989) demonstrated the school's history in measures of attendance, transiency, and percentages of students participating in the free lunch program. Data indicated higher levels of attendance and lower levels of transiency for BPMC students compared to the district. BPMC enrolled students from low income families in significant percents as indicated by the percentages of students participating in the free lunch program.

Achievement Data

Achievement data reported by the district contribute further information about the history of BPMC. As Table 8 shows, 1982 achievement scores for BPMC students in reading range from a low of 33.3% (grade 3) scoring above the mean to a high of

80% (kindergarten) scoring above the mean. BPMC students' scores compare favorably to the district scores for each grade level with the exception of grade 3. District scores show a higher percentage of grade 3 students scoring above the mean by eight points.

In math achievement (1982) the percentage of BPMC students scoring above the mean ranged from 33.3% to 83.1%. As Table 9 shows, BPMC students scored a higher percentage above the mean than district students at only three grade levels, kindergarten, grades 1 and 2. The high percentage of kindergarten students scoring above the mean in reading, 80%, and math 83.1%, may reflect the salutary effects of two years preschool education at BPMC.

Table 8

1982 Achievement Percent Above the Mean

READING			
<u>Grade</u>	<u>Number</u>	<u>Percent BPMC</u>	<u>Percent District</u>
K	60	80.1	59.7
1	62	71.1	53.2
2	64	51.2	48.7
3	60	33.3	41.0
4	46	45.7	45.8
5	27	66.7	50.1
6	23	78.3	63.7

MATH			
<u>Grade</u>	<u>Number</u>	<u>Percent BPMC</u>	<u>Percent District</u>
K	59	83.1	48.2
1	62	61.3	58.2
2	64	65.6	62.2
3	60	33.3	57.0
4	46	39.1	57.0
5	27	59.3	63.8
6	23	60.9	78.9

Test: Metropolitan Achievement Test

Source: Annual Report on Testing, Buffalo Public Schools.

Table 9

1983 Achievement Percent Above the Mean

READING			
<u>Grade</u>	<u>Number</u>	<u>Percent BPMC</u>	<u>Percent District</u>
K	62	88.7	63.0
1	57	63.2	55.2
2	72	51.5	49.3
3	64	51.5	40.3
4	56	42.8	45.2
5	44	68.2	50.3
6	28	78.6	61.4

MATH			
<u>Grade</u>	<u>Number</u>	<u>Percent BPMC</u>	<u>Percent District</u>
K	62	83.9	50.1
1	57	84.8	62.5
2	72	55.6	61.5
3	64	54.7	56.7
4	56	57.0	57.9
5	44	63.6	64.2
6	28	85.7	78.5

Test: Metropolitan Achievement Test

Source: Annual Report on Testing, Buffalo Public Schools.

Achievement data reported for 1983 in reading, Table 9, indicate that BPMC students scored above the mean in a range of 42.8% to 88.7%. Only at the grade 4 level did BPMC students score approximately 2 percentage points below the district percentages. Whereas BPMC students' scores compared favorably to the district students' scores, Table 9 shows instances of more than half the students scoring below the mean. For example 35 grade 2 students, 32 grade 3 students and 33 grade 4 students scored below the mean. Numbers of students were derived from percentages shown in Table 9.

Math achievement (1983) as indicated in Table 9 shows a range 54.7% to 85.7% above the mean for BPMC scores. Percentages above the mean for grades 3, 4 and 5 were slightly lower for BPMC scores than for the district scores.

The Metropolitan Achievement Test was the measurement instrument used through 1984. As Table 10 shows, in 1984 BPMC students scored in a range of 100% to 56.2% above the mean. For all grades except grade 2, BPMC scores reflected higher percentage points above the mean than the district's scores.

Table 10

1984 Achievement Percent Above the Mean

READING			
<u>Grade</u>	<u>Number</u>	<u>Percent BPMC</u>	<u>Percent District</u>
K	47	80.8	73.7
1	56	66.1	63.7
2	62	58.2	60.7
3	51	64.7	44.8
4	57	56.2	47.2
5	45	62.3	54.0
6	37	89.2	64.5
7	23	78.4	50.6
8	8	100.0	60.6

MATH			
<u>Grade</u>	<u>Number</u>	<u>Percent BPMC</u>	<u>Percent District</u>
K	48	79.1	59.6
1	56	62.5	69.6
2	62	71.0	71.8
3	51	76.4	67.6
4	57	64.8	63.9
5	45	51.1	70.8
6	37	83.8	81.6
7	23	78.3	66.4
8	8	75.0	70.8

Test: Metropolitan Achievement Test

Source: Annual Report on Testing, Buffalo Public Schools.

In math achievement BPMC scores ranged from 83.8% above the mean to 51.1% above the mean. As Table 10 shows, for three grade levels, district students scored at higher percentage points above the mean. As Tables 10 shows, 1984 was the first class of eighth grade students at BPMC.

From a review of this data, it may be noted that BPMC students scored at higher percentages above the mean than district students in the majority of instances. However, there are examples of higher percentages above the mean by district students in reading and math achievement. What this data does not emphasize is the percentage of students scoring below the mean. Nor does this data provide information to the BPMC community and the district about their effectiveness in educating minority students. This data raises a question about how effective BPMC is in meeting the educational needs of its minority students. The data invites speculation about which students are not achieving at or above the mean.

An illustration of this speculation and the subsequent vulnerability of BPMC to undocumented judgments was underscored during an interview with one of the legal staff.

There are charges that Montessori children, especially minority children, do not learn to read. These are rumors that I've been hearing through the years. There are a number of black administrators as well as black parents who have come to the conclusion that Montessori does not work. That children do not learn to read in the Montessori program as well as they do in other programs. That this is particularly true for black children (Plaintiffs' Legal Staff Interview 3).

This legal staff member expressed the belief that the school district needs to "know where it is succeeding and where it is not succeeding" (Plaintiffs' Legal Staff Interview 3).

Achievement data which show large percentages of students scoring below the mean in reading and math but do not indicate scores by ethnic group do not provide strategic information which would be useful in planning, monitoring and evaluating. Patterns of racial disparity in achievement may be one indicator of inequities within a school.

Other achievement data which compared BPMC students' scores with district scores include the New York State Pupil Evaluation Program (PEP Test). Achievement tests in reading, math and writing are administered annually in May to students in grades 3, 6 and 5 as shown in Table 11. Results of the tests are indicated as a percentage above the state reference point. The state reference point is the score below which a student is deemed in need of remediation for that subject.

Results of 1988 PEP Test indicate that more than 80% of BPMC students scored above the reference point in reading; more than 96% scored above the reference point in math; and 100% scored above the reference point in writing. PEP Test scoring of the writing section only is done by the teachers. Consequently, this scoring may reflect bias. BPMC results compared favorably to district results on all but one measure. Information from Table 11 showed that 20% of sixth graders who took the reading test, eight students, scored in need of remedial work. Seven grade 3 students scored in need of remediation for reading.

Results from the 1989 PEP Test as shown in Table 12 indicated that a greater percentage of BPMC students scored below the reference point than the district percentage in all instances of the test. Eighteen third graders and 11 sixth graders scored in need of remediation for reading. Math scores show 8 third graders and 6

Table 11

1988 New York State PEP Program
Percentage Above State Reference Point*

READING			
<u>Grade</u>	<u>Number</u>	<u>Percent BPMC</u>	<u>Percent District</u>
3	50	86.0	80.3
6	41	80.5	81.9

MATH			
<u>Grade</u>	<u>Number</u>	<u>Percent BPMC</u>	<u>Percent District</u>
3	51	96.1	95.5
6	45	97.8	93.2

WRITING			
<u>Grade</u>	<u>Number</u>	<u>Percent BPMC</u>	<u>Percent District</u>
5	41	100.0	89.8

*State Reference Point is that score below which a pupil is deemed in need of remediation for that subject.

Source: Annual Report of Testing, Buffalo Public Schools.

sixth graders in need of remediation for math. Five fifth graders scored below the reference point in writing. Numbers of students were derived from percentages shown in Table 12.

As shown in Tables 11 and 12 the number of students taking the PEP Tests, 1988, 1989, in grades 5 and 6 is fewer than in grade 3. Total numbers of students in the upper levels have been affected by natural attrition; students move or transfer to other schools, for example, City Honors. Also, participants in the special education program, may not take the PEP Tests.

This study reviewed PEP Program records for 1990, 1991 and 1992 as reported by the school district administrator of evaluation. On the reading test, the numbers of

Table 12

1989 New York State PEP Program
Percentage Above State Reference Point*

READING			
<u>Grade</u>	<u>Number</u>	<u>Percent BPMC</u>	<u>Percent District</u>
3	60	70.0	82.0
6	38	71.1	86.0
MATH			
<u>Grade</u>	<u>Number</u>	<u>Percent BPMC</u>	<u>Percent District</u>
3	57	86.0	96.5
6	36	83.3	96.2
WRITING			
<u>Grade</u>	<u>Number</u>	<u>Percent BPMC</u>	<u>Percent District</u>
5	45	88.9	91.9

*State Reference Point is that score below which a pupil is deemed in need of remediation for that subject.

Source: Annual Report of Testing, Buffalo Public Schools.

students who scored below the reference point in grades 3 and 6 ranged from three to nine students. On the math test, the numbers of students who scored below the reference point, grades 3 and 6, ranged from one to four students. In the three years of testing, one grade 5 student scored in need of remediation for writing.

Taken together, five years of PEP Program tests, 1988-1992, showed that each year a small number of students scored in need of remediation for reading and for math. However, assertions based on this achievement data are not specific to majority and minority students. Levels of achievement, in particular low achievement, have been addressed by the school.

The BPMC Comprehensive School Improvement Plan (May 1990) prepared by a committee whose membership included teachers, administrators and parents, designated as a primary objective the need to improve third and sixth grade PEP test scores. A secondary objective, "to raise the stanine levels of 'at risk' students in our program," was also named as a priority (BPMC Comprehensive School Improvement Plan, May, 1990). In addition the plan sought "to identify children informally who have a pattern of academic and/or behavioral problems to work with adults" (BPMC Comprehensive School Improvement Plan, May, 1990). Activities designed to forward these objectives required implementation by all BPMC adults including administrators, classroom teachers and aides, Chapter I teachers and aides as well as resource room teachers. Objectives and activities in the plan omit references to equity in achievement levels for majority and minority students.

Significant Outcomes

Compensatory programs, Chapter I programs and special education programs, have been continuous at BPMC since their inception in 1980. A sampling of records which indicated student participation in Chapter I over two years appears in Table 13. Numbers in Table 13 showed that minority students participated in Chapter I programs in greater percentages than majority students. This data documented perceptions shared by staff during interviews.

In addition to remedial help offered for students through the Chapter I and special education programs, BPMC applies an informal retention practice. A child beginning as a 3-year-old at BPMC takes 11 years to complete the program and graduate from eighth grade. There are occasions when the staff recommends that a

Table 13

BPMC Students Eligible for Chapter I

1989			
<u>Grade</u>	<u>Majority Students</u>	<u>Minority Students</u>	<u>Total Students</u>
1	4	9	13
2	9	9	18
3	2	10	12
4	6	8	14
5	0	9	9
6	2	6	8
7	1	8	9
8	<u>1</u>	<u>4</u>	<u>5</u>
	25	63	88

1991			
<u>Grade</u>	<u>Majority Students</u>	<u>Minority Students</u>	<u>Total Students</u>
1	0	9	9
2	13	23	36
3	8	19	27
4	9	18	27
5	7	10	17
6	2	12	14
7	6	15	21
8	<u>0</u>	<u>9</u>	<u>9</u>
	45	115	160

Source: BPMC Chapter I records.

child take another year at one of the mixed-age levels. This practice was recounted by one of the teachers and confirmed by others.

It's not documented but we tend to hold kids back at certain points. Seventh grade is a point and very often these are minority kids. It's generally the minority kids who need extra time. We determine these students can do it given more time. So often that's a pattern for us. The kids we keep at the 5 to 7 year level for an additional year, again those tend to be minority kids (Teacher Interview 5).

Because of the mixed-age groups at each level, this retention practice seems to be implemented in ways which create fewer peer pressure difficulties for the child.

For example, an administrator noted that "we sometimes keep a 6-year-old in the 3 to 5 level; we keep an 8-year-old in the 5 to 7 level; and we don't say that the child has repeated a grade" (Administrator Interview 2).

Whereas the BPMC community recognized the staying power of working with siblings and whole families, they also have described a drift toward the City Honors. Because City Honors Comprehensive School has developed a strong reputation for quality, many parents seek this program as an outcome for their Montessori children. However, admission to the high school at grade 9 is very limited, with fewer than 10 available places some years.

In order to assure admission for their children, many BPMC parents apply to City Honors for grades 5, 6 or 7. One BPMC parent found this practice unfair since the high school truly is not open to admissions at the ninth grade level. For some parents it means a choice between City Honors and Montessori.

Eighth graders from City Honors and the gifted and talented school are automatically accepted at City Honors High School. They don't have to take the admissions test for ninth grade. A lot of children change in seventh grade because it is easier to get in. And then they don't graduate from Montessori which is the reason they are probably eligible for City Honors. I think it's unfortunate (Parent Interview 9).

This BPMC parent felt strongly about continuing her children in the Montessori program. She described her decisions in the following way:

Any of my children could have gotten into City Honors, if they had gone earlier. They are very intelligent. They had excellent grades. But this is the school that I credit. I love it. And I hope that it always will live as long as the interest is there (Parent Interview 9).

One of the BPMC staff commented upon the lack of fairness in the City Honors admissions practices. She noted that City Honors High School reserved places

for all students graduating from the gifted and talented program. Originally, there had been discussion about City Honors reserving places for Montessori students. She judged that "in a way it's unfair to save places for the gifted and talented, and it's unfair to save places for Montessori kids. That's very inequitable" (Teacher Interview 6).

Of the BPMC students who apply for fifth or sixth grade at City Honors, most are majority students. An explanation for this was offered by a staff member.

It is mostly majority students who go to City Honors. I think that happens because as a parent you have to really know how the system works, be knowledgeable about the different programs. Also, it's good if you know someone. So with some of the minority parents already they are at a disadvantage if they depend solely upon the system . . . but if you have information, a lot of information, then you have more of a chance for your child to get into these different programs (Teacher Interview 6).

Interview data support the assertion that mostly majority students transfer to City Honors for fifth and sixth grades. Records are not available to document this trend.

Another indicator of outcomes in the history of BPMC relates to graduation and admission to high schools. District policy regarding graduation requirements was altered in 1988. Prior policy allowed students to graduate from eighth grade and receive certificates of attendance in lieu of academic diplomas. With the institution of the altered policy, a student is required to pass his/her academic subjects in order to qualify for a diploma and, consequently, to participate in eighth grade graduation ceremonies. This policy has affected a small number of students at BPMC through the years. One teacher recalled vividly the first implementation year of the diploma requirements.

That was an awakening, the first time we implemented that . . . we had the hardest time with it. They couldn't come to the ceremony. For us that was such a rite of passage. But we stuck by it and that was the right thing to do . . . The first year it was heartbreaking (Teacher Interview 5).

Records showed that from 1989 to 1992 five students were excluded from graduation ceremonies because they had failed to meet graduation requirements. These were female minority students: two students in 1989; one student in 1990; two students in 1991; no students failed to meet requirement in 1992. Also, records indicated that students who had failed participated in Carnegie Summer Programs in order to meet requirements. They earned academic diplomas the following September.

The first students to complete eighth grade at BPMC were the 1984 graduating class. Data collected from graduation and attendance records are shown in Table 14.

Table 14

BPMC Graduates

<u>Year</u>	<u>Majority</u>	<u>Minority</u>	<u>Total</u>
1984*	8	2	10
1985	10	4	14
1986	13	12	25
1987	17	18	35
1988	19	11	30
1989	16	22	38
1990	23	10	33
1991	18	10	28
1992	13	21	34

*Class of 1984 is the first class of graduates from eighth grade at BMPC.

The first two graduating classes, 1984, 1985, showed smaller numbers of graduates because their students constituted the first class of twenty-six 6 and 7-year-olds in

1977. Other graduating classes range in size from 25 to 38 students. Six of 9 classes graduated more majority than minority students as shown in Table 14.

Admission to high schools may be considered another significant element related to outcomes. Guidance counselors assigned to the school meet with BPMC eighth grade students. Counselors are in the position of influencing the application choices made by students. BPMC has given a directive to the guidance counselors which primarily states "that minority students should not be directed to certain high schools . . . they should be able to apply to any high school. No school should be unavailable to them" (Teacher Interview 6).

A staff member stated that she believed that the "guidance counselor should not limit children because of their academic record or because of their past performance as to what high school they should apply to" (Teacher Interview 6). Staff have observed that students frequently apply to the schools where their friends have applied.

As recounted by several parents and a former BPMC student interviewed for this study, BPMC students have made successful transitions to various high schools including schools with competitive admissions criteria. One parent noted that "both of my children wrote about Montessori in their college admissions essays. This school has made an enormous impression upon them" (Parent Interview 8). Another parent recounted that her adult son, a BPMC graduate, stated that he would send his children to BPMC (Parent Interview 9). However, this judgment may not have occurred for every participant. One parent expressed her reservations in the following ways:

It has been universally acknowledged as a very successful school for parents who choose a nontraditional form of education. It's not for everybody. It took me a long while to realize that. At the start I was so enthusiastic myself that it was obvious to anybody that this was the

way children should learn. That turned out not to be the case. And the school had tried from the very start to make sure that parents understood what this method meant because it was in nobody's interest to have people come with wrong conceptions, and then waste everyone's time, and then disrupt the child's learning (Parent Interview 8).

Summary

Data presented here addressed the research question, what are outcomes for majority and minority students at BPMC. Student demographic data, achievement data and other significant outcomes have been presented within the context of the school's history.

Student demographic data has been collected and reported in various documents published by the Buffalo Public Schools. These publications indicated that BPMC annually enrolled approximately 50% majority and 50% minority students.

Quantitative data indicated a high level of enrollment of BPMC student participants in the free lunch program. Reported attendance rates and transiency rate compared favorably to the district rates. This data contributed information as to the total enrollment at BPMC. However, data is not reported by ethnic group. Data reported by ethnic group would contribute significantly to further understanding of the school's relationship to minority and majority students.

Achievement data, customarily considered an important indicator of outcomes, also is not aggregated or reported by ethnic group. Consequently, both BPMC and the school district have been subjected to undocumented speculation about the lack of achievement of its minority students. However, during interviews, staff conceded that some minority students are not achieving on standardized tests. Achievement test scores, Metropolitan Tests and PEP Program Tests, have shown that most students

scored above the mean and above the state reference point. Also, a small number of minority students who failed academic subjects are referred to summer school.

BPMC has offered compensatory programs, for example, Chapter I and programs for children having special needs. Participants in these programs tend to be minority students. Also BPMC informally retains students for an extra year at one of several mixed-age levels. Most of these students have been minority students. Additionally, district graduation requirements recently implemented at BPMC have resulted in students' failure to earn academic diplomas in June. These minority students have attended Carnegie Summer Programs. They have been awarded diplomas in September.

Taken together, the Montessori program, compensatory programs through Chapter I and summer school programs, have contributed to successful outcomes for all students completing eighth grade at BPMC. Records indicated that some students at each level, primarily minority students, have profited from compensatory programs. It became clear during the study that the program needs and outcome levels for minority students have not been formally addressed in the language of equity which specifically recognizes minority students and records their achievement levels for purposes of improving programs. There appear to be at least two reasons for this. The public school district does not model the language of equity in its reporting of data. Also, Montessori philosophy and method are characterized by profound respect for the individual child. This focus on the individual may preclude discussion about outcomes for majority and minority students.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The focus of this research was the historical relationship of Bennett Park Montessori Center to equity. Descriptions of the equity concept, magnet schools, and Montessori magnet schools were products of the review of the literature. Implementation policies and practices which affect majority and minority students provided the basis for this research. The study focused on questions of the school's origins, access and selection of its enrollments, program processes, and outcomes. It described policies and actions implemented during the history of BPMC from the perspectives of individuals involved in the development of the Montessori magnet as well as from data in relevant documents.

Question one asked what are the principal aspects of equity which describe magnet and Montessori magnet schools. Data derived from the literature review indicated three significant aspects of equity. These have been described as selectivity/access to magnet schools, program processes which characterize magnet schools, and outcomes for students.

The second question addressed the critical influences which shaped the founding of Bennett Park Montessori magnet school. Critical influences have been classified in this research as the legal foundation and community involvement. As presented in these pages an extraordinary level of cooperation characterized the involvement of the Court, school administrators, community, and parents.

Citations from Judge Curtin's decisions demonstrated the Court's commitment to the participation of parents, teachers, and community leaders in the complicated process of creating a desegregation plan. Judge Curtin's rejection of a comprehensive mandatory bussing plan was critical in allowing the community to create its own desegregation plan.

Throughout the planning process, the Court held the defendants to high standards of community involvement. The Court also set criteria specifying that magnet enrollments be integrated in order for the magnet schools to open. This requirement prompted extraordinary informational campaigns promoting the magnet schools throughout the city.

Unique in this community involvement was the remarkable work of a nucleus of Montessori parents committed to school environments reflecting racial diversity as well as Montessori educational methods. These parents cooperated closely with school administrators and community leaders in planning and promoting the Montessori magnet school.

From the perspective of participants interviewed for this research, Buffalo schools supervisor and BPMC's first principal was notable in promoting a high level of cooperation and involvement among parents, teachers, and community. She was described as a significant influence during the planning stages of the Montessori magnet as well as during her tenure as principal.

Question three of this research involved the selectivity patterns which determined the enrollment of majority and minority students at BPMC. Historical and

current patterns have been described by participants involved with BPMC from its inception as well as by documents related to access and selectivity.

As depicted here, several conditions related to the access and selection process for BPMC have evolved during the school's history. Changes have occurred in marketing patterns and methods of selection for BPMC and other magnets. BPMC benefitted from the aggressive marketing strategies organized to promote the new magnet schools in September 1977. Media campaigns publicized BPMC and other magnet schools in majority and minority communities. Extraordinary informational campaigns may be considered positive actions toward creating equitable enrollments in the city's magnet schools. However, distribution of information through the media about BPMC and other magnet admissions has diminished decisively. As a result many parents are not aware of magnet options and applications procedures.

Annually the magnet placement office has received more applications than there are places at BPMC. This excess of applications appears to have contributed to complacency on the part of the school district with respect to its on-going marketing responsibilities. Also, district administrators may reason that media publicity would result in increased numbers of applications and increased demand for magnet places from disappointed parents. In addition the complexities of the procedures controlling magnet admissions may not lend themselves easily to explanation, and thus may have a tempering influence on media publicity.

Methods of selecting students for BPMC and other magnets changed after the school's first three years of enrollment. Concerns for racial balance obtained at sending schools prompted the Court to designate preferred majority and minority sending

schools. Students from these school attendance areas have been given preference for places in magnet schools. These designated preferences resulted in a controlled lottery which is conducted in accordance with complex magnet placement procedures. These procedures may be judged as increasing equity because they promote integration at attendance area schools as well as magnet schools. However, specific features of the selection process have not been explained to parents. From the perspectives of those interviewed, this has resulted in increased feelings of unfairness about the access process on the part of many parents.

Other factors related to selectivity patterns portrayed in the study included eligibility requirements, transportation, and school location. Three conditions defined eligibility for the first enrollment at BPMC in 1977. There was an age requirement, a preference for Montessori preschool experience, and a preference for siblings. Given the fact that more than 900 applications were filed for only 261 places, the effect of the combined preferences may have had considerable impact on an applicant's chances in the lottery.

In succeeding years, age eligibility of 2 years 9 months became the primary requirement in the enrollment of each new class of sixty 3-year-old children. The early entrance age to BPMC combined with the mid-February magnet application filing date may favor the most resourceful and forward-looking parents.

Sibling preference has continued to influence enrollment patterns by virtually selecting families in the lottery drawing. BPMC staff and parents value sibling preference because it enables families to develop long-term cooperative relationships with the school. Consequently, reservations about the possible connotation of

exclusiveness which may result from the enrollment of selected families were not voiced by interview participants.

BPMC was established in a school building located in an inner-city African American neighborhood. This location has been considered beneficial in attracting and enrolling inner-city students. Transportation of students to magnet schools was considered an important issue which required additional funding to place aides on the buses. Bus aides were especially significant for BPMC because many of the children enrolled were 3 and 4-years-old. For BPMC, school location and bus transportation with bus aides contributed to an access pattern which appeared to be equitable for majority and minority students.

Self-selection factors also influenced the access and selectivity patterns of enrollment at BPMC. Individuals interviewed for this study expressed the belief that the first parents who enrolled their children at BPMC possessed distinctive qualities. These parents have been characterized as more aware, more involved, more willing to take the initiative and more willing to take risks. Several interview participants felt that the attraction of free child care and free transportation for preschool aged children was a strong influence during the first years at BPMC. In later years, early childhood centers and other programs offered free child care and free transportation for 4-year-old children. BPMC has remained unique in attracting and enrolling children as young as 2 years 9 months.

Research question four asked how Montessori program processes affect majority and minority students at BPMC. Montessori program processes have been considered as instructional technologies and school climate. The narrative of the

essential qualities of Montessori instructional technologies presented by Rambusch and Stoops (1992) provided a framework for analysis. Mixed-age grouping, cooperation rather than competition, and a sense of community characterized the learning relationships at BPMC. Montessori environments prepared with full complements of Montessori learning materials have been characteristic of the younger levels at BPMC. Two adults, one a trained Montessori teacher, assisted students in each classroom environment.

Whereas essential elements of authentic Montessori education have constituted the foundation at BPMC, the school has developed accommodations to school district requirements for older students. These have involved emphases on district curricula in preparation for standardized assessments as well as numerical grading systems for older students. Montessori learning relationships and activities have been modified by the influences of the assessment programs. Students who have not achieved on standardized assessments have become part of the Chapter I program. The greater percentage of Chapter I participants have been minority students.

During interviews, BPMC staff expressed varied concerns and beliefs about the learning patterns of all students, especially minority students who participate in greater percentages in compensatory programs. Staff expressed different views about the possible need for more structure and increased intervention by teachers with minority students especially at the younger levels when students are learning to read.

Several factors contributing to positive school climate have been described in these pages. Interview data suggested that the relatively small size of the first BPMC enrollment contributed to strong community spirit. Various activities promoted parental

and family involvement. These activities included family gym and swim nights at the school and evening workshops for parents which featured among other topics African American cultural activities. Participants at BPMC judged that extensive efforts had been made to build a strong community among majority and minority parents. They felt that the school showed a high level of responsibility toward its African American parents. Though parental involvement has decreased in recent years, BPMC is described as a school with a positive climate.

Question five in the study asked what are the outcomes for majority and minority students at BPMC. Document analysis provided student demographic data, achievement data, and other significant outcomes. BPMC annually enrolled approximately 50% majority and 50% minority students. Annually a high percentage of students have participated in the free lunch program. On these measures, BPMC appears to have had enrollment outcomes which reflected equity. Both attendance rates and transiency rates reported for BPMC indicated that the school's profile compared favorably to that of the district. However, data is not reported by ethnic group; therefore, understanding of this aspect of the school's relationship to majority and minority students is limited.

Achievement data for selected earlier and more recent years in the school's history have been discussed in this study. Data indicated that BPMC students scored at higher percentages above the mean than district students in the majority of instances. However, achievement data are not reported by ethnic group. Therefore, achievement on standardized tests does not reflect on the equity of outcomes for majority and minority students. In interviews staff have indicated that low achievement has resulted

in students spending three years at one of the mixed-age levels. These students have tended to be minority students.

Systematic reporting of data by ethnic group would result in information which would be useful in program planning at BPMC. Such data holds the potential for assisting BPMC in its accountability toward its magnet enrollment. Whereas staff have recognized that small numbers of minority students have not achieved at required levels, this recognition does not appear to enter formal program planning and implementation. It appears that BPMC program processes may rely upon compensatory programs to address the needs of low achieving students.

Recommendations

The final part of this study presents recommendations for practitioners and recommendations for future research. Data presented on the relationship of BPMC to equity indicated future directions for practitioners at the district level. School systems need to aggregate data in ways which yield useful information about the effectiveness of programs for each of the diverse ethnic groups represented. Such information enables administrators to assess schools' accountability toward all students. Information specific to measuring and managing equity is essential for planning, monitoring and evaluating programs.

Montessori magnet school practitioners need to assess their effectiveness with all students and in particular with minority students. Standardized tests provide one means to assess effectiveness when data is reported by ethnic groups. In addition, Montessori magnet educators need to set definable goals for students which can be measured in outcomes other than standardized tests. These outcomes need clear

definition and applicability in order for educators to implement them in their school environments.

Montessori magnet schools are in a unique position within the arena of the school reform movement. Many of the concepts propounded by school reform have been daily practice in Montessori magnet programs. Mixed-age grouping, cooperative learning relationships among students and teachers, concrete learning activities, and common philosophy and methods shared by staff characterize Montessori magnet environments. An important area for practitioners to examine and document is the distribution of learning opportunities within the environment. Because students are responsible for their own learning activities and because teachers are facilitators of learning, disparate patterns of learning opportunities are possible among students or groups of students in an environment. The self-paced learning that was deemed attractive by education-minded parents enrolling their children in Montessori magnets may infer fewer or different learning experiences for children less prepared for academic activities. Documentation of the distribution of learning opportunities in Montessori magnet environments would offer beneficial information to improve Montessori practice with majority and minority students.

Also, it is important that educators at Montessori magnet schools form communication networks for purposes of sharing ways to improve Montessori learning opportunities for all students. Educators need to share the language of equity and to promote practices which result in active learning for majority and minority students.

In addition, Montessori magnet educators need to engage in cooperative activities with their state education departments and with magnet evaluation and

research efforts. Cooperative linkages with these departments will enable Montessori magnets to become better known and understood in public education. The public will become more aware of the educational effectiveness of Montessori magnets for minority students.

In addition to recommendations for practitioners, recommendations for future research are included here. There is a general need for research on Montessori magnet schools and their effectiveness in educating minority students. Several research activities are suggested.

Longitudinal studies are recommended in order to trace the effectiveness of Montessori magnet schools. Studies could follow cohorts of students representing the school's racial diversity through eighth grade and beyond Montessori magnet schooling. These longitudinal studies are especially important because research in Montessori has tended to emphasize early childhood education.

Case studies of individual Montessori magnet schools are suggested. Unique strengths inherent in Montessori philosophy and methods could be defined and explored. In-depth explorations would provide understanding of the meaningful explanations constructed by majority and minority members of the magnet school.

Outcomes for students at Montessori magnet schools need to be researched. Profiles of achievement levels of majority and minority students at several intervals during their Montessori magnet schooling would provide significant information. Outcomes could be studied through standardized assessments as well as through other explorations designed to capture the unique goals and character of Montessori magnet education. Outcomes research could explore qualities of independence, autonomy,

motivation, and social responsibility as demonstrated by majority and minority students participating in Montessori magnet education.

APPENDICES

A. LETTERS OF CORRESPONDENCE

November 9, 1993

Principal
Bennett Park Montessori Center
342 Clinton Street
Buffalo, New York 14204

Dear Principal:

I am a doctoral candidate at the University of Massachusetts, Amherst. As part of my doctoral research I would like to study the historical relationship of Bennett park Montessori Center to equity. This study would involve site visits to your school. It would include a study of documents and interviews with teachers, administrators, and parents.

I am interested in obtaining the necessary permissions to conduct this study of Bennett Park Montessori Center. I will contact you by phone to discuss the procedures necessary to conduct this study.

Thank you for your consideration.

Sincerely,

Maggie Fuller



Bennett Park Montessori Center

342 Clinton Street
Buffalo, New York 14204
716 - 852-3033

June 18, 1991

Dear Maggie,

Superintendent Thompson has responded favourably to your request to gather data for research from our school. We look forward to working with you to gather all the necessary data.

Sincerely,

Principal

BENNETT PARK

A public pre-school and elementary Montessori program, one of Buffalo's magnet schools.

B. INTERVIEW CONSENT FORM

INTERVIEW CONSENT FORM

I consent to be interviewed for Maggie Fuller's dissertation research on the equity history of Bennett Park Montessori Center. I understand that my interview data may be used in the published report. I understand that my name will not be used in the dissertation.

I understand that I may withdraw from the interview at any time.

Signature

Date

C. INTERVIEW GUIDE

INTERVIEW GUIDE

1. Describe your understanding of the desegregation process and the interactions between the court and the buffalo public schools.
2. Describe your role in the process.
3. What did you perceive as the most influential factors in the contributing to the desegregation? What factors hindered the process?
4. What were the strongest influences in creating Bennett Park Montessori Center? What were the hindrances in the process?
5. What was your role in the founding of BPMC?
6. What did you perceive as the chief problems in enrolling majority and minority students at BPMC?
7. What was the understanding of equity during the early years at BPMC?
8. What did Montessori philosophy and methods offer to equity understanding and equity practice during the first years?
9. During the daily life of the school, in what ways was/is BPMC most equitable? least equitable?
10. In what ways has the understanding and practice of equity changed during your years of involvement at BPMC?

D. BUFFALO MAGNET SCHOOLS APPLICATION, 1977



DATE _____

NAME OF STUDENT _____
(last) (first) (middle initial)

Date of Birth _____ Sex: ☐ male ☐ female

ADDRESS OF STUDENT _____

Zip Code _____ Race: Black - White - Other (Circle)

School attended 1976-1977 _____

Grade Entering September, 1977 K 1 2 3 4 5 6 7 8 9 10 11 12 (Circle)

If application is for an elementary program, name Public Elementary School closest to your home. _____

If applying for Pre-Kdgn., Check here _____

To apply for enrollment in a Magnet School, fill in and return this application form. If you need additional information call:

INFORMATION CENTER
842-4730

MAGNET SCHOOL PROGRAMS

AVAILABLE FOR

1977-1978

1. **Montessori - Ages 3-6**

2. **Montessori - Ages 6-9**

3. **Campus East - Gr. Pre-Kdgn.**

4. **Campus East - Gr. Pre-Kdgn.**

5. **Follow Through - Gr. Pre-Kdgn.**

6. **Academic Challenge Center - Pre-Kdgn.**

7. **Academic Challenge Center - Pre-Kdgn.**

8. **Build Academy - Gr. Pre-Kdgn.**

SEE SUPPLEMENT

9. **Academy of Visual & Performing Arts - Gr. 5-9**

10. **Academy of Visual & Performing Arts - Gr. 5-9**

11. **Buffalo Traditional School - Gr. 5-9**

LIST MAGNET SCHOOLS (IN ORDER OF PREFERENCE) FOR WHICH STUDENT IS APPLYING:

1. _____
2. _____
3. _____

Name of Parent/Guardian _____
(please print)

Address of Parent/Guardian _____

Zip Code _____

Telephone Number: HOME _____ BUSINESS _____

Signature of Parent/Guardian _____

* See supplement

RETURN APPLICATION TO:
 Magnet Schools '77-78
 Room Number 732
 City Hall
 Buffalo, New York 14202



For additional information on Magnet Schools, attend one of the community meetings on magnet schools to be listed in your daily newspaper - or call 842-4730 for dates and places.

or see - special news supplement

MAGNET SCHOOLS
A CHOICE FOR SEPTEMBER '77
AND BEYOND

BUFFALO PUBLIC SCHOOLS

E. MAGNET SCHOOLS PLACEMENT AND PROCEDURES

1983 - 84 SCHOOL YEAR

MAGNET SCHOOL PLACEMENT AND PROCEDURES

1983 - 1984 SCHOOL YEAR

1. Each school should compile a listing of tentative class sizes indicating space available for minority and majority pupils at each grade level. These lists should be forwarded to the Magnet School Placement Office by January 28, 1983.
2. All assignments to the magnet schools will be made by the Magnet School Placement Office.
3. All pre-kindergarten placements in the ECC's will be processed through the Magnet School Placement Office. Out of district assignments to Schools 53 and 74 will be processed through the Magnet School Placement Office.
4. There will be a controlled lottery.
5. In compliance with the June 29, 1978 U.S. District Court Order the following policies will apply with respect to filling vacancies in the Magnet Schools.
 - A. Minority pupils from predominantly minority schools shall be given preference over minorities from non-minority schools and majority pupils from majority schools shall be given preference over majorities from non-majority schools.
 - B. Siblings (brothers and sisters residing in the same household) will be given preference for available space in accordance with established waiting lists, when placement does not have an adverse effect on the grade level or school's racial balance for the sending or receiving school.
 - C. Transfers between Magnet Schools will be avoided and denied wherever an adverse effect on the racial balance would result.
 - D. Requests for transfer from a Magnet to the regular district school should be handled through the grievance procedure administered by the Pupil Personnel Department. No pupil should be "locked into" a program if an inappropriate placement was made at the time of application.
 - E. Transfer requests from the Magnet Schools should be discouraged. Pupils desiring a return to a neighborhood school are to remain in the Magnet School for the entire year unless there are unusual circumstances requiring special authorization from the Office of Pupil Personnel Services.

- F. Where the welfare of a pupil is concerned, the Pupil Personnel Department may effect a transfer at any time. Such transfers, however, which tend to have an impact on the racial balance of the receiving school must be approved by the Office of Coordinator of Integration.
- G. Minority pupils from the following schools will be given preference for placement in the Magnet Schools: 3, 36, MLK, 53, 59, 68, 74, 76.
- H. Majority pupils from the following schools will be given preference for placement in the Magnet Schools: 27, 28, 33, 43, 45, 51, 60, 64, 70, 72
- I. Names of pupils authorized for placement in a Magnet School will be deleted from waiting lists in order to avoid the possibility of dual assignments.
- J. Placements from established waiting lists must be processed through the Office of Assistant Superintendent for Integration.

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1. Administrator Interview (July, 1991)
2. Administrator Interview (July, 1991)
3. Plaintiffs' Legal Staff Interview (May, 1992)
4. Teacher Interview (July, 1991)
5. Teacher Interview (July, 1991)
6. Teacher Interview (May, 1992)
7. Teacher Interview (May, 1992)
8. Parent Interview (May, 1992)
9. Parent Interview (May, 1992)
10. Former BPMC Student Interview (May, 1992)

