

DOCUMENT RESUME

ED 314 520

UL 027 186

AUTHOR Archbald, Douglas A.
 TITLE Magnet Schools, Voluntary Desegregation, and Public Choice Theory: Limits and Possibilities in a Big City School System.
 PUB DATE 88
 NOTE 278p.; Ph.D. Dissertation, University of Wisconsin-Madison.
 PUB TYPE Dissertations/Theses - Doctoral Dissertations (041) -- Reports - Research/Technical (143)
 EDRS PRICE MF01/PC12 Plus Postage.
 DESCRIPTORS Admission (School); Doctoral Dissertations; *Economic Factors; Elementary Secondary Education; *Magnet Schools; Nontraditional Education; Outcomes of Education; *Politics of Education; Program Evaluation; *School Choice; *School Organization; *Teacher Attitudes; Urban Schools; Voluntary Desegregation
 IDENTIFIERS *Milwaukee Public Schools WI

ABSTRACT

School choice is advocated on the theory that deregulation and greater market control can restructure and improve education. While certain market strategies of improvement are worth exploring, complex production functions, unclear goals, and the political role of education in society limit the extent to which education can be understood and improved as a market. This document clarifies the public choice critique of education, describes the conditions of choice in a large urban magnet-based voluntary desegregation program, and analyzes central assumptions and propositions of public choice theory about family preferences and the organizational effects of choice. Data from the Milwaukee (Wisconsin) Public Schools (MPS) magnet/voluntary desegregation program were collected and analyzed. The following major topics are discussed: (1) the political and economic arguments supporting choice in public education; (2) differences and similarities between the MPS system and traditional systems, emphasizing limitations on mandatory assignment policies; (3) choices and attendance patterns of inner city black families and the correlates of magnet participation; (4) the effects of choice on teacher attitudes and organizational outcomes as measured by a teacher survey; and (5) potential system-level consequences of choice in MPS for achieving goals of educational equity and efficiency. Statistical data are included on 20 tables and 10 graphs. The following materials are appended: (1) a 255-item bibliography; (2) the results of a teacher survey of elementary and middle magnet and nonmagnet schools; (3) the differences in resource inputs between magnet and nonmagnet schools; and (4) a scatterplot of student composition variables for elementary magnet and nonmagnet schools. (FMW)

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

11/29/89

ED314520

MAGNET SCHOOLS, VOLUNTARY DESEGREGATION,
AND PUBLIC CHOICE THEORY:
LIMITS AND POSSIBILITIES IN A BIG CITY SCHOOL SYSTEM

by

Douglas A. Archbald

A thesis submitted in partial fulfillment of the
requirement for the degree of

Doctor of Philosophy
(Educational Policy Studies)

at the

UNIVERSITY OF WISCONSIN--MADISON

1988

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

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Doug Archbald

This document has been reproduced as
received from the person or organization
originating it

Minor changes have been made to improve
reproduction quality

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

UD 027 186

ACKNOWLEDGEMENTS

I wish to express sincere gratitude to Dr. Mary Metz, my advisor, for her patience and guidance throughout this project. She improved immeasurably my skills in the tasks of research and the development of theory. But for her high standards, prodding, and special insights, this would be a much lesser dissertation.

"Statistical archeology" best describes Dr. Michael Olneck's relentless and meticulous approach in guiding me through the extraction of meaning from mounds of numbers. I am profoundly grateful and a stronger statistician for his help.

Thanks also go to Dr. Herb Kliebard, Dr. Fred Newmann, and Dr. Bill Clune. On relatively short notice they each took time from their very busy schedules at a busy time of the semester to read and comment thoughtfully on my work.

I am especially indebted to Dr. Clune, director of the Center for Policy Research in Education where I have been employed while doing my dissertation. My psychological well-being owes much to his humor, moral support, and patience. He deserves a very special thankyou.

To my wife, Anne, for her love, understanding, and security, and for her ability to keep the family and the home going during difficult times, words cannot express what I owe and what I feel. Although you don't care to hear much more about magnet schools and the subject of family choice in education, this dissertation is dedicated to you, Anne.

Finally, to my young ones, Danny and Sarah, to my young at heart parents, David and Helene, and to my sister, Renny, thankyou for being my family, for putting up with me, and for giving me so much. Danny and Sarah, we'll have a lot more time to play bear trap now.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	<i>i</i>
LIST OF TABLES	<i>ix</i>
LIST OF FIGURES	<i>x</i>
INTRODUCTION	
Statement of the Problem	1
Purposes of the Study	2
Organization of Chapters	3
CHAPTER 1 PROPOSALS FOR CHOICE, THE CASE FOR CHOICE, AND CONTINUING ISSUES	
INTRODUCTION	5
SECTION I. PROPOSALS FOR PUBLIC CHOICE IN EDUCATION	5
SECTION II. THE POLITICAL CASE FOR CHOICE	9
Choice and Family Sovereignty	10
Choice as an Instrument of Liberation and Equal Opportunity	13
The Demand for Choice	15
SECTION III. THE ECONOMIC CASE FOR CHOICE	16
Monopolistic Conditions and Organizational Consequences	16
Normative Conceptions of Educational Markets and Supporting Evidence	19
Summary	23

SECTION IV. PROBLEMS WITH PUBLIC CHOICE THEORY 24

Political Problems With Family
Control and Differentiated Schools 25

Problems With the Economic Case for
Choice: Market Versus Government Control 28

Concluding Comments 31

SECTION V. RESEARCH QUESTIONS,
PURPOSES, AND ORGANIZATION OF THE STUDY 32CHAPTER 2 A DESCRIPTION OF MAGNET SCHOOL-BASED
VOLUNTARY DESEGREGATION: BALANCING GOALS OF
CHOICE, FEASIBILITY, AND RACIAL DESEGREGATION

INTRODUCTION 33

SECTION I. THE DEMOGRAPHIC AND POLITICAL
CONTEXT OF MAGNETS AND VOLUNTARY DESEGREGATION 34

SECTION II. THEORETICAL IDEALS AND
PRACTICAL REALITIES IN CHOICE: INTRODUCTORY
COMMENTS AND METHODOLOGICAL OVERVIEW 44

Alternatives 44

Knowledge of Options 44

Logistical Accessibility 45

Methodology and Data Sources 45

SECTION III. A VARIETY EDUCATIONAL ALTERNATIVES 48

The Magnet Options 48

Magnets With Nontraditional Methods 49

Magnets Distinguished By Content 51

Magnets Distinguished By
Their Students' Characteristics 52

The Traditional Nonneighborhood School Option 53

Concluding Comments 53

**SECTION IV. INFORMATION
DISSEMINATION IN THE MPS SYSTEM 55**

Formal Information Dissemination Mechanisms 55

Findings on Awareness of Magnets
From the Parent Telephone Survey 59

Concluding Comments 61

**SECTION V. THE MULTI-STAGE ENROLLMENT PROCESS:
CONSTRAINED CHOICES AND INCENTIVES TO DESEGREGATE 62**

Application and Enrollment Policies: Overview 63

Stage I: Filling the Magnets, K4's, and PAT's 64

Stage II: Filling Traditional Neighborhood
Schools and Non-attendance Area Schools 66

Stage III: Transfer Requests and Continuing
Placements of Students at Transition Grades 68

Appealing School Assignments 69

Concluding Comments on the Enrollment Process 69

Summary and Conclusions 72

**CHAPTER 3 AN ANALYSIS OF PUBLIC CHOICE ASSUMPTIONS ABOUT
FAMILY PREFERENCES AND CONSTRAINTS IN THE PRACTICE OF SCHOOL
CHOICE**

**INTRODUCTION: CENTRAL ASSUMPTIONS AND PROPOSITIONS
OF PUBLIC CHOICE THEORY AND METHODOLOGICAL COMMENTS 74**

Methodology 75

**CHAPTER 3: PART ONE EXPLORING CONDITIONS OF CHOICE
IN THE INNER CITY: LIBERATION FROM UNPREFERRED SCHOOLS
AND THE SALIENCE OF PEDAGOGICAL CRITERIA**

INTRODUCTION 78

**SECTION I. INNER CITY MAGNET, NONMAGNET,
NEIGHBORHOOD, AND NONNEIGHBORHOOD CHOICES 78**

Concluding Comments and Qualifications
Regarding the Distribution of
Preferences for School Categories 84

SECTION II. CHOOSING MAGNETS: THE IMPORTANCE
OF PROXIMITY AND PEDAGOGICAL SPECIALIZATION 89

Proximity to a Magnet
Creates Awareness and Demand 91

Conformity of Inner City Choosing to the
Liberation Thesis and Pedagogical Choice 94

Concluding Comments on Choices of
Inner City Black Families for Magnets 97

SECTION III. AN EXAMINATION OF THE CHOICES
OF INNER CITY BLACK FAMILIES FOR
NONMAGNET SCHOOLS IN WHITE ATTENDANCE AREAS 99

Interpretation 104

Concluding Comments on Inner City
Choices for (Nonmagnet) Desegregated Schools 107

Conclusions for Chapter 3: Part One 108

CHAPTER 3: PART TWO AN ANALYSIS OF
CORRELATES AND CAUSES OF MAGNET PARTICIPATION

INTRODUCTION 111

SECTION I. (A) SOCIO-ECONOMIC AND
DEMOGRAPHIC CORRELATES OF MAGNET PARTICIPATION 112

Correlates of Magnet Participation 114

SECTION I. (B) PATTERNS OF PARTICIPATION
IN MAGNETS BY REGIONS WITH SELECTED
DEMOGRAPHIC AND SOCIAL CHARACTERISTICS 118

Concluding Comments on
Correlates of Magnet Participation 134

SECTION II. EXAMINING THE INFLUENCE OF SOCIO-ECONOMIC STATUS ON
MAGNET CHOICES: A COMPARATIVE ANALYSIS OF MAGNET PARTICIPATION
FROM TWO REGIONS 135

Introduction 135

Survey and Interview Data
on Magnet "Awareness" and "Knowledge" 136

Explaining Regional Comparative Participation
in South Side and Inner City Magnets 144

Concluding Comments from the
Comparative Analysis of Region E and C 155

CONCLUSIONS 160

The Liberation Thesis
and The Pedagogical Choice Model 160

Family Sovereignty and Allocative Efficiency 163

CHAPTER 4 ORGANIZATIONAL AND MARKET OUTCOMES OF CHOICE

INTRODUCTION 166

SECTION I. THEORETICAL FRAMEWORK AND METHODOLOGY 166

Public Choice Theory:
Ideal Tests and Research Needs 170

Design and Methodology 171

SECTION II. A COMPARISON OF MAGNET
TO NONMAGNETS ON SELECTED ORGANIZATIONAL
VARIABLES: RESULTS OF THE TEACHER SURVEY 176

The Dependent Variables 179

Results of Magnet versus Nonmagnet
Bivariate (Uncontrolled) Comparisons 179

Introducing Control Variables:
Student Composition, Demographic
Effects, and Capacity 183

Results of Magnet versus Nonmagnet Multivariate Controlled Comparisons	184
Assessing Variation Within Magnets: Effects of Students from High-College Attendance Areas	187
Results of Regressions of Items on Magnet PHICOL Subcategories	189
SECTION III. IMPLICATIONS OF REGRESSION RESULTS FOR PRINCIPLES OF VOLUNTARISM AND COMPETITION	192
Introduction	192
A More Demanding Clientele	193
Greater Professional and Administrative Discretion	195
A More Competitive Environment	199
Voluntarism, Organizational Consensus, and School Quality	203
CONCLUSIONS	207
CHAPTER 5 PROSPECTS AND ISSUES IN CHOICE THROUGH MAGNETS AND OPEN ENROLLMENT POLICIES	
INTRODUCTION	211
SECTION I. A MORE ALLOCATIVELY EFFICIENT MATCHING OF PREFERENCES AND ALTERNATIVES	211
SECTION II. IMPLICATIONS OF ALLOCATION BY FAMILY CHOICE FOR EQUITY: SORTING BY ACADEMIC PREFERENCES	213
Interpreting Self-Selection: How Does It Compare to Central Assignment?	218
SECTION III. CONSTRAINTS ON CHOICE AND PROSPECTS FOR IMPROVEMENT	223

Limits on Information and
Family Awareness of Magnets 224

Limits To Magnet Supply 225

C2.1 School Performance
Information Improve Family
Decision Making and School Accountability? 228

Concluding Comments 230

SECTION IV. POTENTIALITIES OF GREATER DECENTRALIZATION AND DIFFERENTIATION 232

Thinking Realistically and
Comparatively About Choice 234

BIBLIOGRAPHY 239

APPENDICES

A--Teacher Survey Results:
Elementary and Middle Magnet Versus Nonmagnet 255

B--Magnet Versus Nonmagnet
Differences: Resource Inputs 259

C--Scatterplot Of Student Composition
Variables For Elementary Magnets And Nonmagnets 265

LIST OF TABLES

- 2.1 MPS Magnet Schools And Programs 49
- 2.2 Stage I Applications and Assignments By Alternatives For 9/84 65
- 2.3 1984/85 Enrollment In Magnets & Nonmagnets 70
- 2.4 1984/85 Enrollment: Magnets, K4s, PATs, and Other
Non-attendance Area Schools As A Percentage Of Total Enrollment 70
- 2.5 Students Leaving Home Attendance Area By Level And Race 71
- 3.1 Stage II Applications To Different Categories Of Options
From Residents Of Inner City Attendance Areas By School Level 79
- 3.2 Average Inner City Black Applications
to Schools By Categories Of Options And By School Level 85
- 3.3 Black Enrollment In Magnets From Closest
Attendance Areas As Compared To Proportional Representation 92
- 3.4 Inner City V. Non-inner City
Representation Of Blacks In Non-inner City Magnets 96
- 3.5 Regression Results Of
Number Of Inner City Applications
To White Attendance Areas On Predictor Variables 102
- 3.6 Regression Results Of Magnet Participation
On Socio-economic And Demographic Predictor Variables 115
- 3.7 White Enrollment In Magnets From Closest
AAs As Compared to Proportional Representation 120
- 3.8 Elementary School Enrollment in Non-A.A.
Schools and Magnets By Attendance Area and Race 122
- 3.9 Middle School Enrollment in Non-A.A.
Schools and Magnets by Attendance Area and Race 123
- 3.10 High School Enrollment in
Non-A.A. Schools and in College Bound
and Technical High School By Attendance Area and Race 125
- 3.11 Index of AA Representation in Four Magnet Middle Schools 126

LIST OF TABLES (continued)

- 4.1 Item and Scale Content For Tables 4.2 and 4.3 177
- 4.2 Regression Results of Survey Outcomes:
Magnet Effect in Uncontrolled and Controlled Equations 181
- 4.3 Regression Results of Survey Outcomes:
Magnets in High, Medium, and Low College Categories 190
- 5.1 Regression Results of Black
Fifth Grade Test Scores on Percent Low-Income,
North-South Dummy, and Magnet-Nonmagnet Dummy Variable 216

LIST OF FIGURES

- 2.1 Black Population As A Percent Of Total Population - 1980 36
- 2.2 Black Population As A Percent of Total Population - 1970 37
- 2.3 Percent Of Households Below Poverty Level - 1979 38
- 2.4 Percent Of Persons 25 And Older
Who Are High School Graduates - 1980 39
- 2.5 Population Under 18 Years Of Age
As A Percent Of Total Population - 1980 40
- 3.1 Map Of Milwaukee Showing Sample Elementary Attendance Area
Boundaries 77
- 3.2 Map Of MPS Magnet Schools And
Six Regions With Income Levels Shown In 3.3 127
- 3.3 Median Income By Census Tract In Six Regions In Milwaukee 128
- 3.4 Map Of MPS Middle School
Magnets And Middle School Attendance Areas 129
- 3.5 Map Of MP'S Senior High Schools 130

INTRODUCTION

Statement of the Problem

Education By Choice (Coons and Sugarman, 1977) and *Public Schools of Choice* (Fantini, 1973) begin with stories of children not adjusting well to their neighborhood school. Coons and Sugarman describe a (fictional) artistically gifted child, Ann Orlov. She and her parents would like a different kind of learning environment -- a school where she could work closely with art teachers and learn in ways connected to art. In a neighboring district, a teacher has proposed to central authorities "a comprehensive elementary curriculum in which the teaching of basic subjects would be built around the symbols and materials of the artist's world" (p. 9). Neither the would-be Art school teacher's aspirations nor the child's learning interests are fulfilled. The bureaucratic structure of public education cannot accommodate them, and both the family and the teacher lack the financial and political means to realize their aspirations.

Fantini writes from personal experience. His son developed learning and behavioral problems in the course of his Kindergarten year. Fantini and a school psychologist believed a less competitive, more individualized classroom environment would help, but Fantini's request to enroll the child in a school in a nearby district in which a nongraded continuous progress program had been started proved futile.

The superintendent said he was very sorry he could not honor my request. If he did so he would have to do the same for others, and there would, he knew, be too many people seeking to transfer their children into this type of school. ...I lost my composure, exclaiming, "If they want it, why can't they have it.?" At once, the superintendent replied blandly, "That would interrupt our whole administrative organization (p. 40)."

Hentoff (1977) describes the experience of a black father concerned about his once curious and alert kindergartner falling further behind with each year of school.

The black father was so consumed with anger and despair that it was hard for him to speak. "You people" he said to the impassive members of the board of education, "operate a...monopoly like the telephone company. I got no choice where I send my child to school. I can only go where its free. And she's not learning. That's your responsibility, it's the principal's responsibility, it's the teacher's responsibility that she's not learning. And when you fail, when everybody fails my child, what happens? Nothing. Nobody gets fired. Nothing happens to nobody except my child." Without response, the board of education went about its business, business which clearly did not include that black child (p.41).

These are selections from the "public choice" critique of public education in the United States (Coons and Sugarman, 1977; ICS, 1977; Everhart, 1982;

applies principles of liberal philosophy and economic theory to the provision of services in the public sector.

School systems are viewed as producers and allocators of goods. How production and allocation are controlled has important consequences for goals of education. In public choice theory centralized control and "government production" of education have resulted in the denial of family sovereignty and monopolistic inefficiencies. Proponents of choice in education criticize centralized bureaucratic/union control over schools, compulsory attendance laws, assignment of students to schools by attendance areas, and structural and curricular uniformity.

Choice is advocated on the theory that deregulation and greater market control can restructure and improve education. Proponents support a variety of reforms including tuition vouchers, tax credits, public alternative schools, magnet schools, open enrollment policies, and other approaches.

Purposes of the Study

The purpose of this dissertation is to examine public choice theory and learn about limits and possibilities of public choice plans for school systems. I will clarify the public choice critique of education, describe the conditions of choice in a big city magnet-based voluntary desegregation program, and analyze central assumptions and propositions of public choice theory about family preferences and organizational effects of choice.

Data for the study were collected over 18 months in 1984 and 1985 while I held a staff position with the Milwaukee Metropolitan Public Schools Study Commission. The twenty-seven member Study Commission was established in June 1984 by Governor Tony Earl and Wisconsin State Superintendent of Public Instruction Herbert Grover to study and make recommendations to improve public education in the metropolitan Milwaukee area.

I was responsible for research in the "Specialty Schools Project." In that capacity I collected and analyzed data related to the Milwaukee Public Schools' (MPS) magnet/voluntary desegregation program. The MPS system provides a valuable site to study principles of public choice theory. Open enrollment, a large number of educational alternatives, free and accessible transportation, and an information dissemination program contribute to school choice in MPS.

Given the long institutionalized tradition of formal uniformity between schools and centralized control over student assignment, formally differentiated schools and open enrollment represent a significant change in urban public education. There is disagreement, however, over the meaning and significance of this change. Proponents of choice and magnets argue these are progressive changes, claiming that families are empowered by the right of choice and by benefits of attending schools improved by processes of voluntarism and competition. However, there are many unresolved theoretical and policy issues. These include fundamental questions about the appropriateness of public choice assumptions about the nature of schooling, the demand for alternatives, and the ability of families to choose. More specific questions pertain to administrative feasibility and the proper role of regulations or other

mechanisms to expand or control choice.

There are to date very few studies examining system-wide policies, enrollment patterns, self-selection processes, or organizational effects under conditions of choice. Not much literature is available on how magnet-based voluntary desegregation programs operate in practice. Yet, magnet schools and open enrollment programs have captured the attention of policy-makers and theorists interested in choice, are growing in number, and have potentially important implications for social and political dynamics in urban education. This study will bring empirical evidence to bear on issues in public choice theory, answering some of them, clarifying others, and pointing out continuing research needs.

Organization of Chapters

Chapter 1 begins with a description of proposals and policies to implement choice in public education, and then presents the case for choice. A political argument for choice reflects values of individualism and freedom of thought. Although not denying a state interest, critics on both the political left and political right believe the state exceeds its legitimate jurisdiction by compelling a particular form of political, moral, and cultural socialization. Uniformity and state control in public education conflicts with a public choice vision of cultural pluralism, diverse individual learning needs, and family sovereignty.

The public choice critique is also concerned with efficiency. Education is viewed as a good produced for private and public benefits. Critics claim excessive government control over production and the absence of competition in public education create monopolistic conditions, and that deregulation, public choice, and the development of markets are needed to improve production efficiency.

The last section of Chapter 1 discusses problems with public choice theory and proposals. Specific issues raised in this section yield theoretical propositions that will be examined empirically in Chapters 3 and 4.

Chapter 2 describes magnet-based voluntary desegregation. It opens with an introduction to the role of magnet schools in the politics of desegregation and urban education. The bulk of Chapter 2 describes the policies and programs of choice and desegregation in MPS. I focus on MPS's departures from and similarities to formally uniform schools and mandatory assignment policies characteristic of the "common schools" tradition. Understanding conditions of choice in the MPS system provides helpful background to the more detailed analyses in Chapters 3 and 4.

Chapter 3 examines the political case for choice presented in Chapter 1. The basic question is -- who gets what school and why? I discuss assumptions of public choice theory about family sovereignty and the potential of choice as an instrument of liberation and the accommodation of alternative pedagogical preferences. An empirical analysis of attendance patterns and processes of choice focuses on such questions as: To what extent do conditions in MPS facilitate choice? What factors influence enrollment patterns and constrain

choice? Is there evidence that choice policies can liberate families from low quality schools or more adequately satisfy diverse family preferences than possible alternative approaches? Part One of Chapter 3 examines the choices and attendance patterns of inner city black families; Part Two analyzes correlates of magnet participation.

Chapter 4 is framed within the economic case for choice presented in Chapter 1. Proponents claim choice in education can improve schools through particular social and technical processes created by market forces. I will explore effects of the conditions of choice on staff attitudes and organizational outcomes as measured by a survey of teachers in MPS, examine processes created by the conditions of choice that differentially affect the magnets, and assess the extent to which differences in outcomes are consistent with claims from choice theory.

Chapter 5 will discuss potential system-level consequences of choice in MPS for goals of equity and efficiency in education and draw conclusions about public choice theory. Public choice theory offers a persuasive critique of prevailing forms of governance and control in public education; it exposes important taken-for-granted assumptions about public schooling; and as a theory, it generates useful, testable questions. Certain market strategies of improvement are worth exploring. However, complex production functions and unclear goals and the political role of education in society limit the extent to which education can be understood and improved as a market.

CHAPTER 1

PROPOSALS FOR CHOICE, THE CASE FOR CHOICE, AND CONTINUING ISSUES

INTRODUCTION

The argumentation and literature synthesis presented here organizes the case for choice in education. I discuss evidence and present arguments that contribute to the case's coherence and cogency. It should be recognized that on specifics, the literature reveals differing theoretical leanings, problem formulations, and commitments to particular policy remedies. These will be noted where they are important.

The first step is to understand what is meant by choice in education. Section I. presents and contrasts three approaches revealing different values underlying support for choice and different views about what policy changes are necessary and possible. Section II. presents the critique that the structure of public education violates basic family rights of freedom of belief and educational opportunity. Section III. argues that the monopolistic structure of public school systems causes low performance in relation to costs and social and economic needs.

While the political-economic distinction helps organize the choice critique, a grey area exists because the political rationale for choice can be seen as a special case of, or a result of, structural deficiencies of government ownership and control of public education to which economists pay primary attention. Some critiques do not distinguish between the two issues, arguing that families are forced to accept the teaching methods and the moral and political content of schooling because of the monopolistic nature of control over education. However, this conflation obscures the lack of interest of some critics in the efficiency/productivity problem, and their paramount concern over the perceived violation of family or group values by the public school monopoly and the classroom's hidden curriculum. Other critics are concerned almost exclusively with efficiency.

SECTION I. PROPOSALS FOR PUBLIC CHOICE IN EDUCATION

A choice versus non-choice dichotomy has emerged from rhetorical battle lines drawn on tuition tax credits and voucher proposals and from the lumping of different dimensions of and approaches to choice into one category called "choice in education" which is opposed to a condition of "non-choice." This dichotomy obscures important differences among the proposals for and practice of choice in the present system.

What constitutes choice in education is a matter of perspective and degree. To advocates of choice, electives, tracks, and private schools are not what is meant by public choice in education. A section of Raywid's (1985) review of family choice arrangements in public education is devoted to a consideration of electives and "tracks" in schools as a "conventional" approach

to choice held by most school officials and perhaps educators in general.¹ In this view, private schools, home instruction,² and public alternative schools are considered an adequate range of alternatives on the assumption that the great majority of families are satisfied with and have open access to a public school and the range of options it provides, and that public schools are generally adequate in quality -- as good as they can be given the financial and human resources they have to work with.

Proposals for choice in education vary in specifics, but have the common feature of giving families the right of exit from the neighborhood public school by opening access to other schools or distinctive and administratively autonomous programs within schools. Choice shifts control over the process of allocating students to schools from the determinants of residence and the politics of attendance area boundaries to individual choices of families under constraints of a particular system of choice. Common to all choice proposals is the belief that discrete organizational units need to be the object of choice. They can be autonomous, can develop distinctive cultures and specializations,³ can be responsive to changing needs, and can compete with each other.

Approaches to choice are generally categorized as tuition vouchers, tuition tax credits, and open enrollment systems with alternative schools. While the general aims of these proposals are similar, each approach comprises a number of models and in implementation changes relations between producers and families in different ways. It is useful to conceptualize the changes these proposals intend to produce in terms of several dimensions. Elmore (1986) discusses how different arrangements for choice vary on the key dimensions of finance, staffing, attendance, and curriculum. On each of these dimensions, the level of control exercised by producers and consumers varies depending upon how choice is constrained.

¹ Ironically, some critics of secondary education believe there is too much choice. They argue that high schools' attempts to accommodate student diversity and have "something for everyone" (like a shopping mall) have caused a fragmentation of the curriculum and a kind of organizational aimlessness. They advocate narrowing the curriculum (Powell, Farrar, and Cohen, 1985). The academically focused high schools proposed by Cohen et al., Sizer, Goodlad, Adler, are not incompatible with choice. Sizer (1984) discusses this.

² For an overview of home instruction which includes a discussion of state regulatory policies, see Lines (1987). Home instruction is permissible in every state in the United States.

³ Raywid (p.445), for example, writes: Finally, and of enormous importance, it seems increasingly clear that only diversification among schools (or units) can provide a choice of school climate, which may ultimately be the single most important selection criterion for both students and their parents.

Tuition vouchers are government-issued certificates to families redeemable by a school for cash. Some models proposed have few regulations. Friedman and Friedman (1981) and other supporters of laissez faire models believe control over finance, staffing, attendance, and curriculum are best left to family choices and market forces. The value of vouchers in a given area would be determined by the average per-pupil cost of public education. Parents could, though, supplement their vouchers with their own money. Schools would be free to set their own tuition rates. The role of government would be confined to the disbursement of funds and insuring compliance with basic educational requirements and standards of quality. All choice models support some curriculum regulation to curtail fraud, incompetence, or extremes in anti-social teachings.

More regulated voucher designs attempt to engineer egalitarian outcomes without unduly compromising the libertarian and economic ideals of choice. Compared to laissez models, there is greater regulation on the finance dimension. For instance, in the Sizer-Whitten (1968) model the value of a voucher would vary inversely with family income, therefore compensating for educational disadvantages experienced by the poor and creating incentives for schools to serve this often neglected segment of the market. Even more complex, and thus involving more regulations, is the 1971 Coons-Sugarman model. According to this model, schools would be permitted to choose one of four tuition levels. Families would be free to choose any school. In return, families would be taxed according to the tuition level of the school they picked *and* according to their income level. Thus, an equalizing policy would be implemented through a progressive tax, while varied tuition levels and school types would permit the kind of family choice advocated by voucher proponents.⁴ Regulated voucher designs also typically regulate attendance to prevent segregation. Relative to existing arrangements, vouchers would give both producers and families considerable leeway in deciding the "whats, wheres, and hows" of education in a regulated market context.

Tuition tax credits, like tuition vouchers, are intended to foster

⁴ The Center for the Study of Public Policy (1970) describes seven models differing according to the extent and nature of the regulations they incorporate and their policy goals; see also Coons and Sugarman (1977) for a discussion of implications of different regulations in voucher plans. Rebell (1982) describes and draws favorable conclusions about a program of limited vouchers in New York where state law permits schools to contract with local private agencies to provide schooling for the handicapped. Washington, Colorado, California, and Minnesota have or are in the process of developing tuition voucher programs for dropouts. In these programs, profit or non-profit organizations willing to provide academic instruction to dropouts receive state funds at prespecified levels related to average state per pupil expenditures. Another example of the current use of tuition vouchers is described by McClaughry (1984). Students from about 250 small towns (without high schools) in Vermont and Maine are allowed to choose, from the available nearby high schools, where they wish to enroll. For an overview of education vouchers, see Lindelow (1980).

greater diversity in education and to increase competition by placing the public schools in a competitive market with private schools. In tax credit plans, families would receive a credit against their income taxes equal to a percentage of the cost of school tuition and fees. The percentage can vary from a relatively small percentage to one hundred per cent. Tax credit proposals can vary in other ways as well. They can have upper limits which the credit cannot exceed; be restricted only to costs *above* a certain tuition level and then may cover all or a percentage of costs; bear a linear or curvilinear relationship to tuition costs; and contain regulations placing limits on the types of schools that qualify.⁵

Like vouchers, tuition tax credits directly affect education finance policies. They are intended to make schooling a private contractual arrangement between family and school, though an arrangement that is constrained by state regulations. Regulations would determine the extent to which producers could be "choosy," the definition of a school, and the rights of families with respect to control over staffing and curriculum. Whatever the specific form taken, both tuition vouchers and tax credits are intended to decentralize control and production of education. While a greater dependency upon clients is anticipated, proponents claim tuition vouchers and tax credits could ultimately result in more autonomy for school professionals.

Public school open enrollment alternatives are a third category of choice in education. Included here are public alternative schools ("free schools," and the like), magnet schools, and the school-within-a-school approach providing a diverse array of nontraditional purposes, philosophies, and methods. Compared to tuition voucher and tax credit plans, open enrollment alternatives do not change finance procedures much, although compared to traditional systems, control over the distribution of money to schools becomes linked to family choices and attendance patterns, rather than being a direct function of attendance area size. However, control over funding can remain relatively centralized by procedures controlling openings and application limits for schools.

The level of client control over curriculum, staffing, and attendance brought about by open enrollment procedures is greater than under traditional non-choice arrangements, but less than with tuition vouchers and tax credits. In open enrollment systems, families can choose staff, classmates, and curriculum by choosing schools; staff often are exempt from central policies

⁵ A tuition tax proposal that received much publicity, "The Educational Opportunity and Equity Act of 1982" was submitted to Congress by President Reagan. According to the legislation, the credit--50% of tuition costs for each child--would be phased in over a three year period achieving a maximum of \$500 in 1985; families with incomes over \$75,000 were ineligible; for incomes over \$50,000, the credit was reduced. Breneman (1983) and Freeman (1982) describe the nature of tax credits and how proposals can vary. For justifications and general discussion of tuition tax proposals see: Glazer (1983), Moynihan (1978), President's Commission on School Finance (1972), Vitullo-Martin (1980), and West (1982).

and responsible for program development, recruiting, and other tasks. However, these conditions generally do not approach the autonomy of schools conceived in voucher and tuition tax models. Private schools are not an option, and families do not directly wield "the power of the purse."

The three categories of approaches to choice in education encompass a wide variety of more specific programs and policies. While tuition vouchers and tax credit plans are "high-profile" and tend to dominate debate, their controversial and theoretical nature overshadows the many different operating policies and programs of choice in education across the country: various open enrollment programs like the Southeast Alternatives in Minneapolis; the Chapter 220 program supporting inter-district transfers in the metropolitan Milwaukee region; the Postsecondary Enrollment Options Act in Minnesota giving 11th and 12th graders the opportunity to take college courses paid for out of the state education aids revenue; the policies in a number of small towns in Vermont and Maine permitting students to choose high schools; programs in Colorado, Washington, and California supporting private educational services for at-risk students and in New York city for handicapped students. Open enrollment magnet schools now exist in many cities across the country, including Milwaukee, Boston, Houston, Seattle, Buffalo, Philadelphia, Los Angeles, and New York.⁶ Having considered these proposals for choice, we turn now to the public choice theory which has been instrumental in the development and promotion of these different proposals, programs, and policies.

SECTION II. THE POLITICAL CASE FOR CHOICE: STRUCTURAL AND CURRICULAR UNIFORMITY AND THE DENIAL OF FAMILY SOVEREIGNTY AND EQUAL OPPORTUNITY

Critics of the uniformity and monopolistic characteristics of public education appeal to two ideals, family sovereignty and equal opportunity, in their advocacy of choice. I will summarize the family sovereignty position first, pointing out of different positions and key figures in the debate. I discuss the equal opportunity position second, showing how it differs from and relates to the family sovereignty position, and conclude by noting continuing issues in these arguments.

⁶ For descriptive overviews and discussion of studies of choice in education see Bridge and Blackman (1978), Nathan (1983), Finn (1985), and Raywid (1985).

For different perspectives on the contribution of magnet schools to the creation of diverse educational opportunities, the revitalization of urban schools, and effects on interracial and intercultural relations see: Barr (1982), Clinchy (1984), Estes & Waldrip (1977), Fullington (1977), Levine & Havighurst (1977), Mcadams (1974), Metz (1986), Missal (1977), Schofield (1982), Power (1979), and, Premazon & West (1977).

Choice and Family Sovereignty

Choice as a Philosophical Good.

The philosophical roots of the family sovereignty concept lie in the classical liberalism of Adam Smith in the 18th century and the neoclassical liberalism of John Stuart Mill in the 19th century. These philosophers and others before them were critical of traditional forms of authority and control. They believed in the great potential for individual fulfillment and social good afforded by science and rationality. The role of education was to create "rationally autonomous" individuals (Hamm, 1982), and it was the duty of the state to furnish education conducive to this end. Only under conditions of rational autonomy could a democratic state through the power of reason and the technical benefits of science produce the greatest social good.

Arons and Lawrence (1982) claim this vision of individual rational autonomy is embodied in the First Amendment of the United States Constitution, and are critical of public education for what they see as a denial of its ideals.

Expressed in terms of the traditional understanding of politics and personality, this central conception regarded the individual as the central unit of political and social being, free to develop in his or her own way, to express himself, and to engage in the struggle to mold social institutions and public policy without government interference. The First Amendment is thus a statement of the dignity and worth of every individual, of the value of a "single human soul," of the fact that the government exists for the benefit of the people and not the people for the benefit of the government (p. 227).

These authors see in the uniformity and mass education processes of public schools and the lack of individual family control over attendance, an infringement of the spirit of Constitutional values of freedom of thought, individualism, and self-determination.⁷ They view choice as a good in principle because a democracy based on the foundation of political liberalism ought to maximize individual choice.

Choice for Preservation of Political/Cultural Beliefs

While some analyses of the family sovereignty issue are philosophical or Constitutional in nature, critiques often come from particular political and cultural perspectives. They are based on the view that public school curriculum is not and cannot be value-neutral. Friedman (1973:28), for instance, has

⁷ See Doyle (1984), "Family Choice in Education: The Case of Denmark, Holland, and Australia." This paper discusses the meaning of family sovereignty in education, critiques the American view of the distinction between public and private in education, and describes systems where government aid is provided to all schools.

declared that, "the penalty now imposed on parents who do not send their children to public schools produces a real violation of the spirit of the 1st Amendment ...The penalty abridges the religious freedom of parents who do not accept the liberal, humanistic religion of the public schools."⁸

Some of the more fervent adherents to this view have given the label "secular humanism" to the set of beliefs and values they claim schools teach.⁹ This doctrine, they claim, teaches moral relativism and skepticism about God and the validity of religious beliefs, and encourages disrespect for American institutions by offering critical views of certain government policies, family traditions, and cultural beliefs. The perception in conservative communities that the program of instruction in American public schools is hostile to their views and imposed upon their children has sparked local and state-level controversy over curriculum policy. In many communities bitter disputes have occurred (Hillock, 1978). These communities feel "on the outside" of the public education establishment and often outraged at their powerlessness over the school curriculum.¹⁰

With the ascendancy of Republican political administrations since the early 70s this conservative view has gained prominence. Support and proposals for tuition tax credits have increased, inspired in part by the heightened prominence and legitimacy of conservative religious views, but also by wider interest in choice and a growing belief that the public school system has become a huge monopolistic industry. Defeat of all the major tuition tax credit proposals, aided by strong lobbying from the National Education Association, the American Federation of Teachers, the American Association of School Board Administrators, the Council of Chief State School Officers, and other groups affiliated with public education has done much to confirm the conservatives' suspicion that public education is indeed a monopoly controlled by liberal groups with vested ideological and professional interests.¹¹

⁸ For a different treatment of the value-laden nature of curriculum and pedagogy and the myth of value-neutrality see Sizer (1984:Ch.6).

⁹ For the conservative ideological critiques of the public education system and the denial of choice, see McGraw (1978), Gardner (1975), and, Adams and Stein (1983).

¹⁰ Jenkinson's (1979) Censor in the Classroom examines the recent conservative backlash, covering numerous local incidents and analyzing the question of rights of control over the curriculum. See also Arons's (1983) Compelling Belief.

¹¹ AFT President Albert Shanker in a 1983, Washington, D.C. convention address stated: "We must ask ourselves with respect to each and every decision and action that we take, 'Is what we are doing going to help bring tuition tax credits about?' Each and everything we do will either help to push tax credits, and undermine support for public education, or it will build support for our

In ways, the position of the political and religious right is similar to that of the politically liberal alternative schools advocates of the 60s and early 70s, although the values are diametrically opposed. The 60s critics objected to the authoritarian structure of schools, the conformist, materialistic, and competitive moral values of the curriculum, and the lack of explicit attention to social and political issues the reformers considered crucial to proper educational development. The liberal activists also perceived their efforts to establish public alternative schools to be thwarted by bureaucratic intransigence and vested interests (Gross and Gross, 1971; Graubard, 1972; Illich, 1971; Kozol, 1972; Postman and Weingartner, 1973; Reimer, 1970).

Choice as Accommodation of Individual Pedagogical Needs and Family Preferences

Another family sovereignty position is more politically moderate and pedagogically oriented and takes a more instrumental view of choice. Though somewhat a carryover from the views of 60s political liberals, current pedagogical choice advocates are primarily concerned with the promotion of alternatives in public schooling to accommodate differences in childrens' learning styles and interests or family needs arising from circumstances concerning transportation, work schedules and the like (Fantini 1976, Levine and Havighurst 1977, Clinchy and Cody 1978). Advocacy from this camp -- they tend to have professional ties to public education -- is typically less critical of the existing governance structure of public education than some of the more vitriolic choice-oriented critics (eg. Friedman and Friedman, 1986; Lieberman, 1986; West, 1981). Fantini and other like-minded advocates of choice perceive higher public satisfaction with schools and greater consensus regarding educational goals and methods. They do not support broad tuition voucher or tax credit proposals. However, they believe there is an unmet demand for greater variety in curricular offerings and structural flexibility in public education.¹² Fantini (1976:374) writes:

If our assumption is valid -- namely that the present public school educational process constitutes only one alternative to *a common set of objectives*, [emphasis added] and that a diverse consumer-society is rightfully demanding alternatives to the one -- then the basic problem is really in the delivery of an expanded supply of legitimate

nation's schools. It is going to be hard to get used to doing that, but it is something we must do." Cited in Lieberman (1986:180).

¹² See for instance, Hoachlander and Choy (1984), "Work-based attendance: a new approach to expanding parental choice in education." A 1976 Rand Corporation report, Youth Policy in Transition, endorsed choice on grounds of diverse individual learning styles and interests. After analyzing several government reports on youth policy, it concluded that "underlying all of these proposals is the belief that no one institution, especially the current high school, can meet the needs of an increasingly heterogeneous clientele." Cited in Estes and Waldrip (1977:110).

educational alternatives. In supply and demand terms, we now have a high demand market, but limited supply.

This conception of choice and family sovereignty, compared to the previous position, is predicated on a more consensual view of curriculum. Preservation of group beliefs is not the issue. Generally, common educational goals are assumed, but families as *individuals* are seen to vary in their pedagogical tastes and children in their learning styles, and, accordingly, have a right to expect a form of schooling congruent with their preferences. Choice grants this right, enhancing family sovereignty; it also makes teaching and learning more effective.

When critics disagree with the content of public school curriculum on moral and ideological grounds (eg. neo-conservative critics, black consciousness groups, the radical critics of the 60s), pedagogical effectiveness is not the main issue; preserving or promoting values is. Family sovereignty tends to be formulated as an issue of liberty and freedom-of-thought. Support for more far-reaching approaches to choice, such as vouchers or tax credits is likely.

Choice as an Instrument of Liberation and Equal Opportunity

Choice is also advocated on grounds of equal opportunity. This position evinces greater concern for achievement and mobility. There are two issues, the first relates to the discussion of family sovereignty. Where conflicts between family beliefs and learning needs and classroom values and teaching are serious enough to impede learning, an equal opportunity violation is claimed to occur. That pedagogy is uniform while learning needs differ damages the chances for success of some children. Estes and Waldrip (1977:117) write, "Until recently, uniformity of schools was assumed to be equal educational opportunity. Only today are we beginning to recognize that a school which expects all children to learn in the same way and at the same time is in fact a violation of equal educational opportunity." Although this argument might apply in the case of political and religious conservatives who object to the curricular hegemony of the educational establishment or to advocates of "free schools" or specialized subject-matter schools, generally in these cases the argument is not formulated as an equal opportunity issue.

The argument for choice which most strongly asserts the denial of equal opportunity (and family sovereignty) rights concerns the plight of low-income black and Hispanic children. They are the poorest and the low achieving of public school students, and are commonly depicted in studies as neglected and oppressed or hostilely treated by public schools.¹³ Choice is

¹³ Some of the more illuminating studies in this vein are conducted from an ethnographic perspective and are unconnected to policy or theoretical debates on choice in education (Kozol 1966, Levy 1970, Ogbu 1974, Rosenfeld 1971); however, ethnographers are often highly critical of school bureaucracies and call for greater self-determination for families and ethnic communities. For example, Spindler (1974:77) characterizes ethnic minorities in public schools as

advocated as a way out of "ghetto schools," as a way to improve them through forces of competition, and as a way for minorities to gain greater control over their schools (Greeley, 1977; Finn, 1985). There is an affinity between the case for choice and the community control policies that have been advocated as a way to improve schools in minority communities.

The second form of equal opportunity argument is critical of public education not so much because an offensive but inescapable value-laden curriculum or an excessively rigid system, but because the non-rich are believed to experience compulsion and entrapment in inferior schools, while the rich have good schools and choices. This argument is linked with the efficiency critique in the next section; however, the issue here is political -- fair treatment -- rather than economic, i.e., fiscal prudence. Coleman writes that because of high racial and economic segregation resulting from demographic changes and increasing residential mobility, and the existence of a "protective tariff" (tuitions) against competition from private schools, the "public schools are no longer a common institution" (Coleman, 1981:29).¹⁴ Coons (1981:91-92) in "Making Schools Public," states that for an institution to be labeled "public" it must be accessible to all on an equal basis regardless of wealth or place of residence. But the rich...

...have the power to cluster their children in isolated tax-supported schools called "public." And when they have paid their school property taxes, they can deduct them on their federal return.

Some well-to-do families don't worry about which school district to live in. They cluster their children in schools called "private" and pay tuition. What they share with the burgher of Beverly Hills is the ability to choose. They cherish it, and they exercise it -- and who can blame them?...

...Those who lack the means (or the church subsidy) must go the government schools in neighborhoods where they can afford to live. For these children the connection with the school and teacher is made not by adults who know them -- nor for that matter, by any human at all. It is determined by the fact of their residence. The decision is unsullied by human intervention and is best handled by computer.

What California has managed to create is a system designed to serve

existing in "essentially a colonial situation. That is, they may have the theoretical rights of self-determination and self-regulation, but, in fact, do not and could not exercise these rights [in the public schools studied by the ethnographers Spindler cites]...For minority people the schools have been experienced as damaging attempts to recruit their children into an alien culture. Their self-images and identities were ignored, or actively attacked."

¹⁴ See also Coleman (1977:1-7).

the private preferences of relatively few. These have choice; the rest have their marching orders. This system of tax-supported schools is "public" only in the vapid sense that it is a creature of the law. Viewed in terms of its structure and functions, it is simply a monopoly reigning over the education of the non-rich; and it is a unique monopoly making an offer the ordinary family can't refuse.

Although many non-rich families may be satisfied with their neighborhood school, those that are not satisfied have little recourse; they are denied the opportunity to gain access to a good school because of attendance area policies and the lack of money to move. In the view of choice proponents, poor families are more likely to be trapped in mismanaged, under-financed, or inadequately staffed neighborhood schools.

The Demand for Choice

Underlying the case for choice is an assumption that there is a demand for greater family control and alternatives in public education. This demand is seen to be suppressed directly by bureaucratic regulations, and indirectly by popular, uncritical acceptance -- an acceptance reinforced by education professionals -- that the commons schools model is *the only* model.

However, a potential demand for family choice is assumed to exist on the basis of widespread criticism of public schools, the uniformity of public schools, and the manifest diversity of American society. Demand is seen in textbook controversies and political conflict between communities and schools (Hillocks, 1978; Jenkinson, 1979), in efforts to create alternative schools and in the home schooling movement (Lines, 1987). Evidence of demand can also be found in a revival of support for tuition tax credits and vouchers; in the growing willingness of policy-makers to employ approaches based on the principle of choice in efforts to reform public schools;¹⁵ and in a critical literature on the public education monopoly. Arons (1986:190) contends demand for choice would be higher but for a kind of false consciousness. "The difficulty in seeing the present structure of schooling for what it is lies in widely held assumptions about education that cloud public perceptions. It will be difficult to see the effect of schooling structure upon culture and politics if these assumptions are not reexamined and if we are ideologically unwilling to acknowledge the testimony of struggle and resistance given by families whose private beliefs have become public issues."

Polls are often cited as evidence of discontent with public schools and demand for choice. According to Gallup (1982:47), 45% of a national sample of public school parents would shift to private schools if tuition were paid. Gratiot (1979) sampled white, suburban, middle-class parents in San Francisco and found 38% would transfer to private schools if tuition were paid. A 1985

¹⁵ The Center for Policy Research in Education at Michigan State University and the University of Wisconsin-Madison has been involved in a study of policies promoting choice in public education as part of its larger study of current state education reform. See Elmore (1987), Archbald, (1988).

Gallup poll questionnaire item inquiring specifically about education vouchers found 51% of parents of schoolchildren, 59% of the black parents, favor the idea; 53% of central city residents were in favor (Finn 1985:85). A Minnesota poll (Craig and Pederson, 1985) found somewhat less, though still substantial, support for education vouchers, with 35% supporting, 29% opposing, and 37% with no opinion on, education vouchers. This lower support in the Minnesota poll may be due to the lobbying by educational associations (including television commercials) against several concurrent legislative initiatives in Minnesota aimed at allowing parents to choose their schools.

The next section discusses the case from an economic perspective. The economic case is linked, of course, with the political concerns just discussed. Family sovereignty implies the exercise of control over suppliers to generate services that better satisfy client preferences. If this improves schools, it can also improve opportunity. However, the central problematic in the economic case is the comparative efficiency of market versus government production and control.

SECTION III. THE ECONOMIC CASE FOR CHOICE

According to public choice theory the public education system is a supplier of educational services and its performance can be understood in terms of economic theory. Theorists believe productivity and responsiveness to family and community needs would improve if public education were provided under conditions in which market forces were operative. The argument is as follows.

Monopolistic Conditions and Organizational Consequences

Three primary conditions create the public school monopoly and are therefore substantially responsible for the system's performance problems. First, there is a block grant system of funding. Instead of money flowing to suppliers of educational services on the basis of performance or as a function of parental demand, school districts are guaranteed yearly block grants from taxes. Money is distributed to and within schools on criteria having little to do with performance, mainly staff seniority levels and state finance equity regulations.

Parents' weak control over schools and districts is the basis of the other two conditions contributing to the public school monopoly. Families lack the power of "exit" and "voice" (Hirschman, 1970), unlike consumers in the private sector who can more easily switch suppliers, exiting an unsatisfactory relationship. Dissatisfied school parents face prohibitive costs of exit: private school tuition or a residential move.

Should dissatisfied parents attempt to exercise their second option, "voice" -- political advocacy and other formal and informal methods of influence -- they do so from a greatly disadvantaged position. Many studies show professionals and functionaries in large public bureaucracies have a lopsided advantage in the control over information and the definition of organizational processes and outputs (Boyd 1976, Gross and McEachern 1958,

Joffe 1977, Kerr 1964, Katz and Danet 1973, Lipsky 1980, Weatherly 1979).¹⁶ These conditions, that is, a captive and relatively weak clientele and the absence of the threat of losing income, are the basic conditions of the public school monopoly.

Viewed from the framework of normative organizational and economic principles, the monopolistic conditions produce a deficient structure of organizational incentives. There are insufficient rewards for exemplary work, cost-saving actions, quality control, and technical innovation. Instead, in the bureaucratic monopoly a perverse utility function prevails. Compared to a private firm, in the public bureaucracy the collective effect of individual workers acting according to principles of instrumental rationality is less likely to produce overall organizational efficiency. Niskanen (1971:38) in his seminal *Bureaucracy and Representative Government* argues that, bureaucrats are "budget maximizers," their utility function being made up of, "salary, perquisites of the office, public reputation, power, patronage, output of the bureau, ease of making changes, and ease of managing the bureau." All but the last two he argues are directly proportional to the bureau's budget. Increasing the budget increases these utility outcomes, but the relationship between these increases and changes or improvements in performance is uncertain in public service bureaucracies, particularly school systems.¹⁷

This theory makes problematic patterns of organizational growth and change and structural characteristics in the public education system.

Public choice critics believe school bureaucracies steadily grow larger and more centralized, and less efficient.¹⁸ In the last three decades the school systems in the United States declined in number from 95,000 to 16,000 and their average size increased. It appears costs have increased. While gains

¹⁶ The power differential between large bureaucracies and their "clients" (or relevant publics) along with the persistence of the conditions the bureaucracies are supposed to ameliorate have lead some political theorists to advance the concept of "symbolic politics"--the ability of powerholders, through their control of bureaucracies, to manipulate perceptions and maintain public quiescence while withholding substantive rewards and preserving prevailing power relations (Edelman 1971, 1977).

¹⁷ In the lexicon of bureaucratic criticism "empire-building," "goal-displacement," "feathering the nest," "red-tape," "stagnation," and Parkinson's (1957) laws are references to phenomena of bureaucratic dysfunction. See Perrow (1979) for more on these practices. Crozier's (1964) The Bureaucratic Phenomenon is a classic study of the problem of organizational control in a large French government bureaucracy.

¹⁸ See Wise (1979) and Van Geel (1976) for more data on these growth trends and analyses of consequences. Both authors are skeptical that commensurate gains in productivity have accompanied consolidation and argue that serious problems of accountability and control have developed.

or losses in productivity over the last several decades are difficult to assess, data suggest administrative structures have expanded with disproportionate increases in real dollar per pupil costs (Berg 1970:178, Staff 1977). According to the *Digest of Education Statistics* (Peterson 1983), the national average per pupil expenditure has increased by about 50% per decade since 1930 (in adjusted dollars based on 1979 purchasing power). Staff's study concluded school district consolidation consolidates power over budgets and major decisions but, beyond a relatively small size, does not achieve the reputed economies of scale.¹⁹

A recent literature review and large scale study in New Jersey of relationships among size, SES, expenditure, and performance variables showed that controlling for expenditures (three different cost variables were used) and SES (an index incorporating education, income, and property wealth factors), larger districts had lower scores on the state achievement tests in writing, essay,²⁰ math, and reading at three different grade levels (Walberg and Fowler, 1987). Each of the three expenditure variables (controlling for district size and SES) had consistently negative, but predominantly statistically insignificant, relationships with achievement. Walberg and Fowler conclude, "The inefficiency of expenditures and diseconomies of scale in raising achievement are contrary to popular and considerable opinion but corroborate previous research" (p. 5). While the authors avoid strongly critical comments and the term "monopoly," citations in their article are less restrained; one, by Kenneth Boulding refers to his AERA paper entitled, "The Schooling Industry as a Possibly Pathological Section of the American Economy."

The public choice perspective has also been applied in studies of organizational change and program implementation. Pincus (1974:48-9) claims that compared to a competitive firm, public schools are more likely to adopt cost-raising innovations, and innovations that do not change institutionalized structures and established relationships and routines (since these represent costs to the organization), and schools are less likely to adopt cost-reducing innovations (unless the funds saved become available for other internal purposes). Berman and McLaughlin (1978), although not explicitly employing market principles, draw a conclusion consistent with public choice theory regarding patterns of bureaucratic growth.²¹ Their large-scale study of

¹⁹ Bidwell and Kasarda (1975) and Turner et al. (1986) have investigated and find support wanting for the economy-of-scale rationale for consolidation on grounds of achievement. See Hannaway (1976) for further evidence on this question and a more detailed exploration of some of the factors that may cause administrative expansion in school districts.

²⁰ The writing test is a holistically graded written composition required of all 9th graders in the state.

²¹ Paul Berman appears to support public choice solutions. Voucher-like reform policies were a centerpiece in his 1984 report to the Minnesota legislature (Berman and Weiler). This report was instrumental in providing

federally financed innovations described "opportunistic adoption" as a dominant pattern of use of federal funds, often symbolically, with little commitment and effort toward long-term substantive change.

Related research on organizational structure suggests that planned change and program innovation is hampered by "loose coupling" in school systems. Organizational goals tend to be fragmented and unclear (Gross et al. 1958, Kerr 1964, Meyer et al. 1978, Boyer 1983, Powell et al. 1985); relationships between instructional techniques and outcomes are uncertain (Stephans 1967, Averch 1971, Heath and Nielson 1974, McDermott 1976); and technical practices are generally difficult to control, monitor, and coordinate (Lippitt 1965, Sussmann 1977:215-16, Lortie 1975, Sieber 1975, Dornbusch and Scott 1975). This structure makes innovation and change complex and difficult to manage.²² Michaelson (1981:274) contends loose coupling is "a necessary consequence of the systemic deficiencies of public school districts as a producer of educational services."²³

Normative Conceptions of Educational Markets and Supporting Evidence

The monopolistic conditions and bureaucratic structure of schools and school systems are unlike the more flexible schools envisioned by Lieberman (1986, Ch.9), Kolderie (1985) and other advocates of more entrepreneurial forms of education that theoretically would emerge under conditions of public choice. Teachers could operate in private practice, schools could operate like small clinics with nontraditional staff and management processes, or entire systems could be composed of multiple suppliers utilizing different technologies and providing different kinds of specialized services. Coons and Sugarman (1977:10) write, "In place of compulsory assignment, many children and their families might prefer programs emphasizing science, the classics, McGuffey's reader, music, the Baltimore Catechism, or the sayings of Chairman Mao. Some might want an outdoor school, a school in a living room, a school that starts at 7:00 and ends at noon, a school with the long vacation

support for the 1985 Minnesota Postsecondary Enrollment Policy creating public choice conditions for high school students wanting to take college courses.

²² Many studies show planned change to fall well short of expectations. Sussmann (1977) and Popkewitz et al. (1982) studied classroom innovations and found instructional conditions to be markedly unlike the prescribed models. Wolcott (1977) and Kirst (1983) studied district performance-based accountability systems and found them largely unimplemented, and easily circumvented by school level personnel.

²³ See also Chambers' (1981) analysis of the effects of the school district organizational structure on decision making processes. He sees little opportunity for forms of decision making management theorists view as necessary for efficient organizational administration.

in the fall, or a school whose teachers are artisans or otherwise employed part-time outside the school. Likewise, many teachers might wish they were free to enlist children in the enterprise of learning by offering the bait of their special abilities in dance, botany, French, Chinese culture, or the teachings of Muhammad."

Public choice theorists believe this kind of dynamic educational marketplace would improve public education. Individual schools would be more effective in achieving their learning objectives, an increase in technical efficiency, and the market system would better satisfy the diverse preferences of the client population, an increase in allocative efficiency (Michaelson, 1981, Sullivan, 1983).

Evidence that provides support for the position of choice advocates comes from studies of private schools and public schools of choice. Probably most well known is research comparing public and private schools, an off-shoot of an established tradition of comparative analyses of private and public service organizations.²⁴ When schools are compared, the outcomes of interest usually are test scores and organizational measures, like staff morale or consensus.

Recent performance comparisons based on large national samples of students have been made between public and private schools (Coleman, Hoffer, and Kilgore 1982; Coleman and Hoffer, 1987; Greeley 1981). The studies show high school students in private schools generally outperform students from public schools matched on home background variables. The 1987 Coleman and Hoffer study controls not only for social background variables (including college aspirations), its longitudinal design measures growth in achievement between the sophomore and senior years. On most of the subjects and skills tested, scores are significantly higher (up to one year in grade equivalents) in the private schools, with Catholic schools showing the highest overall performance.²⁵ Overall, the between-sector gap is largest on the tests of verbal skills.

Greeley's (1981) data (from the same national sample), focusing specifically on minority students in Catholic secondary schools, shows about half of the test score advantage of parochial school minorities remains after controlling for input variables. Coleman and Hoffer (1987), also on the basis of

²⁴ See Borchering (1977), Spann (1977), and Davies (1971) for studies indicating private, compared to public, organizations produce comparable services at a lower cost in transportation, government, and water works. Another four studies are cited by Ed West (1986).

²⁵ Students were tested in six areas: vocabulary, reading comprehension, writing, mathematics, science, and civics. Public school students scored moderately higher in science, possibly due to the lack of laboratories and equipment in most nonpublic schools. See Chapter 3 in Coleman and Hoffer (1987) for a detailed description of results.

controlled comparisons, find private schools, especially Catholic schools, markedly more successful with minority students; in addition, the private schools have lower dropout rates and higher percentages of students going to and remaining in college.

Other studies -- they comprise a very mixed bag -- have focused on the qualities and performance characteristics of alternative, voluntary enrollment schools. Nirenberg (1977) compared management systems of five public high schools to ten alternative schools, matched on socio-economic characteristics, and found higher values on organizational climate and commitment and teacher autonomy variables in the alternative schools. He attributed this to the smaller size of the alternative schools, and to the more informal and personalized relationships enabled by the smaller size and the higher levels of agreement about goals and procedures. Duke's (1976) study of demographically matched samples of alternative nonpublic and traditional public schools also found differences in organizational structure, and concluded that "contemporary alternative schools represent as much a rejection of how conventional public schools are organized as an indictment of teaching methods and curricular offerings in these schools" (p.34).

Studies of alternative schools also generally show positive findings, but lack comparison groups (Campbell and Levine, 1977; Comerford, 1981; Doob, 1977; Taylor, 1981). Preponderantly, the alternative schools examined in these studies receive high ratings on measures of organizational commitment of staff, students, and parents. Academic achievement is measured less often, and only rarely in a way that permits comparisons on standardized measures. (Opposition to standardized tests, conceptions of knowledge entailed in their use, and values implied in grading in relation to norms are common reasons for the establishment of the alternatives in the first place). In the few studies that do include academic achievement measures the alternative schools generally do well; but data are absent on the representativeness of the sample of test-takers.

While these studies indicate under certain conditions, where small schools are established or chosen by like-minded persons and/or in opposition to traditional public education, choice produces well functioning schools; they offer less evidence about the ability of choice to achieve these results in larger urban populations and under different forms of control and distribution of educational services. Further, as Duke in his (1978) review of research on alternative schools points out, many of these studies are methodologically weak, lacking comparison groups, clear theoretical constructs, and objectivity.

Studies of magnet schools (usually comparative studies of magnet versus nonmagnet schools) generally show them to have higher test scores relative to non-magnet schools in the district (Royster, 1979; Blank, 1983; Archbald and Witte, 1985; Cunningham, 1978; Shavelson, 1981; Comerford, 1981); though, a few studies have found similar patterns of achievement (Larson, 1981; Evans, 1978). These studies also do not control for student composition variables, and offer few insights into the causes of differential achievement or the generalizability of results. More detailed investigations into the sources of the differential performance found in these comparative studies are needed. Chapters 3 and 4 contain informative findings on these questions.

The authors of the private versus public school studies believe that higher academic standards and expectations, stricter discipline, and more homework are the immediate explanation for the higher performance, but believe the different social context in which these schools operate are ultimately responsible for the differential performance outcomes. Coleman and Hoffer (1987) attribute the higher performance of the private schools primarily to the greater degree of value consensus in these schools -- a consensus which is most potent in the Catholic schools due to the religious component and to the socially integrated "functional community" supporting these schools. Critics, however, have pointed out that, despite the use of matched samples in making the sector comparisons, the private school sample is still different in one possibly key respect -- these students (or their parents) *chose* to attend a private school.²⁶ Thus, sampling biases stemming from selective processes may be present. A study cannot control for this characteristic without random assignment. This problem afflicts the alternative school and magnet school comparisons as well. The longitudinal 1987 study by Coleman and Hoffer offers a considerably more controlled comparison, however, than any of the other studies, and lends persuasive evidence of sector differences favoring the private schools, particularly the Catholic schools.

The methodological problem of self-selection biases poses a challenge to claims about the academically beneficial effects of specific programs and policies found in private schools. However, to the extent that higher performance of chosen alternatives comes from their greater dependence upon clients, greater organizational autonomy, and more competitive environment, the effects of their "biased" characteristics are precisely the point from the standpoint of public choice theory. These conditions exist because these schools operate under more market-like conditions. To argue that these schools would not be better if they were not chosen is not a refutation of the choice thesis.

Moreover, at least in the case of Catholic schools, higher performance is being produced at lower cost. Catholic schools operate on a per pupil expenditure level about half that in public schools. In part, costs are lower because parochial school teachers are slightly less likely to have advanced degrees, parochial school salaries are lower and class sizes larger, parochial schools offer little vocational instruction (requiring expensive equipment), and parochial schools sometimes receive administrative support from parishes that does not show up in the books (Sullivan, 1974, 1983). Cost and productivity comparisons between public and nonpublic schools are complex -- the two sectors do not offer identical services (eg. religious versus secular

²⁶ See the special issues on this debate in Sociology of Education, 1985. Critics argue that most of the variation in achievement can be accounted for by background characteristics of the students in the private schools, not by private school policies. This debate continues, with attempts by statisticians to develop methods to control for background variables that are correlated with student academic ability. While this may have technical interest to statisticians, I question whether it is possible to do and the assumption that more perfect statistical controls will settle the debate. The technical aspects of this debate are beyond the scope of this dissertation.

instruction). However, critics of the public school monopoly do not see the two sectors as offering such different services that comparisons of efficiency are completely unwarranted, and they conclude that costs of public education are inflated by needlessly large administrative structures, inflexible union policies, and, more generally, the absence of incentives for cost-saving.

A unique opportunity to study longitudinal effects of voluntarism and guaranteed survival on organizational climate measures arose in Canada when several provinces began partial subsidization of Catholic schools. Erickson (1982) compared effects of type of financial support on parent, student, and staff commitment. The researchers, using interviews and questionnaires, were able to collect longitudinal data on attitudes and school climate in individual Catholic schools before and after the infusion of public funds, and also, comparative data from public versus private schools. Both designs produced evidence favoring the private schools; but most significant for inferring causality, the longitudinal measures indicate the infusion of public funds brought about declines in parental satisfaction and parental judgments of teacher responsiveness and school quality. Erickson claims a key reason for the declines is the reduced dependency of school staff on parents. With school survival less in question and the environment less competitive, the incentive to satisfy their clients decreased. Similar measures of student commitment exhibited the same patterns of decline. The questionnaire responses from teachers (morale, commitment), however, did not decline. According to Erickson, salary increases and enhanced job security accompanying public support, gave them more reason to be optimistic and report more positive perceptions and attitudes on the social climate measures.

Finally, I recently completed a study of the 1985 the Postsecondary Enrollment Options Act in Minnesota. It gives Minnesota 11th and 12th graders the right to take, at no expense to the student, college courses during high school and receive up to two full years of high school credit, which can later be applied toward a college degree if approved by the participating institution. The costs of tuition come from the state education aids and are transferred from the high school to the postsecondary institution according to the tuition costs. Backers of the law, a coalition of choice advocates and accountability lobbies, see it as a mechanism to expand choice and family control and to create some competition for public high schools (Archbald, 1988). Although it is too early to assess the full impact of the law, there is little question that it has stimulated action in the public secondary education system. Districts have initiated efforts to provide more advanced and more diverse courses through cooperative relationships with nearby colleges, electronic networking systems, and the Advanced Placement program. Some districts have contracted with college faculty to teach high level courses at the high schools. Survey data from the Minnesota Department of Education indicate student and parent satisfaction with the program is high and students who have participated in the options program perform well (MDE, 1986).

Summary

There are two distinguishable arguments in the case for choice. Critics focusing on family sovereignty and equal opportunity rights charge that state monopolization of education has produced conditions which are

inconsistent with philosophical precepts of classical liberalism underlying democracy and deny an equal education to large segments of the population. Free market theorists see the public education system as an inefficient supplier of education. Individual families and communities have weak leverage over schools; incentives fostering inefficient patterns of spending and growth predominate. Critics believe reform, which do not alter the basic monopoly characteristics of public education will continue to be relatively ineffective at producing improvements equivalent to the magnitude of the problem. Reforms based on free market principles have been proposed on the belief that competition created by giving families more "voice" in education and the power of "exit," and the programmatic diversity that would result as a response to market forces, would lead to better education.

Images of school choice and the free market critique present a compelling challenge to the status quo in public education. But criticizing imperfections in the education system from principles of family sovereignty, equal opportunity, and economics does not prove alternative institutional arrangements will be better. Many theorists and policy-makers have concerns about deregulation, privatization, and family choice in education. The next section discusses criticisms of public choice theory.

SECTION IV. PROBLEMS WITH PUBLIC CHOICE THEORY

Public choice theory can be criticized on different grounds.²⁷ I will narrow my focus to concerns about (1) formal distinctions between schools to provide educational alternatives and (2) increasing family control over the process of allocating students to schools. Magnet schools and voluntary/open enrollment desegregation policies bring about significant changes in these areas; and it is the rationale for and effects of these changes I study in the empirical portion of my dissertation.

The challenge to choice is based implicitly or explicitly, on the "common schools" theory of public education. In this view, uniformity of schools and centralization of student assignment, funding, and curriculum are not caused by an absence of incentives, institutional resistance, ideological opposition to change, or a lack of imagination. Uniformity, rather, reflects a general social and cultural consensus and public education's function of providing equal opportunity and socializing children to join in that consensus. Standardization and centralization reflect a bureaucratic theory of efficiency. These are discussed in turn.

²⁷ For instance, criticisms have been made about the constitutionality with respect to the First Amendment of tuition vouchers and tax credits for sectarian schooling (though recall that some, e.g., Friedman (1973), see this as a false issue); fiscal concerns are raised by the implications of tax credits for federal taxes and the solvency of the treasury (Longanecker 1983); and legal and philosophical issues are raised concerning the rights of parents vis-a-vis the state with respect to children (Hamm, 1982; Pacheco, 1980).

Political Problems With Family Control and Differentiated Schools

A Demand for Choice and Pluralism?

Critics of choice see less demand for policies of choice. The "unmet demand" for educational alternatives and greater control over curriculum is viewed largely as a projection of theorists or special interests, not as genuine public demand. The absence of grass roots movements supporting vouchers and open enrollment programs is taken as evidence of general satisfaction with public schools, more specifically with the neighborhood schools tradition (hence, central assignment) and with the range of choices offered in courses and electives. In the common schools model, traditional curriculum and neighborhood schools are a reflection of social consensus, not a structure imposed by bureaucratic interests and an intrusive government. "Uniformity," then, is not seen as a problem. Where public dissatisfaction is seen, however, other concerns about effects and feasibility of choice predispose critics to favor other more conventional solutions.

Choice, Pluralism, and the Public Interest

A separate issue concerns the proper role of the state with respect to the socio-cultural diversity that is recognized. If advocates of a common curriculum "see" less individual and group diversity to begin with, there appears also to be a different reaction to the socio-cultural diversity that is recognized. According to critics of choice proposals, public education best serves the public interest by promoting a common set of social and political values needed for social integration and national progress. Ironically, the very evidence of pluralistic needs and values discussed earlier in support of choice -- for instance, censorship controversies or ideological disputes -- is interpreted by critics of choice as evidence of latent forces of disunity requiring the countervailing force of common public schooling (Muller, 1983). Butts (1979) articulates this view in a critique of a California voucher proposal.

We well know that the goals of common schooling have not always been achieved in public schools, but now John Coons would redefine the meaning of "common schools" in such a way that even the *ideal* would be given up. This, I believe, is the real choice before the people...*No!* whether parents shall have more control over the education of their children, but whether the *ideal* of a common school system devoted primarily to the task of building civic community among the vast majority of citizens shall be given up in favor of private choice...Privatism is in the saddle and galloping in a peculiarly ominous way, and a voucher system might just make the race irreversible (p8). [All emphases original].

The common schools view promoted here leans toward an assimilationist view of the role of education in society in contrast to the pluralism of choice advocates. However, as the different interpretations of family sovereignty described earlier suggest, some proponents of choice also are ambivalent about "too much" choice. While differences in view are a matter

of degree and depend upon specific types of policies of choice in question, some advocates of choice are reluctant to give free reign to a privatized market of families and independent providers. This position acknowledges the legitimacy of individual learning differences and different family needs, but appears unwilling to endorse government promotion of cultural pluralism through means of greater family choice and control over schools.

Those favoring greater public support of choice and pluralism dispute the implicit premise of critics that uniformity promotes social integration.²⁸ Coleman (1987:14) writes that, although the "organization of public schooling along residential lines in America was an important integrating force... The question might be posed: Would the society now be less integrated if public schooling had been organized differently, with each immigrant group free to have its own public school? Conventional wisdom would respond that indeed the society would be far less integrated. But the evidence seems to us hardly conclusive." Glazer (1977) and others suggest²⁹ choice might reduce conflict in schools and act as a force of social and cultural integration, arguing the state's endorsement of pluralism through its removal of barriers to choice and pluralistic schools would be an important official act, symbolizing a commitment to democratic principles and multi-culturalism.

Can Choice Liberate the Poor and the Discontented?

A second political issue raised by choice concerns equal opportunity. Critics claim choice could threaten principles of equal access by weakening state control over curriculum and staffing. The "a thousand flowers shall bloom" imagery (different but equal schools) of free market discourse, ignores the competitive disadvantage lower income families are likely to have due to lesser political resources and inadequate information about school choices and enrollment procedures (Ginzburg, 1971; Olivas, 1981). In this vein, magnet schools have been charged with "elitism" (Carrison, 1981), with garnering more than their share of district resources, and with "skimming" good students from other schools.³⁰

The question of access to information is an important issue in choice theory. Research on the subject is meager, though it does suggest under conditions of choice, awareness of alternatives is unlikely to be equally distributed. Bridge and Blackman's (1978) analysis of the Alum Rock data shows that parents with more than a high school education had levels of awareness

²⁸ John Coons has said (New York Times, 1973, Sep. 23), "let schools specialize, as private schools would, and the pull of common interests will overcome the pull of color."

²⁹ See also Coons and Sugarman's (1977) treatment of implications of choice for social and cultural integration.

³⁰ Raywid (1985) and Royster et al. (1979) discuss these issues.

of the voucher options that exceeded awareness levels of parents without a high school diploma by a ratio of 1.2 to 1, a relatively small difference; knowledge of transportation and transfer policies differed by only a few percentage points (eg. 63% versus 61%). Differences in awareness by income were smaller than by education. Interestingly, SES-based differences in awareness decreased from the above margins over the several years of the study. Nault and Uchitelle, (1982) studying an open enrollment program found parents (N=48) with higher levels of education to be more knowledgeable of alternatives and more active participants in choice, though they concluded that "deliberative and reflective choice" was the modal pattern.

Much more research on the role of information, knowledge of alternatives, and family preferences is needed.³¹ Present evidence is insufficient to make generalizations about how differential awareness and orientations toward choice among families might affect equality or efficiency in stabilized programs of school choice.

Beyond the information question, there is little empirical evidence bearing directly on equity issues in systems of school choice. Criticisms of choice theory and policies are perforce mostly conducted on a theoretical level.³² In the view of critics of choice, inequality and stratification by SES would increase under systems of choice, particularly the most deregulated forms (Sterns and Timar, 1981).³³ To remedy existing inequalities, conventional measures are favored including finance equalization policies, standardization of curriculum, and certification processes to regulate personnel quality. Other examples include programs for at-risk students or bilingual/bicultural (or multi-cultural) curriculum programs. The recent Milwaukee RISE (Rising to

³¹ For more general theoretical analyses of the role of information in systems of choice and treatments of the issue of differential access, see Bridge and Blackman (1978), Klees (1974), and Olivas (1981). This issue is discussed in more depth in the empirical analyses in Chapters 3 and 4. Additional references are cited in Chapter 4.

³² Research on tuition tax credits, although empirically based on existing patterns of participation in private schools, distributions of wealth, and tax formulas, is necessarily speculative when it comes to predicting effects of tax credit policies. Policy analysts have tried to predict the likely distributional effects of tuition tax credits (James and Levin, 1983; Sullivan, 1974), though results of analyses often come to opposite conclusions.

³³ See Pacheco (1980) for a critical analysis of the Coons and Sugarman argument, particularly their position on the implications of choice for educational equality.

There is a relatively large literature, mostly policy-oriented, economically-based, and technical, on tuition tax credits. Due to its scope and tangential relevance to magnet school-based choice policies, this literature will not be treated here.

Individual School Excellence) program aimed at improving the inner city schools is typical of this approach.

Believers in choice tend to be skeptical of continued reliance on government programs and appear to have more faith in (a) the ability of parents to take responsibility for choice and choose wisely, and (b) the effectiveness of regulations to equalize access and competitive resources in choice systems. Also, proponents of choice appear more willing to accept a certain tradeoff: while some families may not choose well, a higher good is served by preserving the right of choice for all families and adhering to principles of individual responsibility. However, the hard edge is taken off of this tradeoff because of the assumption that entire systems of schools can be improved through mechanisms of choice, so, while relatively speaking, some families will choose or compete less effectively, those families would be even less well off in a traditional system.

Finally, with respect to claims about poor parents not choosing well or being out-competed, choice proponents charge that an objectionable paternalism underlies challenges to choice based on professed egalitarian concerns. "The real issue here concerns *presumptions*. The current presumption -- that no parent is responsible unless he happens to be rich and can opt out of the system -- approaches the perverse" (Wagner, 1977: 165). And Sowell (1977:165) writes, "Educational 'experts' often proceed on the implicit assumption that low-income parents are not competent to make decisions about their children's education. Compulsory attendance laws and the compulsory assignment of children to particular public schools are among the heavy-handed procedures justified by the belief that low-income parents either do not know or do not care about what is good for their own children."

Problems With the Economic Case for Choice: Market Versus Government Control

The monopoly theory of public education's bureaucratic dysfunctions is countered by a bureaucratic theory of efficiency. Structural and curricular uniformity and attendance area-based assignment, are not monopolistic mechanisms; rather they are seen as an efficient way to utilize and allocate students to educational resources.

In contrast with the market vision of numerous distinctive educational vendors, bureaucratic theory espouses centralization and standardization on an "economies of scale" rationale -- like a shopping mall as opposed to diverse and geographically dispersed specialized stores. Standardization produces efficiencies of scale stemming from productive forms of cooperation and program coordination; since all schools are the same, a relatively greater fraction of organizational resources can be devoted to special programs and courses. Responding to the current U.S. Assistant Secretary of Education's voucher proposal, the Executive Director of the National School Boards Association writes, "Fifty years ago, America had more than 130,000 school districts; now we have about 15,000. We reached a solid consensus that the highest quality education at the most reasonable cost is available only through districts of more than one school that can coordinate curriculum between the early and later grades. Limited curriculum, uneven standards

within communities, extreme parochialism, and duplicate costs were all part of the bad old days to which Finn would have us return" (Shannon, 1986:18).

Choice, in this view, can be expanded within schools. If one views these choices (course, electives, etc.) as sufficient for the purposes of meeting diverse family preferences (especially, if one views American culture as less diverse to begin with), it is more efficient to accommodate diverse preferences using the comprehensive curriculum model than to have students more geographically dispersed among more numerous specialized schools.

If each school is viewed as capable of accommodating a full range of preferences and learning needs, and centralized control is assumed, then there is no reason not to have attendance area-based student assignment. Centralized allocation of students and resources to schools is simpler and more predictable than decentralized control. Uncertainties introduced by family-controlled student allocation processes undermine planning and coordination of major organizational functions (allocating staff and instructional resources to schools, planning for building maintenance needs, etc.).

Further, centralized student allocation obviates the need for information dissemination and other measures to minimize and equalize costs of access -- a central task inherent in the proper functioning of markets, and a political requirement in education. If there are no school alternatives, information about alternatives is unnecessary. Any exercise of choice or information gathering about schools by parents has traditionally been considered a private affair; something parents may engage in if they choose before they decide which neighborhood to live in. A prerogative of the private domain, there is no obligation of the state to supply information to parents before they have moved into an attendance area (Indeed, public attention drawn by information about relative quality of different schools would undermine the legitimacy of claims of formal equivalence of public schools).

Countering the public choice theory of bureaucratic deficiencies is the argument public schools serve important social functions other private organizations do not. Public schools operate under political and regulatory constraints aimed at reducing racial desegregation, promoting common civic beliefs, equalizing the distribution of public funds to schools, and protecting the interests of groups in the minority, whether the handicapped, ethnic minorities, or children from broken homes. Also, as state employees, teachers and administrators have occupational rights that produce regulations in the interest of equal treatment of workers. In Chapter 5, I discuss in more detail how public choice is unlikely to eliminate these sorts of regulations. This argument, then, asserts that private schools enjoy an autonomy and are accountable to clients in a way that is unlikely to be reproduced on a mass scale merely by allowing all parents to choose schools.

Generalizations about relative gains in production efficiency from studies of private versus public production in non-education services also can be questioned. Compared to technical knowledge of production processes in other kinds of services (utilities, medical, legal), the technology of education is uncertain, and therefore not subject to the forms of control found in private bureaucratic organizations. Organizations with "hard" technologies can employ

tight controls over production and the monitoring of outputs, allowing a more tightly coupled and hierarchically manageable structure. Thus, schooling is not subject to the same principles of production efficiency that operate in the private production of non-education services. The organizational structure of public school systems is a unique, functional adaptation to technical and institutional needs and problems not faced by other kinds of bureaucracies.³⁴

Finally, choice proponents' descriptions of public school monopolies are viewed by some as unrealistic caricatures. Public schools are not unaccountable to the communities they serve and to family preferences. State monitoring policies, testing programs, public school board hearings, parent organizations, and the day-to-day accessibility of teachers and principals subject schools to multiple forces of accountability and insure responsiveness of schools and educational programs to family and community needs.

These explanations, because they take for granted the assumption that public education must be provided by a large government bureaucracies, are viewed critically by public choice theorists. Problems of accountability and "loose-coupling," and difficulties in managing a large and diverse clientele in a highly regulated political environment are viewed as predictable consequences of centralized state provision of education (West, 1982). Education officials, critics contend, continually propose new programs but seldom question basic premises underlying the organization and control of public education (Brandl, 1986). Proposals to decentralize control, to shift control over curriculum, attendance, or education finance to communities and families, however, are typically opposed, often with arguments about the inefficiency of decentralized control and the prospect of undermining equal opportunity.³⁵

³⁴ There is a large literature with different explanatory perspectives on the structure and functioning of educational organizations. Meyer et al. (1985) proposes a theory of bureaucratic growth that emphasizes the causal factors of technological and environmental uncertainty. March (1978) offers an illuminating analysis of dysfunctional effects of technical uncertainty on the work and motivation of school administrators. Weick (1976) views the loose-coupling of educational organizations as functional and adaptive. Meyer and Rowan (1978) and Rowan (1981) view the structure of educational organizations also in functional terms, ascribing their loose-coupling to technological uncertainty and the political and institutional functions of schooling. While some of these theorists see deficiencies in the structure of educational organizations, it is unclear if they believe choice and competition might improve organizational functioning. Primarily these are explanatory, not normative, analyses.

³⁵ Recent proposals to implement choice in Minnesota education (see Section I.) were bitterly opposed by the major education associations (teachers, administrators, and school boards), and produced the most political conflict in education legislators had experienced in many years (Archbald, 1988). See Weiler et al. (1974) for a discussion of the NEA's testimony before Congress and opposition to the idea of testing vouchers. Kohl writes in Fantini (1973:Appendix) about the resistance of Berkeley school officials to the support

Concluding Comments

The debate over choice is wide-ranging because the subject of choice in public education is broad. As the case for choice showed, there are different reasons choice in education is supported, different definitions of the problem, and different proposed remedies. The more radical measures -- some of the voucher designs -- have not even been tried; open enrollment programs and magnet schools still have a short history.

In the interest of organizing literature on the case for choice, my interpretation has inevitably resulted in some conflation of viewpoints that, while sharing certain assumptions differ in specifics. Like the polarization of discourse on choice, this is a result of fashioning a two-sided issue out of varying positions. The major qualification to be borne in mind is the division between supporters of public school alternatives and proponents of voucher or tax credit policies that include private and parochial schools. Many public educators support the former; far fewer, the latter. Also, some supporters of public school alternatives would disagree with the more critical comments about monopolistic excesses and the absence of choice in traditional public systems. Thus, while I have articulated a counter-position to the case for choice, it is not a coherent opposing theory.

To summarize, prevailing conditions are viewed as a problem because, relative to the common schools view of public education, public choice proponents:

1. Place a higher value on the principle of family choice and minimal government involvement in family affairs.
2. Assume greater individual diversity and cultural heterogeneity and consequent dissatisfaction with the public school uniformity, and thus believe the status quo in education abridges rights concerning freedom of belief and equal opportunity.
3. Favor a more pluralistic position on the part of the state with respect to individual diversity and cultural heterogeneity in society.
4. Believe there is greater inefficiency in present public school systems. Proponents of choice claim the absence of competition (monopolistic interests), more than technical requirements of mass, common schooling, accounts for centralized governance and control in public schooling.
5. Believe markets are more feasible (information, registration, transportation, accounting, quality control) and can be more technically and allocatively efficient producers of educational services.

of several alternative schools he and other parents in the Berkeley community were trying to create.

SECTION V. RESEARCH QUESTIONS, PURPOSES, AND ORGANIZATION OF THE STUDY

Benefits and costs of choice must be better understood. The following chapters will provide findings and draw conclusions to inform the debate on public choice theory and on magnet-based open enrollment policies as a means of achieving choice. While a more detailed introduction to the purposes and significance of the research for this dissertation is provided at the beginning of each following chapter, it will be helpful to offer a brief overview here.

Chapter 2, after discussing the emergence and functions of magnet schools, turns to a description of the MPS magnet system. This will give us a better understanding of administrative requirements of choice and begin to answer the question -- what forms of choice are possible within contemporary arrangements in public education? Choice and family sovereignty are worthwhile social goals, but not at any cost. Both to improve choice theory and to inform public policy, we need to have a better understanding of the practice of choice in school systems and logistical and political problems created or solved by choice.

Chapter 3 analyzes assumptions and propositions in the political rationale for choice. Theoretically, policies of choice can accommodate diverse family preferences without undermining goals of educational equity. I examine assumptions about choice as an instrument of family sovereignty and liberation, about demand to exit neighborhood schools, and about pedagogical decision making under conditions of choice.

While both Chapter 2 and 3 are germane to claims about the possibility and efficacy of markets in education, Chapter 4 explores most directly causal claims about the potential contribution of choice to educational productivity. As pedagogically distinctive, open enrollment schools, magnets operate in a kind of market environment. By analyzing properties of magnets and their environment, we can learn about the causes of magnets' attractive qualities and broader potentialities of choice.

Chapter 5 will return to some of the issues discussed in this section concerning implications of choice for improvement and equity in public education. I will offer different views of the sorts of changes relative to traditional centralized assignment systems that have resulted from the implementation of magnet schools and open enrollment policies in Milwaukee, discuss advantages and disadvantages, and contemplate possibilities for broader educational improvement through choice.

CHAPTER TWO

A DESCRIPTION OF MAGNET SCHOOL-BASED VOLUNTARY DESEGREGATION: BALANCING GOALS OF CHOICE, FEASIBILITY, AND RACIAL DESEGREGATION

INTRODUCTION

The purposes of this chapter are primarily descriptive. One purpose is to provide background information for analyses in Chapters 3 and 4. Key features of the MPS (Milwaukee Public Schools) system of school alternatives and open enrollment are described in the three main sections of this chapter (III. - V.).

A second purpose is to begin to show how choice in education operates in practice. In spite of much academic theorizing about choice, few understand sufficiently the logistical and political problems confronting the implementation of choice in education. Scholars are often remiss in appreciating the myriad complexities of implementing choice, complexities that are not merely bureaucratic contrivances, but necessitated by unique political and logistical problems created when a school system departs from the institutionalized arrangements of the "common schools" model. Also, given the prevalence of misconceptions about what magnet-based voluntary desegregation is, it appears there is a need for some straight information. Though many applaud school choices and educational alternatives, and the achievement of desegregation through voluntary methods, no comprehensive system-level descriptions are available.

The MPS system provides a prime case study site to explore public choice principles in education. If policies of choice aim to increase voluntarism and efficiency in public education, they will do so under the "imperfect" market conditions of big city politics and the constraints imposed by state regulations and administrative technology. Any public choice plan is likely, in practice, to be regulated for purposes of racial integration, finance equity, quality control, and perhaps other purposes (e.g. job security).³⁶ Even the one deliberate attempt to try the pure voucher model -- the Alum Rock voucher demonstration -- in implementation became a modified open enrollment program with site-based autonomy and job protections.³⁷ If the MPS system is not an ideal experiment in public choice theory, it is a successful program of

³⁶ See for example, the different regulated voucher models presented in the Center for the Study of Public Policy's Education Vouchers, 1970. The MPS plan resembles the "Egalitarian regulated voucher model" described in this document.

³⁷ See Cohen and Farrar (1977) for a politically oriented analysis of the voucher project -- they argue teachers and principals were the main beneficiaries of the decentralization of control in the system; Wortman and Pierre (1977) review their reanalysis of selected achievement outcomes of the voucher demonstration.

choice, with one of the largest magnet programs in the country, and believed to have implemented voluntarism and educational alternatives on a large scale.³⁸

To provide a broader understanding of the program of choice in MPS and insights into problems choice needs to resolve, I begin with an introductory discussion of the political and demographic context of magnet-based voluntary desegregation. This is to stress that magnet schools and open enrollment are instruments of desegregation, institutional maintenance, and conflict resolution, as well as, choice. Literature on magnet schools tends to accentuate their contribution to voluntarism and educational improvement.³⁹ Section II. will discuss methodology and a conceptual scheme to help interpret the description of the system of choice in MPS.

SECTION I. THE DEMOGRAPHIC AND POLITICAL CONTEXT OF MAGNETS AND VOLUNTARY DESEGREGATION

Magnets bring some solutions to a complex of political problems confronting state governments and big city school districts. Desegregation is becoming harder to achieve with continuing white emigration from cities; and educational and political problems increase as urban systems contend with growing numbers of poor children from ethnically diverse backgrounds (Orfield, 1983). Some demographic facts on Milwaukee illustrate the dimensions of these changes.

Like many large older American cities, Milwaukee has been changed by the migration of affluent professionals to the suburbs. Milwaukee's population

³⁸ MPS's is considered to be one of the most successful voluntary desegregation programs in the country. Rossell (1985a:57-60) using the MPS case as an example of a successful voluntary plan argues that on the criterion of long term (since 1976) reduction in racial isolation, it can be compared favorably to the Boston case, which achieved substantial desegregation, but through the use of mandatory reassignment techniques. See also the U.S. Commission on Civil Rights (1979) for a classification of 49 big city school desegregation plans; MPS's is one of twelve districts with voluntary plans. Morgan and England's (1982) analysis of a large number of different desegregation techniques in 52 separate desegregation programs shows the Milwaukee "voluntary-magnet" program to have produced a level of reduction in racial isolation approximately two-thirds that of the mandatory plans; (37 of the 52 desegregation programs are based on mandatory plans). The Milwaukee program has also received much press coverage, locally and nationally, and in educational trade journals for its outstanding magnet schools and achievement of extensive desegregation on a voluntary basis.

³⁹ Warren (1978), in "The magnet school boom: implications for desegregation," attributes the growth of magnets to a demand for educational alternatives, greater parent control, and "the search for voluntary desegregation measures."

in 1980 was 636,212, down 11% from 717,372 in 1970. The first ring of suburbs immediately surrounding the city also declined in population, but only by a few percent. However, the three counties bordering Milwaukee county grew by about 12% (53,000 residents) in that same time. Large shopping areas, industrial parks and service jobs, lower housing prices, and large properties are drawing people -- those who can afford it -- away from the city.

As white-collar professionals vacate the city, the children who remain in the public schools come increasingly from low-income families, jobless parents, and single parent, often female headed households.⁴⁰ Out of 152 MPS schools, only 26 have fewer than 20% low-income students (based on subsidized lunch figures) and the figures for these 26 schools are mostly in the high teens. Close to half of MPS schools have above 30% low-income students. In contrast only 11 out of 116 suburban schools are over 10% low-income students; the vast majority are in the 2. to 8% range.⁴¹

Milwaukee's black population has grown by about 10% in the last ten years; now over a quarter of Milwaukee residents and 51% of Milwaukee public school children are black. Of the 750,000 people in the adjacent suburban communities, .5% are black. The great majority of blacks in Milwaukee live in the inner core (Figure 2.1). Figures 2.1 and 2.2 show a mixed picture of changes in residential integration between 1970 and 1980. According to the Milwaukee Urban Atlas (DCD, 1983), in 1980, 63% of the city's blacks lived in census tracts in which at least 75% of the residents were black, while in 1970, 59% did. Racial isolation in the inner city has grown somewhat at the same time as more blacks are moving into predominantly white areas to the north and northwest of the inner city. Overall, the degree of residential racial integration in Milwaukee has not changed much over the last decade.

Blacks are poorer than whites in Milwaukee. In the 1980 census, the per capita income for blacks in the city was \$4,707; the median household income, \$11,961. ("Household" refers to any dwelling). Whites' per capita income was \$7,865, with a median household income of \$17,069 (DCD, 1983). These differences are evident in Figure 2.3, which shows the black inner city area to have the highest percentage of households below the poverty level. (Compare maps in Figures 2.3 and 2.1.) The racially isolated inner city is the poorest area and has the lowest level of educational attainment (Figure 2.4) in Milwaukee.

Also, the median age of blacks is younger than that of whites (Figure 2.5). This is one reason for the difference in income between blacks and whites. Older wage earners earn more. That blacks are younger in Milwaukee, have a higher fertility rate, and lower levels of enrollment in private

⁴⁰ In one of the high schools studied by the Study Commission, we were told almost one out of three black high school girls in the school were mothers.

⁴¹ Milwaukee Metropolitan Public Schools Study Commission archives.

FIGURE 2.1 BLACK POPULATION AS A PERCENT OF TOTAL POPULATION - 1980

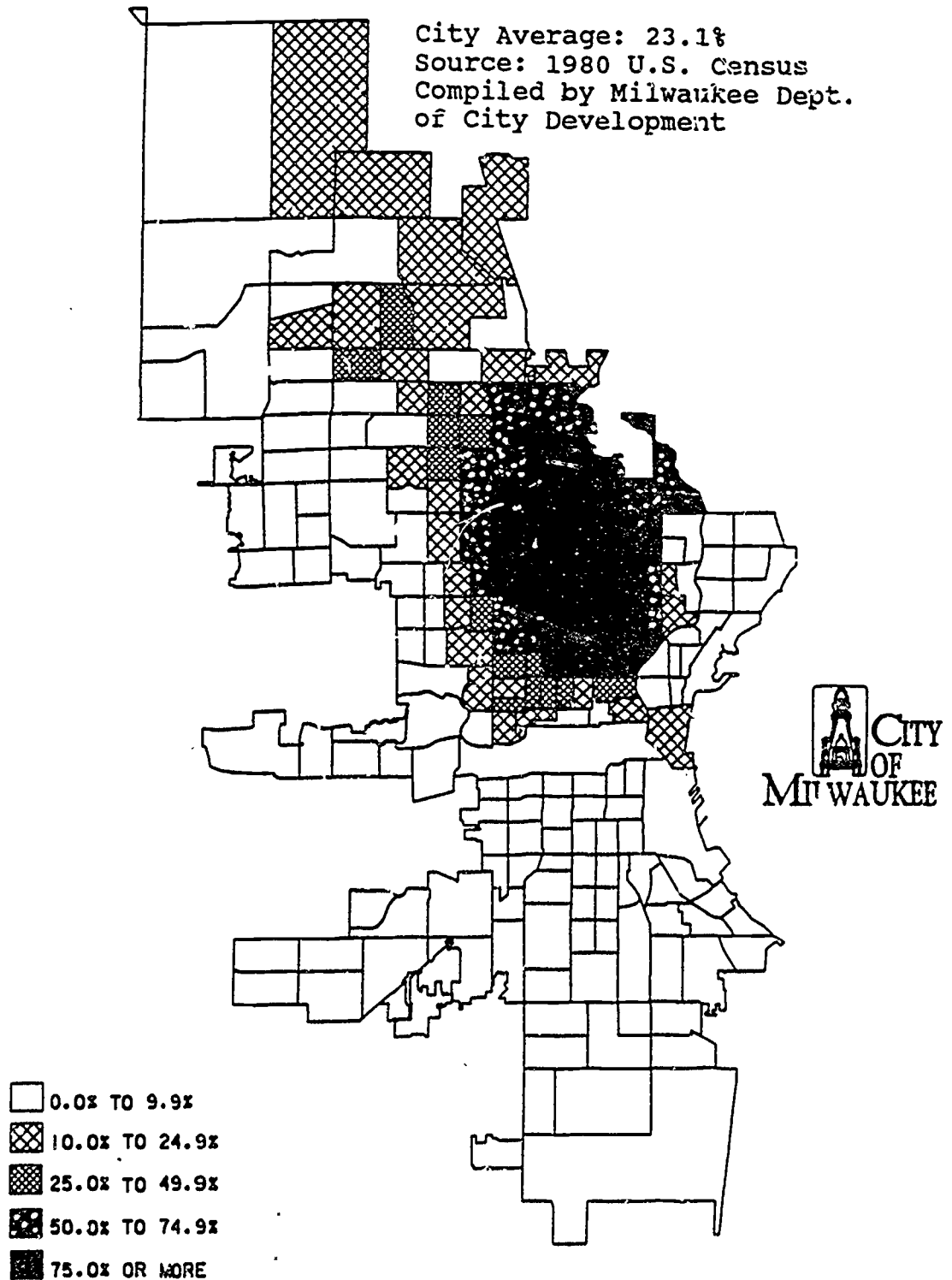
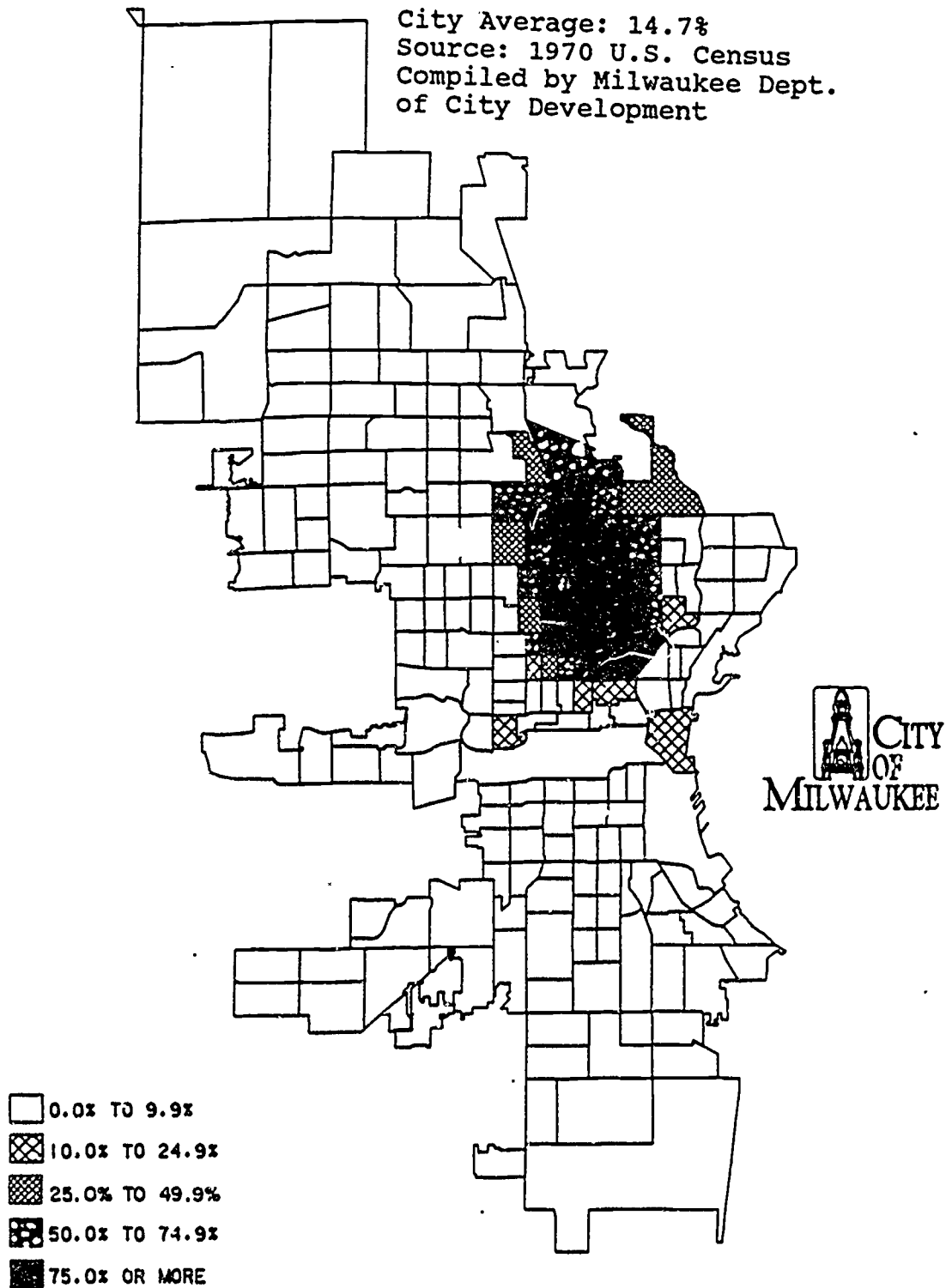


FIGURE 2.2 BLACK POPULATION AS A PERCENT OF TOTAL POPULATION - 1970



**FIGURE 2.3 PERCENT OF HOUSEHOLDS BELOW
POVERTY LEVEL - 1979**

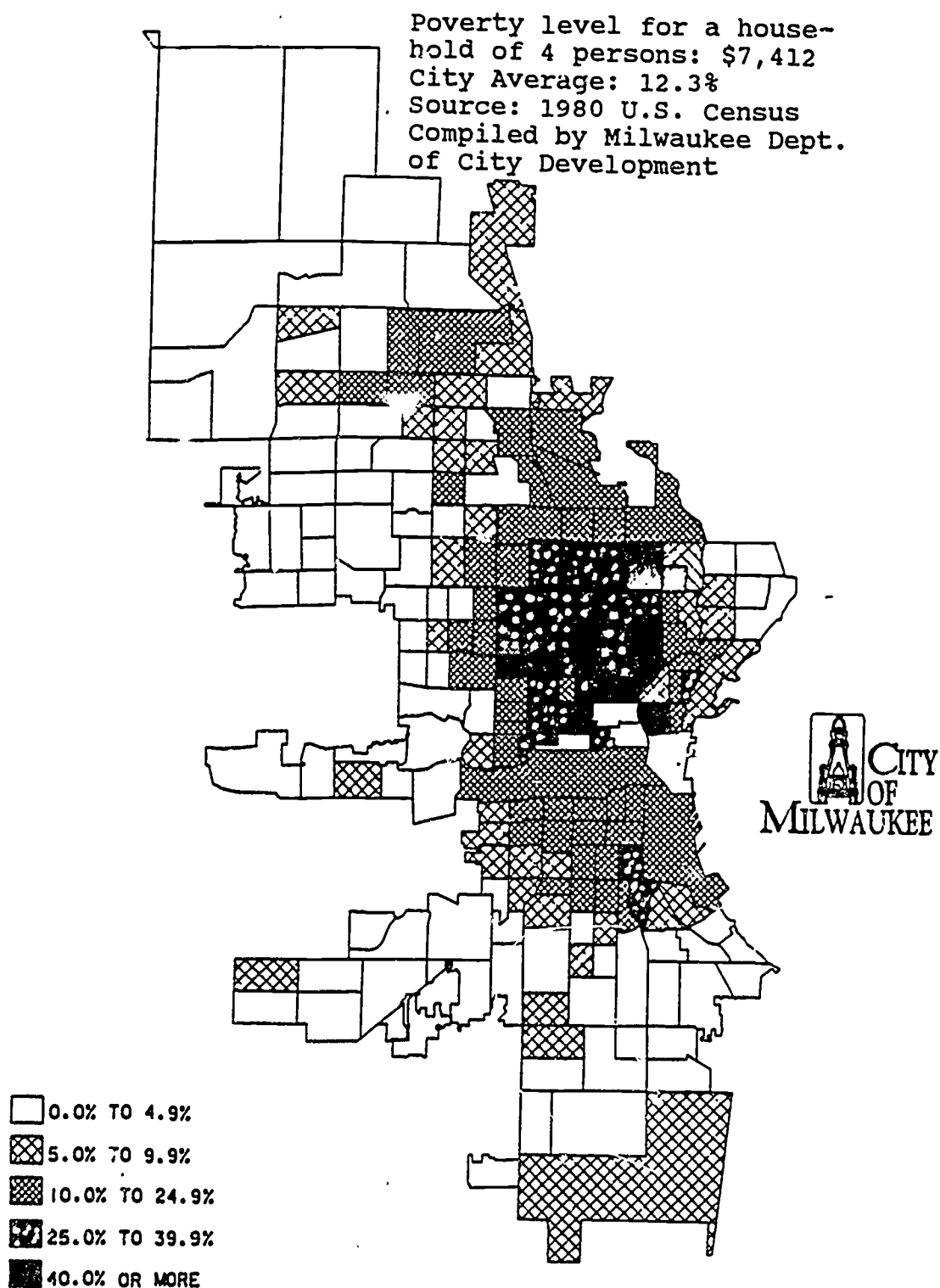


FIGURE 2.4 PERCENT OF PERSONS 25 AND OLDER WHO ARE HIGH SCHOOL GRADUATES - 1980

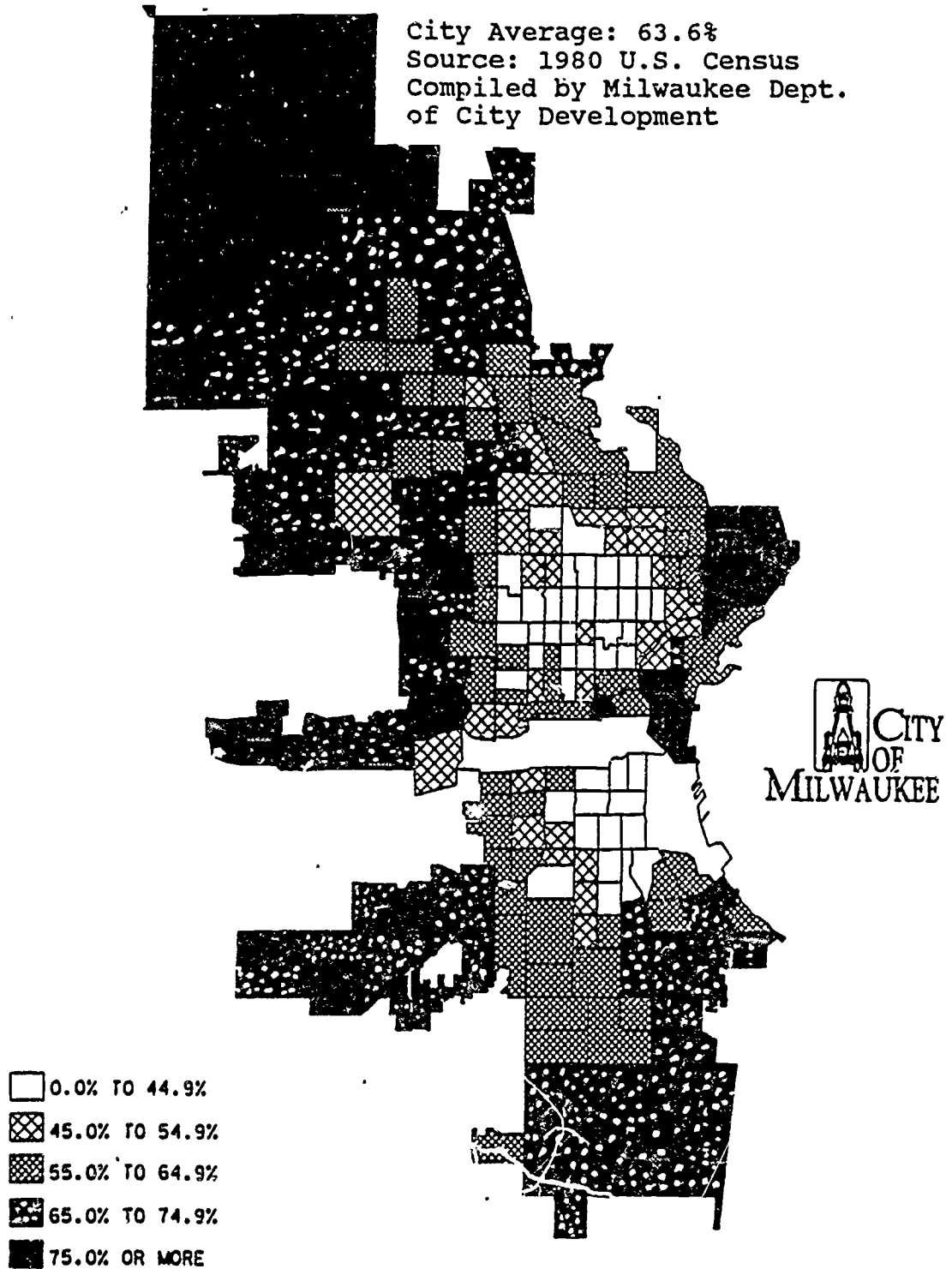
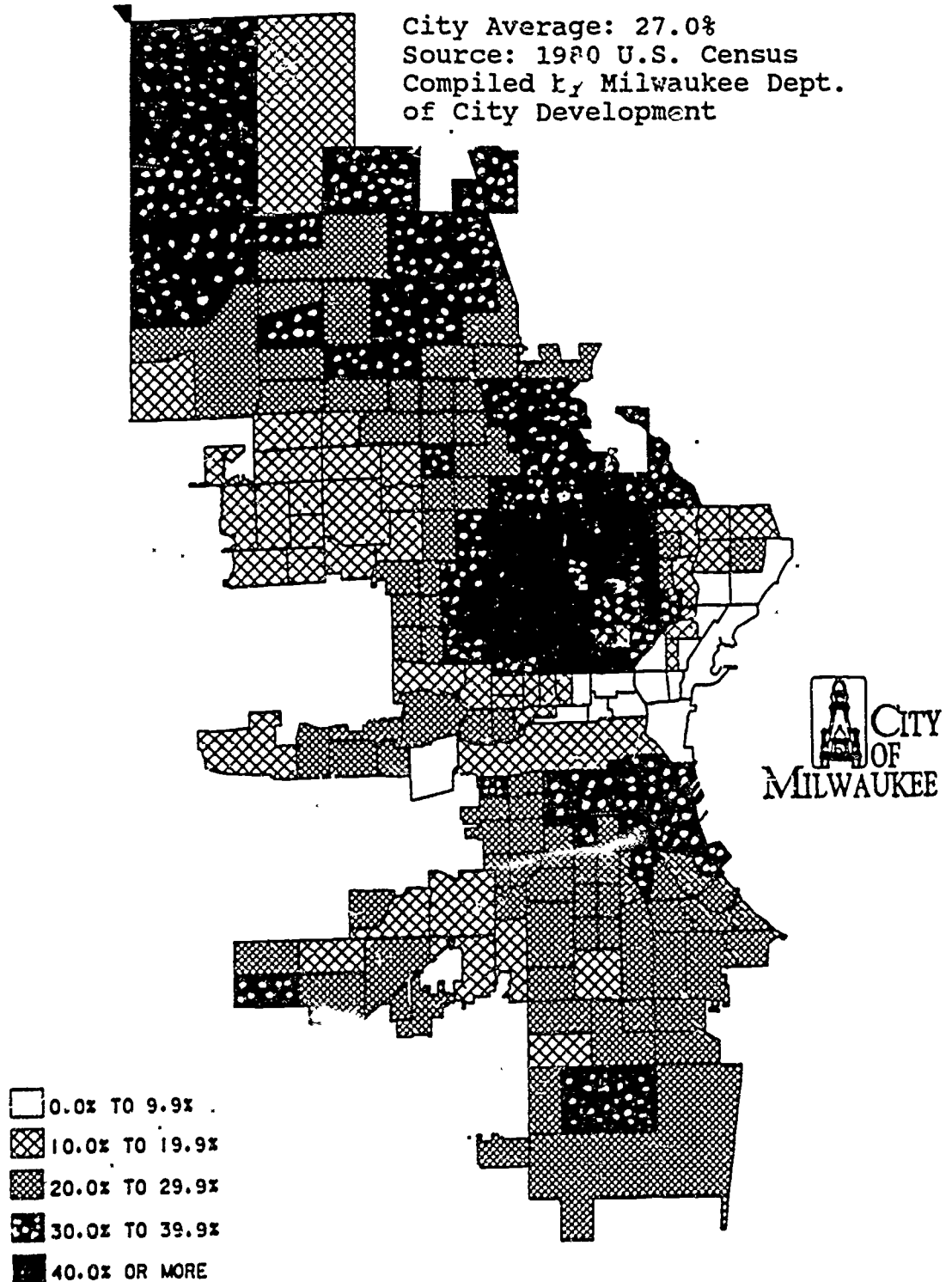


FIGURE 2.5 POPULATION UNDER 18 YEARS OF AGE AS A PERCENT OF TOTAL POPULATION - 1980



schools explains why the public school system has a percentage of black children double the proportion of blacks in the city.

These conditions, typical of most large cities in America, present difficult educational challenges. The 1984 Metropolitan Milwaukee Public Schools Study Commission for which I conducted research was itself spawned by the political conflict within the metropolitan area and the rising concern among Milwaukee civic leaders over social problems involving the schools. Research reports from the Commission documented large differences in dropout rates and test scores between MPS and the suburban schools. Generally, teaching is a different, and probably more difficult, job in the MPS schools requiring more time and effort devoted to maintaining order in classrooms and improving reading, writing, and basic functional skills.⁴² Metropolitan-wide busing programs have been proposed to reduce racial isolation, but the legal basis and political feasibility of this remedy is uncertain.⁴³ Even intra-district busing has waned. An increasingly conservative political climate since the mid 70s, changes in legal opinion, an increase in the number of legislative initiatives limiting or prohibiting mandatory reassignment (Hawley, 1983:Ch.1), and key court ruling have slowed considerably the process of mandatory school desegregation (NIE, 1976; Orfield, 1978b; Feagin, 1980).⁴⁴ At the same time, magnet schools and voluntary desegregation programs have increased. A sudden demand for educational alternatives is not the reason.

Magnets solve educational, racial, and political problems for big city

⁴² See Witte and Backus (1985) for a Study Commission research report which compares results across districts from the survey administered to all teachers in the metropolitan area. On three scales summarizing large numbers of items revealing teachers' attitudes toward work, (job satisfaction, control over work, and magnitude of problems experienced in work), MPS teachers reported the lowest overall results of the 21 districts. One other school district, also with a relatively high percentage of low-income families had values on these scales close to MPS's.

⁴³ The 1977 Milliken case in Detroit was a landmark case on the question of inter-district remedies. The Supreme Court held that an inter-district desegregation remedy exceeded the constitutional violation. Suburban districts surrounding Milwaukee have participated, many reluctantly, in Wisconsin's Chapter 220 program providing monetary incentives to encourage inter-district voluntary transfers for racial balance purposes. Recent litigation involving MPS and suburban districts and an out-of-court settlement resolving the dispute attest to the precariousness of political relations between the city and the suburbs. (Board of School Directors of the City of Milwaukee, et al. v. Thompson, et al., Case 84-C-877).

⁴⁴ Feagin (1980:46) believes, "Comprehensive school desegregation has not occurred because the more powerful societal actors did not, and do not, wish it to occur. From a broad vantage point, patterns of discrimination interlock across political, economic, and educational sectors."

school districts. As instruments of school desegregation, they serve a conflict-control function. In Judge Garrity's view, the magnets and the voluntary component of the Boston desegregation plan provided "an enormous safety valve" (Royster et al., 1979:6). On federal support of magnets, Senator Glenn⁴⁵ proclaimed, "The goal is to provide schools with superior education -- education so attractive to all racial groups that integration will occur naturally, rather than as a result of a government requirement" (Power 1979). The voluntarism of magnet choices and regulated open enrollment designs are politically more acceptable to communities than "forced busing" which remains controversial, the term itself stirring up images of state coercion and political protest (Orfield, 1978a; Levinsohn and Wright, 1976). However, some see magnets as artifices to avoid or deflect judicial mandates to desegregate (Barr, 1982:38).

Voluntary desegregation with magnets uses enrollment incentives and racial balance guidelines to regulate choices. School desegregation in MPS relies little on mandatory reassignment. However, many more whites than blacks attend nonneighborhood schools; a larger percentage of whites than blacks who attend nonneighborhood schools are in magnets or accelerated-tracks in nonmagnets; and a sizable fraction of blacks remain in segregated schools exempt from the racial balance policies by the court order. The exemption suggests consideration of the principle of voluntarism and the goal of conflict reduction were considered in the court's approval of the MPS desegregation plan.

It is more than voluntarism or a desire for educational alternatives that has contributed to the "magnet boom" (Warren, 1978). Magnets may be a sign that the threat of exit (white flight) has resulted in big city school districts

⁴⁵ Senator John Glenn sponsored federal legislation to assist big city school systems in the development and implementation of magnet-based voluntary desegregation programs. He explains the federal rationale for support:

"Although I think that some federal judges have moved almost instinctively toward mandatory transportation, I did not offer the bill as a means of short-circuiting court-ordered busing. (p30)...We wanted to provide direct federal funding so the localities involved in school desegregation disputes would be able to design a full range of remedies for problems encountered in school desegregation. Our hope was that, by increasing available remedies and by having these additional remedies stress educational methods significantly improving educational quality we might encourage increased voluntary integration, while reducing mandatory transportation as a means to accomplish desegregation" (Glenn, 1978:31)

Foster (1973:24) has a less charitable view of the voluntarism brought about by magnets. "One of the most spurious desegregation techniques is the "magnet school" idea...The magnet concept is a message to the white community which says in effect: "This is a school that has been made so attractive educationally you will want to enroll your child voluntarily in spite of the fact that he will have to go to school with blacks."

becoming more responsive to the preferences of families able to exercise that source of leverage.

Though definitive evidence is lacking, there is reason to believe magnets help retain families in urban public systems who would otherwise leave.⁴⁶ In several meetings of the 1984 Metropolitan Milwaukee Public Schools Study Commission, members of the Commission who were also involved in the school system in the early desegregation years (beginning 1976) were explicit that magnets were developed in part to stem white flight. There is strong evidence that private schools retain whites in large central city areas (Sullivan, 1974:70). Consider, for instance, that in desegregation programs with mandatory reassignment, on average, 50% of whites assigned to schools formerly above 90% black will not show up.⁴⁷ Yet, MPS's magnets, many of them formerly all-black schools, not only attract thousands of white children from through Milwaukee, several hundred suburban students are also enrolled in magnets. Magnet schools appear to be part of a more general movement toward urban revitalization and an effort of urban system to improve their image and compete more successfully with private schools.⁴⁸

Thus, magnet schools represent a change in urban education which goes well beyond the goal of implementing choice in public education. They are an outcome of the politics of education, the result of an evolving compromise between different political and economic ideals and different sets of institutional, class, cultural, and state interests. Unlike the ideal educational markets of public choice theory which inexorably proceed toward efficiency optimums, magnet school-based voluntary desegregation programs have no single purpose. If magnet programs lack the free market purity of voucher models, magnets can boast something voucher plans cannot -- acceptance. Found in only fourteen districts in 1976, as of 1981 there were over one thousand magnet schools in one hundred thirty eight school districts (Blank et al. 1983). Because the focus of this study is on magnets and open enrollment as instruments of choice, the following, after introductory theoretical and methodological comments, describes educational alternatives available to MPS families and the policies which make choice possible. I will return to political and administrative constraints on choice in Chapter 5, at which time how choice operates in MPS will be much clearer.

⁴⁶ Murphy and Pawasarat (1986) based on a somewhat simple analysis supported by Milwaukee Magazine believe MPS's magnets have helped retain whites in the school system.

⁴⁷ Rossell (1985b). Five references are cited.

⁴⁸ See Levine, D. et al, (1980) for descriptions of magnet schools in several different cities and their effect on community-school participation, and a discussion of the role of magnets in the renewal of urban systems. Estes and Waldrip (1977) also discuss this issue.

SECTION II. THEORETICAL IDEALS AND PRACTICAL REALITIES IN CHOICE: INTRODUCTORY COMMENTS AND METHODOLOGICAL OVERVIEW

The preceding discussion showed some constraints and interests shaping magnet-based voluntary desegregation programs. It is useful to think of the structure and policies of the magnet system as a response to a number of system goals. If choice is to be implemented at the same time as the mandate to achieve school desegregation, then the school system confronts the task of: (1) how to maximize choice with (2) manageable logistics and accounting procedures (the "overhead" of choice) while (3) insuring that blacks and whites end up in the same schools in sufficient numbers to achieve desegregation. These different needs can conflict and must also be balanced against institutional maintenance and conflict reduction needs. To gain a perspective on practical and political factors shaping the practice of choice, it is helpful to consider ideal conditions of choice.

Alternatives

A market must present consumers with genuine alternatives. Choosing between identical options is a spurious choice. While one can debate what "genuine" means or the required differentiation of alternatives, clearly a minimum requirement is that families must attach different values to different options,⁴⁹ for instance on criteria of transportation convenience, safety, pedagogical goals, and staff and classmate characteristics. Theoretically, no minimum number of options can be specified; ideally, the number and kind of school alternatives (up to some point of diminishing returns) should match the full range of preferences -- a state of perfect allocative efficiency. Public choice theory assumes existing uniform/neighborhood assignment systems suppress a demand for alternatives. (This assumption will be analyzed in more detail in Chapter 3).

Knowledge of Options

Choice theory suggests a relationship between knowledge and the level of system efficiency.⁵⁰ Without information on school alternatives, market processes cannot operate. Assuming rational utility-maximization, the better informed families are, the more efficiently the market should operate. The more people are aware of learning needs and interests, and available alternatives, the more informed their choices will be and the greater the control over suppliers they can exert; at the same time, suppliers can better tailor services to family preferences if families reveal those preferences in

⁴⁹ For discussion of this issue and some references to empirical work see Rossell (1985b). Relevant studies include, Nault and Uchitelle (1982), Weiler (1974), and Bridge and Blackman (1978).

⁵⁰ See Olivas (1981) for a discussion of the information problem in relation to proposals to give parents public support for private school tuition. Bridge and Blackman (1978) also discuss the role of information in systems of choice.

choices they express. Choice theory assumes families have varying preferences and will utilize information (assuming availability) under conditions of choice to realize those preferences. Although a related process receives less attention, the development and availability of educational alternatives can be expected to create demand and differentiated preferences.

Logistical Accessibility

Knowledge of alternatives may exist (condition #2.), but if one is constrained to choose a particular alternative, there is no choice. There must exist some equalization of the distribution of the costs of access to alternatives. Costs cannot be perfectly equal, but they should not be prohibitive and should be sufficiently equal so as not to exclude large portions of families from the market. Theoretically, a relationship can be posited between the extent to which costs of participation are equalized and system efficiency.

The content of sections III., IV., and V. corresponds to the ideal requirements identified above. This supplies one perspective to assess the conditions of choice in MPS. In a world without technological and resource constraints, and political conflicts of interest, choice in education faces no obstacles to the optima implied in the above model. Using an ideal model focuses attention on limiting factors and compromises that must be struck between different goals.

Another perspective on choice in the MPS system describes its departures from traditional "non-choice" conditions -- the uniformity and centralized assignment proponents of choice define as a problem. This is how the contribution of magnets and open enrollment policies to public choice in education are usually described. This perspective highlights the significant programmatic and administrative changes necessitated by choice that are part of the MPS system and help account for the interest this program has stimulated nationally and internationally among school administrators, policy analysts, and state legislators interested in choice and desegregation. Thus, my description of conditions of choice in MPS will show, on the one hand, how the system departs from traditional structures and policies and, on the other, how it compares with ideal principles of choice. I also discuss how institutional goals and goals of choice theory can conflict.

Methodology and Data Sources

To fulfill my charge to the Metropolitan Milwaukee Public Schools Study Commission, I carried out research from July 1984 to September 1985, producing two reports for the Study Commission subcommittee responsible for overseeing the "Specialty Schools" project. The research reports described the nature and variety of distinctive schools and programs in the metropolitan area and provided data related to their quality and accessibility to all children.⁵¹

⁵¹ The 11 research reports and the final Study Commission report with recommendations are available from the Wisconsin State Department of Public Instruction.

This work along with additional efforts on my own time (including research after the Study Commission project was completed) produced the data for this dissertation.

Data come from several sources that can be grouped as follows: (1) documents and records from the school district's central office; (2) semi-structured face to face and telephone interviews, (3) mailed and coded telephone surveys, and (4) case studies of schools. Below I describe these data sources. Additional methodological details (sample sizes, measures of variables, relevant methodological caveats, etc.) are given in the following chapters where relevant to the presentation and interpretation of findings.

Central Records Data

From the MPS school district, I collected data on standardized test scores (Iowa Test of Basic Skills and the Metropolitan Achievement Test); on school enrollments, staff characteristics, and budgets; and on district policies, course offerings, and school characteristics as profiled in MPS's "Profiles of School Characteristics" yearly report. Additionally, I reviewed documents collected by other Study Commission researchers on district personnel, pupil service, parent involvement, course policies and program characteristics. These documents were for other Study Commission projects on parent involvement, achievement test analyses, special education, and teacher policies. Chapter 2 is based largely on descriptive interviews and policy documents detailing how choice in MPS is formally implemented. Chapter 3 heavily utilizes MPS district level data on applications to and attendance patterns in different categories of schools by race for the 1984-85 school year.

Surveys

All the teachers and principals in the metropolitan region were surveyed. The surveys developed by the research staff of the Study Commission covered a wide variety of subjects of theoretical and policy interest, including job satisfaction, professional autonomy, leadership characteristics, parental involvement, organizational cohesiveness, and the like. More information on the survey is provided in Chapter 4.

A private research organization conducted telephone surveys (developed by the research staff) with a sample of about 200 parents randomly selected from each of the 16 case study schools in the metropolitan area (7 of the schools were from the Milwaukee district). Several survey items dealt with parent awareness and attitudes toward magnets. Results are discussed in Chapter 2, Section IV., and where they relate to particular analyses throughout Chapter 3.

Interviews

I conducted over 100 hours of semi-structured interviews with approximately 65 central office and school staff persons to understand the

policies and practices and beliefs and values of those involved in the voluntary desegregation program. Because interview data were gathered in telephone calls, face-to-face interviews, and various impromptu conversations at schools, the central office, and the Study Commission office, it is difficult to pinpoint the total time spent in or number of interviews. About 25 interviews were conducted with 18 central office persons (ranging from the deputy superintendent to technical specialists and curriculum coordinators); 19 interviews were conducted with principals (14 magnet principals and 5 nonmagnet principals); 22 interviews were conducted with teachers (12 magnet and 10 nonmagnet); and 6 interviews were conducted with guidance counselors (4 magnet and 2 nonmagnet).

I conducted another 52 telephone 15 to 30 minute interviews with parents to gather data on perceptions and knowledge of magnet schools, factors involved in decisions to apply to magnet schools, and knowledge and beliefs about different enrollment policies. Parents interviewed were not selected with random procedures. Rather, names and telephone numbers were collected informally over the course of the study from school parents I know in Milwaukee, from several persons living in Milwaukee and participating in the Study Commission's work, and from the people I interviewed. My main intent was to interview a cross-section of parents -- blacks and whites from different SES backgrounds, and both magnet and nonmagnet parents. Statistical representativeness is not an issue here because I do not use the parent interviews in this fashion; rather, these interviews are used to suggest in general terms how parents describe and think about magnet schools and their own school choices. This is discussed more fully in Chapter 3 where I rely most heavily on parent interview data.

Case Studies

Fifteen schools in the metropolitan area, 7 in MPS and 8 suburban schools, served as case study sites. Each school was visited for one week (7 hours per day) by a team of four researchers. The schools were selected to represent a range of high and low performance on standardized test scores. Reputational information was also incorporated into decisions determining which schools were to be studied. The purpose of the case studies was to assess differences in school organizational characteristics that were related to "effectiveness" as defined by a regression model of test scores on school percent low-income.

I participated in the high school case studies. In each high school we interviewed about one third of the teachers (randomly selected) and the entire administrative staff. Groups of students from different tracks were interviewed and a stratified random sample of approximately 10% of the students in each high school filled out surveys. We also observed and coded instruction and student participation in classrooms.

Case study reports were prepared for each of the study schools. Although I do not draw specific findings from the case studies in this dissertation, the case studies, and the discussions among the twelve researchers involved, furnished a valuable experience. There is no substitute for understanding gained from first-hand observations and direct dialogue with people in the

trenches." I gained special insights into and an appreciation of differences among MPS schools and between MPS and suburban schools that quantitative data could not provide.

SECTION III. A VARIETY EDUCATIONAL ALTERNATIVES

This section describes the three basic categories of educational alternatives available in MPS: magnet, neighborhood (attendance area), and non-neighborhood (or non-attendance area) schools. If a non-neighborhood school is chosen, families can choose one of a relatively large number of traditional (nonmagnet) schools or from a variety of distinctive schools and special programs, of which magnets are the most significant. Theoretically, because MPS is an open enrollment system and virtually every school or program within the district presents a different set of characteristics, one could conceive of a more detailed categorization of alternatives, for instance, by size, ethnic composition, geographic location, etc., in addition to the above categories. However, the three main categories are formally distinguished in the school system and are most relevant to present purposes. I will discuss the role of other more specific criteria of choice in Chapter 3.

The Magnet Options

MPS has 15 comprehensive high schools⁵² and 100 elementary schools, with the remaining 28, either K - 8 or middle schools. Most of these schools are not magnets. They are called "traditional" or "regular" schools to distinguish them from the magnets. The traditional schools offer the standard variety of music, vocational education, and art classes in addition to the regular "core" (basic skills/traditional subjects) curriculum.

Out of the totals above, there are thirty-six magnet schools and magnet programs providing the specializations and alternatives shown below in Table 2.1. (For stylistic reasons, unless a distinction is specifically made, the term "magnet school" generally will be used to refer both to magnet schools and within-school magnet programs. In schools containing magnet subprogram, the school contains both a group of students who are enrolled in a set of magnet courses and mostly neighborhood children who are enrolled in the school, but not in the magnet program).

The magnet schools are of three types distinguished by (I.) their instructional methods (how they teach), (II.) their content (what they teach), or, in the case of the gifted and talented, (III.) their students (who they teach). The range of alternatives in the "instructional methods" category is greatest at the elementary level, and is practically non-existent at the high school level. It is noteworthy that open education and the continuous progress instruction programs were attempted at the high school level. The intention

⁵² A handful of other programs for older students pursuing a GED, juvenile offenders, and severely handicapped adolescents exist. Altogether they enroll about 1,000 students. These programs, while they are under auspices of the school district, are administered separately. Little data were available on these programs, and they are excluded from this analysis.

=====

TABLE 2.1

MPS MAGNET SCHOOLS AND PROGRAMS

Magnet High Schools	Magnet Career Programs (H.S.)
H. S. of the Arts	Law/Enforcement/Protective Services
Technical High School	Applied Technology
University High School	Tourism/Food Service/Recreation
Business High School	Transportation
College Bound High	Energy/Environment/Electronics
	Agribusiness/Natural Resources
	International Studies
	Marketing/Word Processing
	Medical/Dental/Health
	Communications and Media
	Computer Data Processing

Middle Schools	Elementary Schools	
Art	Art	Montessori (2)*
Gifted/Talented	Continuous Progress (2)	Gifted/Talented
Open Education	Open Education (2)	Env. Ed.
Spanish Language	Indiv. Guided Ed.	
German Language	German Immersion	
French Language	French Immersion	
Computer	Spanish Immersion	
Indiv. Guided Ed.		

*Number in () indicates number of schools of the type.

=====

was to provide a complete K - 12 program in each of those areas; but at the high school level, these concepts never produced viable programs although there still is an Open Education stream at one of the high schools. At the high school level the different alternatives fall into the traditional categories of college-bound and work-bound, although some of the Career magnet programs are for the college-bound. However, within these two basic categories, the magnet specializations at the high school level offer substantial variety. The following gives more detail on the alternatives provided by the MPS magnets.

Magnets With Nontraditional Methods

The schools distinguished by their instructional methods offer Individually Guided, Continuous Progress, Open, and Montessori education. Individually Guided and Continuous Progress Education are similar. They reflect a belief in the importance of individual differences in learning styles and rates, and both rely heavily on a diagnostic-prescriptive model of learning which utilizes extensive testing and assessment. These approaches de-emphasize "grading on a curve." They attempt to design individualized learning programs based on individual needs, measuring progress with a variety of paper and pencil instruments, and evaluating progress in relation in starting points and fixed

competency criteria. Instruction can be one-on-one, but resource limitations dictate the use of small ability groups, whole class instruction in areas of common interest or need, and the use of programmed learning materials for individual instruction. One key difference between the Individually Guided Education and Continuous Progress Instruction programs is that the latter utilizes traditional self-contained classrooms, while the IGE schools group are organized into "units." A unit consists of around 100 to 150 students of several different ages, and usually 4 or 5 teachers with relatively specialized tasks. Within the unit, students are instructed in smaller groups formed around content areas and skill levels.

The Montessori philosophy was founded by Dr. Maria Montessori, an Italian physician in the early 1900's. Key principles of this approach are a belief that at young ages learning requires a great deal of "hands-on" activities, that young children have strong drive to learn, that the sequencing of curriculum must be sensitive to definite stages of psychological development, and that the classroom must offer freedom for independent learning, but not in a chaotic environment. Montessori learning "apparatus" are grouped into three categories: (1) exercises for practical life (interaction with materials and others for practical learning purposes); (2) sensorimotor exercises; and, (3) educational apparatus (books and other traditional learning materials). The role of the teacher is to prepare the environment, preserve order, provide stimulation, direct activities, but not really "teach" in the traditional sense of the term. Classrooms are large, self-contained, and contain children of different ages. Students generally remain with a teacher for about three years.

Open education emerged as a dominant educational philosophy in the late 60s. It took several forms and was promoted by such liberal authors and activists as John Holt, Neil Postman, and Joseph Featherstone.⁵³ To a large degree, open education is based on a philosophy that is defined in opposition to the values expressed in the traditional organization of schools and classrooms. Democratic decision making processes are favored. In open education schools there are typically norms of participative decision making, respect for students as individuals, and staff cohesiveness. Like Montessori education, there is a strong belief that the child should initiate and direct much of his or her own learning. Self-directed learning is a central goal. Rather than a uniform curriculum, open education schools are likely to have "interest centers" with a variety of instructional resources. Students gravitate to activities in which they excel or are interested. Desks are less likely to be in rows, and the teacher is likely to spend less time at the front of the class dispensing information. Rather, circular seating formations predominate, there may also be couches and cushions for floor-seating, and the teacher is likely to spend more time "guiding," "facilitating," or acting as a "catalyst" to promote "growth." In accordance with open education's more holistic view of learning and de-emphasis of competition, grades and grading, viewed as narrow and competitive, tend not to be used. (In fact, on computer printouts of "Grade Point Average" for Milwaukee schools, the open education schools are not listed, because they do not issue grades). Evaluation is more diffusely

⁵³ See "Proposals to Increase Choice in Education," Chapter 1.

concerned with the social, emotional, and cognitive development of the "whole child."

Magnets Distinguished By Content

Most of the magnet schools are distinguished by what, as distinct from how, they teach. They each have a dominant curricular theme or concentration. For instance, the foreign language schools at the elementary and middle school levels offer immersion programs in German, French, or Spanish. In these schools, children learn in a foreign linguistic environment. English is rarely used in these schools and is first introduced as a subject in the middle primary grades. The Art magnet schools offer courses in dance, drama, music, and visual arts and require considerably more instruction in the arts than do nonmagnet schools. Art themes are also introduced into the regular subject matter. An eighth grader, for example, taking full advantage of all the electives available in the arts middle school could spend fifteen hours per week in school in formal instruction in the arts. The art magnet schools, with galleries to exhibit student works, devote much more time to the creation of exhibits and the production of performances than do nonmagnet schools.

At the technical high school, minimum numbers of courses in technical specializations, mathematics, and science and specialized instruction in either the trade, the technical, or the pre-engineering program are required of all students. Students spend anywhere from one to four hours per day in their chosen specializations. The diploma from the technical high school indicates the technical subspecialization in which the student has been certified. Students unable to complete successfully the required sequence in a given subspecialization, but who have otherwise met graduation requirements are granted a diploma with the designation "general." (This is viewed as a deficient degree by staff of the technical school). The programs of the other content specialized magnet schools are similar in structure to the examples described above. In all cases, the content specializations are made possible by organizing the curriculum -- the electives, the core subjects, and extra-curricular activities -- around a dominant theme.

The high school level differs from the pattern at the elementary and middle school levels where most of the schools at each level are not magnets. *Each* of the fifteen high schools is either a magnet school, or a school offering a specialized magnet program oriented toward career preparation (see Table 2.1). The latter career programs consist of a sequence of courses, usually one or more pre-requisite courses plus three to five specialized career courses. For instance, students in the Computer Data Processing program all must take Algebra, Computer Technology, and Introduction to Computer Data Processing. Afterwards, students may choose between a three-course programming sequence or a more applied (to business and industry) sequence. There are also courses with an accounting focus, with computer instruction geared toward this end, and courses in data entry and word processing. These are not rigid tracks or sequences. Students may take courses from several sequences, but not less than one course from the magnet program per year (or they are ejected from the program). This example is typical of all the magnet career programs. Students enrolled in the magnet career programs are not completely separated from the other students in the high school. The magnet

career program students take the rest of their courses required for graduation with the rest of the nonmagnet students.

Like the magnet career programs, the other magnet high schools draw students on a voluntary basis from throughout the city. But these high schools that are fully magnet schools differ from the career magnet programs in other ways. First, unlike in the high schools with the magnet career programs, in the full magnet high schools *all* the students in the school are magnet students. A second difference, is that the number of courses offered in the full magnet high schools in their respective specializations is greater than the number of courses offered in the magnet career programs in their respective specializations; many of the specialized courses in the full magnet high schools are in-depth courses not available elsewhere in the district. Third, the full magnet high schools operate more autonomously than do the magnet career programs. The full magnet high schools have greater control over their enrollment process and curriculum. The magnet career programs operate under the authority of the high school principal in matters of building-level disciplinary and scheduling policy, and are under the authority of a central office administrator for enrollment and curricular policies. The central administrator regulates admissions processes for the 11 career magnet programs, coordinates the advertising and recruitment for these programs, and coordinates and informally supervises the 11 "program implementors" -- teachers in each of the career magnet programs with part-time program coordination and development responsibilities. In contrast, the full magnet high schools each regulate their own enrollment processes and shape their own programs.

Magnets Distinguished By Their Students' Characteristics

The third category of magnet school is distinguished by an emphasis on an accelerated curriculum and its selectivity. There is a magnet gifted and talented school at the elementary and middle school level, and at the high school level there is a "School for the College Bound," and a "University High." The defining feature of these schools is the generally more academically talented students they attract. These schools are advertised in part by the implicitly selective nature of their admissions process, although screening *per se* is prohibited in the high schools.

Finally, there are two other types of choice-expanding options, both available on an open enrollment basis. MPS offers at twenty-four schools a Program for the Academically Talented (PAT). These are selective programs for students with good grades and test scores. PAT classes run from grades 4 - 6 in eleven elementary schools (except for two schools where the program begins in 2nd grade); grades 7 - 8 in nine middle schools; and 9 - 12 in four high schools. The PATs are similar to academic courses offered in the gifted and talented middle school and the college bound high school magnets. Unlike the gifted and talented program, the PATs, do not claim to accommodate the category "talented" (music, leadership, etc.). PATs select mainly on the basis of standardized test scores and grades. Also, the PATs do not offer the range of challenging courses that are available in the magnets. In some respects the PATs are similar to an accelerated track in a traditional neighborhood school.

MPS also has a program that gives parents of four-year-olds a choice. Instead of day care or home care, they can enroll their child in one of MPS's 78 elementary schools with a kindergarten program for four-year-olds (K4). This can be considered a choice-expanding school alternative because it gives parents of four-year-olds the choice of enrolling a child "early," since five years of age is the standard age for entry into Kindergarten. The K4 program also gives parents the choice of sites since the K4 schools are filled on an open enrollment basis. Note that it would be less legitimate to consider the K4 an educational alternative, and thus a source of choice, if K4s were widely available in public education.

The Traditional Non-neighborhood School Option

In addition to the magnets, K4s, and PATs, MPS's open enrollment policy makes a large percentage of the rest of the schools in the district another option for families. In MPS, as part of its open enrollment "right to attend a racially balanced school" policy, any student can choose any non-attendance area school in the district where their presence will not contribute to racial segregation. This policy makes about half of the schools at each level (elementary, middle, and high school) available to MPS families, in addition to their neighborhood school. In Section III. of this chapter, I will discuss policies implementing and regulating family choices and consequent enrollment patterns.⁵⁴

Concluding Comments

This section describes alternatives to the neighborhood school in MPS. MPS offers a conventional program of core subjects and electives typical of most schools; but, additionally, offers on an open enrollment basis a variety of specialized and distinctive programs and opens access to a large number of traditional, but non-attendance area schools.

The intent here is not to assess precisely how "truly" differentiated or unique the magnet programs are in the extent to which they conform to their original designs. They do, however, present alternatives to the nonmagnet traditional schools. Magnet pedagogical specializations are not merely labels. Magnets are perceived to be specialized by teachers, administrators, and parents and they do offer something different. On the basis of visits, tours, and interviews with staff at over three-quarters of the magnet schools, and additional interviews with central office curriculum coordinators responsible for particular magnet programs, in my judgment most of the magnets offer genuine

⁵⁴ About twelve other nonmagnets (mostly IGE) mostly at the elementary level have had pedagogical specializations at one time or another, and some still do. However, they receive little attention -- I did not know about them until several months into the study, and learned of them by paging through an MPS booklet of telephone numbers, staff positions, school names and addresses, etc. These schools were part of the early plan to make a number of nonmagnet neighborhood schools distinctive too, probably to help legitimate the notion of school specializations and to help downplay quality distinctions between magnets and nonmagnets.

specializations in the sense of more time devoted to particular content, or deliberate efforts to employ particular pedagogical approaches.⁵⁵ Children at the environmental education school go on more nature field trips and spend more time studying ecology and environmental issues; students at the computer school spend more time on computers; children in the individualized programs receive more individually paced and monitored curriculum; the open education schools do not use grades and staff-student relations are more informal, and so on.

There is variation among magnets in distinctiveness and quality. This is illustrated by findings from three magnet schools that were studied by research staff in the Study Commission case studies. Two of them, a Montessori elementary school and the technical high school, clearly offered the specialties they advertised; the third, one of the open education elementary schools, offered open education in some, but not most of the teachers' classrooms.⁵⁶ The first two schools, however, are more typical in terms of adhering to a specialized theme than the latter school.

Looked at from an ideal perspective on choice, the magnets are variations in a broader pattern of uniformity; they vary within well-defined parameters of traditional teaching and organization in public schools. System-wide staffing and curriculum rules, with some exceptions for the magnets, create a relatively standardized program.⁵⁷ MPS appears quite typical of most large city systems in the extent to which there is central control over major school functions (curriculum, staffing, financial control). Thus, while magnets and non-neighborhood nonmagnets create alternatives, they fall short of some of the more extreme forms of distinctiveness envisioned in some choice plans. As discussed in Section I., magnets and open enrollment in MPS are not only instruments of public choice in education. Magnets must have a racially integrated student body, and must operate generally within the same curriculum and administrative policies as the other schools in the system. Magnets vary enough to validate their claims of distinctiveness and to attract applicants seeking particular forms of instruction or curriculum, but, not much beyond this minimal requirement.

⁵⁵ This is given some quantitative support from findings of the teacher survey discussed in Chapter 4. Magnet teachers reported statistically significant higher levels of control over curriculum and student policies than nonmagnet teachers.

⁵⁶ Schools were selected in part because they were outliers in a regression analysis of standardized test scores on percent low-income, and in part on reputational information.

⁵⁷ Ironically, it is believed that a standardized curriculum is necessary in part because of the open enrollment policies. Because of the high level of student mobility between schools due to residential mobility and school transfer policies (see Section V.), district officials attempt to insure program continuity for students by standardizing the curriculum.

SECTION IV. INFORMATION DISSEMINATION IN THE MPS SYSTEM

In the common schools model, schools are supposed to be the same; there is no logical reason to choose among schools and not to have attendance areas. In the logic of the choice rationale legitimating magnets, families have diverse needs and preferences and so there is a need for educational alternatives and open enrollment. This creates a need for information dissemination to learn about the alternatives and the rules of access.⁵⁸

Learning about MPS's information dissemination processes is useful because it permits reasoned inferences about the accessibility of information and general levels of family awareness likely to result. It is also important to know about the supply of information to be able to draw some conclusions about costs of access to information. Part of the act of choice is choosing whether or not to gather information. If information is unavailable, informed choice is precluded and mechanisms of improvement through choice are likely to be undercut. This kind of consequence can be interpreted as a market malfunction, possibly rectifiable through improved information procedures. If, on the other hand, information is made available and costs of access are minimized, it can be assumed that certain conditions of choice have been implemented and, depending upon the nature of the information available, that families can make informed choices. Finally, to appreciate logistics of choice, it is also important to know how MPS has managed the "information problem" inherent in choice and assumed to be manageable in public choice theory. This section, then, focuses on the formal mechanisms of information distribution; a more detailed analysis of family choices and attendance patterns is in Chapter 3.

Formal Information Dissemination Mechanisms

When and where should a child be enrolled?, What kinds of special programs are available?, What schools outside of the neighborhood can be chosen? Which schools offer four-year-old Kindergartens? What are magnet schools? At what age can children enroll?, Are there admissions requirements?, What can be done if the first choice is full?, What is a waiting list? Can a child be on more than one waiting list? How is transportation provided?, Where are the bus stops for different schools? Can a school choice be changed or a rejected application appealed? These are the kinds of logistical questions centrally disseminated information is mainly intended to answer. It is factual, procedural information, aimed at managing the logistical problems created by choice, that do not arise when students are assigned to schools by central

⁵⁸ Data for this section derive from interviews with central administrators, principals, counselors, and teachers. I also reviewed MPS informational literature and attended different kinds of information sessions at two high schools, five middle schools, and the central office.

decisions.⁵⁹ After describing the main mechanisms, I will offer some analytical comments.

The "MPS INFO" Documents

Each year two brochure-like publications go out to all MPS families as part of an "MPS INFO" series of such brochures. In January an eight-page, two-color, newsprint mini-tabloid, called "MPS INFO: A catalog of educational opportunities," informs families of upcoming school registration and enrollment options. The INFO is mailed directly to each MPS family's home address several weeks prior to the registration period. It has instructions about registration; 250 to 600 word descriptions of each of the magnet schools and programs with accompanying telephone numbers of the principals; a map showing the locations of each of the magnets; transportation guidelines; information about bilingual education, exceptional education, gifted and talented programs, and the 4 and 5 year old kindergartens, and the PATs; and other assorted items, including the names of the school board members and the superintendent and a general information number for the central office. A Spanish edition is mailed to Hispanic families.

There is also a 32 page parent/student handbook "INFO" mailed to each MPS home in June which, among many descriptions of programs and policies and calendar announcements, alerts readers of next year's sign-up times for the MPS schools. This, too, has a Spanish edition.

Letters to Parents

Three different letters, each mentioning the magnets and registration dates, go to each household with children enrolled in MPS. One is the "right to attend a racially balanced school" letter informing each parent that they will not be refused a choice to enroll at any nonneighborhood school where their child contributes to racial balance. A second letter, referred to as a "superintendent's letter," notifies parents of registration dates and procedures and lists the magnet options and the PAT schools. It also refers to additional information sources about the magnets, encourages parents to inform others about registration times and procedures, and provides an application form for all the elementary and middle school magnets. (The application form for the career magnet programs is sent to all homes of eighth graders. Application forms for each of the five remaining magnet high schools are available at the respective magnet high schools; at the central office; and are distributed to all eighth graders during the December advertising/recruiting program described below). A third letter, also a "superintendent's letter," notifies parents with

⁵⁹ The student assignment handbook which all administrative specialists, student services personnel, and principals must be familiar with contains 215 pages of instructions, rules, approved exceptions to rules, examples of accounting forms and letters to parents, and more. There is no question that choice, when it is centrally administered, produces a new and formidable set of administrative problems. A detailed accounting analysis would be required to calculate the additional costs these present.

children in four-year-old Kindergartens, provides registration information, and lists the eighty elementary sites. All the elementary magnets offer four-year-old Kindergartens and are identified in this letter. (I am not aware of any procedure to reach with direct household mailings parents of three year olds who do not have children in MPS. Informational literature is sent to city day cares; and school-related public service announcements on radio and television are used).

The Advertising/Recruiting Program

A major yearly advertising and recruiting program in the weeks prior to the enrollment period is conducted by the high schools. I attended the advertising/recruiting programs at four of the middle schools. At each school I interviewed a guidance counselor about the information program and observed a total of about twenty-five presentations by individual magnet programs.

A team made up of a representative from each of the magnet programs and schools at the high school level travels to each of the eighteen schools in the system with an eighth grade. At each of these schools, the day is divided into a morning session and an afternoon session. One session is for the magnet career programs; the other for the full high school magnets. The representatives, called "presenters" or "recruiters," are individually assigned a room where they give a back-to-back presentations describing the magnet program they represent. Each presentation lasts from twenty to thirty minutes, is usually accompanied by slides and taped material, and includes time for questions. Each 8th grade student is required to select and attend four presentations on the advertising/recruiting day: two magnet career program presentations and two presentations from the five full high school magnets. Brochures and application forms are available for each of the high schools.

The recruiters from the career magnets are called "program implementors." This is a specialized position created to manage information and program coordination functions. Program implementors also have half-time teaching responsibilities in their respective magnet career specializations. They are supervised by a district administrator who heads the magnet career program. A guidance counselor typically handles the middle school advertising/recruitment sessions for the full high school magnets.

In preparation for the arrival of the recruiters, each school conducts its own preparation program for 8th graders. These programs vary from school to school, but typically guidance counselors are responsible for providing 8th graders with career guidance counseling that attempts to encourage students to start thinking of their goals in high school and afterwards. Commonly, the guidance counselors will go to each 8th grade homeroom, talk about planning for education and jobs, and answer questions about the different high school magnet options. Also, an "exploratory class," a required career/life goals class for all 8th graders, is used to prepare students specifically for the process of making a decision about where and how to apply for magnet schools.

Centrally Organized Public Presentations

There are a number of presentations open to the general public about

MPS educational programs and options. These presentations are targeted primarily at MPS parents. They are held Saturday mornings or during weekday evenings at the central office auditorium or high school auditoriums.

The most heavily attended presentations are those for the magnet high schools. The district holds one on each side of the city on separate nights. All middle school parents are sent a letter notifying them of these opportunities to learn about the high school options. Presentations begin with a lecture in the school auditorium emphasizing the opportunity to choose, briefly covering the range of high school options, and providing registration information. This is followed by a kind of "open house" where each high school representative gets assigned a room and hands out brochures, shows pictures, and informally answers questions. Parents and students -- the great majority in attendance are parents, however -- stroll at leisure from room to room. The whole program lasts about three hours.

In addition to these presentations focusing largely on the high school level there is usually at least one formal presentation at the central office on the magnet options at the middle school level. This is conducted in a fashion similar to the high school presentations. A representative of each school describes their program, hands out information, and answers questions. To my knowledge there is not a similar formal presentation that brings all the elementary magnet schools together in one location to describe and sell their programs. Presumably the difficulty of contacting parents of pre-schoolers is one reason, since they are not yet on the system's files. Instead, the elementary schools engage in the individual school-based efforts that will be described shortly.

The central office also supports and coordinates a whole host of other promotional activities which disseminate information about the magnets and other MPS options to the community. These activities include: a two-day program at a downtown location for private school 8th graders (though it is open to anyone); an evening program describing the MPS options to which all private school administrators are invited; placing four-column by 10 inch ads in five January issues (just prior to the school registration process) of the city's two main newspapers describing the magnet system and announcing the sign up periods; placing the same ad in seven weekly city newspapers, including a black oriented and a hispanic oriented newspaper; placing announcements of the registration process for the MPS schools in recreation tabloids which go to all Milwaukee households several times a year; placing promotional materials in public libraries and other public locations; preparing video spots for airing on the local television stations; preparing public service announcements for radio stations, including black oriented stations; broadcasting announcements over the MPS-owned radio station; and having speakers available to go to groups to explain MPS programs and options.

School-based Promotional Efforts

Each of the magnet schools can and does engage in its own advertising and recruiting according to its own needs. This is more true of the middle and elementary schools than of the high schools, which have the benefit of the comprehensive advertising/recruiting program described above and much high

school sports related media coverage to inform families of school names and program offerings. Still, several of the city-wide magnet high schools hold their own recruiting evening open houses for presentations and tours. Members of the administrative staff of the city-wide technical high school have sought out black educators and community leaders in an effort to attract larger numbers of black applicants from the city's predominantly black sections. The arts high school deliberately employs theatrical and artistic productions, and the publicization of these events, towards promotional ends. When a new academically oriented magnet high school was established (during the course of this study), it sent out individual mailings to families describing its new mission and unique advantages, positioning itself against the city's other two college prep high schools. However, the magnet high schools, overall are not as dependent on their own promotional efforts as are the magnets at the lower levels.

Staff from the magnet middle and elementary schools sell their school anyway they can. However, although they have a large amount of discretion in how they go about this, their resources are quite limited. The magnets do not receive extra resources for advertising purposes. For the most part advertising consists of the principal or teachers talking to parent-teacher organizations and community groups and distributing promotional flyers, taking packets of information to day care centers, and undertaking school projects to generate publicity in the media or community. At the middle school level the principals of the magnets write letters to elementary principals describing their (the magnet principal's) school and inviting elementary principals and/or students to their school for a tour. At both levels, teachers, guidance counselors, curriculum coordinators, and students also participate, sometimes contributing a substantial amount of their own time during evening hours. Also, parents are encouraged to drop in informally, during regular school hours to assess the magnets. In the weeks before school registration, some of the magnets draw hundreds of visitors.

Informal Communications

From an ideal efficiency perspective, mass presentations and distribution of printed and electronic information would give people all the information they need. In practice, informal communications are an important element of information dissemination. Much information is disseminated through telephone calls and face-to-face conversations between parents and school people, mainly principals and guidance counselors. They answer questions from parents who want additional information, who did not read or receive the literature, or who, citing special circumstance, are inquiring about the possibility of switching schools.

Findings on Awareness of Magnets From the Parent Telephone Survey

Between 117 and 134 parents were selected randomly (from an alphabetical listing of telephone numbers) from each of seven schools selected for a telephone survey. Because of the MPS's open enrollment policy, the respondents come from all over the city, although one of the elementary schools has preponderantly neighborhood children. The seven schools that were

selected vary greatly on standardized test scores and income characteristics,⁶⁰ and thus are adequately representative of the schools in the system.

The telephone survey shows that about five out of six MPS families have heard of the magnet schools. To the question, "Have you heard of the MPS magnet schools and programs?", 83% of the 916 parents answered "Yes."⁶¹

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

⁶⁰ The racial and income characteristics of the 916 parents interviewed match closely those of the district as a whole. From each school, parents were sampled randomly from an alphabetical listing. Three schools are elementary, two are middle, and two are high schools. The samples of parents from the schools range from a low of 28% low-income (total household income less than 15,000 dollars per year) to 72% low income; half of the total sample consists of respondents from households bringing in less than 15,000 dollars per year. The composition of the sample is very close to that of the city, where, according to 1980, U.S. Bureau of Census figures, 47% of households earn less than 15,000 dollars.

Although three of the seven schools surveyed are magnets, it appears that this does not bias the sample as much as one might expect. Because magnets are overrepresented in the sample of schools selected for the survey, one might predict that a higher percentage of the parents surveyed would know about magnets as compared to parents in general. The 83% figure may overestimate the true value for this "magnet awareness" item, but when the three magnets are removed from the sample, the figure drops only to 81%.

The reason that the drop is not as great as one might expect is that in one of the magnet schools surveyed, only 70% of the parents, to phrase the question again, "had heard of MPS's magnet schools and programs." In the other two magnet schools, the figures were, 97% and 91%. The latter figures are without question much more typical of magnet parents' awareness of magnet schools and programs. However, the particular magnet (with 70% awareness) was selected intentionally to make the sample as a whole more representative. We wanted to include a school "on the bottom end," so to speak, on measures of achievement, staff morale, and student mobility, and this school met the requirements. Not to include a school with these qualities, in our judgement, would have been more biasing than to include it, because such a school, while an anomaly for the magnets, is representative of a class of schools in the district as a whole. That the school was a magnet was somewhat relevant in the decision to include it, because we were interested in understanding how a magnet school could have these characteristics.

⁶¹ Larson (1981), on a similar question in a telephone survey, found much lower levels of awareness in the Tacoma Park, Maryland, school district. Only 27% of the non-magnet parents surveyed had heard of the magnet schools; 73% of the magnet parents had. Larson found a large difference between blacks and whites (24% versus 48% respectively) regarding their knowledge of the program specialization of the magnet school in which their child was enrolled. No controls for parent income were used, however.

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.

Looking at further breakdowns, the survey showed large differences in awareness associated with income within the racial categories; but also that whites, regardless of income category, were more likely to have heard about the magnet schools. Of the low-income whites, 85% had heard of the magnet schools; 71% of the low-income blacks had. Of the non-low-income whites, 96% had heard of the magnets; 93% of the blacks had.

It is clear from the survey data that the non-low-income respondents are much more aware of the magnet schools. This holds true for all ethnic categories and is not particularly surprising. Also, it seems clear that a large part of the differential awareness between whites and minorities is best explained by income differences. Because blacks in Milwaukee are poorer on average than whites, it is safe to conclude that blacks' lesser knowledge of the magnet schools can be attributed in large part to factors associated with lower levels of educational attainment and to the living conditions, lifestyles, and other constraints imposed when one has little money.

That low-income blacks are still markedly less informed than low-income whites while in the non-low-income category the differences between the groups is small is less easily explained. In part I think it stems from a possible over-representation of blacks in the low-income category who are actually poorer, or at least live in worse conditions, than the low-income whites in the sample. Perhaps as high as a half of the low-income blacks responding "No" to the awareness question come from a particularly poor area of the city. Thus, they may be people that have moved a lot, live with friends and relatives, and missed school mail; perhaps it is more a matter of inattentiveness to media and school events. I suspect there is a real difference in awareness of magnet schools between whites and blacks in the "under 15,000 dollar/year" category because in Milwaukee, like in most large cities with large inner-city black populations, the blacks in this category are worse off than the whites. Chapter 3 explores implications of differential school information and awareness by race and income for family choices and system-level attendance patterns.

Concluding Comments

This description of the information dissemination processes gives us a reasonable basis to reject the possibility that MPS ignores the crucial information component of choice, thereby making information about schools and procedures a scarce commodity. It is reasonable to infer and the survey data suggest information dissemination in MPS produces generally high levels of awareness of alternatives and enrollment procedures, although differences by race and income exist, and as we shall see in Chapter 3, are important. Information may be abundant and logistical costs may be roughly equalized, but, in general, low-income families, particularly inner city black families, are less likely to come into contact with school information, are less likely to be able to understand what they read, and are less likely to actively seek out and

exploit information.⁶²

It is not a simple question to determine when a system has disseminated enough information. Although a small fraction of the population inevitably remains unaware of magnets and other enrollment options, from the perspective of the political and institutional interests of the system, the information sufficiency question may be answerable. The measure of adequacy of information dissemination is -- are magnets filled, are there enough voluntary transfers to meet desegregation mandates, and satisfy the market as measured by the absence of protest and conflict. By these measures the information sufficiency question is answered in the affirmative.

For purposes of public choice theory, however, the question of information adequacy is more complex. Presently, neither theory nor research deals with the question -- what level of awareness of alternatives must exist to warrant claims that a certain quality of educational market has been achieved? Answering this question depends upon one's standards in regards to key outcomes of choice. For instance, we need to know if costs incurred by information dissemination are recovered in an adequate "return" in increased family sovereignty, improved matching of preferences with school alternatives, and other desired outcomes of choice. Answers to this question will depend in part upon one's views about the level of responsibility acquired by families for information gathering.

Resources invested by MPS in information dissemination are not trivial. Advocates of choice are critical of cumbersome bureaucratic rules and procedures, but often fail to consider the overhead, or "transaction costs" (Krashinsky, 1986) of choice, including the burden of disseminating and equalizing information. A detailed accounting of marginal increase in costs of administration due to information requirements in MPS, or any choice system, would be valuable. Next, I describe how choice has been made possible administratively in MPS by shifting control over student assignment processes to families. The next section also underscores the necessity of avoiding casual assumptions about the capacity of markets and family-controlled assignment to eliminate expensive regulatory overhead. Chapter 5 will return to these issues by discussing barriers to choice related to information and administrative complexities.

SECTION V. THE MULTI-STAGE ENROLLMENT PROCESS: CONSTRAINED CHOICES AND INCENTIVES TO DESEGREGATE

Attendance area-based assignment is a solution to an allocation problem. It is an efficient and, on common schools assumptions, politically legitimate

⁶² There is a large literature on effects of SES on different sorts of practices, attitudes, and decisions that have implications for choice and schooling. See research references cited in Chapter 3, passim.

There are centrally supported efforts, utilizing churches and community organizations, to spread information, but the task of adequately educating the very poor about school choice is a large and difficult one.

way to allocate children to schools. Laws against racial segregation in schools have changed neighborhood school assignment policies, but not centralized assignment based on neighborhood boundaries. Mandatory reassignment (forced busing) efficiently solves the desegregation problem, but in the eyes of many, runs roughshod over family choice rights. The enrollment process described below shows how choice and voluntary desegregation are achieved in practice, and reveals limits to ideals of exit and accessibility conceived in choice theory.

Application and Enrollment Policies: Overview

The MPS enrollment process successively fills categories of options, beginning by filling the magnets (full magnet schools and within-school magnet programs), the four-year-old Kindergartens, and the PATs in one round (stage I), which lasts a week. Registration for these options is first because their availability is limited and if applicants are unsuccessful, they do not forfeit the option of their neighborhood school. A second round of choosing (stage II), also a week, fills the remaining schools. All applications received in the stage I and II weeks receive the same priority. A final stage (III) gives families not receiving their stage II choice an opportunity to appeal the decision, and gives all families wanting to transfer to a different school an opportunity to submit a transfer request. This stage is stated in the INFO as lasting one week to encourage timely registration and facilitate system planning, but assignments are made throughout the summer and early fall.

The registration process takes place in spring and determines school assignments for the following fall. Each spring, students *at transition points* must make a school choice decision. An application must be submitted for all students in K4s (who are not in magnet school K4s),⁶³ all five-year-old students who will be entering kindergarten in MPS schools, all students entering first grade, and all students at the top grade of an elementary or middle school. This is about 28,000 students. Thus, about 35% of students who plan to enroll in the system for the following year *must* choose. Students in between these transition points are "carried over," it is assumed they wish to remain where they are unless they indicate otherwise. (The reason students going in to first grade must make a school choice, and are not simply carried over from kindergarten, is that kindergarten grades, except in the magnets, are exempt from racial balance guidelines. Once a parent's kindergartner is enrolled, the parent receives information about MPS's various school options, the enrollment procedures, the racial balance policies, and the need to make a school choice for first grade. Of course, parents may inform the school of their interest in continuing at their present school in first grade).

About a week before the registration period, all MPS parents receive a letter about their right to attend a racially balanced school. A racially

⁶³ Students in K4s in magnet schools do not need to choose again unless they want to go to another school. This policy creates an incentive that promotes racial desegregation, because the magnets are desegregated schools. The non-magnet K4s and K5s are exempt from racial balance guidelines. First grades and up must be racially balanced.

balanced school is defined as: (1) each elementary or middle school which has a student population composed of not less than 25% and not more than 60% black students; and, (2) each high school which has a student population composed of not less than 20% or not more than 60% black students.

This letter lists all the MPS schools, including the magnets, projected to be racially balanced for the next year. The letter also states registratic times and names and phone numbers of information sources. Since it is generally understood that whites in the outlying white neighborhoods will not choose to attend a nonmagnet inner city school, it appears that this letter's principal aim is to inform families who may not have looked at or received the INFO about the magnet schools, and to inform inner city black families in all-black schools about their right to choose a desegregated school.

Stage I: Filling the Magnets, K4s, and PATs

While applications may be submitted for enrollment at any grade, the entry grade (kindergarten, 6th, 9th) of the individual programs are where about 80% of the openings occur. Parents are informed of this in the "Superintendent's letter" inviting applications to the magnets and other stage I options about a week before stage I begins. Once children have been accepted into a school their place is secure until they reach the top grade level of the school (unless they want to transfer out). At the top grade, however, they must again make a decision about where to go next.⁶⁴ Once enrolled in a magnet school students tend not to transfer out (most openings occur because students leave the system).

Students who do not get their stage I choice (an application may be submitted to only one school) are notified in time to apply to another school during the next sign-up period, stage II, usually in March. A subsequent letter notifies them of sites where openings remain and of the chance to enroll at another magnet school. Out of a total of 11,767 stage I applications for the 1984/85 school year, 7,919 (68%) received a stage I placement.⁶⁵ The rest had to re-choose. Table 2.2 below gives more detailed breakdowns.

⁶⁴ Six of the thirteen elementary magnet schools (art, foreign language, open education, IGE, and gifted and talented) have "feeder patterns" which guarantee admission to the magnet middle school offering the same program specialization.

⁶⁵ Stage I does not fill all of the magnet slots, even though in the aggregate there are more applications than spaces. This is because the most popular magnets get several times more applications than can be accommodated, while other magnets (very few) have seats available after stage I. These openings are then filled in stage II.

=====

TABLE 2.2 STAGE I APPLICATIONS/ASSIGNMENTS
BY ALTERNATIVES FOR 9/84

<u>Alternative</u>	<u># of Applications</u>	<u># of Assignments</u>
Magnet Schools	7,508	5,721 (76%)
4-yr-old Kinder.	3,012	1,178 (42%)
PATs	1,160	920 (79%)
TOTALS:	11,680	7,919 (38%)

=====

There are several reasons applications are not accepted. The two gifted and talented magnet schools and the PAT programs have entrance criteria which disqualify about 25% of the roughly 2,000 applicants to these programs each year (443 applicants for September 1984). The four-year-old kindergarten program is limited overall by the amount of teachers available to staff this program, and in particular buildings by classroom capacity.⁶⁶ The magnet schools can reach enrollment limits by either achieving the capacity for the building and/or size of the staff, which is what occurs in roughly half of the magnets; or limits can be reached because an insufficient number of applications in one racial category places a ceiling on the number of applicants that can be accepted from the other racial category even if there is sufficient building/staff capacity. The latter situation stems from the racial balance requirements and results in a number of magnet schools operating at enrollment levels well below capacity.

Oversubscriptions -- that is, applications exceed available spaces -- result in a random selection procedure. The applications are numbered one through X, where X is the number of applications received. The number an application form receives is inconsequential because a computer then selects randomly, according to the number of spaces available in the school, those applications that will be accepted. The random selection process is designed so that the school's racial composition remains within the racial balance guidelines established by the 1976 court desegregation order. The order specified that the magnet schools and programs must not be greater than 60% black or "non-black." If applications exceed openings in both racial categories, the proportion accepted in each category is determined by the proportion of students in the district in each category at the grade level concerned, which in the years of the study was close to 50/50.

Parents receive letters informing them of the outcome of the random selection process and of the option of being put on the school's waiting list if they did not get accepted. Parents of students on the waiting list have the option of enrolling their child in the school if openings occur in the course of the year or being included in the following year's count of returning students

⁶⁶ The 1984/85 budget proposal recommended expanding the four-year-old kindergarten program by adding 16 classrooms. This is in accordance with an earlier approved plan to expand the program to all elementary schools by 1988.

if spaces open up over the summer and if the parents are still interested in enrolling at that time. Each year 200 - 300 waiting list applicants are admitted.

Stage II: Filling Traditional Neighborhood Schools and Non-attendance Area Schools

Stage II is the registration period that fills up the approximately one hundred non-magnet schools. About 20,000 applicants out of the original 28,000 remain to be allocated to schools. Each parent with a child at a transition grade is sent a letter informing them of the need to choose a school. The letter doubles as the application form. (This is the same letter described in the previous Stage I section).

Parents are instructed to choose a school and return the letter to the principal. The letter (which precedes stage I) tells parents they may apply to get into their neighborhood school or to any other school in the district in which the child's presence "will enhance racial balance." The letter contains a list divided into "schools where non-black students may enroll if space is available," "schools where black students may enroll if space is available," and magnet schools.⁶⁷ There is a total of 27 schools for blacks and 39 for whites. The number of schools where blacks enhance racial balance is at each level about twice the number of schools where non-blacks enhance racial balance. (The number of schools in the inner city where blacks are concentrated is smaller than the number of schools outside the inner city in predominantly or all-white neighborhoods, although there are more schools per square mile in the inner city). Parents can and do ignore the list, but assignments are unlikely to be granted to parents applying in stage II to non-neighborhood schools that are predominantly of the same race as the parent who is applying. This does occur, however. (Chapter 3 discusses this further).

Because, not all of the magnet schools and PATs get filled in stage I, parents may still sign up for magnet schools, PATs, or four-year-old kindergartens in stage II. Parents unsuccessful in stage I are sent letters informing them of stage I schools and programs where openings remain. Of 16,570 stage II applications (out of about 20,000 possible), 15,560 (94%) received their school choice; the remaining 1,010 did not, either because they made an inappropriate choice (applying to a non-attendance-area school where they do not enhance racial balance), or because the school to which they applied was full. In 1984, of those receiving their stage II choice, 2% were to magnets (306), 1.3% were to PATs (193), and under 1% were to four-year-old kindergartens (132). The rest, just under 15,000, were placed in "regular" neighborhood and non-neighborhood (non-attendance area) schools.

⁶⁷ The non-black category is a product of the court decision and includes whites plus all other ethnic groups.

All students in the top grade of their school⁶⁸ must apply in stage II if they did not apply in stage I, or did apply and did not get accepted in stage I. The onus is on school principals to see that parents at transition points return their school choice applications. In most cases this is not a problem. Overall, the great majority of parents choose a school.

In some inner city schools in poor neighborhoods, "non-choice" (no application is submitted) is somewhat of a problem. While it varies from school to school, my interviews with principals and a central administrator indicate that return rates on application forms as low as 50% can occur in some inner city schools. Principals, are limited in the amount of time they can devote to phoning and sending home reminders. Often, many phone calls are required. Also, although principals are encouraged to "hound" parents to get them to choose, principals do so to different degrees. At some point, the deadline to send the applications to the central office arrives and the principal must fill in the choice, assigning the student to the neighborhood school at the next higher grade. I am told MPS administrators will not choose for a parent a school other than the neighborhood school, but for accounting purposes, a school assignment needs to be made. Doubtless, "administrative assignments" occur for whites as well as black, but it appears to be a more frequent necessity in some of the inner city schools.

These administrative assignments are made initially "on paper." Parents of students who have received these assignments are notified of the assignment and of the opportunity to choose another school where openings still remain. If the central office still receives no subsequent notification of a parent's desire to enroll at a different school, the attendance area assignment becomes "official," i.e. that student is placed on the roster for the following fall. Most of these students end up at the 20 or so inner city schools that are 90 to 100% black, because the attendance areas of these schools include much of Milwaukee's black inner city section.

The number of assignments of students to neighborhood schools made by administrators varies somewhat from year to year. Precise numbers are hard to come by, although as a fraction of the total number of stage II choices it appears to be small. An administrator at the central office estimated that about 300 students at the elementary level received administrative assignments for the 1984-85 school year. As stated earlier, the total pool of applicants who must choose in stage I or II because they are at transition points is about 28,000 students. Adding the number who applied and were accepted in stage I

⁶⁸ MPS has both K-5 and K-6 elementary schools, and grades 6-8 and 7-8 middle schools. Thus, for parents of children in grade 5 of a K-5 school, a school choice must be made. For parents of children in grade 5 of a K-6 school, a choice can be made, but need not be if they wish to remain in their elementary school through 6th grade. However, if these families wish to get into a 6-8 middle school, they should apply at the end of 5th grade (because if they wait a year, the 6-8 middle schools may not have openings at the 7th grade). Parents of children in grade 6 of a K-6 elementary school must make a choice, as must parents of 8th graders.

(7,919) to the number of applicants in stage II (16,570) gives a total of 24,489 student applications that are processed. This leaves about 3,500 out of the pool of 28,000 "unaccounted for." Still, not all of these 3,500 receive administrative assignments to their neighborhood schools. Upon receiving notification of their administrative assignment, yet another portion will go on to apply to some other school at a later date⁶⁹ -- the stage II registration period is not ironclad. These "late" applications as well as those from new arrivals to the system⁷⁰ and transfer requests from families within the system are processed in the next stage, stage III, discussed next.

Stage III: Transfer Requests and Continuing Placements of Students at Transition Grades

During stage III, parents at *any* grade level, or students 18 years of age or older may request a transfer to another school for the following September. According to official communiques sent to homes, stage III lasts a week. This one week period is formally set aside to encourage parents to submit their transfer requests early (April) so the central office can process them, assess where openings remain, and determine the next year's enrollments with sufficient lead time for planning purposes. In reality, while many transfer requests are processed during the stage III week, this process goes on all year long.

Two basic types of applications (they are officially called transfer requests) are processed in stage III. One type was just described -- applications come from families who did not make a choice during stage II, who then received an administrative assignment to their neighborhood school, but who want to transfer out. (Stage III also handles new arrivals to the system, people registering for school in the summer or the school year. They are treated just like stage II applicants).

Most stage III applications are of a second type -- families who are not necessarily at transition grades between schools, but that want to change schools; for instance, families moving from one neighborhood to another and wanting a different school; families wanting to keep siblings or friends together or apart (some parents attempt to remove a child from negative influences of a peer group); or wanting to exit what they believe is a poor school or attend what they believe will be a better school.

Interview and record data indicate MPS officials are quite accommodating of transfer requests. Statistics on transfers from MPS records show that from September 19th, 1983, to June 7th, 1984, 7,681 students (out of 86,000 total enrollment) received a transfer assignment from one MPS school to another

⁶⁹ One estimate by an enrollment administrator put the proportion at one-third for the middle school level.

⁷⁰ About 3000 new students enter the system each year in the elementary grades. An additional 1000 to 1500 enter in grades 7 - 12.

MPS school. (Another 4,654 entered the system during those nine months, and about the same number left). Estimates of the total number of transfers per year put the figure at about 11,000, of which slightly less than 2/3s are black, and slightly less than 1/3 are whites. This 11,000 figure, then, represents the number of students who are at a transition grade, have received an assignment in stages I or II and then "changed their mind," plus those at any grade who simply want to change schools for whatever reason in the course of the summer or the school year.

Appealing School Assignments

Finally, there is an appeals process at the central office for transfer requests that are denied. A small appeals committee takes appeals throughout the year. The appeals process requires that parents go before the committee and present their case for a transfer. During the busiest times in April through June, parents have about ten minutes to present their case and discuss the judgement rendered by the committee.

The majority of appeals are granted. This seems to serve a kind of "political safety valve" function. An interview with the person who heads the appeals process revealed a generally permissive attitude toward the very small fraction of parents who feel strongly enough about a transfer to take their case to this limit. Some cite serious transportation problems; others, medical or job-related reasons. The interviewee recognized that some parents are deeply fearful for their children about inter-racial contact. Requests that are denied leave students at their stage II assigned schools. Denials usually result from transfer requests to schools that are near capacity or to schools where the student's presence would disrupt racial balance. While the number of appeals varies yearly, and many requests are dealt with "out in the field" by social workers and guidance counselors, for the 1984-85 there were 776 formal appeals, 435 from blacks (56%), 245 (32%) from whites, and the rest (12%) falling in the "other" category. A total of 550 (72%) were approved; of these, 55% were black, 32% were white, and 13% other."

Concluding Comments on the Enrollment Process

To review, the registration process occurs in stages that successively fill categories of schools. The magnets, PATs, and four-year-old kindergartens are filled first. Slightly over two-thirds of choosers get their first choice. Stage II fills remaining openings in these stage I options, bringing to about three-fourths the proportion of applications to magnets, PATs, and four-year-old kindergartens that can be accommodated; and stage II fills seats in nonmagnet schools with neighborhood and non-neighborhood children. Ninety-four percent of stage II applications were accepted for the 1984-85 school year. After stage II, there is a third stage in which families at any grade may request a transfer to another school. The great majority of transfers are accepted. This stage begins several weeks after stage II, and continues the following fall. In the course of the school year about one student in ten changes schools in MPS.

According to the enrollment figure summarized below in Table 2.3, about one student in five (22%) is in some sort of magnet school or program.

=====

TABLE 2.3 1984/85 ENROLLMENT IN MAGNETS & NONMAGNETS

=====

Magnet Schools and Programs			Non-magnet Schools		
Elementary Schools	5,751	11%	Elementary	44,401	88%
Middle Schools	2,402	20%	Middle	9,431	80%
High Schools	4,993	20%	High	14,416	57%
Career Programs	<u>5,664</u>	23%			
TOTAL	18,810	22%		<u>6,8248</u>	78%

=====

Table 2.4 shows figures on students in the other open enrollment educational alternatives: the four-year-old kindergartens and the Programs for the Academically Talented. This brings the total proportion to about one student in four (25.7%) enrolled in a distinctive program offered on an open enrollment basis.

Also in Table 2.4, figures for the 1984-85 school year show that about 24,000 students were enrolled in nonmagnet schools outside of their home attendance area. (This figure also does not include about 1,500 students enrolled in schools outside of their attendance area in four-year-old kindergartens and PATs).

=====

TABLE 2.4 1984/85 ENROLLMENT: MAGNETS, K4s, PATs,
AND OTHER NON-ATTENDANCE AREA SCHOOLS AS A PERCENTAGE
OF TOTAL ENROLLMENT

=====

	Enrollment	% of Total Enrollment
Magnet Schools and Programs:	1,8810	21.6%
Four-year-old Kindergartens	1278	1.5%
Prgms. for Academically Talented	<u>2,242</u>	<u>2.6%</u>
(SUBTOTAL: DISTINCTIVE PROGRAMS)	(22,330)	(25.7%)
Other non-attendance area schools	<u>24,000</u>	<u>27.5%</u>
TOTAL FOR OPEN ENROLLMENT OPTIONS	46,330	53.2%

=====

These enrollment processes depart markedly from traditional centralized attendance-area based assignment policies. One could imagine an "index of options," (somewhat like a desegregation index) based on the total number of schools (or the percent of total schools), and the range of alternatives available to a given chooser. Thus, for argument's sake, in a traditional system there is one available school to which each family is assigned and there are no pedagogical alternatives available. Compared to this, figures provided above would show on the hypothetical index a high degree of "openness" in the MPS system. Large percentages of families choose from a large variety of school alternatives (both traditional and pedagogically specialized) and a very large majority receive their choice of school. Given the large number and variety of schools and the huge scale of the communication and registration task (informing families and processing applications), that the process of allocating students to schools is controlled by individual decision: of over 30,000 families each year represents a significant institutional and administrative change.

How is it that nearly all families choose, most get their first choice, and many choose nonneighborhood schools -- yet desegregation is achieved under conditions of extreme residential segregation. Magnets, filled first in the enrollment process, desegregate a sizable portion of the student body. Most magnets are located in the inner city, so this creates vacancies in schools in white neighborhoods, which in many cases already have excess capacity from a decade of declining enrollments. Without magnets, the system would need to produce the same number of transfers, but with compulsory methods. Forced busing of whites into black neighborhood schools has historically been a politically difficult and conflict-ridden task.

Very important is the exemption of the set of inner city schools from the desegregation mandate -- an apparent concession to the goal of maximization of choice. This reduces, compared to the requirement of complete system-wide desegregation, the total amount of transfers needed to comply with the court mandate. Without the exemption, more whites would have to transfer to racially balance schools in black neighborhoods and vice versa, and the level of mandatory reassignment would increase.

Finally, a cushion or safety-valve is created by PATs, transfer options, and the right to appeal decisions. Although some of the magnets are also in white neighborhoods, the PATs, particularly at the middle school level, permit whites to attend nonmagnet schools in other white neighborhoods.

Table 2.4 above shows 24,000 students in non-attendance area nonmagnets. Most are black students. This is evident in Table 2.5 below showing, at each level, much higher percentages of blacks than whites leave their attendance area (column [2]). Also, of those leaving their attendance area, the majority of blacks leaving do not go to magnets, while the majority of whites leaving do go to magnets. These patterns are discussed in more detail in Chapter 3.

=====

**TABLE 2.5 STUDENTS LEAVING HOME ATTENDANCE AREA
BY LEVEL AND RACE**

	[1]	[2]		[1]	[2]
	Total in A.A	Leave (%)		Total in A.A	Leave (%)
Elem.	B: 25,962	13,411 51	High	B: 12,326	8,862 72
	W: <u>17,667</u>	<u>4,878</u> 28		W: <u>11,194</u>	<u>4,516</u> 40
	Total: 43,629	18,289 42		Total: 23,520	13,378 57
Mid.	B: 6,658	4,500 68		B: 44,946	26,773 60
	W: <u>4,177</u>	<u>1,341</u> 32	GRAND	W: <u>33,038</u>	<u>10,735</u> 33
	Total: 10,835	5,841 54	TOTAL:	77,984	37,508 48

Column [1] gives the total number of black and white students by school level. Column [2] gives the total number and percentage of students leaving their home attendance area.

=====

Summary and Conclusions

This chapter described conditions of choice in MPS. Although much policy discourse and theoretical literature assumes magnet schools and open enrollment policies bring choice into public education, the literature lacks a systematic description of policies of choice in a school district. Choice theory cannot rest on the study of individually successful schools of choice nor on normative applications of market principles to education that gloss over the gritty realities of implementing changes in public school systems on a district level.⁷¹ The following chapters will reveal much more about factors curtailing the realization of normative principles of choice theory, and about the possibilities of choice. This chapter sought to lay a backdrop for ensuing analyses and to provide a beginning description of system-level organizational and policy changes brought about by the requirements of implementing choice along with school desegregation policies.

Sections III. through V. show substantial institutional support of choice in MPS. In contrast to traditional non-choice conditions, families in MPS have many accessible alternatives to their neighborhood school. As I discussed in section III., the school alternatives are not radically different programs or novel experiments in school structure or curriculum and pedagogy; rather, they are, if you will, conventional alternatives -- popular pedagogical alternatives promoted in the 70s and particular curricular "content" specializations like art, science, or environmental education. The alternatives are sufficiently differentiated to create distinctive school identities, but similar to each other and to nonmagnets within broader parameters of staffing, scheduling, and governance. In addition to the magnets, a large number of non-neighborhood schools, some with PATs and Four-year-old kindergartens are available and further expand family options.

In my view the conditions of choice that have been implemented are remarkable in light of the pervasiveness of the common schools tradition and its underlying assumptions and the general absence in recent history of large changes in public education. However, if ideals of public choice theory are the standard, the conditions of choice appear considerably more traditional and regulated. Union policies, curriculum guidelines, traditional student and parent roles, basic premises of school governance, and so on, are all very much in evidence in the MPS system and schools.

As discussed at the outset, magnet schools and open enrollment policies can only partially be understood from the perspective of public choice theory. They are not merely instruments to improve technical and allocative efficiency in education; they are enmeshed in the politics of urban education and school desegregation and serve multiple functions including reducing the potential for conflict contained in busing and school desegregation, improving the image and educational quality of large urban schools systems, and, probably, retaining

⁷¹ Murnane (1986), in the context of a discussion of the recent debate over private-public school differences, discusses these issues and associated research needs.

white or black middle-income families in urban public schools.

The next chapter delves more deeply into the nature of voluntarism and choice in MPS. We have seen most families get what they choose; next we will see in more detail who chooses what alternatives, and under what circumstances. We can compare the circumstances to the conditions of choice envisioned in choice theory.

CHAPTER 3

AN ANALYSIS OF PUBLIC CHOICE ASSUMPTIONS ABOUT FAMILY PREFERENCES AND CONSTRAINTS IN THE PRACTICE OF SCHOOL CHOICE

INTRODUCTION: CENTRAL ASSUMPTIONS AND PROPOSITIONS OF PUBLIC CHOICE THEORY AND METHODOLOGICAL COMMENTS

This chapter presents and discusses findings relevant to the political case for choice presented in Chapter 1. Chapter 2 showed at a general level conditions of choice in MPS. This chapter will explore in greater empirical detail conditions of choice made possible by magnets and open enrollment in MPS, and the nature of demand and family choices for alternatives. After a statement of theoretical propositions framing the analyses of this chapter, I discuss methodology and the specific analyses undertaken.

As Chapter 1 showed, within the broader case for choice in education, are more specific rationales. I discussed different grounds for choice which can be formulated as follows:

1. *The Liberation Thesis.* Choice is advocated to empower all families vis-a-vis the public education system, but much choice discourse concentrates on the rights of disadvantaged families. In theory choice could liberate low-income families from inferior neighborhood schools and give them access to better schools elsewhere. I will call this the "liberation thesis." It assumes (a) significant discontent among low-income families and minorities with their neighborhood schools and attendance area restrictions and (b) willingness to leave neighborhood schools. Given this discontent and willingness to leave the neighborhood school, it is assumed, under conditions of choice, a large fraction of families from lower-income backgrounds would enroll in schools they believe to be superior to their neighborhood school.
2. *Pedagogical Choosing.* The pedagogical rationale emphasizes the significance of programmatic criteria in family preferences and school decisions. This view is evident in the literature on alternative schools, tuition tax credits, vouchers, and, magnet schools, and more generally on monopolistic problems of public education.⁷² This literature argues families want not just better traditional schools, but different kinds of schools to accommodate varied preferences. This view assumes, (a) families have preconceived preferences regarding education, (b) that there is a significant demand for pedagogical alternatives, and, (c) that parents will seek out schools congruent with their values and perceived learning needs of their children.

The liberation thesis and pedagogical choosing are models. In practice, choices can reflect several purposes; for instance, a school can be chosen with

⁷² For references, see Chapter 1.

mainly because it is believed to have good students and because it is accessible by bus. I will in some cases use modifiers to describe different criteria underlying choices, such as "specific" or "narrow" pedagogical criteria versus "broad" quality criteria when criteria beyond specific curriculum considerations govern choices.

3. *Family Sovereignty.* Some supporters see in educational choice the promotion of the ideal of family sovereignty. Choice is viewed as an inherent social good, consistent with normative principles of self-determination and minimal state control over people's lives. While those who see choice primarily as an instrument of family sovereignty are not unconcerned with learning outcomes, normative distinctions between pedagogical and non-pedagogical criteria are less important than the right of choice itself, and the affirmation of family sovereignty this signifies. Findings of this chapter can inform the family sovereignty debate by showing how families choose and how choice operates in practice.

Public choice theory rests on a rational value-maximization view of human action. Choice theory assumes that under conditions of choice, parents will reflect on their values and their children's needs and choose after weighing costs and benefits. Values are assumed to be clear -- actors know what they want. It is also presupposed that deliberation occurs with adequate information on alternative means of achieving values. This model of choosing is neutral with respect to preferences, but does assume active decision making. Findings from this chapter will give us a better basis on which to judge how reasonable the rational value-maximization model of choice is, and the extent to which pedagogical criteria and broader school quality considerations guide family choices. Empirical findings cannot resolve, however, issues of political philosophy regarding whether or not school choice should be a right because it is consistent with values of individual liberty.

Methodology

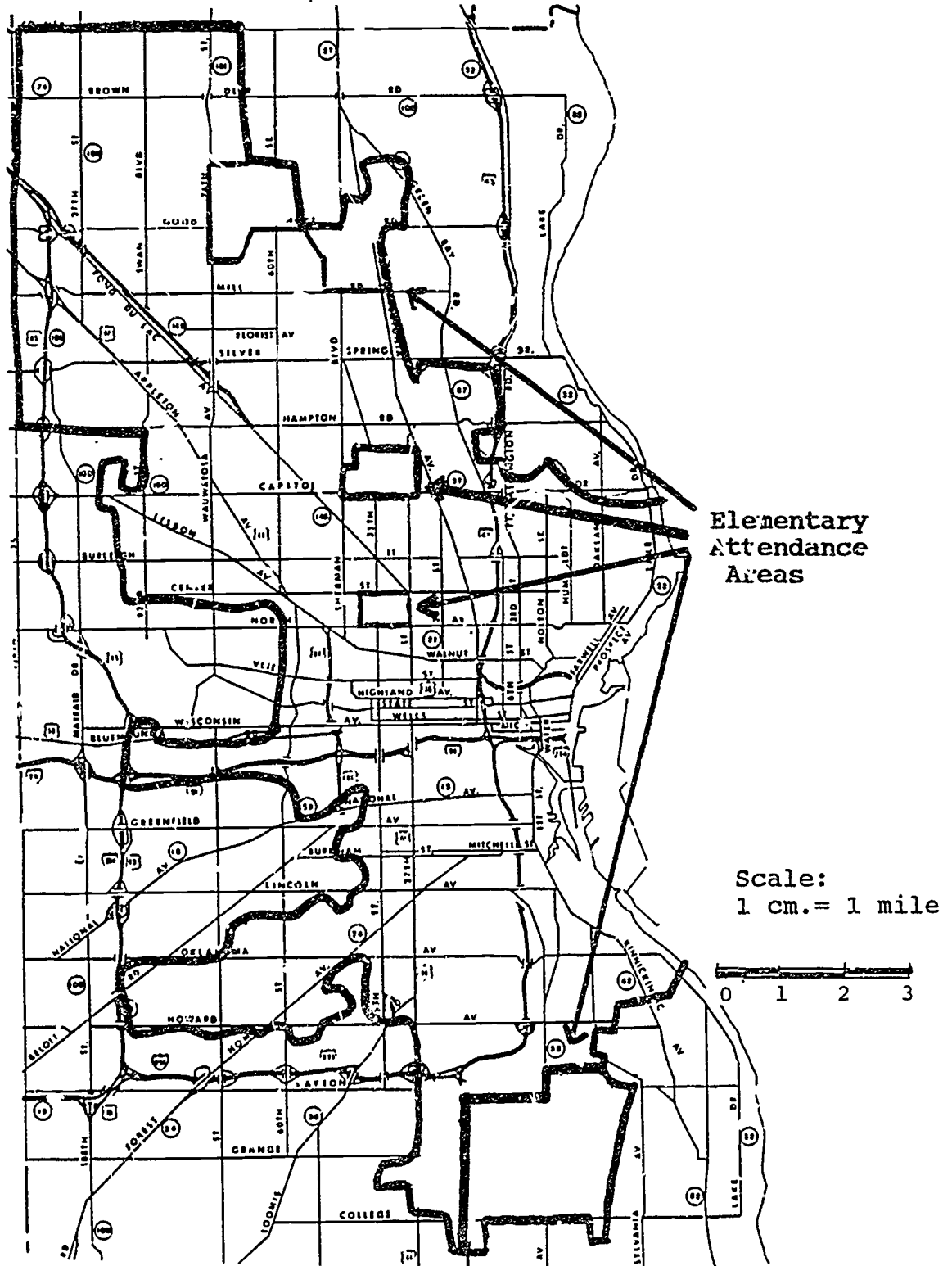
This chapter uses multiple data sources and spans several topics within the theoretical framework delineated above. Hence, it is divided into two parts, each with several sections examining more specific questions. **Part One** examines choices of inner city black families. I focus on the potentiality of choice as a means of liberation from unpreferred schools, the extent to which choices for different alternatives are voluntary, and the kinds of criteria that influence family choices.

Part Two focuses exclusively on choices for magnet schools and draws primarily on data on comparative magnet participation from white neighborhoods varying in demographic characteristics and geographical proximity to magnets. Because magnets offer pedagogical alternatives and are generally viewed as good schools, the question of who attends magnets and for what reasons has important implications for public choice theory. The analysis of magnet choices will be introduced in more detail at the beginning of Part Two, in the second half of this chapter. The Conclusion will discuss findings and make some comparative observations from the analyses of Parts One and Two, and discuss theoretical implications.

Data for these analyses come from MPS records of school choices, school assignments, and enrollments by school for the 1984-85 school year. Demographic data on attendance areas come from the 1980 U.S. Census. Additional data on enrollment policies, registration practices, and on family preferences derive from a pencil and paper survey of parents, and from interviews with parents, teachers, and administrators. (See Chapter 2; additional methodological details are given where relevant in this chapter). Before proceeding to the analysis of the choices of inner city black families a word on attendance areas is needed. (Note, "AA" in Tables and footnotes denotes "attendance area").

Even though MPS has an open enrollment policy and many students do not attend their home attendance area school, *all* students live in a school attendance area. Thus, each school has students from its *own* attendance area *and* students from one or more other attendance areas; also each attendance area loses students to schools in other attendance areas. Figure 3.1 shows a map of the city of Milwaukee with several sample elementary attendance area boundaries outlined. Middle and high schools with their larger student bodies have larger attendance areas. Magnet schools have *no* attendance areas, or put another way, the attendance areas of the regular (nonmagnet) schools are mutually exclusive and exhaustive of the student population. While each magnet school is physically located in some other school's attendance area and will be the closest school to many families in the vicinity, attendance areas have no inherent relevance to magnet assignments. Any student in the school district can apply to any magnet, and each magnet draws students from the majority of attendance areas in the district.

FIGURE 3.1 MAP OF MILWAUKEE SHOWING SAMPLE
ELEMENTARY ATTENDANCE AREA BOUNDARIES



CHAPTER 3: PART ONE

EXPLORING CONDITIONS OF CHOICE IN THE INNER CITY: LIBERATION FROM UNPREFERRED SCHOOLS AND THE SALIENCE OF PEDAGOGICAL CRITERIA

INTRODUCTION

Black children are heavily concentrated residentially in Milwaukee's inner city (Figure 2.1 in Chapter 2, Section I.). They live in overwhelmingly black neighborhoods, most of which are the poorest in Milwaukee (Figure 2.1 and 2.2). For instance, out of the total 25,962 black children at the elementary level, 18,526 (71%) live in just 18 out of 89 attendance areas, all of which are over 90% black.

Is there a demand to exit these inner city schools as suggested by choice theory's liberation thesis? By most accounts, inner city black families are ill-served by public education. Problems in and negative stereotypes of inner city schools and often unsafe conditions of surrounding neighborhoods are well documented. According to public choice theory, options created by magnet schools and regular schools in more affluent white neighborhoods would be evaluated with decisions (school choices) resulting from individual preference functions. Assuming the use of popular standards of quality, there should be significant voluntary exiting of inner city schools.

This set of propositions will be explored in three sections. Section I. examines aggregate applications from inner city attendance areas and the relative attractiveness of particular categories of school alternatives. This will yield an estimate of aggregate demand for different school options and a better appreciation of the complexity of the concept of demand. Section II. examines the concept of pedagogical choosing by presenting data on the extent to which choosers discriminate among magnet specializations, and on the criteria that influence their choices. Section III. further examines the pedagogical choosing model using regression analysis. I investigate factors accounting for choices of black families for nonmagnet, non-inner city schools. Since these schools are not formally distinctive, this analysis provides an opportunity to explore choice under conditions of greater school uniformity.

SECTION I. INNER CITY BLACK MAGNET, NONMAGNET, NEIGHBORHOOD, AND NONNEIGHBORHOOD CHOICES

Will inner city black families voluntarily choose schools outside of their neighborhood? Recall from Chapter 2 that all families with entering children and Kindergartners or with children who are at the top grade of their elementary or middle school must make a school choice in spring for the following school year. Black families can choose their official attendance area school (i.e. the "neighborhood school"), a magnet school (which has no attendance area although it may be nearby), or a regular ("nonmagnet") school in an attendance area which is classified as "white." The last section of Chapter 2 showed majorities of applications for different categories of school alternatives are accommodated and gave a general answer to the above question. Here I will provide further evidence that suggests the great majority

of inner city blacks who choose non-neighborhood schools, do so intentionally and voluntarily.

Table 3.1 (below) gives numbers and percentages of stage II applications from inner city black families for different categories of school alternatives in the 1984-85 school year. These are applications from families living in predominantly black -- most are virtually all black -- attendance areas. Table 3.1 shows slightly more than half (52%) of school choice applications submitted are for non-neighborhood (non-AA) schools.

=====

TABLE 3.1 STAGE II BLACK APPLICATIONS TO DIFFERENT CATEGORIES OF OPTIONS FROM RESIDENTS OF INNER CITY AA'S BY SCHOOL LEVEL

<u>Applic. for Elem. School</u>	<u>Applic. for Middle School</u>
1037 (19%) to magnet schls	445 (28%) to magnet schls
1217 (22%) to white AA schls	764 (49%) to white AA schls
<u>3261</u> (59%) to home AA schls	<u>349</u> (22%) to home AA schls
5515 applications (total)	1558 applications (total)
<u>Applications for High School</u>	<u>Total Applications</u>
329 (35%) to magnet schls	Magnets 1811 (22%)
278 (30%) to white AA schls	White AAs 2409 (30%)
<u>326</u> (35%) to home AA schls	Home AAs <u>3936</u> (48%)
933 applications (total)	8156

=====

Before proceeding with further interpretation, more information on Table 3.1 is necessary. Under the heading "applications for elem. school" is shown the total number of applications coming from blacks living in attendance areas classified in MPS as black. (They average 88% black). The applications for middle school in Table 3.1 come from the two largest middle school attendance areas and for high school from the single largest high school attendance area.⁷³ These three attendance areas average 99% black and contain the majority of inner city black middle and high school students in the city.

While the elementary applications shown above represent all the applications submitted by inner city families, at the middle and high school level, I chose only the attendance areas fully enveloped by the inner city region. This is because I am confining my analysis to choices of inner city families. There are several other middle and high school attendance areas with

⁷³ The stage I applications at the high school level are an estimate based on the percent of black high school students in magnet programs that are from the North Division attendance area. I multiplied the total number of black high school applications to magnets by the percent of black high school students residing in the North Division attendance area. I am assuming the fraction of applications from the North Division attendance area is the same as the fraction of North students enrolled in magnets.

sizable numbers of blacks,⁷⁴ many of whom reside in inner city neighborhoods; but because these attendance areas are large and cover much non-inner city territory, I cannot be sure black applications from these attendance areas are from black families in the "inner city" circumstances of theoretical interest: total residential segregation, an overwhelmingly black school as a neighborhood school, and the likelihood of low-income financial status. My interest here is in the fraction of inner city choosers seeking non-neighborhood schools, and what this suggests about the general thesis.

Let us look more closely at the fractions choosing different options; following this I discuss the theoretical significance. Table 3.1 shows large fractions of black families from inner city attendance areas choose alternatives to their official neighborhood attendance area school. The system-level figures show 52% apply to alternatives to their inner city attendance area school; 30% go to nonmagnet schools in often distant white neighborhoods. ("White" is a system classification; for instance, at the elementary level, 3 of the attendance areas formally classified as white are about 40% black; 18 are between 10% and 40% black; and the remaining 32 are 0 to 10% black.) 22% go to magnet schools, which may or may not be in the neighborhood. Because magnets can be nearby schools to inner city families, the magnet figures do not necessarily reveal the level of willingness to leave neighborhood attendance area schools.

Perhaps most revealing of preferences for exit are the 22% of inner city applications at the elementary level submitted to nonmagnet schools in white neighborhoods. Parents of elementary schoolers are generally ill-disposed, due to the young age of their children, to have them bused to far away schools. (The elementary applications are made for children from 4 to 6 years of age). That more than one in five inner city elementary level applications buses a child from two to seven miles to a regular neighborhood school in a white area suggests considerable interest in pursuing an alternative that presumably is perceived to offer a better education. The percentage pursuing this option increases (to above 30%) when those applying to magnets in white neighborhoods is included (this breakdown is not shown in Table 3.1). Turning to the middle and high school levels, where busing worries related to the young age of children subside, the fraction pursuing the white neighborhood school option increases markedly, approaching one in two. Overall, over half of MPS inner city choosers select an alternative to their official neighborhood school, and over half of these choices are for alternatives that require leaving the neighborhood for a school in a white attendance area.

Further evidence of levels of interest amongst MPS blacks in leaving neighborhood schools to attend schools in white neighborhoods comes from participation in the state's Chapter 220 program, which permits inter-district transfers that enhance racial balance. Each year about three thousand black students (around 8% of MPS black students) voluntarily ride buses to attend schools they have chosen in about a dozen suburban communities. That these bus rides are long and the schools are far from home in communities that are virtually 100% white suggests the depth of commitment of these families to the

⁷⁴ For exact figures, see Tables 3.9 and 3.10.

alternatives they have chosen to their neighborhood school.

Can these figures be taken as indicators of a certain level of demand among blacks living in inner cities for alternatives to their regular neighborhood school? I believe they can for the following reasons, although there are some qualifications I shall discuss.

First, the applications giving rise to Table 3.1's figures reveal preferences expressed under the most voluntaristic conditions the system provides. The applications have all been submitted by families according to the procedures and schedules of the spring enrollment process. To submit an application a parent or legal guardian must express orally their school choice to an administrator or send in a form during the prescribed enrollment period. While obviously a parent may seek advice in choosing a school, the parent has the authority to make the school choice.

Now, as described in Chapter 2, some families who are supposed to submit a choice, do not. (They are assigned "on paper" to their neighborhood attendance area school, notified of this assignment and of their right to choose a non-neighborhood school). My calculations put the proportion of non-choosers at around 10 to 15% of black families.⁷⁵ Exact figures on the fraction of the total pool of eligible choosers that actually submit an application during the spring registration process are unavailable. Does this bias estimates of preferences, since the figures in Table 3.1 are based only on the 85 to 90% of families who make a choice during the formal registration period? It appears not. When non-choosers are contacted (by district officials, principals, and social workers) and asked to make a school choice, roughly the same proportion choose non-inner city schools. As an example, about 700 inner city students from feeder elementary schools received administrative assignments to their attendance area middle school; upon subsequent formal notice of their right to choose, about 200 selected middle schools in predominantly or all-white areas.⁷⁶

However, "non-choice" does present some problems for assumptions of public choice theory about active decision making and feasibility. Non-choice implies information problems and passivity toward choice. This is an issue because public choice theory assumes purposeful and informed choosing. Further, non-choosers are likely to be families experiencing the most social hardships and possibly most alienated from the system. Though perhaps a small

⁷⁵ This calculation is based on the total number of stage I and II black applications divided by an estimate of the total number of black students at the appropriate grade level, i.e. kindergartners for the elementary school applications, 6th grade for the middle school applications, and 8th grade for the high school applications.

⁷⁶ Note, these 700 applications are submitted after the stage II registration period and are not included in the figures in Table 3.1 which show only stage II applications from the inner city.

percentage of the total, they have a disproportionate impact on the administration of student allocation processes.⁷⁷ I return to these issues in the Conclusion to Part One of this chapter.

A second fact suggesting the voluntary nature of choices for non-neighborhood inner city schools is excess capacity in inner city schools. Most of them can accommodate more children than they presently enroll. The mean "capacity" ratio (total enrollment divided by number of classrooms) in the inner city elementary schools is slightly less than the district-wide average, 22.9 versus 23.1. Elementary schools can range as high as 32.8 on this ratio.⁷⁸ The two inner city middle schools, at 7.7 and 9.6, are far below the district average of 14.1 on this figure. The two inner city high schools' "capacity" ratios are more than a standard deviation below the district average at the high school level.

Finally, interviews with parents indicate the prevalence of negative views of the inner city schools. This is likely to contribute to preferences of inner city black families to exit neighborhood schools. It is common knowledge that white parents, although permitted, do not apply to inner city school (except magnets). Interviews indicate this option is not considered. The handful of whites living in the inner city schools exit in high percentages. A very large fraction goes to magnets.⁷⁹

Interviews with inner city parents suggest stereotypes of "ghetto schools" which many people hold are not confined to whites. Terms like "zon" and "pit" were used more than once in interviews with black parents. One inner city mother with high school children in non-inner city schools described the two all-black middle schools as, "...horrible, gross, they're blackboard jungles. These schools have very bad reputations." Two recurring themes in comments by inner city parents about the inner city schools were that the children and the surrounding neighborhoods were "rough" and that the schools were not very good, unable or unwilling to control children, and not caring about absenteeism, tardiness, etc. One mother, living within a block of the

⁷⁷ See Lipsky (1980) for a good treatment of the "problems" presented by clients lacking knowledge of rules and procedures for public service bureaucracies. Non-choosers, while they consume disproportionate organizational resources, are a predictable part of the administration of choice. MPS has developed various procedures to locate and request choices from families who have not made a school choice.

⁷⁸ The standard deviation for the "capacity" ratio for elementary schools is 4.6. (Source: MPS School Profiles).

⁷⁹ See Table 3.8, column [2] for Region D; and Table 3.9, AA's #7 and #8 showing percentages of "leavers" by race, and whether or not they go to magnets. Those not going to magnets can go to open enrollment PAT programs, or can request stage III transfers, which need central approval (see Chapter 2).

neighborhood school chose a non-inner city school because, "I wanted to get him out of the neighborhood, he'd always be coming home if he went to school so close to home."

At the same time, there appears to be a perception that schools with white kids are likely to be better, though I have not probed this view in detail. I presume it is a combination of several simultaneously held beliefs: a belief in racial integration -- black and white children should not be isolated;⁸⁰ a belief that desegregated schools might receive more central support or have better teachers; a belief that white children, being generally more docile and compliant, might act as positive role models; and a belief that the threats and temptations of gangs, drugs, etc. will be less.

Of course, perceptions of inner city schools and preferences vary. Families who choose inner city schools, it can be assumed, attach more weight to convenience and community ties, and perhaps are more ambivalent about the superiority of non-neighborhood schools. That bus rides of a half hour or longer are commonly required to get to most of the outlying desegregated schools is a concern to many parents, especially of younger children. Such concerns were expressed in interviews, even by parents who had chosen outlying schools.

Inner city school preferences go beyond convenience. What some would call ethnic pride and others separatist politics also plays a role in choices for neighborhood schools. A politically active "community schools" coalition in Milwaukee has long been critical of the disproportionate bus ridership of black children in MPS.⁸¹ This coalition resisted the conversion of the single

⁸⁰ A 1977 survey of 250 randomly selected black MPS parents showed 91% responded affirmatively to the question "Do you feel that school desegregation is good for your children?" and 72% responded affirmatively to, "Will you volunteer any of your children [to be bused to a desegregated school?]" (Smith, 1977). A 1986 survey of 1,345 randomly selected MPS parents showed high levels of agreement with the statement, "The Milwaukee Public School Board should continue its current efforts to maintain racial integration in the schools." Of the black respondents (n=519), 52% agreed and 30% strongly agreed; of the white respondents (n=669), 33% agreed, and 15% strongly agreed (Bingham et al, 1986). The overall 82% level of black agreement differs markedly from the overall 48% level of white agreement.

⁸¹ Presently, a highly influential black leader strongly committed to education and community schools in Milwaukee has proposed to the Wisconsin legislature the creation of a black school district within the larger MPS district. This is very controversial, but attests to the sentiment held by some blacks that traditional approaches to desegregation and school governance (by whites for blacks) do not work. This reflects a long existing cleavage in views and politics among blacks, reflected in the difference between the pro-integration and assimilationist-oriented NAACP and other more pluralistically oriented groups that are critical of the NAACP philosophy.

all-black high school into a full magnet high school and attempt to marshal support for the improvement of and greater community control over black neighborhood schools. A progenitor of this movement, in the early 1970s several inner city alternative schools formed the Federation of Community Schools, in part out of disillusionment with traditional public school curriculum. That small percentages of blacks from some of the outer desegregated residential areas are enrolled in inner city schools indicates some blacks prefer a segregated environment.

Additionally, the much publicized RISE school effectiveness program (Rising to Individual School Excellence) probably has contributed to preferences for neighborhood schools. Launched in the early 80s, the RISE program's goal was to improve the quality of inner city schools. Though the extent of school improvement is unclear -- test scores rose somewhat and community involvement increased -- information about this program was disseminated from principals extolling the virtues of their RISE school and from district administrators to individual parents, community leaders, and the media. Doubtless, this program enhanced the image of inner city schools in the eyes of some parents and "tipped" decisions in favor of neighborhood schools.

Concluding Comments and Qualifications Regarding the Distribution of Preferences for School Categories

Findings above suggest, consistent with the liberation thesis, conditions of choice in MPS accommodate a demand among inner city families for alternatives to their neighborhood attendance area school. Absent the open enrollment options, a large number of families would be confined to schools they would prefer not to attend. Also, while "re-zoning," "clustering," or other desegregation techniques might result in similar or greater numbers of inner city families leaving neighborhood attendance area schools (relative to open enrollment policies), these mandatory approaches are unlikely to accommodate preferences for *leaving and remaining* as optimally, because who goes and who stays is determined by place of residence and central authorities, not family choice. On family preferences related to logistical convenience, school racial composition, and perhaps more fundamental ethnic identifications, these data suggest a more optimal matching of preferences and alternatives is made possible by giving families choices. This is pursued in more depth in the next two sections after some qualifications and analytical observations on the concept of demand.

The Complexity of Demand.

The aggregate figures of Table 3.1 reveal a distribution of preferences for schools grouped in three categories, but they mask more complex preferences. The categories of Table 3.1 are formally distinguished in MPS and are highly relevant in understanding demand, but families choose *schools*, not just categories, and the large number of available schools vary on multiple dimensions including proximity to the chooser, racial composition, neighborhood characteristics, and programmatic features. It is difficult, for instance, to assess the comparative value of magnets relative to nonmagnet desegregated schools because of both supply and proximity differences within the two categories.

Because of confounding variables, measuring the value of the three official categories net of other variables would be an exceedingly complex task. Ideally, one would want the same number of schools per category, and the ability to match schools in categories on variables relevant to preferences. Then differential application levels could be attributed to the attractiveness of school categories as well as to other variables. Thus, for example, it would be theoretically interesting to quantify the weight attached in magnet choices to their student composition, pedagogical specializations, special "magnet" status, or convenience factors. However, conditions in MPS prevent such an analysis.

Table 3.2 below suggests multiple variables affect preferences. First, were the categories the only criterion that mattered, families not choosing their neighborhood school (the "home AA" category) would choose randomly a school in one of the other two categories (magnet or a nonmagnet in a white AA). If so, each school within either of the categories would receive the same number of applications, a number equal to the average number of applications for the category (eg. 80 per magnet at the elementary level). However, substantial variation is evident in the bracketed figures below giving the range in applications across schools within each category. (The range is the difference between the highest and lowest application figures for the schools in the category.)

TABLE 3.2 AVERAGE INNER CITY BLACK APPLICATIONS TO SCHOOLS BY CATEGORIES OF OPTIONS AND BY SCHOOL LEVEL

<u>Applications per Elem. School</u>	<u>Applic. per Middle School</u>
1037/13* = 80/magnet [199]**	445/4 = 111/magnet [120]
1217/58 = 21/white AA [69]	764/13 = 59/white AA [118]
3261/30 = 109/home AA	349/2 = 175/home AA
5515/101 = 55/school	1558/21 = 74/school

Applications per High School

329/5 = 66/magnet [59]
278/9 = 31/white AA [157]
326/1 = 326/home AA
933/15 = 62/school

* Number of schools in category

**Numbers in [] show range of applic's within category;
(eg. maximum applic's minus minimum applic's = range)

Table 3.2 also shows substantial variation between categories in applications-received per school (e.g. 80, 21, and 109 at the elementary level). This suggests the categories are significant and that the between-category differences in Table 3.1 do not derive solely from differential supply of particular categories of schools. If the categories were not significant (and no other variables associated with the categories affected applications), each school would receive the same number of applications, a number equal to the "average applications per school" figure for each level (e.g. 55 applications per school at the elementary level; this would give the elementary magnets a total of 715 [55 x 13] applications instead of the 1037 which they presently get, or a 13% share instead of their present 19% share).

The variation within and between categories stems from the multiple criteria on which choices are based. The school categories count in choices; but, as we shall see, so do other factors like how close a school is, a school's reputation, and pedagogical specializations.

Observed and Potential Demand for School Alternatives

A second related issue in understanding demand is the importance of thinking about demand relative to supply and to social, political, and administrative factors that influence both supply and demand. The distribution of applications to the different categories of alternatives shown in Table 3.1 reveals a level of demand and a pattern of preferences at a particular time and under particular conditions. I call this *observed demand*. One figure from Table 3.1, for instance, suggests the estimate that 59% of inner city black parents prefer a neighborhood (home AA) school at the elementary level.

There is also *potential demand*, a theoretical construct. Claims that applications submitted by parents or that attendance patterns are not really in accord with preferences refer to an underlying construct -- a potential demand that would be manifested under more optimal conditions of choice. Attendance area-based assignment systems with uniform schools are assumed in choice theory to suppress a potential demand for alternatives to traditional neighborhood schools. Public choice theory claims conditions of choice in education would allow expression of this demand. The same point applies here.

One could argue that under different conditions, the distribution of preferences suggested in Table 3.1 for different categories of alternatives would be different. To illustrate this point, and to present additional findings on the nature and expression of inner city demand for magnets, I provide data suggesting there is a higher potential demand for magnets. In principle supply-demand gaps can apply to any school category, but my data are most firm and illuminating on magnets. Focusing on the magnet category also provides a context for Section II. in which the concept of pedagogical choosing is examined.

Evidence of supply affecting demand is most clear at the middle school level where the number of magnets has increased the most in recent years. For the 1982-83 school year, 4 middle school magnets received about 400 black applications; for the 1984-85 school year, 7 middle school magnets drew 1013 applications. One middle school in particular, which opened up as a Computer magnet in September 1983, received 20 black applications in the first year, 254 in 1984, and 400 in 1985.⁸² (Part of this increase reflects a growing black enrollment of a few percent per year). Another example is the rise in enrollment in the high school career magnet programs as they increased in

⁸² The two other added magnet middle schools (like the Computer program) are city-wide attendance magnet subprograms in regular attendance area schools. One is a foreign language immersion program, the other is an International Studies program.

number and available seats. In the 1978 they enrolled 1710 students; in 1980, 3131; and in 1983, 5197. (While supply of magnet schools or programs and demand appear not to be independent, I should add that increased applications are neither an automatic outcome nor a linear function of increases in supply. Responses of inner city families to new magnets depend upon the location, specialization, and ability of the magnet to attract whites).

Clearly new magnets are able to get "new" applications, although these increases are not precise statistical estimates of effects of changes in supply. Within limits,⁸³ new magnets can increase modestly the share of applications going to magnets relative to nonmagnets, but also probably gain applications that would have gone to other magnets. Thus, while some of the new applications will be from families that would have attended a magnet anyway -- the constant demand assumption -- there is also a net gain from families converted to magnets -- those who find out about and apply to the magnet who otherwise would have either attended a neighborhood attendance area school, or a non-inner city desegregated school. What are the sources of increased demand?

Increased awareness is the main immediate mechanism behind increases in demand. When a new magnet is established, people find out about it. Both the central office and staff in a new magnet want it to succeed, and so cultivate demand by promoting the school. A sizable fraction of applicants to a new magnet often come from the surrounding neighborhoods, because the new magnet used to be their neighborhood school. Formerly they were entitled to attend; after the change they must apply like everyone else in stage I to get in. (MPS often phases in a magnet, one grade at a time, minimizing displacement). However, information by itself cannot create demand.

Promotional processes and presumably the presence of satisfied magnet families contribute to high potential demand for magnets. Magnets receive special billing in MPS's INFO tabloid and, of course, in their own advertising and recruiting efforts. Additionally, the visibility of white children at inner city magnets -- seen in the playground and boarding or leaving buses -- is another signal to neighborhood black parents that magnets are not typical inner city neighborhood schools. (This would most directly affect those living in close proximity to magnets).

Additional evidence of a favorable predisposition toward magnets that can be triggered by an increase in supply comes from an item from the Study Commission parent survey.⁸⁴ It is significant for public choice's liberation

⁸³ The issue of limits to magnet supply and constraints on choices for magnets is discussed in Chapter 5. Political and logistical factors place inevitable upper limits on magnet supply, and on the value of magnets.

⁸⁴ Responses are from a randomly selected sample of parents (n = 916) from seven purposively chosen Milwaukee schools. To the question, "Have you heard of the Milwaukee magnet schools and programs?", 75% of the minority parents (of which about 93% are black, and most of the rest Hispanic)

thesis, that relative to whites, minorities rated magnets higher on the "comparison of educational quality" item. Of minority respondents (the great majority of whom reside in the inner city), 82% rated magnets as either "much" (45%) or "a little better" (37%), than their neighborhood school. By comparison, 61% of white respondents rated magnets more favorably, (30% - much, 31% - a little).

However, as discussed in more detail in the next section on the salience of pedagogical criteria in magnet choices, if magnets are viewed as superior schools, this perception appears to be grounded in a quite limited understanding of magnets' characteristics and purposes. Interviews reveal sketchy knowledge of magnets among inner city parents, (names, specializations, purposes), but a tendency to describe magnets in terms that connote specialness ("fancy," "special," "elite") and above average quality.

Some misconceptions about magnets may exist. My small interview sample cannot reveal how widespread it is, but some inner city parents may view magnets as special schools with "requirements" or at least high expectations of talent or academic performance -- not schools for average poor black children. An interview with an articulate black women who had grown up poor in inner city Milwaukee and was presently enrolled in the university produced this: When her mother grew up in the south, many of the establishments had two doors, one for whites and one for blacks. Most blacks just accepted that they did not go in the whites' doors. The informant said inner city blacks who are poor, have little experience with "the system" (bureaucracies populated by whites), and sketchy knowledge of magnet schools may see them like the Jim Crow "white doors" and accept that "that doors not for me." Another informant, also one of the more articulate, said, "I hear they are excellent. But I don't think that's a good head trip for a child. There's that crust [as in upper crust] that goes to the specialty schools [the term used in MPS instead of magnet]...People think, you must be gifted, you must be smart, you go to a specialty school'."

Conversations with several MPS administrators, and other fellow Study Commission researchers from Milwaukee (several of whom were black) suggest some plausibility to this thesis. The principal and the central office coordinator for the gifted and talented elementary school described a problem of consistent under-subscription of blacks. Though part of the problem, they said, is that other elementary schools withhold bright black students. An "intimidation factor" was also suggested -- a reluctance of black parents to apply to a school perceived as an academically elite school geared toward affluent white

answered, "Yes." This can be compared with the 93% level of affirmative responses of white parents. The "percent Yes" in the minority category ranges among schools from 57% to 94% (standard deviation = 14%); in the white category, from 30% to 99% (standard deviation = 6%).

For further discussion of the question of knowledge of alternatives and magnet advertising see Chapter 2. Part Two, Section II. of this chapter discusses magnet-related awareness and attitudes among whites and provides additional methodological details the parent survey.

children. Consistent with this explanation, a white Parent-Teacher Organization leader for a magnet school said one reason for low levels of black participation in PTO's was dis-ease, or uncomfortableness in interaction with articulate, well-educated whites in meetings and other kinds of school projects.

To conclude, application figures in Table 3.1 measuring observed demand suggest a substantial willingness of inner city black families to exit inner city schools. Out of the entire sample of 8156 inner city choosers, 52% apply to schools other than their neighborhood attendance area school: 22% apply to magnets and 30% to nonmagnets in white neighborhoods. Several thousand inner city families also attend suburban schools as part of the Chapter 220 program. High levels of voluntary exit and tolerance of sometimes long bus rides suggests, as public choice's liberation thesis contends, there is a significant reservoir of discontent with neighborhood schools within the inner city population.

The concept of potential demand highlights the extent to which demand and preferences are conditioned by factors constraining supply and influencing family choices. Improved inner city schools would reduce demand to exit. Better transportation could increase it. Parent survey evidence and the relationship between magnet supply and inner city demand for magnets shows a quality distinction is made between magnets and nonmagnets, and that there is a higher potential demand for the qualities magnets are perceived to offer.

It appears both greater awareness of existing magnets and an increase in supply could, within limits, raise the percent of inner city black families applying to magnets. However, the question of what limits supply and inner city awareness of magnets is not incidental. Theoretically, there is unlimited demand for better schools; the question is the capacity of the system and the willingness of taxpayers and interest groups to produce better schools. I return to this issue in Chapter 5.

SECTION II. CHOOSING MAGNETS: THE IMPORTANCE OF PROXIMITY AND PEDAGOGICAL SPECIALIZATION

In choice theory, and as it is manifested in policy discourse and descriptions in MPS, magnet specializations are for families interested in particular curricula and pedagogical approaches -- the pedagogical choosing model as exemplified in Coons and Sugarman's Ann Orlov account on the first page of this dissertation. This model assumes knowledge of alternatives, and deliberation based on pedagogical criteria, whether narrow pedagogical criteria or broader quality criteria are assumed. Though research on pedagogical choosing among blacks in systems of school choice is sorely lacking (Rossell, 1985b), studies bearing indirectly on this question are not promising for the pedagogical choosing thesis.

A survey of magnet parents in Boston and Springfield, Massachusetts, found 87% did not know the magnet theme of their child's school, although findings were not disaggregated by race (Citywide Educational Coalition, 1978). A survey of parents in Montgomery County, Maryland elementary magnets found only 24% of minorities and 48% of whites could name a magnet program

feature (Larson, 1981). In the federally funded Alum Rock voucher demonstration, when asked to give reasons for choices, 32% of parents "mentioned anything to do with curriculum, and this is using a generous definition of "curriculum;" 71% named location/transportation reasons (Bridge, 1978:51).⁸⁵ An ethnographer studying magnet middle schools (Metz, 1986:110) observed that at one inner city school: "During orientation at the beginning of the year, teachers posted a map and had students put in pegs for their houses. The vast majority were in a fairly small circle close to the school, with only a few in each class scattered around the rest of the city. Many of the students interviewed said they walked to school, which meant they lived within two miles. Thus the school seemed to be drawing voluntary enrollments from families in the surrounding working-class area who chose the school because it was close and convenient with little or no understanding of its special educational approach."

As described in the previous section, knowledge of magnets in MPS among inner city black families appears to be quite limited. In the parent survey (described in Chapter 2) 29% of the sample of minority respondents in the low-income category responded "No" to "Have you heard of the MPS specialty schools?"⁸⁶ However, this "name-recognition" appears to overstate markedly the level of substantive knowledge about magnet qualities, locations, and enrollment procedures. Instead of there being high levels of knowledge about magnets, with families choosing particular magnets or other school alternatives on the basis of informed pedagogical values, inner city black families enrolled in magnets are often unaware of magnet specializations. Those not enrolled in magnets are unlikely to have considered and rejected magnets. Rather, inner city nonmagnet choosers often do not know about magnets or would like to be in a magnet, but found out too late to apply with any reasonable chance of success. The remainder of this section will elaborate on this idea, and suggest the importance of awareness and proximity to magnets in accounting for

⁸⁵ The Alum Rock sample consists of balanced mixture of predominantly low-income white, black, and Hispanic parents. Also, the educational alternatives were within-school programs, not fully distinctive schools.

⁸⁶ The low-income category is under \$15,000/year total household income: 93% of the 487 minority respondents are black.

Further breakdowns in the parent survey provide additional data on the awareness question at the name-recognition level. Two of the elementary schools surveyed were magnets. Out of the random sample of minority parents with children in these magnet schools, 6% (n=84) and 35% (n=53) answered "No" to the question, "Have you heard of the Milwaukee specialty (magnet) schools?" A larger "truer" sample (i.e., all the magnets) would probably produce a figure somewhere in the middle. The "6%" school has very high numbers of black (and white) applications and is difficult to get into after four years of age; the "35%" school has a higher than average percentage of low-income students, receives few white applications, and often accepts applications after the stage I registration stage. Out of the 45 minority parents at the Technical magnet high school surveyed, 13% responded "No" to the awareness question.

magnet choices.

Proximity to a Magnet Creates Awareness and Demand

Below, Table 3.3 shows inner city magnets have relatively high concentrations of neighborhood children. If, as a strong interpretation of choice theory would suggest, families are well-informed and choose magnets *strictly* on the basis of specific pedagogical criteria (and such preferences are independent of race and income), magnets should not have high concentrations (over-representation) of surrounding neighborhood students. Assuming families interested in say, the Art magnet are not disproportionately concentrated in one area, but, rather, are distributed throughout the inner city region, a similar proportion of students from each attendance area in that region would be in the Art magnet.⁸⁷

Table 3.3 below shows the number and percentage of black students at each inner city magnet from the closest 4 or 5 attendance areas (depending on the number of adjacent AA's within about a mile of the magnet). At each magnet below, blacks come from about 30 to 50 attendance areas. The magnet schools referred to in the table (column [1]) are shown in Figure 3.2. "Expected % due to chance" (column [3], below) shows what proportional representation would be in each magnet if the adjacent attendance areas had a representative number of students enrolled.⁸⁸

⁸⁷ However, the absence of geographical patterns would not be proof of pedagogical choosing. It could mean magnets were chosen either randomly with little or no preference past the decision to choose a magnet -- for instance, arbitrarily from the list of magnet options supplied in the MPS INFO document.

⁸⁸ Proportional representation is determined by summing the total number of black students living in the 4 - 5 closest "sending" AA's and dividing by the total number of black elementary school children in MPS, 25,489. For example, assume a magnet's black enrollment is 300; 100 students (33%) come from (i.e. live in) the four closest sending AA's. Assume the total population of black elementary school children in those four AA's is 5,000. Proportional representation of the four AA's in the magnet would be 5,000 divided by 25,489, or about 20%. Thus, children from the four AA's are over-represented in the magnet by 13%.

=====

TABLE 3.3 BLACK ENROLLMENT IN MAGNETS FROM CLOSEST AAs AS COMPARED TO PROPORTIONAL REPRESENTATION

[1] Fig 3.2. school #	[2] % of black enrol. from nearby AA's	[3] Expected % due to chance	[4] Ratio of [2]/[3]
3	71%	21%	3.4
5	55%	17%	3.2
6	11%	12%	.9
7	55%	25%	2.0
9	30%	20%	1.5
10	30%	19%	1.6
11	51%	20%	2.6
12	71%	15%	4.7

=====

Table 3.3 shows, with one exception, significant local over-representation of neighborhood families in a magnet (as shown by column [4] -- the ratio of over- or under-representation). I should point out the possibility that more fine-grained geographical analysis might show an even stronger pattern of localized attendance resulting from the desirability of ever popular "walking-distance" schools. Children within, for instance, a six block radius of a magnet school might be more disproportionately represented than those officially contained within the attendance area boundaries. For instance, if 10% of a magnet's enrollment lives within six blocks, yet that geographical unit constitutes only 1% of total elementary school children, then the over-representation is by a factor of 10, as compared to the range in over-representation in Table 3.3 which averages about 2.5.⁸⁹

Although, as I will discuss later, pedagogical criteria doubtless influence some choices, in light of the relatively low levels of understanding of magnets' qualities and specializations, two more adequate explanations for the localized attendance patterns can be offered, with different implications for the pedagogical choosing model.

First, a portion of the higher local attendance shown in Table 3.3 above is explained by higher local awareness. Families living near a magnet are more likely to know about it. Given that a magnet is usually viewed as a desirable school (integrated and "special") by inner city black families, in neighborhoods where magnet awareness is higher, applications, and, hence, magnet enrollment, are higher.⁹⁰

⁸⁹ For comparative purposes, see Table 3.8 which gives magnet attendance from a large section of the inner city shown in Figure 3.2 (see "Region D"). Table 3.8 shows that 13% of the region D children attend magnets. System-wide, 11% of elementary children are in magnets.

⁹⁰ This is also true in white neighborhoods as discussed in Part Two of this chapter.

Evidence of a relationship between proximity, awareness, and magnet attendance can be found in Table 3.3. In higher SES neighborhoods proximate to a magnet(s), knowledge of alternatives and magnet awareness, and, hence, localized attendance, is higher. The two schools in Table 3.3 (#3 and #12) showing the most concentrated patterns of local attendance are in (or closer to) relatively less economically depressed inner city neighborhoods, and in the vicinity of a few middle SES integrated neighborhoods. These higher SES neighborhoods, due to higher levels of awareness of magnets and enrollment procedures (though possibly a higher valuation of magnets as well), apply in large, very disproportionate, numbers to the proximate magnets. In the more centrally located inner city magnets, the degree of local over-representation declines; surrounding attendance area children are over-represented, but by a lower margin. The local "share" of applications is lower than it would be under more optimal conditions of awareness.

Substantially higher black application levels to inner city magnets compared to non-inner city magnets also suggests effects of proximate magnets creating magnet awareness, and thus demand. The ratio of applications to assignments for the five non-inner city magnets is 1.3:1; the ratio for the seven inner city magnets, 4.3:1.⁹¹ The five outside magnets receive on average 52 applications; the seven inner city magnets receive on average 138 applications. Thus, the physical presence of a magnet in an inner city neighborhood, made more conspicuous by its integrated student body, creates demand for the magnet through the mediating variable of awareness.

A second reason for magnets' localized attendance patterns is motivational -- a preference for logistical convenience. Higher applications to inner city magnets also reflect a preference for a closer "walking-distance" school. As mentioned earlier, this is where a more fine-grained, block-by-block attendance pattern analysis would be useful. It is likely, especially given the perceived higher risk of walking in inner city neighborhoods, that beyond a reasonable and safe walking distance, the desirability of a magnet diminishes, and the option of a bus ride to a more distant non-inner city desegregated school, or to the (segregated) attendance area neighborhood school, becomes more attractive.

Sibling preference and waiting list rules probably perpetuate localized attendance patterns in inner city magnets. If a second child applies to a magnet where a sibling is already enrolled, but does not get in due to the random draw, the second child gets placed at the top of the waiting list. A top spot on the waiting list greatly increases the odds of admission for the following year, especially for blacks because they have a much higher out-migration rate than whites in the MPS schools. An inner city parent in the immediate vicinity (walking distance) of a magnet with a child at a non-inner city desegregated school is likely to have a higher motivation to transfer the

⁹¹ The grades 3-5 gifted and talented school was omitted from the "inner city" category because it is academically selective; hence the size of the pool of applicants is unclear. (One set of figures provided to me by an administrator suggests the ratio is 2.5:1). It is whittled down in several stages.

child to the magnet in mid-year or between middle grades when an opening occurs than a parent farther away for whom the magnet may also be desirable, but not by enough of a margin to justify a transfer to another school not within walking distance. Even if the parent is far enough from the magnet to qualify for busing, the transfer decision requires a trip to the central office and involvement in bureaucratic procedures for switching buses and routes. Thus, it is the visible presence of the magnet school and its close proximity that contributes to localized demand, though timing and building capacity can limit entry.⁹²

In sum, two processes operate. First, assuming a relatively high and uniform level of potential demand among inner city blacks for magnets, those who find out about magnets and how to enroll successfully get in. On average, these families are more likely to live close to a magnet and find out about them because proximity to a magnet creates awareness. Second, other things equal, those living close to a magnet, especially those within walking distance, probably have a stronger motivation to apply to the magnet and thus are over-represented in the student body.

Conformity of Inner City Choosing to the Liberation Thesis and Pedagogical Choice

Higher magnet awareness among nearby residents and a greater demand for a walking-distance school account for disproportionate neighborhood attendance in magnets. Are these informed choices for a preferred alternative? Next I present data and suggest choices of inner city families for magnets generally conform to the broader interpretation of the pedagogical choosing model. Most inner city magnet choices can be construed as a deliberate preference over the home attendance area school or a nonmagnet desegregated school.

It appears applications for inner city black children to magnets are submitted under two general kinds of conditions, the first of which is in accord with the liberation thesis. Attracting many inner city black applicants to magnets is the opportunity to attend a *desegregated* school (in contrast to their attendance area school) *close* to home; the magnet status per se and the special qualities that status implies are also attractive, but less often

⁹² Entry to school #6 -- the exception to the pattern in Table 3.3 -- is restricted by academic screening procedures; (#6 is the gifted and talented magnet). Students must receive a nomination from a teacher and a parent before applications are reviewed for admission. This process precludes heavily localized attendance. More heavily localized attendance in schools #9 and #10 may also be attenuated by quasi-selective processes. These schools do not have formal admissions requirements, but in #9 I believe some counseling occurs to communicate to applicants that the school is serious about its art specialization, and while talent in art is not a prerequisite, some commitment and interest is desirable; and #10, a Montessori school, generally does not admit children after Kindergarten who have not had previous Montessori training.

understood. However, some families, unaware of the magnet category and believing the magnet is their neighborhood school "choose" magnets unwittingly. This enrollment process is most inconsistent with normative models of choosing because technically a choice has not occurred. I discuss the two approaches leading to enrollment in a magnet next.

Evidence that many inner city magnet choices are deliberate choices for a better school -- the liberation thesis -- even if they are not choices guided by specific pedagogical criteria can be found in the between-school variation in applications in Table 3.3.⁹³ For instance, an Environmental Education magnet and a Montessori magnet (#4 and #13 in Table 3.3 and Fig.3.2) are both situated accessibly a few miles outside of the inner city. The Environmental Education magnet received 24 applications to the Montessori's 103. It seems plausible that the Montessori name and INFO program description would be more appealing to black choosers than Environmental Education, which much research in the area of environmental education has shown to be virtually a non-concern outside of the middle class. Environmental Education may be perceived as "unserious," peripheral to "real" education, while the Montessori label, even if what it means is unclear to choosers, may connote legitimacy and effectiveness. Nationwide, Montessori magnets are one of the most successful types in attracting applications at the elementary level (Royster, 1979).

Another case is illuminating, because it suggests a quality distinction is drawn between the two open education elementary magnet schools. Very low black applications (19, 30, and 26 from 1982 to 1984) to one inner city elementary open education magnet (#11, in Table 3.3 and Fig. 3.2) indicate proximity to inner city neighborhoods and the magnet status alone do not guarantee applications. The other elementary open education magnet (#12, in Table 3.3 and Fig. 3.2), on the other hand, is very popular. Also located in the inner city, it received in the same years, 80, 100, and 117 black applications. Other research from the Study Commission showed the first magnet school (#11) to be experiencing significant staff conflict and leadership problems (Walsh et al. 1985). It also received few *white* applicants in these years, thus compromising its capacity to offer a fully integrated environment.

Table 3.4 (below) shows *non-inner city* magnets have a representative share of inner city black students in their individual student bodies.⁹⁴

⁹³ Between-school variation, however, can result from many things besides pedagogical distinctions (specific or broad) made by choosers. Variation in applications-received among inner city magnets probably is affected by variable neighborhood population density and obstacles like train tracks, busy streets, and intersections.

⁹⁴ To produce Table 3.4, I selected nine large overwhelmingly black attendance areas (11,143 black students) covering a large portion of the central city region. The nine attendance areas were selected to cover as much as possible the neighborhoods in which the inner city magnets are located so that this table would refer to the same population that is proximate to the inner

One caveat is that the black enrollment in these non-inner city magnets has a higher proportion of stage II enrollees, due to these magnets' sometimes insufficient number of stage I black applications. (Note these magnets have lower percentages of blacks relative to the inner city magnets which average 49% black. See "School's % black" column).⁹⁵ Thus, figures probably over-estimate a little the extent to which attendance in these schools reflects the more deliberate and informed approach to choice represented by stage I application processes.

=====

TABLE 3.4 INNER CITY V. NON-INNER CITY REPRESENTATION OF BLACKS IN NON-INNER CITY MAGNETS

	<u>% of black enrollment from inner city</u>	<u>Deviation from proportional representation</u>	<u>School's % black</u>
Magnet # 1	35%	-9%	40%
Magnet #13	48%	+4%	38%
Magnet # 2	44%	0%	40%
Magnet # 8	48%	+4%	28%

=====

A portion of the black attendance in magnets, particularly inner city magnets, does not conform to conceptions of liberation or pedagogical choosing. I call this form of entry, "fortuitous choosing," because a pre-meditated choice between alternatives is not clearly in evidence. According to interviews, when it comes time to enroll a child parents often go to the closest school. Magnets inevitably will be the closest school to home for large numbers of inner city families, even though all have an "official" nonmagnet attendance area school. Thus, many inner city parents inquire about enrolling a child in a magnet, because the school is assumed to be the neighborhood school. If the timing is right, and there are openings, the child receives a magnet assignment. Though it is difficult to assess the prevalence or success rate of the fortuitous enrollment process, it is common enough that several principals brought it up in interviews, contrasting it with approaches taken by middle-class choosers from outside the neighborhood who were described as

city magnets and discussed in other analyses. The nine attendance areas comprise most of the southern half of the black inner city region (from the highway northwards to uppermost elementary magnet school). That representative numbers of inner city blacks are enrolled in these "outside" magnets, furnishes evidence that informed choices for a better school (integrated and formally distinctive) account for a significant portion of the disproportionately localized attendance in inner city magnets. It is difficult to conceive of an inner city parent submitting an application in a timely fashion to a non-inner magnet, unaware that it is a magnet or, at least, a special type of school.

⁹⁵ That these non-inner city magnets enroll some stage II and III black choosers indicates lower demand relative to inner city magnets -- lower both because awareness of them is lower and because they cannot be "walking-distance" schools for inner city black families.

more informed and systematic about the enrollment process prior to applying. (This is discussed in more detail in Part Two of the chapter).

It is unlikely that the fortuitous choosing process is a dominant mode of entry into inner city magnets. The requirement of applying in February and the fact that most inner city magnets reach their enrollment ceilings for blacks during the stage I enrollment week greatly diminishes the probability that fortuitous choosing can be frequent. Many families, particularly first-time enrollments, do not inquire about enrolling a child until late in the summer, often the first day of school. An administrator said, "most parents are not used to thinking about enrolling in school so far in advance." In this way, timing and the entrance-by-lottery policy prevent the occurrence of substantially more concentrated patterns of localized attendance.

Concluding Comments on Choices of Inner City Black Families for Magnets

Findings from interviews and attendance data do not bode well for public choice assumptions about the pre-existence of a demand for diverse curricular and pedagogical offerings, at least among inner city families under the conditions of choice in MPS. The parent survey suggests a majority of inner city parents have heard of magnets and generally perceive them to be higher quality schools, but in the inner city, survey and interview data suggest parent knowledge of qualities of magnets and their enrollment requirements is generally very limited.

However, while magnet choices of inner city families do not evidence the information gathering and specific pedagogical criteria of the pedagogical choice model, many if not most inner city choices for neighborhood magnets are probably purposeful choices for a desegregated school close to home and believed to be better than the neighborhood school or some other open enrollment option. Timing and registration requirements for magnets make it difficult to gain admission without information and some preformulated preferences. Furthermore, inner city black children are well represented in non-inner city magnets -- magnets that cannot be "discovered" simply because they happen to be located in the neighborhood.

"Fortuitous choosing" occurs and, while it is doubtless not a dominant pattern, it appears not to be a negligible phenomenon. What fortuitous choosing lacks, from normative conceptions of pedagogical choosing is not only the use of pedagogical criteria; in addition, choosers can be unaware of other school alternatives, although they may become aware of other alternatives in the course of the enrollment process, especially if the enrollment initiative is made after the stage I registration period. This is probably a common way inner city parents find out about remaining school alternatives.

Fortuitous choosing is not just a theoretical problem. Pedagogical choosing has a clear normative element -- specialized schools are supposed to be chosen as in the Ann Orlov case. This model is not an esoteric construct of choice theory, it is generally held by magnet staff and administrators as well as many middle class parents. Forms of choice departing from this model tend to be seen as less adequate or legitimate.

One problem that has surfaced concerns perceptions that choosers not sharing the philosophy or specialized goals of a magnet school detract from its effectiveness. In interviews in two elementary magnets, I was told inner city parents voiced concerns about inadequate attention to basics. They wanted less time devoted to the particular magnet specializations. The differing views of middle class parents and magnet staff caused some tensions. A related problem can flare up when the number of applications exceed available spaces requiring recourse to the random selection process. Families informed about the school, choosing it after an information gathering process, and interested in its specialization, are no more likely to get in than neighborhood families applying "merely" because the school was close.⁹⁶

The lack of salience of pedagogical criteria may be an artifact of the range of pedagogical alternatives available. Lower income families, black and white, are generally less attracted to "progressive" (child-centered) pedagogies or curriculum themes reflecting middle-class cultural values (Everhart, 1985). Generally traditional curriculum is preferred, teaching that emphasizes "the basics" in an environment with clear, enforced, teacher-centered rules.⁹⁷

In MPS, if magnet "fundamental schools" or other magnet types were available (black culture or history, or schools with a distinctive black style and identity), pedagogical criteria might be more influential.⁹⁸ As discussed in

⁹⁶ Magnet parents in interviews often expressed consternation about this; although, like some of the educators, some parents expressed the view that, while the influx of children enrolling in magnets for no other reason than the close proximity of the school was not a desirable situation, this "problem" did not warrant entrance criteria as a solution. That the magnets should be open to all comers was viewed as more important. Not all people felt this way. Some favored minimal criteria -- interviews or auditions occasionally came up as ideas.

⁹⁷ This is consistent with sociological research exploring effects of social class on child-rearing and educational values (Kohn, 1969; Wright and Wright, 1976).

⁹⁸ One of the more successful magnets in attracting black applicants in the new St. Paul magnet program is the Benjamin Mays Fundamental School, which was developed primarily by the black community. In MPS, there are several elementary inner city attendance area schools designated as "fundamental" in the INFO, but they are not magnets, and their designation is only discoverable by going through a long list which is like an index listing specific programmatic features for each of MPS's 150 plus schools and programs. I suspect the "fundamental" designation is primarily a holdover from the desegregation program's early years when all schools were given formal programmatic distinctions; like the magnets' specializations, the "fundamental" designation is probably unknown to most inner city families.

Chapter 1, many choice advocates would claim the range of MPS alternatives is quite restricted. It could be argued there is an untapped potential demand for different kinds of schools, and this is a more fundamental source of the market imperfections that remain in open enrollment systems with "conventional" educational alternatives.

Finally, it seems very likely that magnet choices of inner city black families at the high school level are based to a greater degree on pedagogical criteria than is generally suggested in the above analyses and discussion which focus on the elementary level. There are several reasons for this. One is that at the high school level a "walking-distance" school is less of a priority for older students, who are more mobile and more experienced bus riders.

A second reason relates to the concept of potential demand. The magnet high school advertising and recruiting program described in Chapter 2 which all eighth graders are required to attend doubtless induces pedagogical choosing. The advertising program creates high levels of magnet awareness; and the formal and explicit treatment of programmatic specializations creates a clear expectation that choices should be pedagogical. This expectation is revealed not only in the formal purposes of the specialized magnet programs and their advertising, but in the frustration communicated to me by program personnel with students who did not take the specializations seriously. Related to this, in contrast to purposes of education in elementary and middle school, there is a general societal expectation that in high school, students *should* begin making educational decisions with careers and college in mind. The high school magnets are differentiated in ways that prepare for a wide range of college and career trajectories. At the pre-high school level, parents in general, inner city black parents in particular, are not predisposed to think about education according to specific pedagogical concepts. Potentially, however, better information, a more diverse range of alternatives, and greater institutional support of pedagogically differentiated schools could induce forms of choosing more in accord with choice theory's pedagogical model. I will consider this in more detail in Chapter 5. The next section examines choices of inner city black families for nonmagnet desegregated schools during the stage II enrollment process.

SECTION III. AN EXAMINATION OF THE CHOICES OF INNER CITY BLACK FAMILIES FOR NONMAGNET SCHOOLS IN WHITE ATTENDANCE AREAS

Below I do a multiple regression analysis to assess the role of neighborhood social characteristics and proximity in the choices of inner city families during the stage II enrollment process in March. This analysis has theoretical relevance because of the homogeneity of choices. Previously we examined relatively heterogeneous alternatives: home attendance area schools, inner city and non-inner city magnets, and regular schools in white neighborhoods in Section I., and choices among magnets in Section II. Here I examine applications to the 58 traditional elementary (nonmagnet) schools in white neighborhoods. Whereas distance, and the availability of busing, create one significant dimension on which individual schools and categories of alternatives in the previous analyses can be distinguished by choosers; the 58 schools are all outside the inner city by a mile or more and almost all inner

city students going to them are bused. Further, unlike the magnets which are individually formally distinctive, and which are distinguished as a group from nonmagnets, the 58 schools are presented on a list on the stage II application form. While some basic information about these schools is available in the INFO (that families receive about a month prior to receiving the application forms),⁹⁹ the application forms themselves contain no information about the individual schools. Thus, analyzing application patterns for this subset of schools is an opportunity to explore effects of proximity under conditions where the great majority of children are bused, and, in the absence of formally created distinctions, where reputational or related distinctions are likely to distinguish some schools or types of schools from others. If patterns of applications are found that suggest deliberation over prior information about choices, supporting evidence exists for the claims of choice theory.

The dependent variable is the number of March, 1984, stage II black applications received per elementary school in predominantly- or all-white neighborhoods. Families who have not already applied and received an assignment to a magnet or one of the other stage I options during February, are requested to choose one of the schools on the list, or their neighborhood school. Black families are given a list of 58 schools to choose from. A total of 1,506 applications, ranging from 1 to 70 per school, were submitted during the week.

The independent variables are as follows:

1. *College*: the percentage of adults over 25 with four or more years of college in the receiving school's attendance area.¹⁰⁰ This might increase a school's

⁹⁹ Information about each school's location, special programs (K4, PAT, program specialization if any), and sources for further information is sent to each family in January and is available at the central office and at each school in the system. Families are given a week to submit a choice which can be communicated to the central office by telephone or mail, or through the local school principal.

¹⁰⁰ The measure of education is a weighted mean derived by adding the number of college educated adults in an AA's census tracts (henceforth CT) and dividing by the total number of adults. (AA's are larger than CT's, usually two to eight CT's per AA). Because AA's and CT's are not contiguous, estimates were made when a CT was not fully contained within an AA. The estimates took into consideration not only the percent of the CT contained within the AA, but the apparent density of the portion of the CT being included in the estimate. For instance, assume an AA fully encompassed two CT's, each with 1000 "over 25" adults, and with, respectively, 50 and 100 graduates. Half of a third CT (200 graduates and 1500 adults) is also within the AA. The "College" percent would be $[50+100+(200/2)]$ divide by $[1000+1000+(1500/2)]$, which comes to 9.1%. Topographical features (parks, cemeteries, institutions, highways, RR tracks, size of blocks) indicating residential population density was also factored in to my estimates. For instance, if part of the half of the CT within the AA just described was a

attractive power to black families through the relationship between educational attainment and parental support for education, and/or through the relationship between education and racial tolerance. Schools in neighborhoods with higher percentages of college graduates may develop reputations as good schools, or the neighborhoods may be viewed as relatively benign with respect to racial attitudes (compared to, for instance, white working class neighborhoods which are inclined to more overt expressions of ethnic conflict).

2. *Income*: the median income of the census tract in which the school is located. The median income figure is intended to be measure of affluence of the census tract immediately surrounding the school. If people are influenced by a general image of a school's immediate environment that is related to income -- eg. the school is in a "nice" neighborhood -- median income may predict application levels. While it seems probable that a neighborhood's image would influence choice, more direct measures than median income would be preferable.

3. *Distance*: the approximate distance in miles of the school from a central point in the inner city area.¹⁰¹

4. *PropB*: the percent of black elementary age children living in the receiving attendance area. About a quarter of the outlying neighborhoods to the north and northwest of the black inner city region are more or less residentially integrated, though they remain predominantly white. Schools in these neighborhoods might be more attractive to black choosers from the inner city if they believe that the residential integration is viewed as a sign of racial harmony and may be likely to foster a school climate more receptive to bused-in blacks.

If neighborhood social characteristics and/or the Distance variable are associated with the number of applications, we have evidence that choices are being made with foreknowledge of characteristics of options. This supports arguments of choice advocates although proximity-to-home is not a favored criterion in the equity and efficiency rationales. If no relationships are found, other factors must be considered.

The Pearson Correlation Matrix shows sizable correlations between several of the variables. Two relevant observations should be noted. First, the subsample reveals a "truncated range" effect. The correlations between

park, its weighted contribution would be decreased in proportion to my visual estimate of the percent of the area without households.

¹⁰¹ The distance measure is based on one mile increments in radius from a central point in the inner city. The range on the distance variable is six miles and the distances have been accurately measured with a map.

As the previous analysis showed, other things equal, families prefer loser school.

=====

TABLE 3.5 REGRESSION RESULTS OF NUMBER OF INNER CITY APPLICATIONS TO WHITE AAs ON PREDICTOR VARIABLES

Dependent Variable: # Applications

Minimum value=1

Maximum value=70

Standard Deviation=12.1

N=58

Regression Results:

R SQRD=.34 MLTPL R=.57 ADJST'D R SQR=.28

STANDARD ERROR of EST.=10.5

<u>VARIABLE</u>	<u>COEFF.</u>	<u>S.E.</u>	<u>ST.COEFF</u>	<u>P value</u>
<u>Constant</u>	8.0	6.7	.00	.238
<u>College</u>	70.1	20.4	.48	.001
<u>Distance</u>	-.41	1.1	-.06	.699
<u>Income</u>	.250	.451	.092	.582
<u>ProbB</u>	16.7	9.1	.22	.073

Pearson Correlation Matrix:

	<u>College</u>	<u># appl.</u>	<u>Income</u>	<u>Dist.</u>	<u>ProbB</u>
<u>College</u>	1.00				
<u># appl.</u>	.52	1.00			
<u>Income</u>	.39	.21	1.00		
<u>Distance</u>	-.14	-.15	.57	1.00	
<u>Prop. Black</u>	.01	.23	-.15	-.32	1.00

=====

PropB and both Income and College are much smaller than they would be for the entire sample of attendance areas because of the truncated range on PropB in the attendance areas classified as white. The subsample excludes inner city attendance areas which are high on PropB and low on Income and College.

Second, we see a sizable correlation (.57) between Income and Distance -- the farther an attendance area is from the inner city, the richer it is; but, a negligible, negative (-.14) correlation between College and Distance. This is due to two factors. First, there are two high education clusters of neighborhoods situated several miles directly to the east and west of the inner city area; and the other attendance areas do not increase markedly on average in College with increasing distance from the inner city. A large number of attendance areas on Milwaukee's south side, which contribute positively to Income's correlation with Distance, do not impart the same statistical contribution on the College variable. Controlling for Income, south side attendance areas are on average 4.3% lower in College.¹⁰² As we shall see, the generally lower levels of College on the south side have important implications for school choice processes in MPS.

The regression model explains 33% of the variation in Applications. This is substantial, but leaves a lot unexplained because I have not measured all the subtle factors that are likely to influence choices. The inclusion of other variables in the regression more sensitive to school reputations and kinship/friendship networks would explain a larger percentage of the variance. I will discuss these possibilities after explaining the associations shown in the regression results.

Two of the independent variables, College and PropB ($P = .001$ and $.073$, respectively), explain the most variation. The college variable, with a regression coefficient of $.477$, has the strongest independent effect on Applications. Every one point increase in a receiving attendance area's percentage of college educated adults is associated with an additional $.7$ applications. A one standard deviation increase (8.2%) in percentage of adults with college (the range is 39%), is associated with 5.75 extra applications. The proportion black of the receiving school makes a difference too, but it is smaller. A one standard deviation increase (15.8) in the percentage black of a receiving attendance area (PropB) is associated with 2.6 additional applications.

Somewhat surprising, given the desirability of nearby magnets, is the negligible relationship between Applications and Distance. The regression coefficient of $-.41$ is small, but in the expected direction. A one standard deviation increment in Distance (1.8 miles) on average results in a loss of only $.74$ applications. However, the high P value ($.70$) suggests a strong likelihood that the association is due to chance.

The effect of Income is in the expected direction, but has a relatively

¹⁰² This is based on a regression of College on Income using a dummy variable to classify AAs by south = 1 and north = 0, yielding: $\text{College} = .019 + .006(\text{Income}) - .043(\text{NS})$.

high P value (.498); a \$10,000 increase (over half the variable's range) increases Applications by 2.5. The significance of this weak association is unclear. It seems plausible that, controlling for other variables, the income level of a school's neighborhood would be positively related to Applications in a system of choice, but it would probably require a sizable increase in income to have a net effect over other relevant environmental variables that influence the attractiveness of a school.

Interpretation

Visual inspection of attendance patterns and interview findings suggest two processes occur that explain the associations of both College and ProbB with black Applications, and the lack of the significance of Distance. There is some avoidance of nearby all-white south side schools, and disproportionate choosing of schools in higher education attendance areas, several of which have modest percentages of attendance area blacks and are relatively remote from the inner city area.¹⁰³

Virtually all blacks in Milwaukee live on the north side of the highway that bisects the city on an east-west axis. In general, Milwaukee's old and "traditional" (conservative/blue-collar) neighborhoods are on the south side. The south side neighborhoods developed around the factories, shipyards, trainyards, and distribution-warehouses that once thrived in central, south side Milwaukee. Most of the early hostile resistance to desegregation occurred in several south side schools.¹⁰⁴

I have heard from several different sources that blacks are more reluctant to attend south side schools than they are north side schools. Apparently these south side schools still have negative reputations in the grapevine as evidenced by comments from district administrators about the greater difficulty of attracting blacks to some of the high school magnet programs on the south side. Also, relations between black and Hispanic students are strained by ethnic tensions and youth gang rivalries. The Hispanic community is concentrated on the near south side. Milwaukee's expanding black population is growing northward and westward, but not southward. Networks of

¹⁰³ A subsequent regression using a North-South dummy variable was computed to assess if lower applications to south side schools stems from factors other than those measured by the College variable, for instance, geographical factors unique to the south side. The dummy variable had no independent effect and did not change the coefficients of the other independent variables, lending additional support to the explanation that factors associated with the south side's lower educational attainment produce the effect on the dependent variable, Applications.

¹⁰⁴ See Fuerst and Pupo (1983) for a discussion of some of the responses of whites in different regions of the city to the MPS desegregation program in the early years. They discuss resistance to busing and significant increases in enrollments in private schools on Milwaukee's south side.

friends and kin make the north side familiar and attractive; at the same time, the south side, especially the near south side which is poorer and "rougher," is probably viewed as more alien and less receptive.

The effect on choice is that inner city black families apply in lower numbers to the south side. Of the eleven schools that receive the lowest numbers of applications (less than 10), 8 are south side schools. Twenty schools receive between 10 and 21 applications: 15 are south side schools. Even though schools on the near south side are quite close -- many are one to two miles from many inner city neighborhoods -- there appears not to be higher preference for schools on the near south side as compared to schools farther south. Since the schools in the extreme northwest of the city have application levels about 50% higher than those on the far south side, and a handful of schools on the near south side have very low application levels, the proximity effect is not as great as one might expect considering the distances involved. That is, to some degree, black families "pass over" closer schools on the south side for more distant ones farther north.

Subjectively, it may not be perceived this way. After the decision is made to bus a child to a non-neighborhood school, the distance criterion may recede in significance. Once a child will be on a bus for more than short trip to attend a non-neighborhood school outside of the web of friends and kin and the familiar territory of the neighborhood, additional one mile increments may not be very important. More important, presumably, are the quality characteristics of the receiving school, for instance, "not being on the south side" is one quality characteristic that influences choices.

Before discussing other school criteria, another influence diminishing proximity effects is the selection of schools on the basis of bus routes. Parents prefer bus routes where the bus stop is close to the home and does not require crossing busy streets. On average, this criterion will diminish proximity effects since closer/safer bus stops are not necessarily routes to closer schools.

The positive association of College with black Applications stems primarily from the effects of a relatively small number of attendance areas. Within the same (approximately 3 mile) radius of the inner city is a low education area (4% on the College variable) on the near south side, which is relatively avoided,¹⁰⁵ and two high education areas directly east (49%) and west (20%) of the inner city with frequently-chosen schools. Much of the education effect stems from one frequently chosen attendance area on the east border of the city with a very high percentage of college graduates. Farther away from the inner city (5 to 7 miles), but again at roughly equivalent distances northward and southward are clusters of attendance areas, roughly equivalent in income, but differing in education. The northside areas have slightly higher education and application levels.

One attendance area with a 55% college education level attracts high

¹⁰⁵ The city average for whites is 12%.

level: of applications and strongly influences the regression results. Removing it from the equation reduces the effect of the education variable by about 40%. Its standardized regression coefficient drops from .48 to .21. However, that an independent effect remains, shows the relationship does not stem entirely from this one attendance area. Interestingly, ProbB (proportion black of receiving attendance area) becomes more strongly associated with Applications, climbing from a standardized coefficient of .22 to .32. This lends more support for the hypothesis that inner city families are more likely to choose non-attendance area schools in neighborhoods that are residentially integrated.

Of course, black families are not choosing schools on the basis of an examination of census tract information about percentages of college educated adults. Rather, the college education measure is a proxy for neighborhood or regional characteristics black families probably consider when making school choices. For instance, several attributes of high-education neighborhoods on Milwaukee's east side are likely to have salience in information networks. These neighborhoods are home to many of the educators employed at the University of Wisconsin-Milwaukee and many white collar business and service professionals working in the nearby growing business sector. The neighborhood schools have long had good reputations; their test scores are consistently among the highest in the city. Several high-education neighborhoods west of the inner city (white and integrated) are close to the MPS central office and home to many MPS workers. Blacks may view white residents of these neighborhoods as more racially tolerant and their children as desirable classmates. These factors contribute to these schools being known and popular. Once schools are known and popular, informal networks and the continuing supply of younger siblings assure continuing applications in high levels.

The other north side high-education neighborhoods contain growing percentages of well-educated black families. In fact, there are several tracts 3 to 4 miles to the northwest of the periphery of the inner city where educational attainment of blacks is very high: an average of 31% on the College variable in the three most northern tracts (for whites: 19%);¹⁰⁶ three other tracts out of the next twenty-five show black college education levels of 20%, 20%, and 17%. (The remainder show lower or no figures. The numbers of black families in these areas are very small.¹⁰⁷ For many of the tracts, figures are suppressed for confidentiality).

This section of Milwaukee is growing and much of it is residentially

¹⁰⁶ I doubt this rather large disparity between blacks and whites exists throughout the northwestern part of the city. The Census does not report statistics for all tracts. Still, an average for all of the reporting tracts (20 out of 29) that encompasses much of the north-northwest quadrant shows 14% of blacks and 9% of whites with four or more years of college. An aggregated average would be closer to the 9% figure because there are far more whites than blacks living in this part of the city.

¹⁰⁷ See census maps, Figures 2.1 - 2.3, for more demographic information.

integrated. In the 1950s and 1960s, the small amount of residential integration in Milwaukee was confined to a several neighborhoods immediately to the west of the inner city (referred to above). In the past, upwardly mobile middle-income black families lived in these neighborhoods. Presently, integrated residential growth is in neighborhoods farther north, offering newer housing, more expansive suburban-style properties, and shopping malls.

Mobility patterns and communication networks link these neighborhoods to the inner city. Inner city parents are likely to have siblings and cousins living in the more affluent integrated neighborhoods to the north who have children in the neighborhood schools. Siblings and cousins are likely to be trusted information sources; their children, desirable peers.

These conditions will produce awareness of and a favorable disposition toward these neighborhoods among inner city choosers that would influence choices during the stage II application process. If negative stereotypes of inner city black schools and a commitment to desegregation provide reasons to leave inner city schools, these demographic factors suggest reasons for disproportionate preference of schools in the relatively distant northwestern quadrant of the city.

Concluding Comments on Inner City Choices for (Nonmagnet) Desegregated Schools

The regression analysis provides some support for the public choice view of informed and purposive choosing. The positive association of Applications with College and with PropB suggest choices made according to a school's academic reputation and inferences or knowledge about racially tolerant attitudes.

More of the variation in Applications to schools could be explained with different variables and measures. Interviews with inner city parents and discussions with MPS staff suggest that it is unlikely that the inclusion of additional school resource or performance variables in the model would make much of a difference in the explained variance. The schools that can be chosen in stage II do not discernibly differ on these dimensions. Even a highly astute chooser privy to school-level information available in MPS documents would be hard pressed to make quality distinctions that would improve upon generally known reputations of a handful of schools.

The most powerful explanatory variable, I believe, would be a sociometric measure of the frequency or extensiveness of informal connections between a stage II receiving school's families and inner city families.¹⁰⁸ The College variable adequately picks up the popularity of several schools in high-College neighborhoods, but measures an effect confined to a relatively small number of

¹⁰⁸ This is suggested by the removal of the outlier (55%-College) attendance area from the sample and the consequent diminution of the College standardized regression coefficient to a level about 30% less than that of the standardized coefficient for PropB.

schools. In some ways, these few high-College neighborhood schools are chosen like magnets, they have individual reputations and distinctive identities. But, there is a broad middle range of neighborhoods "undistinctive" in educational attainment, neighborhood characteristics, or test scores, which, however, receive the vast majority of applications. ProbB explains a significant portion of the variance in Applications to these schools, but, unless the remaining variation is completely random (i.e., random choices off a list), doubtless, additional unmeasured factors would add to the explained variance. Interview data suggest a better measure of informal social connections would contribute markedly to the explained variance.

The question of how these connections initially develop in stage II schools in white neighborhoods, particularly in all-white neighborhoods, is logical and reveals the necessity of understanding the historical development of demand for white neighborhood schools. Obviously, some inner city blacks at the outset of the desegregation program had to be the first to attend previously white neighborhood schools. Given the desire of many inner city blacks to exit inner city schools, but the homogeneity and large number of options, it is likely that many early choices were somewhat arbitrary or made on the basis of central office recommendations -- not unlike conventional desegregation strategies (re-zoning, clustering, pairing), though with more family choice involved in student allocation to particular schools. It is likely central influence accounted directly or indirectly for a significant portion of the distribution of black applications to white schools. Converting inner city neighborhood schools to magnets and requiring the displaced families to choose desegregated schools was one method employed. And currently, while a large fraction, perhaps the majority of inner city families, select schools on the basis of personal ties or knowledge of staff qualities, some stage II choosers, lacking information to distinguish particular schools, probably choose off the list or purely on the basis of transportation considerations or administrative recommendations. Doubtless, central office influence continues to steer applications to school to meet racial balance guidelines. This influence may be most pronounced following the spring registration process, when late choosers are informed of remaining "open" schools -- schools needing more black applications to achieve racial balance.

Conclusions for Chapter 3: Part One

Findings from analyses discussed in Part One support public choice's liberation thesis and assumptions about the willingness and capacity of inner city families to choose alternatives to their traditional attendance area schools. First, that many families have even chosen schools far outside their home attendance area is consistent with choice theory. Tradition and critics of choice suggest the neighborhood school concept is an immutable institution or an administrative necessity. The burden of proving that parents will voluntarily leave neighborhood schools rests largely with advocates of choice. Table 3.1 in Section I. shows 52% of inner city families (from the selected racially segregated attendance areas) voluntarily select non-attendance area schools, both magnet and regular schools in white attendance areas -- many of which are six or more miles away. This indicates there may be much discontent with the quality of inner city schools as claimed by critics to be grounds for choice in public education. It could fairly be said that restrictions like neighborhood

attendance areas and regulations inhibiting transfers which prevent choice of non-neighborhood schools are tantamount to entrapment for at least a sizable minority of inner city families.

The non-neighborhood choices of inner city families represent a large voluntary exodus from inner city schools. My interviews and supporting surveys suggest concerns about school quality broadly construed (safety, academics, climate), the "ghetto school" image, and a desire for integrated schooling motivates non-neighborhood choices.

Those applying to non-neighborhood schools pursue a view of school quality that encompasses both social and academic characteristics. Though the regression analysis in Section III. left a substantial portion of the variance in Applications to non-neighborhood white attendance areas unexplained, the positive association of Applications with a receiving attendance area's percentage of black children suggests decisions are made on the basis of familiarity with neighborhoods, people, and schools that arises out of friendship/kinship ties. The positive association of Applications with a receiving attendance area's educational attainment suggests, in addition to inferences about racially tolerant attitudes, decisions made on the basis of academic quality criteria (especially since these schools have high published test scores). Neighborhood median income, appears not to be independently associated with applications received from inner city black families. It seems that the College variable, compared to Income, is a closer measure of parental values and habits that can make a school attractive.

Distance-to-school is important, but complexly related to school choices. Magnets are favorably viewed among those who know about them, and, disproportionately located in the inner city, are logistically convenient schools for many black families. Hence, distance (proximity to a magnet) is very important in accounting for magnet enrollments of blacks in the inner city.

However, busing can make more distant schools more accessible than neighborhood schools if the neighborhood school (or a magnet) is many blocks away, but closer than the distance which qualifies students for bus transportation. And once a child is to be bused, although there is a preference for short bus trips, proximity effects may attenuate beyond a certain distance as fine distinctions between distances in, say, a three to six mile range from home recede in significance as more general school quality characteristics or bus route criteria become more influential.

The magnets' specific pedagogical specializations do not seem to be influential in the school choices of inner city families. Given the lack of salience of specific pedagogical criteria in magnet choices, it seems logical that, lacking formal distinctiveness and pedagogical specializations, nonmagnets are not chosen for specific, known pedagogical characteristics. Probably, in contrast to magnets, the relative sameness of white neighborhood schools necessitates greater reliance on sociometric factors and a more diffuse set of judgments about neighborhood characteristics.

The home attendance area school has been given less attention due to my focus on the issue of demand for and distinctions among non-neighborhood

schools among inner city black families. However, in a voucher or open enrollment system, there are no home attendance area schools.¹⁰⁹ All schools are schools of choice. While not commonly viewed this way, MPS families' neighborhood attendance area school can be seen as a chosen option (although it is unclear what percent actually exercise a choice for the neighborhood school over other known alternatives). Table 3.1 shows 48% of MPS inner city applications submitted to the neighborhood school. As described in Section I., choices for inner city neighborhood schools probably reflect less dissatisfaction with the neighborhood school, less confidence that alternatives will be better, a stronger community attachment, or a perception that the logistics of access to other options are prohibitive (or some combination of these).

The openness of the MPS enrollment policies probably produces a greater accommodation of preferences -- an allocatively more efficient matching of preferences and alternatives. Mandatory reassignment could produce more desegregation, but it would come at the expense of these gains.

While these findings give us reasons to be optimistic about the theory and practice of choice in education, it is well to emphasize the 10 or 15% fraction of inner city parents who do not submit applications and typically arrive in September at a neighborhood school, and may be unable to get in. The uninformed "non-choosers" are an unwieldy segment of the market and consume disproportionate administrative resources. These families do not conform well to assumptions of pedagogical choosing and to rational value-maximization decision models; and they present a serious challenge to claims about family sovereignty. The prevalence in inner city populations of significant numbers of non-choosers makes imperative in systems of choice well-constructed "safety-nets" to mitigate the consequences of uninformed choices and their vulnerability to bureaucratic neglect.

¹⁰⁹ This is not as hypothetical as it seems. A few school districts, Cambridge, Massachusetts, and Little Rock, Arkansas, were the first, have implemented "controlled choice" programs. These systems have completely eliminated attendance areas and neighborhood schools (Alves, 1986).

CHAPTER 3: PART TWO

AN ANALYSIS OF CORRELATES AND CAUSES OF MAGNET PARTICIPATION

INTRODUCTION

Part One examined choices of inner city black families for different schools and school categories. Part Two examines choices of families from all attendance areas for magnets, although I focus mainly in later sections on differences related to SES. Comparisons will be made to findings on choices of blacks in Part One. Again, empirical and analytical questions will be drawn from the liberation thesis, the pedagogical choice model, and the concept of family sovereignty, and analyzed to assess the nature of demand for different alternatives, the kinds of criteria influencing choices, and the nature of voluntarism in the system.

As described in Chapter 1, school choice in education is promoted on both political and economic (efficiency) grounds, the rationale being that families should have more sovereignty -- more individual control over the education of their children -- and the right to exit low quality schools or schools where they disagree with the values promoted in the school's climate or curriculum. In the Introduction to Part One, I formulated three basic propositions to frame my analysis and test with data from the MPS program of school choice. These propositions are (in summary form):

(1) *The liberation thesis*, views choice as a mechanism of liberation for families "trapped" in schools they would prefer to exit. The liberation thesis figures prominently in political and theoretical discourse supporting magnets.¹¹⁰

(2) *Pedagogical choosing*, refers to the assumption that preconceived pedagogical preferences (e.g. open schooling or an international curriculum) are important in the demand for choice in education and would be significant in school choices.¹¹¹ Pedagogical choosing also has a normative side, as discussed in Part One. It is generally viewed as less legitimate to ignore specialized pedagogy and curriculum in school choices.

(3) *Family sovereignty*, refers to a fundamental belief that principles of individual liberty and a minimal government dictate greater family control over educational choices. This question is not dealt with empirically here. I defer

¹¹⁰ See Snider (1987) and Finn (1985).

¹¹¹ The pedagogical choosing model is implicit in the MPS superintendent's declaration, "We offer every mode of education that has developed in America since the one room school house" (Thompson, 1979:31) Although critical views and cautionary notes appear, paeans to magnets seem to be frequent in Phi Delta Kappan and other trade journals.

discussion of it to the conclusion of this chapter and to Chapter 5 which considers system-level changes brought about by choice and prospects for choice theory.

I begin in Section I.(a) by specifying relevant theoretical propositions and then undertake a regression analysis aimed at assessing the nature and strength of associations among a set of demographic and socio-economic variables with levels of magnet participation from elementary attendance areas. Then, particular patterns of magnet attendance from selected regions in MPS are described in Section I. (b). Magnet attendance maps and tables are useful to see in concrete terms levels and contrasts in magnet participation across regions differing in SES and proximity to magnets. These figures, show some of the values on the independent variables giving rise to the statistical associations and show particular patterns of attendance subsumed in regression models.

To learn more about the causal processes underlying the associations revealed in Sections I.(a) and (b), Section II. analyzes in more detail family preferences. Using parent survey data, interviews with MPS parents and personnel, and regional magnet attendance data broken down by schools, I probe more deeply into SES-related values and practices that influence attachments to neighborhood schools and preferences for magnets. This will give us a clearer picture of how much families know about magnets, and how they view their open enrollment options.

SECTION I. (A) SOCIO-ECONOMIC AND DEMOGRAPHIC CORRELATES OF MAGNET PARTICIPATION

The unit of analysis in the regression is the elementary attendance area.¹¹² The dependent variable is the percentage of students from the attendance area attending magnet schools (P_{mag}). I begin by discussing the theoretical relevance of the independent variables in the regression model; that is, the expectations or predictions that would be consistent with public choice theory.

1. *College*: the percentage of adults over 25 with four or more years of college in the sending school's attendance area. Choice theory's "liberation thesis" suggests magnets should be exploited disproportionately by lower SES families.

¹¹² Minority and ProbB (below) are inherently school-level measures. Individual level data on College and Income, which potentially could show different results, are not available; but it seems unlikely the AA-level statistics I use mask significantly different patterns individual-level data would show. First, the associations uncovered in the regression are consistent with data on parent preferences and demand processes from interviews with MPS staff and parents. It is difficult to construct plausible scenarios consistent with the group-level statistical outcomes and my qualitative data, but that would posit relationships at the individual level contradicting the group-level inferences. In fact, the group-level data may well mask stronger relationships, as discussed earlier in the case of proximity.

Much public choice rhetoric is based on this rationale. Accordingly, we should see a negative relationship between SES and magnet participation. On the other hand, it could be hypothesized that in all neighborhoods (varying in SES) there are roughly similar fractions of families discontent with their neighborhood school and interested in alternatives. If this is true, no independent relationship between College and Pmag should be observed. This could be interpreted as support of the liberation thesis, but perhaps would suggest some modification of it to include "trapped" non-low-SES families.

A positive relationship between College and Pmag would be evidence of different SES-related preferences or levels of awareness of options. A positive association presents problems for the liberation thesis, at least in so far as it is based on the assumption that lower SES families are trapped in inferior neighborhood schools by attendance area boundaries. Or, a positive relationship shown to be caused by insufficient awareness of magnets among lower SES families, might be viewed as evidence of the inability of the school system to inform parents of options and involve them in student-school assignment decisions -- necessary preconditions if choice is to work. If an information problem is the reason, improved information dissemination mechanisms are called for, mechanisms more sensitive to the practices and values of lower SES families.

2. *Income*: the median income of the census tract in which the school is located. The same propositions about relationships between College and Pmag, and the implications of different possible relationships, (see 1. above) apply to this measure of SES. Most literature on choice concerned with the liberation thesis and empowerment focuses on the deprivation and entrapment of low-income, rather than low-education families. Presumably this is because of an assumed high correlation between income and education, and because "deprived" or "disadvantaged" generally means being poor, rather than uneducated. (Most studies show the relationship between educational attainment and income at the individual level to be about .45).

3. *Minority*: the percentage of minority students attending the neighborhood school. This is included because a school's perceived quality may be influenced by the percentage of minority (black and Hispanic) students at a school. The magnets, even though they are desegregated schools, may become comparatively more attractive when a neighborhood school has a large percentage of minority students.

A positive relationship between Pmag and Minority would suggest magnets become comparatively more attractive as a neighborhood school's Minority climbs because of a perception of diminishing quality of the neighborhood school. In a perverse way this would support the liberation thesis, but this does not accord with the normative precepts of public choice theory. Schools of choice are "supposed" to be chosen, not out of flight from racial minorities, but for programmatic reasons, or at least more appropriate motives, like transportation convenience or peer group considerations.

4. *PropB*: the percent of black elementary age children living in the attendance area. This differs from the Minority variable in that Minority includes Hispanics (who make up 7% of MPS children) and is a measure of the

percent minority students in attendance at the school. ProbB is a measure of the percentage of black elementary age children enrolled in MPS living in the attendance area. Thus, many non-inner city schools are low or zero on PropB, but about 50% on Minority. This variable provides another test of the flight hypothesis.

5. *Proximity*: the number of magnet schools within a two mile radius of the center of the attendance area. This can be expected to be positively related to magnet participation because, other things equal, it makes a school logistically more convenient, more likely to be known, and more familiar.

On the other hand, proximity effects might arise in a way which could mitigate the expected relationship between Proximity (as it is measured) and Pmag. Proximity to magnets might serve as a "bee in the bonnet," i.e. introducing the idea to families of attending a magnet, stimulating a review of the magnet options, and resulting in applications to magnets that may or may not be close by. In this way, proximity might increase a given attendance area's participation in magnets, but it cannot be assumed that proximate magnets responsible for creating the heightened participation also receive the local applications. The regression analysis cannot distinguish between the two types of effects, although the localized attendance patterns discussed in Part One, Section II. suggest the first type of proximity effect may be more pronounced.

A strong proximity effect, as discussed earlier, is evidence of the lack of significance of the influence of specific pedagogical criteria in family preferences. Although the proposition that a strong preference for the magnet status (regardless of pedagogical specialization) could still hold, it would necessarily have to be qualified by the provision that *proximate* magnets have high value. For instance, there may be a high demand for elementary magnets 20 minutes or less from home.

A weak proximity effect may be evidence of the primacy of pedagogy in choice. The influence of proximity could also be weakened, however, if a subset of the magnets are very popular for general school quality reasons and draw from distant attendance areas; however, popular magnets drawing widely could also be chosen on specific pedagogical criteria. These processes are not easily sorted out. More detailed analyses following the regression analysis will yield additional information relative to competing hypotheses.

Correlates of Magnet Participation

Table 3.6, below, shows results of regressing attendance areas' magnet participation (Pmag) on the set of independent variables selected for this analysis.

=====

TABLE 3.6 REGRESSION RESULTS OF MAGNET PARTICIPATION
ON SOCIO-ECONOMIC AND DEMOGRAPHIC PREDICTOR VARIABLES

Dependent variable: Pmag
Minimum value=.00
Maximum value=.42
Standard deviation=.08
N=89

Regression Results:

R SQRD=.51 MLTPL R=.72 ADJST'D R SQR=.49
STANDARD ERROR of EST.=.06

<u>VARIABLE</u>	<u>COEFF.</u>	<u>S.E.</u>	<u>ST.COEFF.</u>	<u>P value</u>
<u>Constant</u>	.072	.041	.000	.084
<u>College</u>	.727	.084	.731	.000
<u>Minority</u>	-.045	.037	.125	.235
<u>Proximity</u>	.012	.004	.369	.002
<u>Income</u>	-.003	.002	-.209	.073
<u>PropB</u>	-.018	.022	-.091	.408 ^a

PEARSON CORRELATION MATRIX:

	<u>College</u>	<u>Minority</u>	<u>Proximity</u>	<u>Income</u>	<u>PropB</u>
<u>College</u>		-.26	-.29	.41	-.31
<u>Minority</u>			.60	-.58	.86
<u>Proximity</u>				-.70	.69
<u>Income</u>					-.60
<u>Pmag</u>	.57	.06	.22	.09	.05

a The coefficients (and other estimators) for both Minority and PropB, while shown as if from a single run, are from separate runs. This is necessitated by their high intercorrelation (.86). Thus, for instance, Minority's coefficient is based on an equation that includes all variables but PropB. PropB's coefficient is from an equation that excludes Minority. The summary statistics (R squared, etc., are from the equation excluding PropB) because of its weaker independent effect.

=====

The Pearson correlation matrix shows the association between the different variables in the model. Given the residential racial segregation in Milwaukee and the greater poverty among blacks (see Figures 2.1 - 2.5), and what we have learned thus far about magnet locations and participation patterns, the relationships in the correlation matrix are generally unsurprising.

Because the values for the inner city schools are included in the variables for this data set, the negative association between PropB and Income is much larger, -.60, compared to the correlation of -.15 found in the previous correlation matrix for nonmagnet schools outside the inner city. The

relationship between College and Income changed only slightly, increasing from .39 to .41, a level very close to correlations between income and educational attainment shown in other studies using national samples (Jencks et al., 1976).

Pmag is correlated with College at .57 and Income at .09. Proximity is correlated with College at -.29 and with Income at -.70. These associations suggest patterns of attendance that cannot be sorted out without controlling for separate variables. These will be examined more closely in the estimates produced from the regression equation.

The regression model explains 51% of the variance in Pmag. The standardized partial coefficients show that most of the variation is explained by College (.731, $P=.000$).¹¹³ Proximity (.369, $P=.002$) and Income (-.209, $P=.072$) also have independent effects with significance values suggesting chance should be discounted. However, Income's partial coefficient is small. The standardized coefficient for the Minority variable (.125) indicates the existence of an association, but, the P value of .235 suggests chance may account for it.

The College variable has a very strong very statistically significant independent effect on Pmag.¹¹⁴ Every percentage point increase in College brings about 3/4s of a percentage point increase in Pmag. A one standard deviation increase in College (.077), produces an average increase in Pmag of 5.6%, which is 70% of a standard deviation. By comparison, a one standard deviation increase in Proximity increases Pmag by 2.9%. Put another way, on average, for every magnet school that is within a two mile radius, even when attendance areas are the same on the other variables, participation goes up by 1.2%. The Income variable's effect is in the opposite direction. A one standard deviation increase in Income (\$5,470) diminishes Pmag by 1.6%. (Effects and the significance of Proximity and College are discussed in more depth later).

Does the presence of blacks and Hispanics contribute to higher magnet participation? Minority's effect, possibly chance, is small enough that it requires a 20% increase to produce even a one percent increase in magnet participation. Outside of the inner city schools, this 20% increase approximates

¹¹³ Note the "suppressor effect;" the standardized partial regression coefficient of College, .731, is larger than the correlation coefficient between College and Pmag, .57. The controlling effects of the other variables, increases the strength of College-Pmag relationship. ($P=.000$ means the P value is smaller than .0009.)

¹¹⁴ A subsequent regression computation included a North-South dummy variable to examine the possibility that the lower magnet participation (Pmag) from south side attendance areas might be due to factors associated with geography per se, in addition to arising from the lower levels of College on the south side. The dummy variable, with a metric coefficient of .008 and a standardized coefficient of .047, had neither a statistically ($P=.73$) nor a practically significant effect. College remains the single most important explanatory variable.

the full range on the Minority variable. The effect of the PropB variable (percentage of an attendance area's children that are black) is even smaller, and with a P value of .408, this effect may well be due to chance. It would appear that, outside of the inner city, magnet participation induced by a flight response triggered by increases in the percentage of minorities in the neighborhood school does not occur.

The probable reason for this is that, outside of the inner city schools, by attending magnets, in all but a few cases, one does not escape minorities -- the magnets are all racially balanced. Indeed, in eight out of thirteen cases at the elementary level and in more than half the cases at higher levels, attending a magnet for whites means sending a child into a black neighborhood. Conceivably, a child could be sent from a 55% minority nonmagnet neighborhood school for one of the south side magnets that have minority percentages in the low 40s. But in most cases, this would require a long bus trip, since most of the schools around 55% minority are on the north side.

Although over the whole range of attendance areas, Minority does not appear significant in motivating magnet attendance, it appears to among the small numbers of whites living in inner city attendance areas. Columns [1] and [3] of Tables 3.8, 3.9, and 3.10 (next section) show whites in attendance area's that are overwhelmingly black leave (not all go to magnets) in relatively high percentages. However, the numbers of children are not great, because there are very few whites in these attendance areas. For these families, magnets provide a means of exit, although probably for reasons that are normatively disapproved (i.e., white flight). On the other hand, the presence of a handful of whites in a school that is 99% minority is does little to integrate a school.

The lack of a significant relationship between PropB and Pmag also suggests that, when controlling for the other variables, those living in Milwaukee's inner city (high PropB neighborhoods) are no more or less likely to attend magnets than those not living in the segregated inner city. Even though in absolute terms the magnets are attended by a large number of inner city residents -- magnets' geographic accessibility has a lot to do with this (see Part One, Section II.) -- in relative terms, participation is much lower (see Table 3.8, region D). Because of the large number of children living in inner city attendance areas not attending magnets, any given inner city attendance area's *percentage* of children in magnets is comparable to that of other attendance areas.

The strong positive effect of College on Pmag, and the weak negative effect of Income on Pmag are provocative findings and raise important issues for public choice theory. Clearly the magnets are attended in highly disproportionate levels by families from attendance areas with higher levels of educational attainment, but the income level of the attendance area does not seem to make much of a difference once we have controlled for education. Unless the group-level data mask very different individual level processes, these findings suggest parents who have more education believe the magnets afford some special educational opportunities and more vigorously pursue admissions. When it comes time to enroll their children, they pay close attention to the options available and apply in higher percentages than parents

with less educational attainment.¹¹⁵

However, inconsistent with this apparent SES effect, differences in median income make a small difference. The meaning of this finding is less clear. The finding may be a measurement artifact -- Income somehow being a function of Proximity even after College is taken into account; that is, higher income attendance areas equivalent on Proximity possibly having lesser logistical access to magnets in some unmeasured way (for instance in driving distances). Thus, higher income attendance areas "appear," other things equal, to send fewer children to magnets, when in fact the decrement in magnet participation is a function of some unmeasured "access" variable. A second explanation is that as the median income of an attendance area goes up, greater percentages of families go to private schools instead of magnets. A third explanation is neighborhood schools in more affluent areas are more attractive; that is, they hold students in the attendance area because they are believed to be better, perhaps because they have other affluent classmates. This implications of these associations will be addressed further in "concluding comments" at the end of Part One.

The regression analysis shows independent statistical associations based on the full population of MPS attendance areas, and therefore is representative of system-wide associations among the variables. Our understanding of the determinants of magnet participation can be enhanced by examining some regional comparisons. This is useful to provide particular reference points and to show precise differences in percentages of students attending magnets from particular regions and attendance areas in Milwaukee (with demographic characteristics based on 1980 Census data). The bulk of this portion of the chapter will concentrate on two regions (C and E, Figure 3.3) selected because data permit closer scrutiny of their characteristics and school preferences and because they most vividly illustrate socio-economic effects on school choice; but it will be instructive to survey patterns from some other regions to provide a broader comparative frame of reference for understanding effects of proximity, income, and education on magnet participation.

SECTION I. (B) PATTERNS OF PARTICIPATION IN MAGNETS BY REGIONS WITH SELECTED DEMOGRAPHIC AND SOCIAL CHARACTERISTICS

Relationships in the regression analysis can be illuminated by examining patterns of attendance in particular regions with socio-economic and proximity attributes relevant to the question of determinants of magnet participation. Figures and Tables relevant to the following discussion are :

¹¹⁵ The College effect does not diminish much when the one outlier attendance area referred to in the previous section (with a 55% College value) is removed from the sample. The regression coefficient drops from .727 to .617. That the College effect remains strong shows it is by no means confined to this single area.

*Figures 3.2 and 3.3: maps with six geographic regions outlined¹¹⁶ which range widely on demographic and social variables (see, Figures 2.1 -2.5 for further Milwaukee census information);

*Figure 3.4 shows middle school attendance area boundaries, the location of middle school magnets, and participation in middle school magnets by attendance areas; Figure 3.5 shows locations of senior high schools -- magnets are named, the rest are numbered to coincide with the attendance areas numbered in Table 3.10.

*Magnet participation figures: Table 3.7 shows elementary level proximity effects on magnet attendance in white neighborhoods. Tables 3.8 - 3.11 show magnet participation by race and regions (elementary level - Table 3.8) and by race and attendance areas (middle school - Tables 3.9 and 3.11; and high school - Table 3.10). The tables show the total number of students by racial category living in each of the regions¹¹⁷ or attendance areas (column [1]), the number and percentage that leave (column [2]), and the number and percentage that go to magnet schools (column [3]).

Proximity Effects.

As was shown in Part One and in the regression results, proximity is strongly associated with magnet attendance at the elementary level among inner city black families. Table 3.7 (below) shows proximity effects in attendance patterns at the five elementary magnets located in white neighborhoods.¹¹⁸ Each elementary magnet's white enrollment is composed of disproportionate numbers of students from the three to five nearby attendance areas, with the remaining students coming from over 30 additional school

¹¹⁶ The regions are composed of a small number of elementary attendance areas -- but enough to provide large samples of students. I have selected regions that are composed of demographically uniform groups of census tracts. This is to reduce the demographic variation within each region, and so to reduce the level of error inherent in making inferences about individual actions from group level statistics. For example, according to census figures a region may have 8% college graduates and according to enrollment data send 15% of its students to magnets. I will assume that the "senders" reflect the region average when in fact there are likely to be some differences. The data suggest that the senders-to-magnets from any given region have a higher socio-economic standing than the regional average. However, if this is true for all regions, the direction, and perhaps the magnitude, of the error is the same and thus the validity of comparative judgments may not be greatly affected.

¹¹⁷ The following number of school attendance areas make up each region: A, 6; B, 4; C, 3; D, 5; E, 5; and F, 6.

¹¹⁸ As discussed in Part One, Section II., proximity effects can occur on a geographic scale which is smaller than attendance areas, and which is shaped by "walking-distance" ranges and the observable presence of a nearby magnet school.

attendance areas.¹¹⁹

=====

**TABLE 3.7 WHITE ENROLLMENT IN MAGNETS FROM CLOSEST
AAs AS COMPARED TO PROPORTIONAL REPRESENTATION**

<u>School #</u>	<u>% of white enroll.</u> <u>from nearby AA's</u>	<u>Expected</u> <u>to chance</u>	<u>due</u> <u>Ratio of</u> <u>[2]/[3]</u>
1	24%	6%	4.0
2	23%	4%	5.8
4	65%	8%	8.1
8	8%	4%	2.0
13	65%	10%	6.5

=====

As with inner city elementary magnets (Table 3.3 in Section II., Part One), close proximity to a magnet increases the probability of participation. There are some noteworthy differences in the blacks' and whites' patterns however. The percent of white children from surrounding attendance areas in the non-inner city magnets (Table 3.7, above) is lower than the percent of black children from surrounding attendance areas in the inner city magnets (Table 3.3). This reflects the lower population density outside of the inner city and the greater number of predominantly white attendance areas. Inner city elementary attendance areas are around two to two-and-a-half times as populated.¹²⁰ However, in terms of degree of over-representation of surrounding attendance area children in inner city versus non-inner city magnets, surrounding white attendance areas are considerably more over-represented in non-inner city magnets. If equal preferences for magnets are assumed, the explanation for the higher white over-representation is probably greater awareness of magnets and enrollment procedures. Findings from the parent survey support this.¹²¹ Minority parents relative to white parents are less likely to have heard of magnets, but more likely to give magnets higher quality ratings. Clearly, a close magnet is a desirable alternative to the neighborhood school.

¹¹⁹ School #8 is an anomalous case because it enrolls both attendance area students and students who enroll in the stage I open enrollment process for the school's bilingual Spanish language program.

¹²⁰ In the inner city region "D" in Figure 3.3, according to 1980 census data, about 43% of persons are under 18, and only about 7% are 65 or over. For the two statistics city averages are, respectively, 27% and 12%. These figures show a high fertility rate among lower-income blacks, which, in conjunction with residential segregation, produces the high population density of the inner city.

¹²¹ Eighty-two percent of minority respondents compared to 61% of white respondents rated magnets as either "much" or "a little" better than their neighborhood school; 75% of minority respondents and 93% of white respondents had heard of the magnets. See Part One, Section II., for further details.

Magnets with lower levels of local over-representation as shown in Table 3.7 reveal the possibility of pedagogical choosing. Magnets #1, #2, and #8 are magnets with manifestly distinctive programs: foreign languages. Families are probably more likely to think "pedagogically" and seriously about the decision to send a child to a foreign language immersion program (#1 and #2) or a "bilingual development center" (#8) than the other two magnets, Environmental Education (#4) and Montessori (#13), which have programs that are distinctive, but that lack the potentially large impact on a child's development in the critical area of language. Magnets #4 and #13 are distinctive, but not dramatically different from regular curriculum and pedagogy. Magnets #4 and #13 have the highest local over-representation and are probably more likely to be chosen "just" because they are magnets and/or nearby.

Finally, while proximity to a magnet is associated with magnet attendance, it is well to recognize that there is demand for magnets throughout the city. This is revealed perhaps most clearly at the elementary level, because magnet participation involves children at an age at which parents are typically most reluctant to bus children away from the home attendance area. Figure 3.2 and corresponding Table 3.8 (below) reveal magnets' drawing power (for both blacks and whites) in relation to distance. It shows that from the northern- and southern-most regions A and F (Figure 3.2), 4% to 6% of elementary children go to magnets. The percentages are higher at middle and high school. While these figures show a certain level of preference for magnets over neighborhood schools in these more affluent neighborhoods, the 4% to 6% level is considerably less than percentages of inner city families leaving neighborhood schools for equally distant nonmagnets.

A general association between proximity and magnet attendance can be seen on a district-wide geographical scale at the middle school level by scanning the figures in the "Percentage Participation by Attendance Area" table within Figure 3.4. The attendance areas are numbered in a north to south sequence.

At the high school level, proximity effects are observable, but diminish because students are much more mobile. Table 3.10 shows magnet participation in the two most established high school magnets from areas corresponding to the high school locations shown in Figure 3.5. Because these two magnet high schools (columns [3] and [4] Table 3.10) are quasi-selective, and have good reputations, proximity effects are relatively weaker than they are for most of the other magnets at the high school level.

Though not unexpected, it is clear from the middle and high school magnet participation tables (3.9, 3.10) that proximity is not the only determinant of participation. For instance, the northern most middle school attendance area (AA-1, Figure 3.4) sends almost as high a percentage of children (12.1%) to magnets as the inner city attendance area (AA-7) which is much closer to magnets and sends 14.9%. As I have discussed, demand for magnets depends upon many factors. Magnet awareness, which is related to parent educational attainment, is one of the more important factors.

TABLE 3.8

ELEMENTARY SCHOOL ENROLLMENT IN NON-A.A SCHOOLS AND MAGNETS
BY ATTENDANCE AREA AND RACE

REGION	[1]	[2]		[3]	
	TOTAL STUDENTS	TO NON- AA SCHOOLS		to magnets	
		#	(%)	#	(%)
A	B: 320	85	(27)	29	(9)
	W: <u>1278</u>	<u>185</u>	(4)	<u>71</u>	(6)
	1598	190	(2)	100	(6)
B	B: 953	338	(35)	52	(5)
	W: <u>1063</u>	<u>231</u>	(22)	<u>78</u>	(7)
	2016	569	(28)	130	(6)
C	B: 97	23	(24)	4	(4)
	W: <u>676</u>	<u>28</u>	(42)	<u>229</u>	(34)
	773	306	(40)	231	(30)
D	B: 6850	4382	(64)	905	(13)
	W: <u>199</u>	<u>143</u>	(72)	<u>64</u>	(32)
	7049	4525	(64)	969	(14)
	B: 70	22	(31)	6	(9)
	W: <u>2551</u>	<u>717</u>	(28)	<u>195</u>	(8)
	2621	739	(28)	201	(8)
F	B: 31	5	(16)	1	(3)
	W: <u>1260</u>	<u>205</u>	(16)	<u>55</u>	(4)
	1291	210	(16)	56	(4)
TOTALS	B: 8321	4855	(58)	997	(12)
	W: <u>7027</u>	<u>1764</u>	(25)	<u>692</u>	(10)
	15348	6539	(43)	1689	(11)

Source for Tables 3.8 - 3.11: MPS Enrollment Records

B: = BLACK

W: = WHITE

TABLE 3.9

MIDDLE SCHOOL ENROLLMENT IN NON-A.A SCHOOLS AND MAGNETS
BY ATTENDANCE AREA AND RACE

AA Number		[1]	[2]	[3]	
		Tot. AA Students	To Non- AA Schools	to magnets	
			# (%)	# (%)	
1	B:	141	32 (23)	13 (9)	A
	W:	<u>320</u>	<u>64</u> (20)	<u>43</u> (13)	A
		461	96 (21)	56 (12)	A
2	B:	115	39 (34)	25 (22)	A
	W:	<u>366</u>	<u>55</u> (15)	<u>36</u> (10)	A
		481	94 (20)	61 (13)	A
3	B:	329	105 (32)	36 (11)	
	W:	<u>424</u>	<u>121</u> (29)	<u>89</u> (21)	
		753	226 (30)	125 (17)	
4	B:	755	523 (70)	141 (19)	B
	W:	<u>215</u>	<u>97</u> (45)	<u>66</u> (31)	B
		970	620 (64)	207 (21)	B
5	B:	161	88 (55)	27 (17)	
	W:	<u>241</u>	<u>77</u> (32)	<u>55</u> (23)	
		402	165 (41)	82 (20)	
6	B:	1631	1233 (76)	361 (22)	
	W:	<u>439</u>	<u>344</u> (78)	<u>104</u> (23)	
		2070	1577 (76)	465 (23)	
7	B:	1541	1079 (70)	229 (15)	D
	W:	<u>7</u>	<u>6</u> (86)	<u>2</u> (29)	D
		1548	1085 (70)	231 (15)	D
8	B:	1844	1340 (73)	320 (17)	D
	W:	<u>40</u>	<u>38</u> (95)	<u>27</u> (68)	D
		1884	1378 (73)	347 (18)	D
9	B:	40	17 (43)	6 (15)	C
	W:	<u>150</u>	<u>94</u> (63)	<u>87</u> (59)	C
		190	111 (58)	93 (49)	C

Note: The letters in column [3] correspond to the regions designated on the Maps in Figures 3.2 and 3.3.

(TABLE 3.9 continued...)

TABLE 3.9 (continued)

MIDDLE SCHOOL ENROLLMENT IN NON-A.A. SCHOOLS AND MAGNETS
BY ATTENDANCE AREA AND RACE

AA Number		[1]	[2]	[3]		
		Tot. AA Students	To Non- AA Schools	To magnets		
			# (%)	# (%)		
10	B:	78	38 (49)	14 (18)		E
	W:	<u>557</u>	<u>190</u> (34)	<u>97</u> (17)		E
		635	228 (36)	111 (18)		E
11	B:	12	4 (33)	0 (0)		E
	W:	<u>277</u>	<u>89</u> (32)	<u>37</u> (13)		E
		289	93 (32)	37 (13)		E
12	B:	2	1 (50)	1 (50)		
	W:	<u>234</u>	<u>18</u> (8)	<u>10</u> (4)		
		236	19 (8)	11 (5)		
13	B:	1	0 (0)	0 (0)		
	W:	<u>253</u>	<u>57</u> (23)	<u>20</u> (8)		
		254	57 (22)	20 (5)		
14	B:	1	0 (0)	0 (0)		
	W:	<u>313</u>	<u>44</u> (14)	<u>27</u> (9)		
		314	44 (14)	27 (9)		
15	B:	7	1 (14)	0 (0)		F
	W:	<u>341</u>	<u>47</u> (14)	<u>28</u> (8)		F
		348	48 (14)	28 (8)		F
GRAND	B:	6658	4500 (68)	1173 (18)		-
TOTALS	W:	<u>4177</u>	<u>1341</u> (32)	<u>728</u> (17)		
		10835	5841 (54)	1901 (18)		

BLACK = B: WHITE = W:

TABLE 3.10

HIGH SCHOOL ENROLLMENT IN NON-A.A SCHOOLS
AND IN COLLEGE BOUND AND TECHNICAL HIGH SCHOOL
BY ATTENDANCE AREA AND RACE

AA Number		[1]	[2]		[3]		[4]		
		Tot. AA Students	To Non- AA Schools	To College Bound H.S.	To Tech High School	To College Bound H.S.	To Tech High School		
			# (%)	# %	# %	# (%)	# (%)		
1	B:	301	101 (34)	4 (2)	5 (2)	A			
	W:	<u>956</u>	<u>149</u> (16)	<u>23</u> (2)	<u>14</u> (2)	A			
		1257	250 (20)	27	19	A			
2	B:	542	265 (49)	22 (4)	21 (4)	B			
	W:	<u>1187</u>	<u>386</u> (33)	<u>47</u> (4)	<u>27</u> (2)	B			
		1729	651 (38)	69	48	B			
3	B:	1949	1275 (65)	160 (8)	108 (6)				
	W:	<u>966</u>	<u>329</u> (34)	<u>51</u> (5)	<u>37</u> (4)				
		2915	1604 (55)	211	145				
4	B:	305	192 (63)	23 (8)	17 (6)				
	W:	<u>780</u>	<u>294</u> (38)	<u>66</u> (9)	<u>52</u> (7)				
		1085	486 (45)	89	69				
5	B:	4135	3466 (84)	145 (4)	210 (5)				
	W:	<u>1050</u>	<u>844</u> (80)	<u>108</u> (10)	<u>186</u> (18)				
		5185	4310 (83)	253	396				
6	B:	4034	2836 (70)	97 (2)	207 (5)	D			
	W:	<u>39</u>	<u>33</u> (85)	<u>2</u> (5)	<u>6</u> (15)	D			
		4073	2869 (70)	99	213	D			
7	B:	896	595 (66)	22 (3)	45 (5)				
	W:	<u>629</u>	<u>365</u> (58)	<u>174</u> (28)	<u>103</u> (16)	C			
		1525	960 (63)	196	148				
8	B:	137	120 (88)	5 (4)	10 (7)	E			
	W:	<u>1480</u>	<u>862</u> (58)	<u>22</u> (2)	<u>261</u> (18)	E			
		1617	982 (61)	27	271	E			
9	B:	10	3 (30)	1 (10)	1 (10)				
	W:	<u>1465</u>	<u>430</u> (29)	<u>12</u> (1)	<u>256</u> (18)				
		1475	433 (29)	13	257				
10	B:	13	6 (46)	0 (0)	3 (23)	F			
	W:	<u>1653</u>	<u>659</u> (40)	<u>18</u> (1)	<u>314</u> (19)	F			
		1666	655 (40)	18	317	F			
11	B:	4	3 (75)	0 (0)	0 (0)	F			
	W:	<u>989</u>	<u>165</u> (17)	<u>12</u> (1)	<u>78</u> (8)	F			
		993	168 (17)	12	78	F			
GRAND	B:	12326	8862 (72)	479 (4)	627 (5)				
TOTAL	W:	<u>11194</u>	<u>4516</u> (40)	<u>535</u> (5)	<u>1334</u> (12)				
		23520	13378 (57)	1014 (4)	1961 (8)				

INDEX OF REPRESENTATION IN MAGNET MIDDLE SCHOOLS¹

A.A. Number	IGE	G & T	Open Ed.	Art
1 B:	.308	.458	.000	1.418 A
W:	.087	.761	.446	.747 A
2 B:	.756	2.805	.000	.652 A
W:	.531	.911	.000	.178 A
3 B:	.396	.931	.000	.836
W:	.197	1.814	.674	.667
4 B:	.864	1.816	.424	.695 B
W:	.775	1.491	3.322	1.213 B
5 B:	.540	1.703	.497	.932
W:	1.153	1.277	.593	1.353
6 B:	1.146	.682	1.741	1.150
W:	2.658	2.044	3.146	2.922
7 B:	.818	1.109	1.142	.438 D
W:	.000	.000	13.605	.000 D
8 B:	1.179	.787	.911	1.396 D
W:	4.167	.641	4.762	5.978 D
9 B:	6.522	.806	.000	1.875 C
W:	2.593	3.419	1.587	3.478 C
10 B:	2.787	.414	.512	1.923 E
W:	1.297	.391	.684	.820 E
11 B:	.000	.000	.000	.000 E
W:	1.504	.324	1.375	.392 E
12 B:	.000	.000	.000	12.500
W:	.000	.329	.204	.279
13 B:	.000	.000	.000	.000
W:	.659	.557	.000	.258
14 B:	.000	.000	.000	.000
W:	.355	.532	.152	.556
15 B:	.000	.000	.000	.000 F
W:	.03	.263	.279	.255 F

¹ The index is computed by dividing an AA's percent leaving (by racial category) to a particular magnet by the system-wide percentage in that category of the same racial category. For instance, 5.7% of blacks from AA #1 of the Art magnet. The system-wide level of black participation in the Art magnet is 4.0. Thus, compared to system-wide participation of blacks in the magnet, blacks from AA #1 are over-represented by a 1.418 ratio.

FIGURE 3.2 MAP OF MPS MAGNET SCHOOLS AND SIX REGIONS WITH INCOME LEVELS SHOWN IN FIGURE 3.3

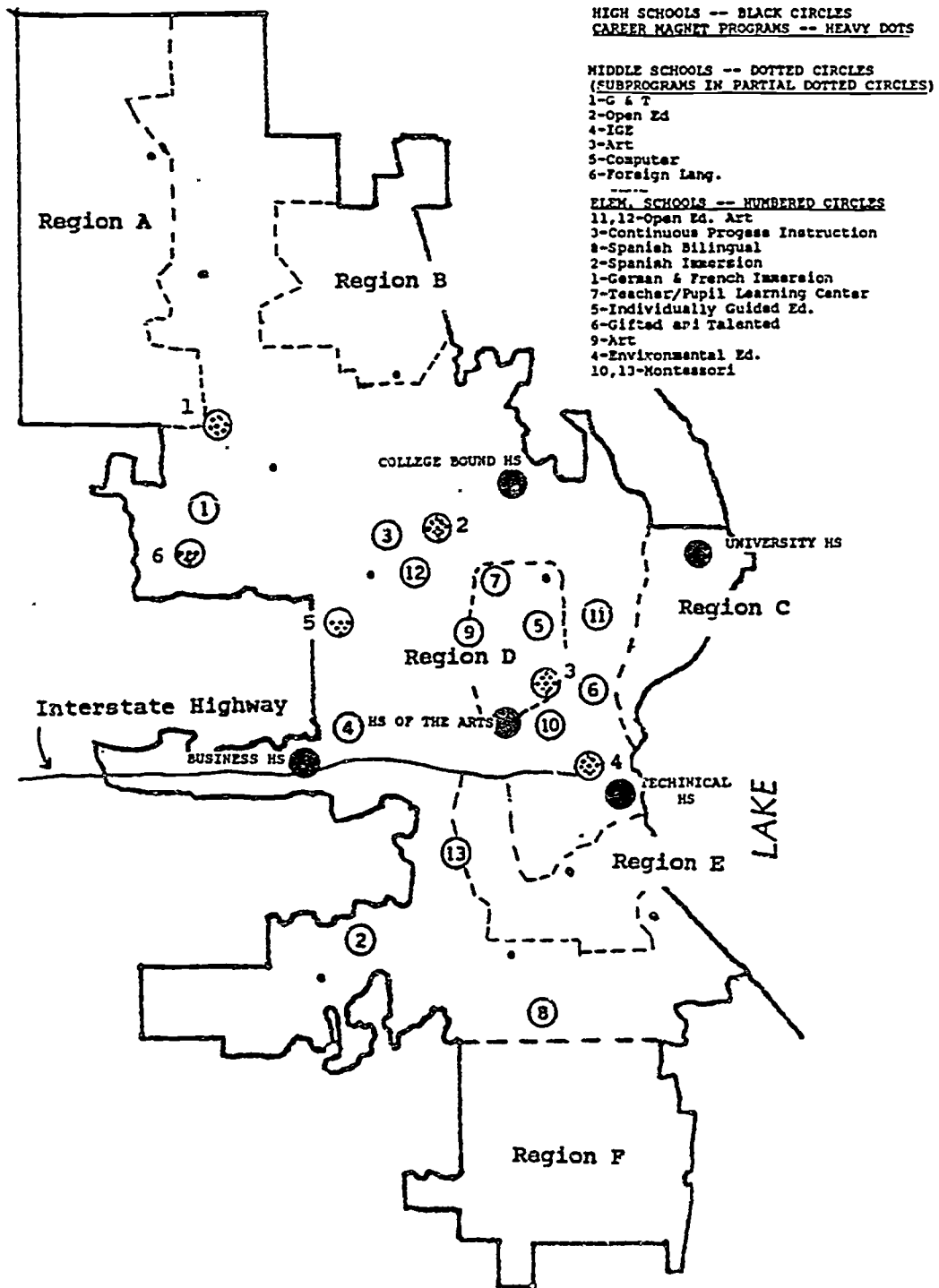
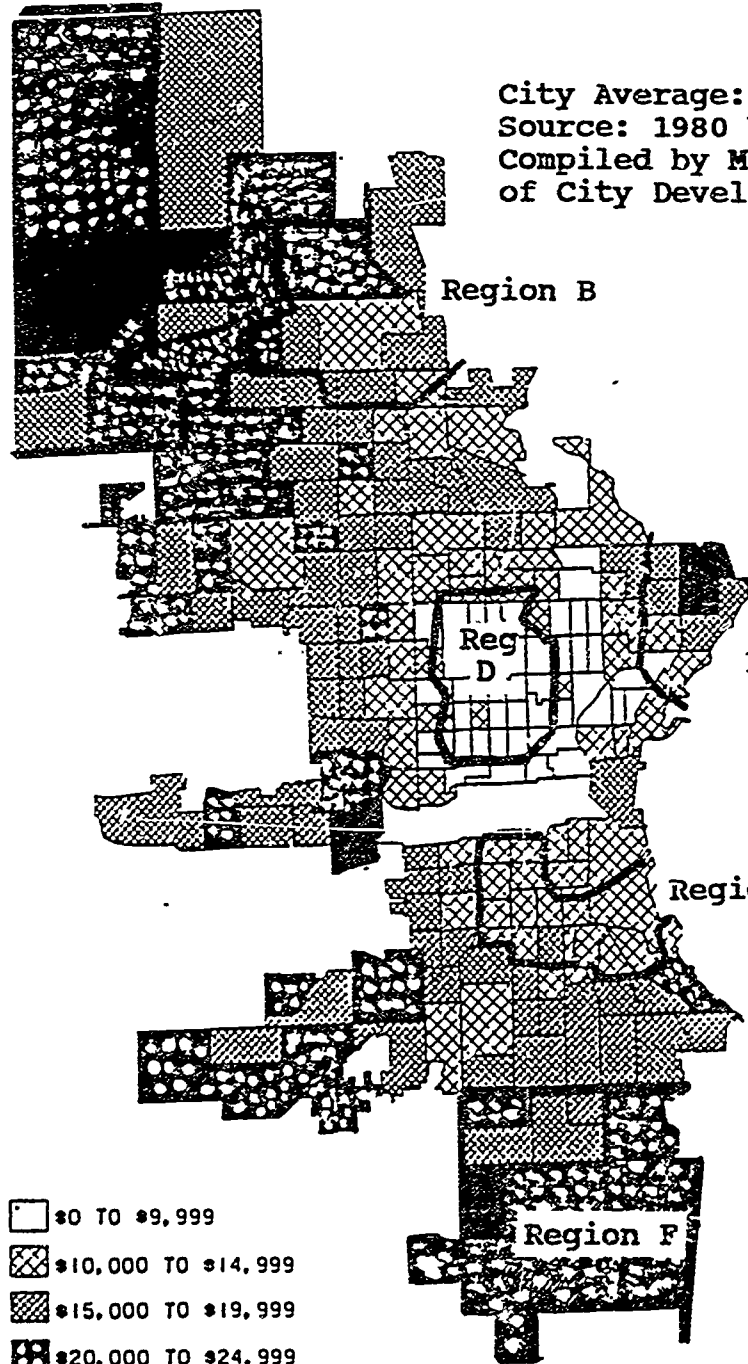


FIGURE 3.3 MEDIAN INCOME BY CENSUS TRACT
IN SIX REGIONS IN MILWAUKEE

Region A



City Average: \$16,028
Source: 1980 U.S. Census
Compiled by Milwaukee Dept.
of City Development

Region B

Region C

Region E



- ☐ \$0 TO \$9,999
- ▨ \$10,000 TO \$14,999
- ▩ \$15,000 TO \$19,999
- ▧ \$20,000 TO \$24,999
- \$25,000 OR MORE

Region F

FIGURE 3.4 MAP OF MPS MIDDLE SCHOOL MAGNETS AND MIDDLE SCHOOL ATTENDANCE AREAS

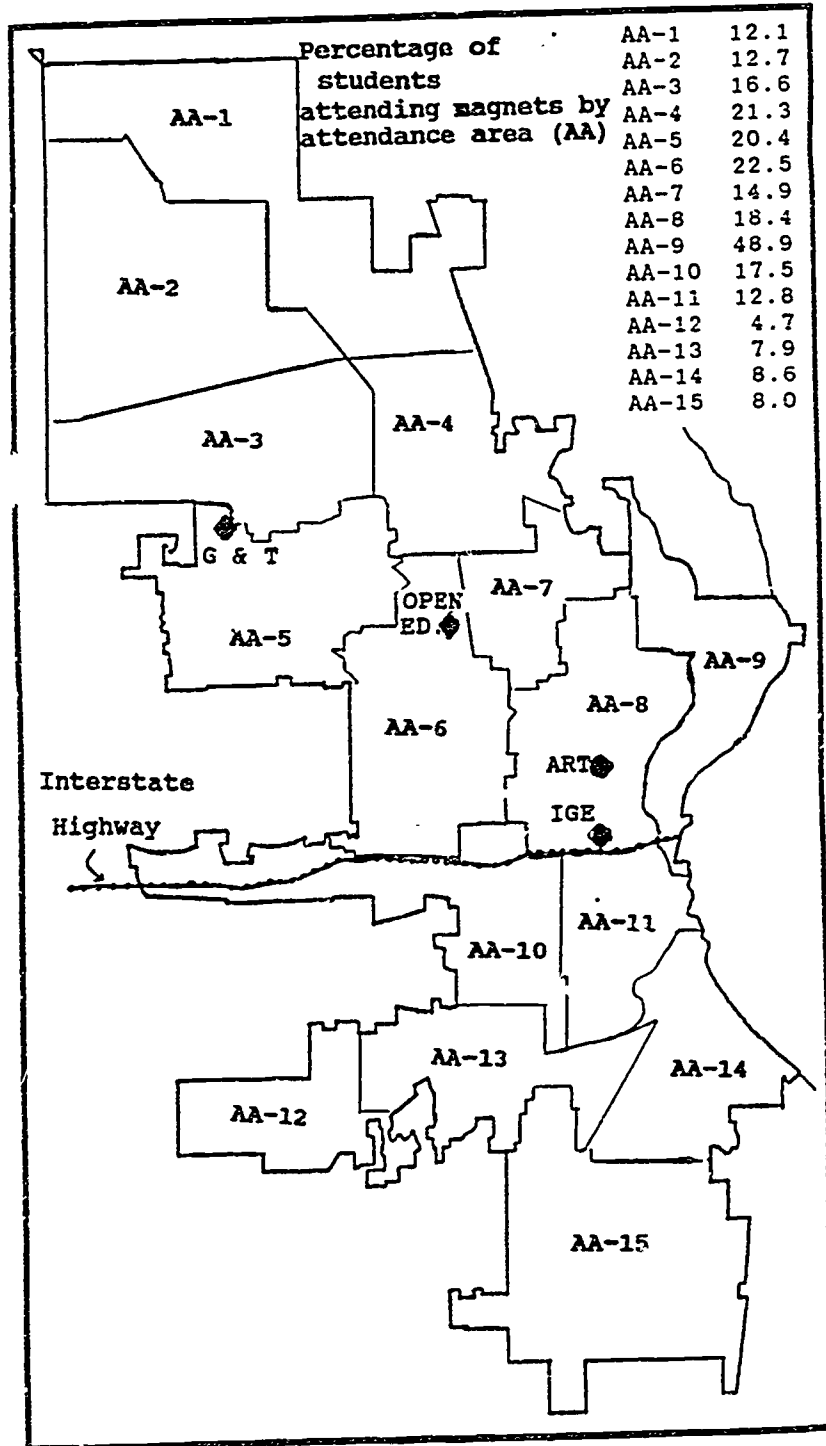
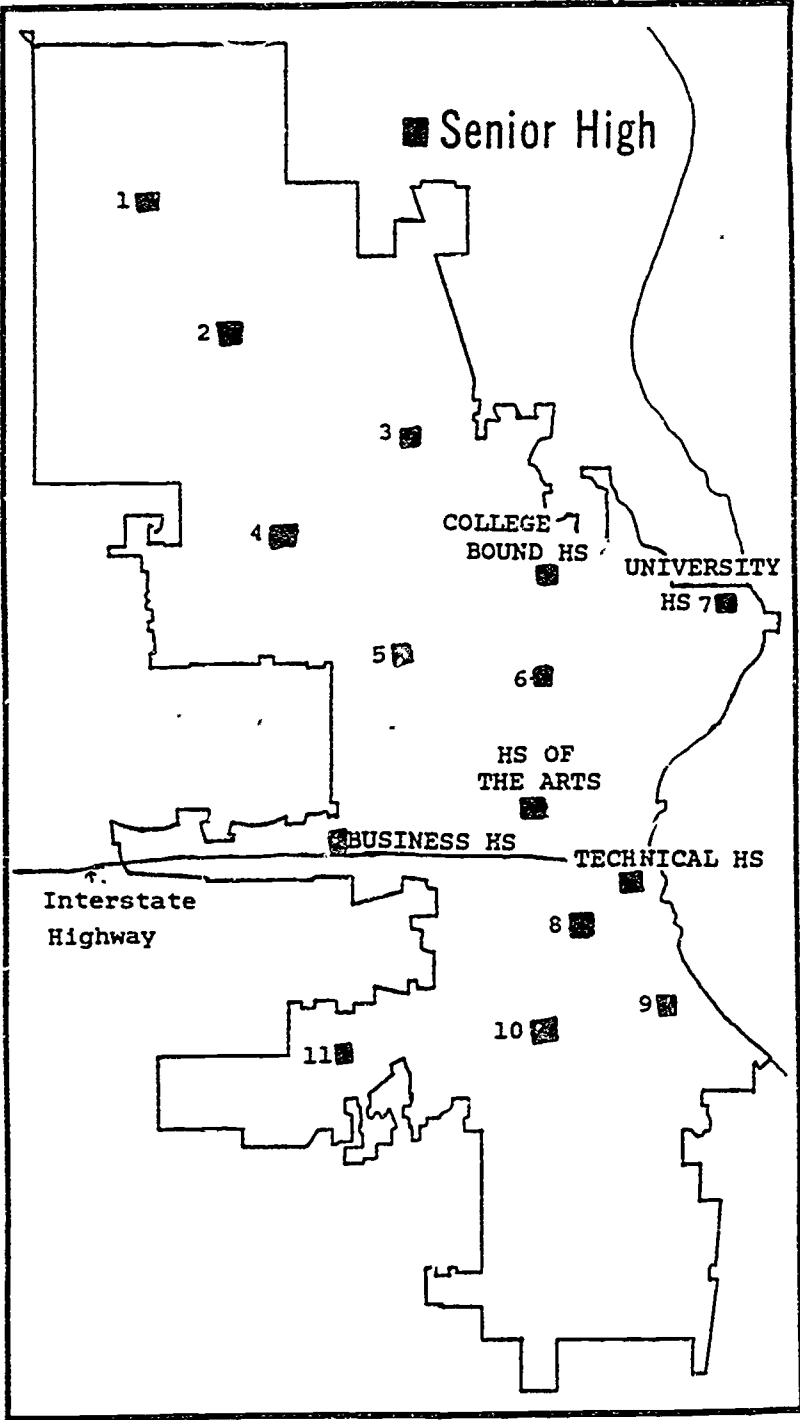


FIGURE 3.5 MAP OF MPS SENIOR HIGH SCHOOLS



Education Effects.

Education effects under different conditions of proximity can also be assessed at the regional or attendance area level. Elementary regions A and F, far from all but a few magnet schools, (Figures 3.2 and 3.3) provide an informative contrast. They are comparable in proximity to magnets and in income (see Figure 3.3). Region A is a "new" suburb-like section of Milwaukee in the northwest -- a middle income area, about 13% college educated and 90% white, and with a relatively large percentage of young people. Young upwardly mobile well-educated black families, tend to move to this section of the city. Its black percentage has been increasing steadily over the last decade. It is one of the few areas in Milwaukee that had a substantial net increase (approximately 300%) in population from 1970 to 1980.¹²³

Region F, on Milwaukee's far south side, is middle income and virtually 100% white. It is similar in age and housing characteristics to region A, though it has a lower percentage of college educated residents, 8%. While A's population is growing, F's is slowly decreasing.

Table 3.8 shows where elementary black and white students from the different regions on Figure 3.2 and 3.3 go to school. Comparative magnet participation of regions A and F at the elementary level shows A's participation to be higher by a ratio of 1.5 to 1 (column [3]).

The same pattern occurs at the middle school level (Figure 3.4 and Table 3.9). The ratio of magnet participation from region A compared to region F is 1.6 (13% from AA-2) to 1.0 (8.0% from AA-15). AA-2 corresponds to region A, and AA-15 corresponds to south side region F. (High school data, showing the same patterns, will be discussed later in a more detailed comparative analysis of region C and E).

It is noteworthy that, in contrast to the rest of the city, blacks in region A have a higher level of educational attainment than whites. These are some of the sought after attendance areas among stage II black applicants discussed in Part One, Section III. For the three census tracts contained (at least partly) in region A the average on the College variable for blacks is 31%; for whites, 19%. Blacks from region A have a representation index of .95.¹²⁴ Whites' representation index from region A is .44. Thus, region A blacks are represented in elementary magnets at virtually the same proportional level of

¹²³ The median yearly income for the city of Milwaukee is 16,028 dollars, 17,069 dollars for whites. Of Milwaukee residents 25 years old and over, 12.3% have four or more years of college; for whites the figure is 13.5%.

¹²⁴ The index shows the extent to which an attendance area's participation in a magnet (or magnets) matches the system-wide level of participation. A value of 1.0 means an attendance area is participating at the same level as the average for the district. A 2.0 would mean an AA's Pmag is twice the system-wide percentage at that particular school level.

representation as blacks district-wide -- somewhat remarkable given their distance from the magnet schools. This suggests the effect of College applies to both blacks and whites.

Next compare regions C and E. Both regions are the same distance (Figures 3.2 and 3.3) -- 10 to 20 minute bus or car rides -- from most of the magnet schools and equivalent with respect to transportation access. Both regions are more than 95% white and have desegregated schools, although region E's schools have about 15% fewer minorities on average.

The two regions differ greatly in SES (Figure 3.3). Region C tracts are more variable than tracts in region E, but overall C, is markedly more affluent. Its four most heavily populated residential tracts are in the "\$25,000 or more" median income category. Region C has a very high percentage of college graduates due to its proximity to the University where many of the residents of region C work. Property values¹²⁵ in region C are mostly in the "\$55,000 or more" category. Region C has the highest educational attainment levels in the city. Of region C's residents 25 years old and over, 49% have four or more years of college.

Region E is an old section on Milwaukee's near south side, just south of the interstate highway which horizontally bisects the city.¹²⁶ Region E contains a disproportionately high percent -- about 30% -- of residents over 65 years old. The median income of E's census tracts are predominantly in the \$10,000 - \$14,999 range, although there are almost as many \$15,000 - \$19,999 tracts. Property values in E, mostly in the \$25,000 to \$39,999 category (with several tracts in the next lower category), are among the lowest in Milwaukee outside of the poorest sections of the black inner city area. Region E has low levels of educational attainment: about 5% of adults have four years of college.

Despite their equivalence on Proximity, magnet participation from region E is much lower than from region C. Table 3.8 reveals region C elementary students are enrolled in magnets at more than four times the percentage from region E, 34% compared to 8%. Compared to the district-wide percentage of white elementary schoolers enrolled in magnets (13%), region C's magnet participation is much higher, and region E's is markedly lower.

For comparative purposes, in region D in the inner city, 4% of adults have four or more years of college. With nearly all its census tracts in the \$0 - \$9,999 category, region D is lowest in the city in SES. While region D's magnet participation is somewhat higher than the system-wide average, given perceptions of low quality in inner city schools, preferences for integrated schooling, and region D's proximity to magnets, magnet participation among

¹²⁵ Average value owner-occupied single family home in 1980.

¹²⁶ Inside the region E's "curve" (see Figure 3.3) is the growing, and largely poor, Hispanic community in Milwaukee. The several schools in this area are overwhelmingly Hispanic.

blacks from the inner city is lower than would be expected under more optimal conditions of magnet awareness.

Middle school attendance data also show a strong College effect on magnet participation. Figure 3.4 shows MPS's 15 middle school attendance areas (AA). Table 3.9 shows middle school attendance patterns. AA-9 corresponds to the well-educated and generally higher income region C. AA-10 and AA-11, have the lower socio-economic characteristics of region E. Compared to the 17% system-wide level of participation of whites in middle school magnets, 59% of whites from AA-9 are in magnets, and 17% from AA-10 and 13% from AA-11 are in magnets.

High school figures are shown in Table 3.10. Participation levels are shown for only the two most popular and well-established high school magnets.¹²⁷ Figure 3.5 shows the locations of the two magnet high schools and the other high schools in MPS. The high school numbers on Figure 3.5 correspond to the high school AA numbers on Table 3.10.

To avoid introducing a whole new set of geographic areas, I will use the elementary regions to specify neighborhood areas. There is sufficient congruence of high school attendance areas with these regions for the purposes of this analysis. Table 3.10 shows attendance at Tech and College Bound by region and race. While 28% of white high school students from (high-College) region C go to College Bound, only 1% of students from the south side region E go to College Bound. Similar very small percentages from the other south side regions attend College Bound. In fact, only 64 out of 5587 white students from the entire south side go to College Bound. Given that 50% of white high school students in MPS live on the south side and that College Bound enrolls 574 white students, it can be seen that 64 south side students is exceedingly low representation.

On the other hand, Tech, (Milwaukee Technical High School) on the south side and close to region E draws 18% of its students from region E neighborhoods; from the three other south side high school attendance areas it draws, 18%, 19% and 9% (from AA#s 9, 10, and 11, respectively. The 9% is from the most distant attendance area from Tech). Yet, while few families from south side attendance areas appear to choose College Bound, relatively high percentages from the regions of high educational attainment on the north side

¹²⁷ Due to the more complex array of options at the high school level -- two dominant, well-established magnet schools, three high schools recently converted from magnet subprograms to full-fledged magnet high schools, and ten career magnet programs -- and limits on my data entry capacity, this kind of comparative analysis can only be done for participation at the two established magnet high schools, College Bound and Tech. In the ten career magnet subprograms, attendance is not broken down by sending attendance areas. The three new high school magnets underwent major program changes and expansions in years 1982-84. This complicates the awareness question, and the presence of neighborhood attendance area students complicates attendance pattern analyses.

choose Tech: 16% from region C, and 18% from another region of high educational attainment to the west of the inner city area (in middle school attendance area number 6, Figure 3.4). Tech's popularity is apparent. This will be the focus of the next section, where the Pmag-College association and the role of magnet knowledge and different class-related preferences are examined in more depth.

Concluding Comments on Correlates of Magnet Participation

The regression, based on the full population of elementary attendance areas and capable of statistically controlling for confounding variables, shows statistically significant independent effects of College and Proximity on Pmag. The Proximity association showed each additional magnet located within a two mile radius increased Pmag by 1.2%, although both stronger effects within walking distance and weaker effects outside of walking distance may occur. Outside of the inner city, increases in a school's minority composition appears not to induce magnet participation, but the small number of whites in the inner city schools take advantage of magnets in high percentages, probably to escape attendance in an overwhelmingly black school.

Of all the variables, College has the largest effect -- a standardized coefficient of .71. The regression and attendance pattern analyses suggest that, under the conditions of choice in MPS, parents from high-education neighborhoods will take advantage of magnets at three to four times the rate of parents from neighborhoods with the socio-economic characteristics of region E, about 5% of adults with a College degree. Put another way, each one point increase in an attendance area's "percent college-educated" is associated with about a 3/4's of a percent increase in magnet participation. Income, by itself, however, appears to make much less of a difference, and in the opposite direction.

The causal processes underlying differential magnet participation need closer analysis. The significant over-representation in magnets of children from surrounding attendance areas doubtless reflects the attractiveness of a neighborhood school. On the other hand, that magnets vary in how over-represented they are with surrounding attendance area children, and that children from any given attendance area are dispersed among many different and often distant magnets suggests pedagogical and broader school quality criteria are important. Section II. will examine this in more detail.

The College variable is clearly important and I will explore it further to assess the magnet awareness factor in the choice process. Findings concerning magnet awareness discussed in Part One suggest that perhaps as many as a quarter of inner city black parents may lack awareness of magnets, and that the potential demand for magnets exceeds the observed demand. Perhaps, then, college educated parents disproportionately seek out magnets mainly because they are more likely to know that magnets exist and are available. If that is the reason, it is a flaw of the market and information remedies are indicated. This also suggests the potential of a larger untapped demand. This could support the liberation thesis.

On the other hand, the College effect on Pmag could be explained by white families with lower educational levels feeling more content with their neighborhood school or more averse to the idea of busing a child into the inner city. If the factor underlying differential participation is different class-related preference functions, public choice needs to be adjusted to this reality and its implications for the kinds of alternatives that might be provided in systems of choice and the kinds of policies and efforts that may be needed to lessen the potential stratifying effects of choice policies.

**SECTION II. EXAMINING THE INFLUENCE OF
SOCIO-ECONOMIC STATUS ON MAGNET CHOICES:
A COMPARATIVE ANALYSIS OF
MAGNET PARTICIPATION FROM TWO REGIONS**

Introduction

The most important issue for public choice theory raised in Section I. that my data can address here concerns the relationship between College and Pmag. No matter how it is explained -- information gaps, different class-related preferences, or otherwise -- the strong relationship observed has important implications for choice theory's liberation thesis, pedagogical choice model, and claims about family sovereignty. Schools in choice systems might be competing largely for applications of parents with high levels of educational attainment. Related questions concerning pedagogical choosing and the strength and sources of proximity effects will be addressed in the context of this analysis.

Since magnets are generally viewed as good schools and since public choice discourse focuses most often on the need for alternatives for low SES families, the basic question of this section is -- why the relatively low magnet participation of lower-education families? (In the following, for stylistic reasons, instead of using the technically more accurate "parents from attendance areas lower in College," I will use the simpler "lower-education parents"). There are several possible explanations for the College-Pmag association:

1. Lower-education parents may not know about magnets, and therefore cannot choose what they do not know about. In this case, it cannot be said they have chosen to remain in their neighborhood school because a choice by definition requires knowledge of an accessible alternative. If one views the causes of this situation as an information problem, policy remedies could restore more optimal levels of awareness and theoretically a more efficiently functioning market.
2. Lower-education parents may not like the range of pedagogical specializations offered. Given more appealing schools, lower-education parents may more readily choose on pedagogical criteria and non-neighborhood alternatives. If so, assumptions about pedagogical choosing may be more tenable than attendance patterns suggest. As with #1 above, this may be viewed as a market imperfection amenable to policy remedies.
3. Lower-education parents may have either or both (a) a stronger attachment to the neighborhood school or (b) a stronger aversion to sending children into

the inner city where most magnets are located. While these are analytically distinct preferences, my attendance data, in most instances cannot distinguish between the two. To the extent that such attitudes underlie the College-Pmag association, choice theory may be more a model of conditions based on the practices and preferences of middle-class choosers.

These are not competing hypotheses. Each of the factors above probably makes a difference. I will explore them using data related to practices and preferences influencing attendance patterns in region E (Figures 3.2 and 3.3). Region E is close to many magnets and low on the College variable (5%). Region C provides a useful comparative sample, because it is similar in ethnic homogeneity and proximity to magnets and high on the College variable (49%). There are two parts to this section.

The first part deals with the question of awareness and knowledge of options. Survey and interview data will be presented suggesting low levels of "awareness" of magnets among parents of regions E are unlikely to account for the low region E magnet participation, and more generally, the large College effect on Pmag. However, at a deeper "knowledge" level, there may well be important differences between lower- and higher-education families.

The second part describes and explains particular region E attendance patterns which suggest the influence of different preferences. Region E families seem for the most part to prefer traditional neighborhood schools, tend to avoid inner city magnets,¹²⁸ and relative to north side higher education families (region C and others) make choices that appear less influenced by pedagogical criteria. This contrasts markedly with region C's more dispersed attendance patterns and pedagogically oriented participation in a variety of magnets. The question of the influence of pedagogical criteria will be addressed in more detail at the end of this section.

Survey and Interview Data on Magnet "Awareness" and "Knowledge"

Parent Survey Findings.

Survey results suggest region E levels of awareness and ratings of magnets are typical of the full sample of white respondents. Magnet awareness is high and magnets are given positive quality ratings. Results of the parent survey broken down by school and race show the random sample of south side whites from the three schools attended largely by region E families responded "yes," to the awareness-of-magnets question in the following percentages: 95%,

¹²⁸ There may possibly be avoidance of north side magnets in general, but it is difficult to tell because of the limited number of north side magnets that are not in the inner city.

93%, 88%.¹²⁹ The average percentage of "yes" responses for whites from all seven Milwaukee schools surveyed (n=429) was 93%. (Twelve of the fourteen white parents I interviewed from the region E area had heard about the magnets). On the dimension of merely being aware that magnets exist, having been exposed to magnet information by school literature, and knowing that they can be chosen, it appears region E parents could be described as well-informed.

It is possible that at the elementary level, region E parents have lower levels of awareness of magnets. No elementary schools with region E children were included in the sample of schools surveyed. However, breakdowns by school level in the entire metropolitan sample (n=1059) of seven MPS schools and five suburban schools showed white parents' awareness of magnets to be similar across school levels: 94% at the elementary level; 89% at the middle school level; and 91% at the high school level. (Each of the suburban schools was above the 90% level on the "awareness" question).

Like minority and white parents from the entire MPS sample, parents from the three schools in the region E area also give the magnets positive ratings on the quality question. White parents from the three region E schools surveyed (a middle school and two high schools, including Tech), also rate the magnets higher. On a scale of 1 to 5, where 1 is "much better," 3 is "about the same," and 5 is "a lot worse," the mean on the quality rating by parents from the three region E schools is 2.02; and for the entire sample of white MPS respondents (for n=317) is 1.85 with a standard deviation of 1.01. For the sake of comparison, the mean rating for all white respondents in the metropolitan area is 2.26, with a standard deviation of 1.1.

These data suggest that most region E parents, like most in the city and suburbs, give the magnets relative to their neighborhood school a higher quality rating. The ratings are close to the "a little better" value on the scale. These data do not permit more precise estimates, although it should be noted that magnet-parent respondents rated the magnets higher, more toward the "much better" value on the scale.¹³⁰

¹²⁹ The respondents were chosen randomly from a list telephone numbers generated for each school. Sample sizes for the three schools are, respectively, 109, 100, and 47. The first two are high schools, the third a middle school. One of the high schools (n=100) is magnet school, Milwaukee Tech, which draws heavily from the region E area, and demographically similar neighborhoods surrounding region E: 62% of white students sent to Tech come from just three attendance areas (high schools #8, #9, and #10, Figure 3.5). The other high school (n=109) sampled is #9 on Figure 3.5; the n=47 sample is from middle school AA #11, Figure 3.4.

¹³⁰ Tech parents' mean rating is 1.9; from the other two magnets (elementary schools), the ratings are 1.2 and 1.5. The 1.2 rating is from white parents from a popular north side Montessori magnet with a heavy concentration of region C parents; the 1.5 rating is from white parents from a not-too-successful Open Education magnet near the east side of the city. This

That the majority of respondents rate the magnets "better" is a social fact in MPS. Region E does not appear to depart much from this general perception. However, application rates to magnets are nowhere near the percentages of parents rating the magnets higher for the obvious reason that the ratings represent an abstract judgment and that, for many reasons, people do not necessarily act in accord with attitudes expressed in surveys.¹³¹ Probably these ratings reflect an image of magnets influenced by publicity and "grapevine information" depicting magnets as better schools.

Parent survey results also show white parents (n=969) in the metropolitan area classified as low-income (less than \$15,000) rate the magnets higher (40% - much better; 37% - a little better) than do non-low-income parents (32% - much; 31% - a little). Low-income respondents may well apply popular standards of quality equating social class of students with school quality to their own schools, and at the same time may be more likely to have an inflated (and less realistic) image of magnets. Terms like, Montessori, Continuous Progress Instruction, Individually Guided Education, etc. may have a greater mystifying or rhetorical effect on low-income audiences. Also, schools in higher SES may objectively be better schools.

The parent survey data suggest the improbability of large differences in awareness and views of magnets between region E and parents in general as represented by the total sample of respondents. The random selection of respondents and the over-representation of E parents in the survey suggest the low magnet participation of region E families, or more generally the relationship of Pmag with College is probably not the result of gross information inadequacies in the system, or greatly differing SES-related views of magnets. Given the abundance of opportunities, both formal and informal, to learn about magnets, it seems reasonable to conclude that magnets are generally viewed as somewhat better schools, and that a large majority of MPS whites and region E parents have heard about them.

Interview Excerpts.

Excerpts from interviews disclose a slice of the subjective world behind preferences. Informants were selected by interviewing people I know with children in the system, by asking for names from other informants interviewed, and picking telephone numbers randomly with digits for selected south side

school has very few (six) region C children. Its children come from a large number of attendance areas. Compared to the higher quality ratings of parents in the magnet schools, region E's 2.02 rating is probably closer to the theoretical population mean on the variable, since the relatively high ratings from the two elementary magnet-parent samples skew the results toward the "much better" end of the scale.

¹³¹ See Deutscher's (1973) What We Say/What We Do for a interesting review of the literature on this subject.

neighborhoods with young families.¹³² The excerpts I reproduce below are a representative cross-section of the interviews. Because my aims are modest, the question of statistical representativeness is not entirely applicable.¹³³ Having interviewed over 50 MPS parents about their choices, and larger numbers of educators and policy-makers on subjects related to registration and attendance patterns, I have no reason to believe the excerpts presented below misrepresent how most white parents in the general SES range of region E parents would respond to the interview questions.

My purpose is to give the reader a sense of the way parents described to me their impressions or beliefs about magnets and more generally school choice. These excerpts give a richer and more direct representation of magnet knowledge and orientations toward choice than survey data, attendance analyses, or my second-hand accounts can furnish. The language of informants reveals how discourse on school choice and "Ann Orlov"¹³⁴ images of pedagogically oriented decision making are theoretical ideals of choice. The practice of family choice often does not involve an explicit weighing of specific pedagogical costs and benefits of different alternatives in relation to preconceived ideas of learning styles or needs. Although choices are made and preferences guide them, particularly among parents with lower levels of educational attainment, education is not normally viewed through the categories of choice theory.

While most region E families probably have heard about the magnets, the following interview data suggest region E magnet knowledge is often sketchy. Also, the interviews show concerns about busing and preferences for neighborhood schools that may underlie the lower Pmag values in lower College attendance areas. For continuity the following excerpts are left intact and relate to both factors which seem to distinguish more educated from less educated parents, differences in magnet knowledge and busing concerns/neighborhood attachments. My interview questions are in capital letters; segments of my interview notes summarizing/interpreting informant

¹³² During my work with the Study Commission I stayed in an apartment (one to three nights per week) in a neighborhood immediately adjacent to region E and became well acquainted with the neighborhoods in the area.

¹³³ Statistical representativeness is more of an issue when one is attempting to make claims about the frequency of occurrence of a well-defined construct, and the probability of occurrence of some observable set of actions related to that construct. The survey and particularly the attendance pattern data give us a good quantitative estimates of values on theoretically relevant variables; the interview excerpts provide another set of data to understand better the subjective reality behind the quantitative attendance patterns.

¹³⁴ This refers to the Coons and Sugarman (1977) "prototype" of family choice which sets the stage for their polemic in Education By Choice. See page 1 in the Introduction for more detail.

comments are in places embedded within informant responses. My words are in [brackets].

=====
HAVE YOU HEARD OF THE SPECIALTY SCHOOLS?

[Informant had vague recognition of the term], said, "I guess I've probably read something about them from the mimeograph stuff the kids bring home from school, but, you know, you read that stuff and forget about it."

HOW DID YOU ENROLL?

We just went to the school, and filled out the health forms and things.

=====
HAVE YOU HEARD OF THE SPECIALTY SCHOOLS?

Yes

CONSIDERED APPLYING?

No.

WHY?

Because they go to the neighborhood school.

DO YOU THINK THEY'RE GOOD SCHOOLS? ABOUT THE SAME OR BETTER THAN NEIGHBORHOOD SCHOOLS?

Oh gee, that's a hard one. I suppose they're just as good as neighborhood schools, except for they got specialties. [Asked to name specialties, informant replied "music is one". Informant was not aware of magnet literature, but did recall some magnet principals coming to their elementary school for recruiting purposes.]

DO YOU THINK AT THE MIDDLE SCHOOL LEVEL YOU MIGHT CONSIDER A SPECIALTY SCHOOL?

I really don't know..I really don't know.

=====
HAVE YOU HEARD OF THE SPECIALTY SCHOOLS?

[Most informed of region E interviews. Oldest child into computers so went to Steuben, then to Washington. For next oldest child plan is to send him to Robinson. Informant knew details of the enrollment process.]
Yes I have one enrolled in one. He's at the computer high school.

DO YOU THINK AT THE MIDDLE SCHOOL LEVEL YOU MIGHT CONSIDER A SPECIALTY SCHOOL?

No, because I have a school a half a block from us. [She went on to describe how previously her first two children were in parochial grade schools "because they *do* give a better education. But then we couldn't afford it and the pastor got real snotty. So then we just put them in the school that was closest...because it's convenient. I don't believe in sending them elsewhere. At the elementary level I think it's ludicrous to send them totally across town; unless when they get older...I have one going to junior high and he wants to be a vet when he grows up. Robinson has the math and science so we might send him to the math and science school.

=====



HAVE YOU HEARD OF THE SPECIALTY SCHOOLS?

Mmmm...Yes.

WHICH ONES HAVE YOU HEARD ABOUT?

Well, you're talking about the senior high schools right?

ANY OF THEM...THEY'RE AT ALL LEVELS

I have a sixteen year old so we went to the meetings at Pulaski to decide which school he should go to and I know Madison is electronics and Pulaski is transportation and...[pause]... I remember pretty much of them.

IS HE ENROLLED AT A SPECIALTY SCHOOL?

Well, he's at Tech.

IS TECH A SPECIALTY SCHOOL?

No, not really.

DO YOU HAVE YOUNGER CHILDREN IN ANY OF THE MIDDLE SCHOOLS?

Yes I do and I also work at the school. [As a school aide].

[Question to informant regarding whether she had considered any of the middle school magnets when enrolling the current child destined for middle school the following year. She answered in a hypothetically:] "I guess it would depend on which courses they offer. I...umm [pause], I don't know, I don't know too much about that I guess yet. My daughter is going to be in middle school next year so this will be the year I'll have to look at that I guess." [This interview was conducted after the magnet registration period had ended.]

HYPOTHETICAL QUESTION: IF CONSIDERING A MAGNET, SAY ART, WOULD THE ART SPECIALTY OR OVERALL QUALITY BE WHAT WAS IMPORTANT?

I hear so many people talking about Golda Meir and Elm Street, but I just don't know if they offer enough of the basic things the kids have to know. You know, if they have all special classes and special courses and things, are they [the students] going to be getting less in social studies and science and math...You know, what are they [the magnets] substituting to get their specialties in. Because in junior high you have to take your reading test and your math test... and, what do you call that thing you have to take before you graduate? [THE COMPETENCY TEST]... in English, and I think they [the kids] should stick to the basics because once you get into a high school, well at Tech anyway, you get into a trade and you've got to get ready for a job.

I AM TRYING TO LEARN ABOUT THE ENROLLMENT PROCESS AND HOW PEOPLE ENROLL THEIR CHILDREN IN SCHOOLS. HOW DID YOU ENROLL YOUR CHILDREN?

Just the neighborhood school...And then all the kids went there.

DID YOU CONSIDER THE SPECIALTY SCHOOLS OR DID YOU NOT KNOW ABOUT THEM AT THAT TIME?

...He's sixteen now and so you figure that was about ten years ago...They

[the magnet schools] were just sort of getting things going then -- there was talk about it -- but probably to do over again, at the grade school level I'd probably just consider neighborhood schools.

WHY IS THAT?

Well he was only eleven years old at the time and at that age its so easy for the kid to go either way; so I was a little concerned that way. I wanted to stick with the neighborhood school so you know who your kid is hanging around with and you know what they're doing after school. [This seemed to imply that if son were in a magnet middle school on the north side, the son might go the "wrong" way. In a closer, neighborhood school, he can be monitored more closely and receive more protection].

=====

Another interview was with a mother of two boys in the career magnet program at the neighborhood high school in region E. This family's choice appears first to have been for the neighborhood high school, second, for a magnet program because it was available in the high school. Although her initial comments focused on the career program, when I probed for factors influencing this choice (eg. other parents, district literature), she responded, "Well, I went to Bayview high school so there wasn't much doubt about that [laughs]" [about where her boys would go to school]. Further probes suggested other magnet options were not seriously considered. When asked about whether at the middle school level, she had considered any of the magnets, She said "the oldest one was but the youngest one wasn't. The oldest one was in the PAT classes which are for special ability children." [PATs are not magnets].

DID YOU PREFER A NEIGHBORHOOD SCHOOL AT THE MIDDLE SCHOOL LEVEL RATHER THAN HAVING YOUR CHILDREN BUSED TO A SPECIALTY SCHOOL?

I'd rather see all kids at a neighborhood school than be bused anywhere. [This appears to be an expression (modestly veiled) of disagreement with the busing of black children to white schools for desegregation purposes].

SO AT THE MIDDLE SCHOOL LEVEL YOU DIDN'T CONSIDER A SPECIALTY FOR YOUR BOYS?

Well around here they don't have any specialty schools.

=====

HAVE YOU HEARD ABOUT THE MILWAUKEE SPECIALTY SCHOOLS?

Yes

ARE YOUR CHILDREN IN A NEIGHBORHOOD SCHOOL OR A SPECIALTY SCHOOL?

Neighborhood.

HOW DID YOU LEARN ABOUT THE SPECIALTY SCHOOLS?

I just learned about them through things they sent home from school. I really don't know much about them.

DID YOU CONSIDER ANY SPECIALTY SCHOOLS AS AN OPTION FOR YOUR CHILDREN WHEN IT WAS TIME TO ENROLL THEM?

Well, only because I wanted my kids in the neighborhood school.

DID YOU KNOW ABOUT THE SPECIALTY SCHOOLS WHEN IT WAS TIME TO APPLY?

I knew about the specialty schools, but I really didn't know about how to apply until I think it was really too late. The counselors had called the kids in -- my one daughter -- when she was ready for high school [the informant was referring here to the 8th grade advertising/recruiting program; see Chapter 2]. But, really I was ignorant to the fact of what they [magnets] were and how you had to get in.

DID YOU SEE THIS AS A PROBLEM OR WOULD YOU NOT HAVE WANTED TO ENROLL IN THEM ANYWAY?

I wasn't real strong, you know, about sending her far away, like on the bus and stuff, but you know I would've liked to know more about them...I don't want my children to be bused, in case something should happen to them I don't have access to a car. I'm just a little more secure having them close to home -- probably not so much for my older child. I know when my daughter was in grade school they [other parents in MPS] were busing Kindergartners which was for a half day of school and to me that's just too young. These are babies.

=====

The survey and interview data suggest the great majority of region E parents are aware of magnets. It seems unlikely low levels of region E magnet participation can be attributed to an awareness deficit. But it appears knowledge of magnets does not run very deep, in general, extending little beyond superficial awareness of their existence, the ability to recall several specializations and sometimes names, and a perception that magnets are formally distinguishable from nonmagnets by "a specialty" as their name implies and a certain diffuse "special" status.

Assumptions of choice theory about the importance of pedagogical criteria, while not entirely inapplicable, are inconsistent with these interview data. Characterizing region E choices for neighborhood schools as a calculated decision -- a weighing of alternatives and a rejection of magnet schools -- seems to overstate the calculation involved. That magnets might be considered a viable alternative to the neighborhood school seems not to be seriously considered, although the small sample size and the fact that I did not interview parents at the decision periods immediately prior to registration makes this conclusion tentative. Still, if magnets were assessed and rejected as an alternative, it seems this would have been mentioned; but, except in a few instances, it was not. Moreover, one would think that if informants had at several times -- all informants had several children -- deliberated over magnet alternatives before choosing a school, they would remember more about the rejected magnet alternatives than was apparent in their responses. In response to questions about the possibility of attending a magnet, interviews showed a consistent pattern of "I wanted my kids in a neighborhood school," though this sentiment appeared not to be the conclusion of an explicit cost-benefit analysis.

We have seen that families from higher College attendance areas seem to feel a greater need for liberation from traditional neighborhood schools, although Income seems not to make a difference when other factors are controlled. While lower-education region E families know about magnets -- and

8% participate -- their participation is low relative to their geographical proximity to magnets. The interviews suggest specific pedagogical criteria lack salience among region E choices. What factors are important? Closer analysis of region E attendance patterns and additional qualitative data provide some answers. Below, data suggest effects of differing class-related preferences: a more traditional pedagogical orientation, a stronger attachment to the neighborhood school, and a greater reluctance to send children to inner city schools.

Explaining Regional Comparative Participation in South Side and Inner City Magnets

Region E Attendance Patterns and Magnet Choices.

In Section I.(a) we saw region E's participation in one south side magnet, Technical High School, is very high (18%) in both absolute terms and relative to all sending attendance areas (Table 3.10). The attractiveness of this magnet to region E families seems inconsistent with region E's generally low levels of magnet participation. Explaining why it is not will show conditions under which region E, and more generally south side Milwaukee families, choose magnets.

It is very unlikely that a lack of awareness of other magnet high schools, particularly the popular College Bound magnet high school, contributes much, if at all, to Tech's popularity. The extensive advertising and recruiting program discussed earlier, the smaller number of schools at the high school level, varsity sports competition with results announced on nightly sportscasts, greater general media coverage of high school events, and the mobility of teenagers make it unlikely families lack awareness of other high school options.

My data indicate Tech is popular with region E families and other south-siders in part because it is accessible and offers a good education; but, also, Tech much more than other magnets has a unique status and tradition that reflects the values of the south side community. The other magnets do not. The neighborhoods surrounding Tech, and from which it draws heavily are generally blue-collar, conservative neighborhoods. There is a large Catholic population on the south side, evident in the large number of Catholic schools, and concentrations of second and third generation eastern Europeans.¹³⁵

It is helpful to view Tech's character and image in relation to College Bound's. College Bound tends to be perceived as an "elite" academic school in MPS. It boasts a successful International Baccalaureate program and has received national recognition. College Bound has a higher than average (for MPS) percentage of children of white collar professions. Its academic climate

¹³⁵ Catholic and other private schools on the south side may operate as functional equivalents for magnets: while 26% of K-8 children in Milwaukee attend private schools, 44% of 1984-85 entering ninth graders to Tech were from private schools, and the large majority of Tech students come from the south side.

and explicit college preparatory goals, and the somewhat preppie-ish and New Wave language and fashion styles of many of its students belie its urban status, its high percentage of minority students (50%) and free- and reduced-lunch students (20%), and its location in a black neighborhood. From the two high school attendance areas overlapping region E, 34 students go to College Bound; 517 go to Tech.

Tech has a different image.¹³⁶ It has a good reputation for science, math, safety, athletics, and overall educational rigor, and a long and "proud" tradition dating back to the 50s. But it also has a "tougher," more blue-collar image. The school itself is surrounded by large factories and warehouses. It is a strict school with little tolerance for rule-breakers.¹³⁷ Decades ago it used to be an all male school, called "Boy's Tech."¹³⁸ The school is redolent of machismo things: impressive, prominently displayed trophy cases from sports victories; large shops with heavy machinery; a respected and successful ROTC program; even the building itself is massive, angular, and unornamented. The principal, a tough and effective, "no-nonsense guy," also fits the school's style and ethos. Tech also has the lowest minority percentage of all MPS high schools at 39%, with 28% black. Some students at Tech characterized College Bound's students as "walking around with their noses in the air;" but there was no evidence of envy. Tech students like their school. (Some girls said the school took a little getting used to).

Tech offers a good education. Out of the total population of high schools in the metropolitan region, it was one of two high schools selected by Study Commission members and researchers for a case analysis because of its performance based on "effective schools" measures (see Walsh and Witte, 1985). In Tech's advertising and recruiting program at the middle schools, and in its

¹³⁶ I spent a week on a case study in this school, interviewing several dozen teachers, talking with and administering paper and pencil surveys to students, and collecting record data. The school's "tradition" was a recurring theme in interviews. Alumni and ex-faculty still visit the school in large numbers, years after their departure. Two of my interviews with south-side whites from low-middle income neighborhoods happened to be with women whose husbands had attended Tech. Both still referred to the school as "Boy's Tech."

¹³⁷ Said the principal in an interview: "A school goes as its halls go. You can't have people running around the halls. Kids are funny. They really want structure. They want to know what their limits are. It's like in the army. They'll [the recruits] belly-ache about the food, because that's the thing to do."

¹³⁸ In muted tones older male interviewees would refer fondly to the good old days, Tech's glory days, before "they" let girls come to the school, and before "the whole integration thing."

open house (attended by over 700 parents)¹³⁹ just prior to the stage I enrollment process, its high standards were stressed more than any other feature of its program; and while the strength of its college preparation program was extolled, with an emphasis on science, engineering, medicine, and other technical fields, Tech's ability to place high school graduates in the trades and technical fields was given almost equal billing. That many of the teachers are licensed and practicing tradesmen is always highlighted in Tech's sales pitch. Being a good school and two or three miles from approximately a dozen south side neighborhoods, including all of the region E neighborhoods, accounts for much of the large participation of region E at Tech.

Tech's popularity can also be understood in relation to the importance attached to secondary education. At the high school level, the stakes in the school choice decisions are higher. High schools, unlike elementary and middle schools, have a well understood institutional role of differentiating and tracking students, of selecting some for college, and preparing others for jobs. The connection between schooling and jobs or career trajectories is experienced in a more pressing way by both students and parents. It appears that at the pre-high school level, the neighborhood school is more sufficient for region E families; but, when the time comes to make a choice that "counts," the neighborhood school is evaluated more critically and according to stiffer academic quality criteria, with the consequence that Tech becomes comparatively more attractive than the neighborhood high school or other magnet options. Still, the "search" appears to be confined to the set of south side options. Thus, if the choice of Tech is an active choice for a non-neighborhood school, it is still a choice in which criteria of familiarity and proximity appear to limit the pool of perceived options to a choice of the best south side high school. This suggests the second factor underlying Tech's popularity.

Tech's popularity in region E, and with south side whites more generally, cannot be understood entirely as a deliberate preference for the school's pedagogical qualities. While it may be that most of Tech's students are headed for jobs in the trades, in business, or in technical fields, and Tech doubtless furnishes a good education for these jobs, the choice of Tech signifies more than this. If it were only technical career training sought by south side choosers of Tech one would expect to find similarly high proportions in some of the career oriented high school magnet options. Business High School, recognized a few years ago by the U.S. Office of Education as a "school of excellence," is a just across the highway separating the north and south side of Milwaukee. It is a short distance from much of the south side, yet it only enrolls 98 south side whites out of 964 students, and 66 of those are from the nearest south side high school attendance area, with homes just over a mile

¹³⁹ I attended advertising/recruiting programs in five middle schools and two evening programs at two high schools -- a north side and a south side high school. Each of these provided an opportunity for each of the high schools to sell their programs. I also attended an evening program by and for Tech. As many (if not more) people came to Tech than to the other south side high school for the city-wide high school advertising program.

from the high school. Two other north side career magnet programs within short busing distances also have low proportions of south side whites. While 50% of white high school students live on the south side, 18% of 284 applicants in 1984 to a computer magnet program, and 9% of 168 applicants to a communications and media magnet program are from south side schools. These enrollment and application levels are disproportionately low by a large margin.

Crucial in understanding preferences of south side whites for Tech is that, beyond its pedagogical virtues, Tech is part of the south side community. Owing to its 50 year stable existence, several generations of south siders have been trained for jobs in the trades or technical professions at Tech. Many still live on the south side.¹⁴⁰ Responding to my question about whether he might consider a magnet school for a boy soon to begin middle school, a father replied, "I don't know if they consider [Tech] a specialty school too, but if that's included in the category we were hoping they [both sons] would go there." I asked if Tech was considered a good school. "Well, I guess, everybody I've known in the past that graduated, myself included, graduated from Boy's Tech. It's always had a good tradition, you know, teaching the skills and the trades. That's one thing that gives kids a good chance when they get out."

Tech staff told me of huge turnouts at periodic alma mater gatherings. An older teacher with 15 years at Tech, described Tech's "fantastic hold on youngsters, especially after they graduate. Thousands of parents and former students come yearly...Recently I met a 70 year old man -- a Tech graduate -- at one of the open houses. He said he was coming back to see tech one last time." Tech seems to have a special status and identity tied in with the culture and working life of the south side blue-collar community.

However, part of any community's self conception is ethnic, and in the south side, "whiteness" is part of what community means. In response to the open ended interview question about significant changes in the years the teacher had been at the school, two of the three changes most frequently cited were the effects on the school of desegregation (black students at the school) and the decision to allow females to attend Tech. (The third was a recent administrative turnover). Obviously these changes in Tech's composition ended its identity as a white, male school and probably required some significant adjustments in the faculty culture built up around that identity.

When asked about the future, a dominant concern was the planned elimination of admissions requirements. The expectation of increased enrollment of less capable black students was one source of this concern. Teachers from another nearby south side high school described the unease provoked by black students loitering on the sidewalks and patronizing the shops during lunch hour and after school. The school was considering

¹⁴⁰ In Tech's pre-stage I evening program, one of the first comments by the opening speaker was, "Many of the staff member are people like myself who graduated from Tech and came back to teach."

approaches to deal with this "problem."¹⁴¹

The references to the effects of blacks, suggests they are seen as a threat to the sense of community that ties Tech to the south side. (The importance of gender is suggested as well). A related example stems from an attempt by the central office to strengthen the science/math grades 6 -12 magnet program and encourage more blacks to attend Tech. With 28% black students, Tech has the lowest percentage of all MPS high schools. A "feeder pattern" was proposed to link an inner city middle school through a technical studies magnet program to Tech. According to the plan, more blacks would go to Tech, and south side whites interested in gaining early preparation for and access to Tech would be encouraged to attend the new black attendance area magnet. This method has been employed by the administration at several elementary and middle schools popular with whites from the north side of the city. By guaranteeing access to a same-type magnet at the next higher level, feeder schools enhance the attractive power of particular magnets by creating program continuity and reducing the uncertainty of stage I admissions at the next higher level. In several instances, the feeder arrangements were initiated by the families presently attending the magnets. However, the Tech feeder pattern plan foundered. Apparently, there was little interest among south side whites in funneling more blacks to Tech, and in making access to Tech partially contingent upon attending a school far from home in a black neighborhood.

That Tech is well attended by region E and many other south side whites, then, is not inconsistent with the general relationship between parents' educational attainment and the likelihood of applying to a magnet school. The reason for Tech's popularity lies in its south side location -- it is a familiar neighborhood school -- its good reputation and long tradition of preparing children for college and jobs, and its general consonance with values of the surrounding community. The higher income and predominantly college educated white parents from region C send their children in greatly disproportionate numbers to all magnet schools, including Tech. In contrast, region E families, while they show a strong affinity for Tech, do not show a comparable interest in other magnets (although some qualification are discussed below).

Certain attendance patterns at the elementary and middle school level also yield data on region E preferences. These examples reveal the importance of the neighborhood school, and supports the proposition that the lower participation of blue-collar south side families in magnets is not an aversion to magnets per se, but a greater reluctance to leave the neighborhood to attend

¹⁴¹ The relevance of this example is that it reflects attitudes of the residential area where many Tech students live. Although the same consternation might be provoked by loitering black students in other neighborhoods, this problem was described to me in a way that tied it to the particular characteristics of the surrounding neighborhood: "The people around here are pretty set in their ways. It was hard enough for them to deal with black students when they first came to the school." Tech did not have a problem with this because of the absence of nearby "hangouts."

(1) distinctive, "different" kinds of schools, and (2) especially when they are located in black neighborhoods.

One south side region E magnet, (Magnet #13), started in 1983, is populated mostly by children from the two closest neighborhoods. Sixty-four percent of its white students are from just two adjacent south side attendance areas. It is unlikely this reflects a strong, but highly localized form of pedagogical preferences for a Montessori education. Another MPS Montessori magnet, a well-established and successful school only a few miles from region E on the north side¹⁴² received few region E applications in the years prior to the 1983 opening of the south side magnet and continues to attract few region E applications.¹⁴³

The high participation in the south side Montessori magnet is probably a result of families from the two attendance areas viewing the new magnet as their neighborhood school. Before being converted into a magnet in 1983 this school was a regular south side neighborhood school. This conversion led to the reassignment of its original attendance area families to two nearby elementary attendance areas. Obviously, many of the reassigned families, applied as soon as possible to "get back in," and are now enrolled in the Montessori magnet. While an interest in Montessori pedagogy cannot be discounted, a strong proximity effect perhaps accentuated by the "new" magnet status is a more plausible explanation. Applications to this "neighborhood" magnet may also be stimulated by crowded conditions in the other region E schools heightening recourse to the stage I application process and the consideration of magnet options.¹⁴⁴

Otherwise, elementary magnet participation from region E attendance areas (outside of the Magnet #13 exception) is low. Another magnet, a Spanish immersion elementary magnet (Magnet #2, Figure 3.2) a few miles south of region E, has .42 of a representative level (i.e., 1.0) of region E children, which is actually higher than region E's representation in most other

¹⁴² This magnet, on the basis of effective schools and reputational indicators, was a case study school by the Milwaukee Metropolitan Public Schools Study Commission.

¹⁴³ In the two years prior to the 1983 opening of the south side Montessori, the two south side attendance areas sent only 1% of their students to the original Montessori.

¹⁴⁴ A handful of near south side elementary schools are reaching capacity limits. The mean for the "total enrollment/number of classrooms" ratio for region E schools is more than a standard deviation above the population mean for the district at the elementary level. This is based on dividing each school's total enrollment by the number of classrooms. The distribution ranges from 13.3 to 32.8 with a mean of 23.2 and a standard deviation of 4.7.

magnets.¹⁴⁵ Region E's representation in the other foreign language school (#1-German/French) located in a more distant north side white neighborhood is .38. Region E's representation in the three closest magnets (#'s 9, 5, and 10) several miles to the north is, respectively, .27, .42, and .30. These magnets are located in the black section of Milwaukee. By comparison, region C's representation in the five magnets just described are as follows: .87 in the south side Spanish immersion magnet (six miles from C); 1.02 in the German/French magnet (five miles from C); and, 4.8, 10.8, and 4.7, respectively, in the three magnets (#'s 9, 5, and 10) in the city's black section.¹⁴⁶

The two elementary magnets where region E representation *exceeds* region C's are illuminating. One, the south side Montessori has been discussed. Only 1 region C child attends this school. Given that the other Montessori school is closer, has a tradition of region C participation dating to its 1977 inception, and is perceived as a more genuine Montessori program, this result is not surprising.

The second school (#11), an Open Education magnet was studied by Study Commission researchers due to its low rating on effective schools measures. Also, the magnet has for several years received low levels of white applications in the stage I enrollment period. Region E's representation in this school is an unusually high 2.6. This may result from overcrowding in some region E attendance areas causing recourse to either stage II or stage III entry into the magnet. That is, some region E parents, finding themselves unable or not wanting to attend their neighborhood school (because it is too crowded), learn that there is still space in this particular magnet school -- which there always is since this magnet receives so few white stage I applications. Also, informal communications in region E may pass on less reliable or detailed information about school quality characteristics (eg. leadership, staff abilities, program fidelity with advertised pedagogy, etc.). Region C's representation in this magnet is 2.2, lower for region C than in all but a few magnets. This may be a result of the lure of proximity: the six region C students at the magnet come from the southern section of region C, which is as close as a half mile to the school. These are also region C's

¹⁴⁵ "Representation" is based on comparing the percentage of students in a magnet from a particular region to the percentage of students in the system (by level and racial category) living in the region. A representative level (1.0) of region E white students in a magnet is .14 since 14% of white elementary students in MPS are from region E.

¹⁴⁶ Magnets #8, a small far south side Spanish bilingual program, and #6, the Gifted and Talented program were excluded from the above because #8 is a subprogram and attendance data by sending AA are unavailable; and #6 screens admissions.

lowest College census tracts.¹⁴⁷

The south side lacks a magnet middle school to provide another comparative example.¹⁴⁸ One datum concerning a near south side middle school (AA-10, Figure 3.4), however, seems consistent with the generally stronger neighborhood affiliation of region E. At first glance, AA #10's 17% level of attendance in magnets -- highest of south side attendance areas -- would seem to be at odds with region E's apparently greater reluctance to attend north side magnets.

A closer examination reveals the influence of intervening factors. The regular neighborhood middle school in AA #10 is crowded, more than a standard deviation above the middle school system-wide mean on the "total enrollment/number of classrooms" variable. A result of this is 34% of the whites leave the attendance area -- highest of the south side attendance areas. (Interviews with MPS administrators reveal this situation has been a source of some friction with the central office. AA #10 whites have appealed to central administrators to build a new school, often request transfers to other south side white schools, and are somewhat disgruntled with the overcrowding problem). That these region E families are forced into a search for alternatives boosts their attendance in magnets. But, resembling the elementary examples, there is evidence of avoidance of magnets, even though several are very close and a third is about four miles away. Table 3.11 shows that the middle school magnet that is preferred is the closest (about 2 miles from AA #10) and, while it is on the north side, it is in the downtown business district, a busy area not far from Marquette University -- in short, not an unattractive location. While AA #10 sends students to the other three magnets, their numbers are disproportionately low (see Table 3.11). At the same time, AA# 10 sends 13% of its students to five other south side middle schools. That these choices are made at a greater "cost" reveals region E preferences. These transfers go against the desegregation efforts of the district, and probably require recourse to the formal appeals process and/or the exertion of social influence in negotiations with district administrators.

Region C Attendance Patterns and Magnet Choices.

The high participation in most magnets at all levels (K - 12) by region C families stands in stark contrast to the attendance patterns I have described from region E. Region C's magnet participation is considerably higher than region E's and can also be distinguished by the broader dispersion of region C students among magnets throughout the system, although region C students are also concentrated in favored magnets. Region C families choose Tech as well as

¹⁴⁷ See Figure 3.3, the shaded section between 700 and 1700 North on the city's far east side.

¹⁴⁸ There is a small foreign language magnet subprogram in middle school #10 (Figure 3.4) in the region E area. However, attendance data are not disaggregated below the school level.

College Bound in large numbers (Table 3.10, see AA #7, "White" row). Table 3.11 shows region C's (AA #9) participation, and over-representation, in each of the four magnet middle schools. And as described, region C children are present in generally disproportionate numbers in elementary magnets throughout the district, with very high concentrations in three magnets (The Montessori magnet-#10 on the inner city's southern periphery, an IGE school-#5, and the elementary Art magnet-#9). While region C is significantly over-represented in the Gifted and Talented magnet-#5,¹⁴⁹ region C's over-representation is much less than in the other three popular magnets.

The region C attendance patterns, especially the level of dispersion, suggest but do not prove, the influence of pedagogical criteria in region C choices. However, my interviews with magnet parents from higher-education neighborhoods show quite clearly magnets' pedagogical specializations are considered when choosing schools, although it is difficult to separate the weight given to pedagogical specialization, broader quality characteristics, and logistical convenience. The following interview excerpts show how parents typically describe their magnet choices.

=====

HOW DID YOU HEAR ABOUT THE SPECIALTY SCHOOL?

I read about it [the magnet in which the child is enrolled] in the newspaper. I also read about the French and German schools.

WHY DID YOU CHOOSE 55TH STREET?

I liked the idea. Learning another language is a big plus. Spanish is the most useful of all the foreign languages offered. There are lots of jobs. [She spoke at length about the growing career opportunities related to the Spanish language].

ARE YOU SATISFIED WITH THE SCHOOL?

Very satisfied. At kindergarten [daughter] went to Sherman. I'd heard it was a good school. It wasn't our neighborhood school. I wanted her to deal with being on her own...academics weren't a big priority. She had been to a Montessori [nursery school]." In first grade she began at 55th Street [the Spanish magnet]....I was sold on the teachers' enthusiasm...Other parents are very involved. The principal is terrific, very visible...Knows who you are and your child's name. I like the specialty idea...Having a school that teaches a foreign language.

HAVE YOU THOUGHT YET ABOUT WHERE YOUR DAUGHTER WILL GO AT MIDDLE SCHOOL?

¹⁴⁹ I doubt region C enrollment in the Gifted and Talented school reflects region C applications to the school, which probably come in more disproportionate numbers. The Gifted and Talented school is selective; admissions are determined by a small committee. That applications are heavily dependent upon teacher recommendations, not just parent applications, and that there probably is a unwritten policy to have widely distributed representation in the school, are likely reasons for the attendance patterns in the Gifted and Talented school.

The school has been thinking about it. They are in the process of developing the program at Wright. I think two classes in foreign language are going to be offered. The program is still developing. We'll just wait and see how it goes.

DO YOU KNOW OTHER PARENTS WITH CHILDREN IN SPECIALTY SCHOOLS?

This neighborhood's children are real young...just beginning Kindergarten. One neighbor goes to Golda Meir. Most parents are in the process of thinking about where their children will go.

HOW DID YOU HEAR ABOUT THE SPECIALTY SCHOOLS?

My son had been in Kindergarten in the neighborhood school and a teacher noticed my son's artistic abilities and recommended Elm...Before that I had heard about the specialty schools but didn't know much about them. [The informant went on to describe how they "checked out" Elm. His wife made several trips to see the school, ask questions, and meet some teachers.]

ARE YOU SATISFIED WITH THE SCHOOL?

We're very pleased...The kids get very good attention. The teachers are motivated which makes the kids motivated. Most of our friends go to Roosevelt, Elm or other specialty schools...When all of us really started the specialty schools were pretty new and easy to get in. [QUALITY OF THE SCHOOLS?] Elm and Roosevelt are two of the stronger ones. [Informant also named Golda Meir, 41st St., and French Immersion program]...Roosevelt and Riverside are really coming on strong, but there are still some neighborhood kids left in those schools...some friction 'till they're out.

FUTURE PLANS?

King [College Bound] will be our first choice...maybe Riverside. [WHAT DO YOU THINK ABOUT TECH?] Not really...too technical. [THE NEW HIGH SCHOOL OF THE ARTS?] People perceive it as a "Fame" kind of high school [the famous New York High School of the Arts], but that's not appropriate. It used to have a bad reputation...a lot of graffiti, vandalism.

HOW DID YOU HEAR ABOUT THE SPECIALTY SCHOOLS?

Well, when my daughter was ready for four-year-old Kindergarten, we looked at all the options...You know, the foreign language schools and art. We thought about the foreign language schools for a little while but questioned whether that would create reading problems for her English. We started looking at schools rather than locations, we wanted a school that was *good*. We visited Elm and were pleased with the atmosphere and teachers.

[This parent described herself and husband as "committed to making integration work. This was described in the context of comments about the several popular private schools in the area. "We're the only ones on our block that don't go to a Catholic or the Lutheran school. I'm not being a hero; I wouldn't sacrifice our kids, but we believe in it [public school integration]. We wanted an integrated setting because that's the

way the world is...Parochial schools sheltering them [other parents' children] from different kinds of people.

=====

Region C patterns of magnet attendance and interviews with well-educated magnet parents seem to substantiate the pedagogical choosing model. However, two qualifying points should be considered. First, there is a proximity effect at the elementary level evidenced in a preference for shorter bus rides. The three popular magnets with region C are located generally in the eastern half of the central city magnet region, relatively close to region C. Similarly, a few white and integrated neighborhoods high in College (17% to 30%) on Milwaukee's west side disproportionately attend west side magnets. This effect diminishes markedly at the middle and high school level though. (It is possible, likely even, that children living within walking distance of middle and high schools do attend the proximate school in highly disproportionate numbers). This suggests parents, particularly at the elementary level, generally choose the best magnet that is not too far away. Still, each magnet draws from throughout the district, particularly the most popular ones -- Montessori, Art, Gifted and Talented, Foreign Language.

It is difficult to say whether a neighborhood magnet would be swamped by region C children irrespective of its specialization. The closest magnet to region C is avoided (#11, Open Ed.), but it is not a "neighborhood" magnet. Pertinent evidence is in Table 3.7 in Section I.(b). Two magnets (#1 and #4) are located in white higher-education neighborhoods (17% on College). They show moderate to high proximity patterns; magnet #4 (Environmental Ed.) has over 8 times its "fair share" (level of representation) from surrounding attendance areas. Given region C's socio-economic characteristics and its aggressive pursuit of magnet opportunities, a magnet located in region C with a reasonably good staff would probably have very high concentrations of region C children.

A second qualification in understanding region C choices is that pedagogical criteria may differentiate otherwise equal options, but by themselves be only moderately important. No parent will willingly choose a bad school just because it happens to have a particular pedagogical specialization. However, faced with several pedagogical alternatives, all of which seem acceptable, pedagogical criteria may well make the final determination. This reflects the reality of choice in MPS. Fine distinctions in school quality are difficult to make and most of the magnets are viewed as good schools. Most non-inner city parents qualify for busing to magnets, so, the very distant magnets notwithstanding, transportation also equalizes the utilities of different magnet school alternatives. Hence, to some degree by default, pedagogical criteria ascend in significance, even though in an absolute sense they may not be that important.

I did not interview parents high in educational attainment who did not choose magnets (due to time and resource constraints), although a number of the 27 magnet parents interviewed had children in neighborhood schools or had only recently become magnet parents, and so to some degree represent this latter category. Thus, while it is a fact that high percentages of region C families -- around half -- consider magnets in relation to their neighborhood schools and reject the neighborhood school option, we do not know if the

other half consider and then reject magnets. It is conceivable, though unlikely, that the half not choosing magnets would be similar to the region E interviews in magnet knowledge and their apparent tendency to strongly favor the neighborhood school and not to seriously consider the magnet option. However, if preferences and magnet knowledge revealed by interviews with magnet parents and a large literature on parent involvement in education are believed,¹⁵⁰ interviews with high education parents not in magnets almost certainly would show higher levels of knowledge about magnets, enrollment procedures, and alternative pedagogies.

In closing, that there are region E magnet choosers (as shown in the earlier interview excerpts) who choose on pedagogical criteria and region C parents who do not want to send children out of the neighborhood should be underscored. The interview data suggesting the significance of magnets' pedagogical specialization do not apply exclusively to region C, just as the interview data from region E parents suggesting higher attachment to the neighborhood school do not apply exclusively to region E.

Concluding Comments from the Comparative Analysis of Region E and C

Different Preference Functions.

We can think of the different level of participation in magnets from region's C and E, and more generally the College-Pmag relationship, as a result of different preference functions. Each alternative (neighborhood school versus particular magnet schools) has a particular utility derived from a set of attributes, each with a particular value attached to it. In the course of my analysis I have discussed several factors which seem to make a difference although, my data do not permit isolating and accounting for the weight of specific causal factors.

First, all parents have strong protective instincts and safety is always a concern¹⁵¹ when busing children to inner city schools. However, the inner city

¹⁵⁰ See, Lareau (1987); Bridge and Blackman (1978); Bott (1971).

¹⁵¹ "Safety" was commonly described as a key reason many families chose Tech. Parents and school personnel interviewed readily acknowledged the "fear of the inner city" many people felt and the importance of assurances to parents that children going to magnets would be safe. In the magnets I visited -- this may be true of all Milwaukee schools -- all doors other than the front door are kept locked, and the front entrance is monitored. When children are outside during recess they are watched carefully; it is a formal responsibility of the principal to supervise the daily unloading and loading of the school buses to insure safety and order. I was told of fear of driving into the inner city at night as being a deterrent to evening meetings and of cars and school property being robbed and vandalized. And more than once in setting up interview appointments I was advised about safe places to park and streets to avoid. White magnet parents expressed strong reservations about the locations

environment may be more threatening to region E families. Images evoked by the inner city may be seen as a threat to family and community values. Racial attitudes doubtless play a role. That the south side schools seem less attractive to blacks, that Tech may well be popular in part because it has low levels of blacks, and that south side whites, when they do attend magnets, seem reluctant to go to magnets in the inner city, suggest explanations based on ethnic schisms.

We may also infer a broader "loss of control" experienced by region E parents at the prospect of busing children to inner city magnets. Region E parents may feel a relatively greater reduction in their sphere of influence over their children. The neighborhood school has families sharing the values of the community and keeps the child within this sphere of values. Recall the region E mother's comment, "he was only eleven years old at the time [when they enrolled him in the neighborhood school], and at that age its so easy to go either way." Although magnet students have the commonality of their school choice, this common bond may have less psychological salience among lower-education parents than beliefs about neighborhood and ethnic heterogeneity likely to be encountered in magnets.

There is a self-fulfilling element to this. If lower-education white families are more wary of placing their children in magnets out of a concern about a diverse student body likely to be encountered, they will be less likely to apply, therefore insuring inner city magnets have a low representation of lower-education white families.

Region C families appear to be less reluctant to attend inner city schools and less attached to the neighborhood. Interviews and attendance patterns suggest they are more willing to take the "risk" of busing a child away from the home neighborhood to a school that is nontraditional and somewhat of an unknown quantity, at least initially unknown. However, in choosing inner city schools, region C families by no means leave friends and community values, since they disproportionately populate magnets and make them more representative of their own cultural background. The proportion of region C children in the three magnets popular with region C parents makes these schools in some ways like neighborhood schools. Still, in the initial choosing of magnets and in the distribution of region C children in magnets throughout the city, a less parochial orientation seems to be a factor.

Second, there is evidence that the pedagogical characteristics of magnets are less appealing to region E families. As the one region E informant questioned, "What are they substituting to get their specialties in." In other words, is basic education -- preparation for the competency tests -- displaced

of some of the magnets, sometimes saying they wished the magnets were located somewhere else.

by "specialties."¹⁵² Related to this may be some mystification by the "fancy-sounding" names of many of the magnets or, relatedly, a perception that magnets are likely to be schools for high achieving children of white-collar professional families, not schools for average blue-collar kids. Thus, region E parents, perhaps adopting middle class standards, may view magnets in an abstract sense as better schools (as survey data indicate), but not for their children.¹⁵³ This explanation is consistent with that offered to account (in part) for lower-than-expected black participation in magnets (see Part One, Section II).

Region E families on the whole seem more content with their neighborhood school. It is possible magnets with specializations different from those offered in MPS could increase demand among lower-education families for magnets. Tech's qualities, aside from the possible lure of a low-minority environment, suggests an emphasis on rules, safety, and discipline in addition to a technically-oriented curriculum with high standards of excellence draws many applicants.

Region C families doubtless feel more at ease with the names and pedagogical concepts of the magnets. Indeed the very notion of choosing from among differentiated schools and thinking about pedagogies in relation to childrens' interests and learning styles is likely to be much more familiar to higher-education families. The normative model of pedagogical decision making underlying choice theory applies more to higher- than to lower-education families.

Family preference functions doubtless include other criteria. Theoretically, we could postulate many distinct attributes among which choosers may discriminate: pedagogy (methods and content), convenience of access, safety (classmates and neighborhood characteristics), general program quality (staff and curriculum), school climate (atmosphere), classmates (by SES, ethnicity, or

¹⁵² As Peshkin (1978) showed in the conservative, rural community he studied, academic excellence was not a paramount value. Adequacy was sufficient, but it was necessary for the school to support community values.

¹⁵³ Child-rearing values and practices differ according to education and income (Kohn, 1969; Wright and Wright, 1976). This makes a difference in school choice (Bridge and Blackman, 1978); higher SES parents prefer more child-centered, developmental approaches and less formally structured environments, and are more likely in systems of choice to choose non-traditional approaches.

Compared to parents with lower income levels, middle class professional parents tend to be less concerned with "the basics" at the elementary level, taking for granted the development of these skills. Independence, interpersonal skills, self esteem, and "feeling good" about self (Everhart, 1985) and school are paramount. For related work see Sussmann (1977), Sharp and Greene (1975), the Weiler study of Alum Rock (1974), and Terrel's (1974) study on open enrollment program in Minneapolis.

friends versus strangers), building appearance,¹⁵⁴ and perhaps others. Some of these have been discussed, but data at the individual level permitting an analysis of relationships between family background variables, parent biographical characteristics, educational preferences, and school choices is needed.

Conceptualizing attendance patterns as a result of a demand based on different preference functions is most appropriate under conditions of optimal information and unrestricted choices. Awareness and accessibility of magnets is sufficient to justify viewing attendance patterns this way, but it is necessary also to consider factors which limit the applicability of this view.

The Role of Knowledge

MPS's information dissemination system and other sources of information insure that magnet schools have high name recognition (probably above 90% of parents outside of the inner city, and perhaps about 70% of inner city parents) and that most parents have encountered enough magnet information to have developed impressions of these schools as specialized and distinctive schools. However, if at one level "magnet awareness" in MPS is widespread and appears not to be strongly related to SES, more detailed knowledge of magnets is not widespread and almost certainly is related to SES,¹⁵⁵ especially College.

The magnet parent interviews¹⁵⁶ show what deeper knowledge means.

¹⁵⁴ One survey shows (Comerford, 1980) lower SES parents place a higher value on building appearance. Levine and Eubanks (1980) examining three successful magnets (one is the Gifted and Talented elementary magnet in MPS) claim in part their success owes to the remodeling efforts improving the appearance of their buildings.

¹⁵⁵ Lareau (1987:81) in a comparative qualitative study of working-class and professional parents writes: "Although [both groups valued school success], the ways in which they promoted educational success [differed]. In the working-class community, parents turned over the responsibility for education to the teacher. Just as they depended on doctors to heal their children, they depended on teachers to educate them. In the middle-class community, however, parents saw education as a shared enterprise and scrutinized, monitored, and supplemented the school experience of their children."

¹⁵⁶ The magnet parents probably are a biased sample. Generalizations about school knowledge and activism made from magnet parents most likely over-estimate levels on these constructs for "average" region C or higher-education parents. However, it is somewhat of an empirical question, rather than a given, as to whether magnet parents' school knowledge is above or below region C's. It is possible that nearly all region C parents closely scrutinize magnets and thus develop knowledge about them, but about half reject magnets as alternatives.

Interviews revealed reflection on pedagogy, staff quality, children's needs and futures, and the characteristics of other alternatives (parents typically named many other specialties). Magnet parents had typically engaged in a thorough information gathering process prior to registration; they read the INFO and talked with people and could cite a range of specialties and name several schools.¹⁵⁷ Also, magnet parents tended to know more about school system politics; several of them were actively involved. One was instrumental in generating support for the middle school Art magnet. She described the advantage of knowing an "ally" in the system "who had lots of good pointers" about how to get the school idea approved. She described learning useful political lessons from a previous initiative of other parents establishing a magnet middle school for the gifted and talented.

Differential school knowledge has important implications for magnet enrollment. If parents miss the registration period, chances of getting in drop substantially, particularly in the more popular magnets because waiting lists are longer and few openings remain after the entry grades. Under the assumption of high potential demand, this is probably a main reason local attendance of blacks in inner city magnets is not greater than observed in Table 3.3.

Parents also might "mis-choose" because they do not know which magnet is best for their children. The over-representation of region E families in the magnet selected for a "problem school" case study by the Study Commission comes to mind. (However, one must consider the possible effect of inappropriate choices as a partial cause of the school's problems). It is difficult to assess the fraction of lower-education families compared to high-education families who would prefer to be in a magnet, but discovered them to late to register, or who have mis-chosen due to inadequate knowledge. These fractions, disadvantaged by incomplete knowledge of options, are probably not insignificant. In either case, conceptualizing attendance patterns as products of preference functions can misrepresent "real" preferences, or potential demand as defined earlier.

Differential knowledge can affect preferences in another way. Region E parents, due to inadequate information, may inflate the objective threat to their children of inner city schooling. Or if region E and region C families view inner city conditions and the prospect of sending a child to an inner city magnet similarly, region E parents' relative lack of pedagogical knowledge may lead to conclusions about the magnets' pedagogy and curriculum that discourage magnet participation, e.g. believing that the Art school gives short shrift to basics, or continuous progress instruction will not be good for their child. This appears to be a concern to some black magnet school choosers who have chosen magnets for logistical accessibility and/or broader school quality reasons, but not on specific pedagogical criteria.

Because of the crucial role of information and knowledge -- not just awareness but broader knowledge of pedagogy and schools -- and the uneven

¹⁵⁷ Kohn (1983) has shown an empirical relationship between job complexity and autonomy and the "intellectuality" of leisure activities.

distribution of knowledge among families, the preference function view must be qualified with an understanding of the imperfect conditions of choice. In public choice theory, people are seen as rational value-maximizers with clear goals and sufficient information to weigh alternative means of achieving goals. In MPS, some choosers act much like the rational model. They are more likely to come from neighborhoods higher in College. But many families, typically from lower-education neighborhoods, although they are aware of magnets, do not, it appears, spend much time gathering information about school alternatives and weighing different options with preconceived pedagogical values in mind. For instance, the region E mother "automatically" directed her sons toward the high school she had attended; a male informant's son was destined for Tech because that is where he (the father, and "everyone he knew who graduated from high school") graduated; while another parent confessed to not paying much attention to the MPS INFO.

The presumption here is that where there is "error" in the preference function estimates, observed demand under-estimates region E's true demand for magnets under more optimal conditions of knowledge. This presumption reflects the focus of this section on region E's comparatively low magnet participation and a bias from public choice theory that makes non-choice problematic. However, a passive approach to choice need not be interpreted this way.

In accounting for attendance patterns, one should probably not underestimate, first, the sheer weight of tradition -- neighborhood schools are the way things have always been -- and, second, most region E families are probably quite satisfied with their neighborhood school, do not feel trapped or a need to be liberated, and are not interested in "fancy" pedagogies, just decent, safe schools, close to home. A large fraction of parents go to the neighborhood school (or central office) and fill out enrollment forms without ever considering an alternative. However one might account for this behavior (tradition, satisfaction, false consciousness, ignorance, misinformation, passive choosing), it stretches the definition of choice.

CONCLUSIONS

The Liberation Thesis and The Pedagogical Choice Model

This chapter analyzed attendance patterns and school choices in MPS in relation to assumptions of public choice theory. Three propositions framed my analysis. First, choice is viewed as an instrument to liberate families from neighborhood schools they do not want to attend. Since supporters of school choice commonly argue for choice on egalitarian grounds -- choice can liberate poor families from entrapment in bad schools -- I have focused on attendance patterns of families from lower SES regions, but in principle the liberation thesis applies to all families irrespective of SES. Second, choice theory assumes there is a demand for alternatives to traditional schools and suggests families will choose schools on the basis of preconceived pedagogical preferences. Third, and less subject to empirical scrutiny, family sovereignty is claimed to be enhanced by school choice.

Magnets and open enrollment policies are viewed as a major forward stride in the movement for choice in education. The diverse offerings are claimed to provide genuine alternatives to families dissatisfied with traditional fare and to allow, in the context of open enrollment policies, all families to choose whether or not they want to attend their neighborhood school.

The liberation thesis arises from a critique of differential access to quality schools based on place of residence. This implies demand to leave the neighborhood school is highest in low-income neighborhood schools. Consistent with this, exit is in fact highest from the lowest SES region in Milwaukee, the overwhelmingly black inner city area (represented by region D in Table 3.8, Figure 3.2). The application figures of Table 3.1 are the best measure of the distribution of voluntary preferences under assumptions of observed demand. These figures show a majority of inner city MPS black families choose non-neighborhood schools. Interview data and previous research suggest preferences for integrated schooling and negative images of inner city racially isolated schools fuel the exit, although inducements by the system (counseling and more available transportation to desegregated schools, help maintain demand for desegregated schools. Although comparisons are confounded by their differential accessibility, it appears magnets are the preferred non-neighborhood alternative, especially proximate magnets because they offer four key assets: convenient logistical access, some official assurances of quality, social ties with the neighborhood community, and a desegregated learning environment.

Many families choose racially isolated neighborhood schools (nonmagnets) in the inner city. It seems likely they attach greater costs to busing (length of rides, waiting outside in the winter) or are more concerned about potential negative treatment of their children in "white peoples" schools, and/or assign greater value to ethnic solidarity and the quality of their neighborhood schools. Efforts by black community leaders and MPS to strengthen educational quality in inner city schools may contribute to their attractiveness in the eyes of some choosers. However, a non-negligible fraction of inner city families, perhaps around 15%, apply late, probably have little knowledge of comparative attributes of different alternatives, and "choose" from a restricted set of less desirable options.

The liberation thesis applies least in the situation of lower SES whites, with parent education probably the dominant factor. While in low SES white neighborhoods theoretically could be expected to find magnets attractive; however, they attend magnets in percentages that are low relative to magnet attendance of inner city families, to higher SES families, and to the accessibility of magnets. This was shown by results of the regression analysis and the analysis attendance patterns from the collection of low SES white neighborhoods (region E) selected for closer scrutiny because of their proximity to magnets. While the regression finding of a small negative relationship between Income and Pmag yields some weak support for the liberation thesis, the strong positive relationship between College and Pmag is contrary to the thesis.

As suggested in the analysis of region E attendance patterns, low SES whites seem largely satisfied with their neighborhood school. They do not

appear to experience much desire to explore nontraditional alternatives or have children bused to other schools. When non-neighborhood alternatives are chosen, those located in the inner city tend to be avoided. Unlike inner city blacks, white families for the most part do not (except in the south side attendance areas described) experience institutional inducements to leave neighborhood schools.

Magnet participation is not a simple function of SES however. Although the numbers involved are small (several hundred), white children living in inner city attendance areas and whom we presumably among Milwaukee's lowest SES whites attend magnets in high percentages; some also attend desegregated nonmagnet schools. No doubt, the prospect of attending an all-black school motivates low-SES whites more strongly than low-SES blacks to search for alternatives. It is possible inner city whites have higher awareness levels of magnets and this, more than a greater motivation to apply to magnets, accounts for their higher representation in magnets as compared to their black inner city counterparts.¹⁵⁸ However, a higher motivation to explore exit options could produce higher levels of magnet awareness.

Families from neighborhoods with high levels of college-educated persons leave neighborhood schools for magnets in very high percentages. That whites from high-College attendance areas attend magnets in highly unrepresentative numbers is clear. They appear to experience the strongest need for liberation from the regular neighborhood school. Due to the small numbers of black families living in high-College neighborhoods and the consequent suppression of census tract data, it is not possible to assess with much certainty if the strength of the Pmag-College relationship is the same for blacks and whites. The regression results are not broken down by race and are a product largely of variation among white or integrated attendance areas and so do not address this question. The more detailed analyses of particular attendance areas show blacks from region C are less likely than whites to attend magnets; but from other regions with relatively high levels of black educational attainment, attendance in magnets is higher than expected.

That parents from higher-education neighborhoods are likely to have better knowledge of specific pedagogical alternatives and incorporate pedagogical criteria in choices suggests that their magnet choices may be more pedagogically oriented. Pedagogical choosing, in the sense of preferences for specific content specializations or pedagogies, seems to be a form of choosing primarily though not exclusively used by parents with relatively high levels of educational attainment.

How much the high representation of higher-education families in magnets reflects pedagogical choosing or exit (liberation) from a neighborhood school perceived as deficient is difficult to ascertain. There is a grey area between specific and broader pedagogical criteria. That a number of nonmagnet schools

158 The parent survey showed (see Part One, Section I.) low-income whites (total household income less than \$15,000) had higher awareness levels of magnets than low-income blacks.

in high-College neighborhoods are sought after schools with good reputations suggests some families leaving those schools for magnets may do so largely on pedagogical criteria. However, I suspect, most prefer magnets because they believe their neighborhood school lacks the quality of staff and classmates likely to be found in a magnet. (Indeed, those most knowledgeable about a magnet's pedagogical specialization are likely also to be most knowledgeable about who else chooses the magnet). Specific pedagogical criteria may tip decisions when other factors like logistical convenience and quality (safety, "quality" and familiarity of classmates, test scores) are seen to be equal.¹⁵⁹ I turn next to conclusions about family sovereignty and allocative efficiency, and then consider limitations of assumptions of choice theory and the practice of choice in education.

Family Sovereignty and Allocative Efficiency

Do conditions of choice in MPS signify a gain in family sovereignty? The answer is probably "Yes," relative to centralized assignment systems with uniform schools. The open enrollment and school alternatives in the MPS system allow families to choose whether or not to attend their neighborhood school, and to choose, with a reasonable chance of success, a non-neighborhood alternative school. Alternatives in MPS fall short of alternatives conceived in more deregulated models of choice, but they are meaningfully differentiated alternatives in the eyes of families and they satisfy different preferences.

Evidence shows that among blacks and whites and across social classes, families confronted with equally accessible alternatives do not all choose the same thing. Families vary in their neighborhood affiliations, belief in integration, interest in pedagogical alternatives, academic values, and in other preferences. Centrally controlled reassignment techniques (rezoning, school clustering, etc.) may be simpler and produce as much or more actual school desegregation, but are unlikely to be as allocatively efficient in matching families with schools in a way that optimizes the achievement of school preferences. Given the long institutionalized practice of centralized neighborhood-based assignment and given that open enrollment is still considered a radical idea in some quarters, the number of alternatives available

¹⁵⁹ Further complicating matters, criteria not only differ by race and SES, they also differ by age of children. The proximity of a school to home is especially important at the elementary level; older children have a much larger range. Methods of instruction and non-essential content areas begin to take a back seat to college or job preparatory considerations when students approach high school.

Moreover, pedagogical criteria can be more or less salient depending on the degree of differentiation of alternatives. The range of alternatives in MPS is relatively conventional, but some specializations are more different than others. For instance, the foreign language immersion programs appear to be the magnets that are chosen most often on pedagogical criteria, because their specialization represents a rather extreme departure from traditional content and forms of instruction.

and level of family control achieved in the MPS system is quite remarkable.

This chapter might be concluded on this testament to the possibility of greater family sovereignty in public schooling. However, magnet schools continue to stir controversy over equity in some cities (Moore, 1988). And MFS, like most big city school systems, seems embroiled in chronic turmoil over educational quality for blacks and Hispanics. Critics of urban systems, less concerned about relative gains in choice and family sovereignty, focus more on low test scores of minorities, and the inability of urban systems to accommodate all preferences for school alternatives and to equalize the burden of busing.

We have seen that in contrast to the liberation thesis, by the measure of proportional representation in magnets, those being liberated are mainly white families from affluent neighborhoods, while inner city black families have relatively low representation in magnets, especially given their close proximity to magnets, and their view of magnets as high quality schools (according to the parent survey). We have also seen that despite the dissemination of much information about school alternatives and an officially sanctioned normative view of pedagogical choice, it is mostly well-educated parents actively consuming pedagogical information and incorporating pedagogical criteria in their school decisions. And while there appears to be a substantial demand among inner city families to vacate inner city schools for desegregated alternatives, many necessarily face what must seem like a bewildering guessing game: a large number of non-distinctive schools in distant white neighborhoods for which little information is available. Some, doubtless, choose schools where the host neighborhood is less than warmly receptive to inner city black families and the principle of school desegregation.

These limitations must be recognized. In normative conceptions of choice, family sovereignty is enhanced by the actions of choosing, by having alternatives, and by achieving preferences; but sovereignty also implies a degree of control to achieve family beliefs and values. Family sovereignty as discussed in the "case for choice" (Chapter 1) implies some form of empowerment, otherwise, as Bastian (1986) writes, "Choices in the school marketplace can end up as they do in the economic marketplace, where low-income consumers are free to live in tenements, free to pay higher prices in ghetto stores, free to compete for too few jobs, but not free or welcome to live somewhere else" (p.103).

While choice supporters believe families should have more control and greater options in education, a state obligation is implicit. The state role is not just to eliminate attendance areas, thereby creating choices. In voucher models, the state's role does not end with the issuance of vouchers to families. Quality and equity control are assumed to be a state responsibility. In MPS, as is likely to occur in voucher systems or other proposed means of choice in education, people hold the state accountable for insuring equal access to genuine alternatives. While such a principle begs the question of when access is equal and what alternatives are genuine, it is easier to point to conditions where these ideals are not apparent. Rejected applications, lack of awareness of enrollment procedures, families choosing in September from "leftover" schools, long bus rides -- especially when these shortfalls from ideals are

experienced most heavily by minorities or the poor -- create problems for choice in policy and theory.

Deficiencies identified in the conditions of choice do not refute the theory itself. Ideal conditions are one thing, but in practice, knowledge is always incomplete and choices constrained. Where assumptions or predictions of choice theory do not hold in practice it is necessary to explore the reasons and assess whether deficiencies can be remedied by improving the distribution of information, changing the mix and accessibility of school alternatives, or modifying enrollment regulations. Proponents of choice would claim shortfalls in the MPS system result in large part because the system has not gone far enough in promoting family sovereignty, that too many centralized, bureaucratic regulations remain and bog the system down.

But, as discussed in Chapter 2, conditions in MPS are shaped by administrative needs and political interests. Choice is only one goal among several influencing the distribution of opportunities in the magnet-based voluntary desegregation system. While it is beyond the scope of this chapter, we need to assess the extent to which these goals are given imposed upon the system, or are subject to change through strategies suggested by choice theory. This will be discussed in Chapter 5.

We need to learn more about limits on what can be achieved through choice. Relative to alternative centrally controlled student allocation procedures, family choice sorts students into schools on different selection criteria. Does this preference-driven redistribution make a difference in equity or overall productivity in the system? Do chosen schools perform at higher levels? Or has the process implemented little more than an inefficient mechanism (compared to central assignment) for allocating children to schools? Learning more about consequences of choice for school quality can inform answers to these questions.

To this point, the question of what families are getting when they choose schools has been left in the background. It would appear based on parents' ratings of magnets and the magnets' special status in the district that magnet choosers may be procuring the most valued goods. The next chapter compares organizational characteristics of magnets to nonmagnets and analyzes sources of their differences. Chapter 5 will discuss some of the broader issues raised here and consider prospects for improvement through choice.

CHAPTER 4

ORGANIZATIONAL AND MARKET OUTCOMES OF CHOICE

INTRODUCTION

Public choice in education is advocated in the name of family sovereignty, equity, and efficiency. Chapter 3 explored questions related directly to issues of family sovereignty and equity. Choice exists in MPS, and, although the pedagogical choosing model can be questioned, we have seen that relative to systems with centralized assignment and uniform schools, MPS's differentiated offerings and open enrollment policies probably have created a more optimal matching of preferences and options.

As described in Chapter 1, choice is advocated not just as a right or as a means to achieve better matching of school alternatives and family preferences. In theory, choice can make schools better. This chapter examines theorized relationships between conditions of choice and school quality, or, technical efficiency as it is sometimes distinguished from allocative efficiency. By comparing organizational characteristics of magnets to nonmagnets and attempting to account for differences, we will learn about organizational consequences of choice and attendance patterns described in Chapter 3, and know more about educational and political implications of magnet-based voluntary desegregation. After we have learned more about how magnets compare to nonmagnets, Chapter 5 will discuss limits to choice and prospects for capitalizing on advantages of choice.

I begin by describing in more detail public choice conceptions of school improvement. Following this, I discuss briefly how choice might be tested under more ideal methodological designs. Sections II. and III. analyze teacher survey and interview data to assess comparative effects of choice on magnets and nonmagnets. Section IV. concludes the chapter.

SECTION I. THEORETICAL FRAMEWORK AND METHODOLOGY

It should be stated at the outset that public choice theory lacks a clearly specified theory of educational efficiency. There is a general belief that markets would produce education more efficiently than current forms of production under government monopoly control. This general theory envisions relatively autonomous (regulated) producers supplying diverse educational services to families able to choose schools under adequate conditions of information and access. (See Chapter 2 for a more complete account of these conditions.)

In theory educational markets would be more productive as a result of incentives and pressures largely precluded under existing government provision of education. Theory and research have focused on several mechanisms in accounting for or predicting higher performance in schools of choice. Below I summarize views on the principal mechanisms theorists propose can improve education through choice.

One view stresses the value of choosing. Choosing is deemed significant

because a service that has a cost attached to it is valued more than one that is free and plentiful. Critics argue that under present arrangements, especially as the financing of education continues to shift from local to more remote state revenue sources, people tend not to feel like they are paying for education. People do not feel like they are *purchasing* a service. Unlike "buying" years of college with tuition payments, K - 12 public education feels "free."³⁸² In our society the value attached to commodities or services varies in relation to their cost and level of abundance or scarcity. If people perceived or experienced more of a direct cost of education, the theory suggests, public schooling would be more highly valued. Non-public education is a choice with a cost attached to it, and by comparison, more highly valued.

While some, like Friedman, believe that financing of public education should be changed to vouchers with allowances for private augmentation of their value, most proponents feel that the value of education can be sufficiently enhanced by responsibilities and deliberations of choosing, whether through vouchers or other means. Choosing a school requires an investment of time and thought; and, even if information gathering, transportation, decision making, and other time costs may not be objectively large, choosing places responsibility in the hands of the deciders. These investments in choice are likely to create interest in monitoring results. The existence of alternatives and the option of exit make it more important for families to monitor the performance of their own school and that of other schools that present reasonable alternatives. These costs and obligations of choice, it is believed, can help foster increased parent involvement in and commitment to education, thereby helping schools to be more effective.

A second proposition links choice to professionalization and staff empowerment on what is essentially a site-autonomy (power equalization) theory of school improvement (Kolderie, 1986; Alves, 1987).³⁸³ Critics believe parental apathy and teacher passivity in public education is encouraged by centralized bureaucratic control over schooling (Wagner, 1977; Doyle, 1977; Nathan, 1983). According to choice theory, decentralization of control

³⁸² Lieberman (1986:215) writes, "It is also my view that privatizing education helps to develop a more realistic understanding of its costs and benefits. On this issue, entrepreneurial schools would be more effective than nonprofit schools. As long as education is supported from taxes, tax exemptions, church budgets, charitable contributions, and other relatively invisible sources, students and parents lack incentives to assess its costs and benefits carefully. Likewise, teachers and administrators are under less pressure to regard productivity as important. In fact, the naive idea that the concept of productivity does not apply to education results partly from the way it is financed."

³⁸³ The Assistant Secretary of Education, Chester Finn, stated choice and site-autonomy "fit together like hand and glove" (1987). For more on this, see also A Time for Results: The Governors' 1991 Report on Education. Task Force on Parent Involvement and Choice, National Governors' Association (1986).

necessitated by conditions of choice gives families, teachers, and principals greater control over school policy and curriculum. Advocates of choice envision educators working more like professionals in medical and legal clinics. With decisions and control in the hands of those closest to the learning environment more informed educational decisions can be made and feelings of professional efficacy should increase. These conditions are believed to increase student achievement.³⁸⁴

A third view believes choice can improve schools by producing greater cohesiveness and value consensus in schools.³⁸⁵ Many analysts believe public schools are pulled in multiple and often conflicting directions trying to accommodate individuals and groups with greatly differing needs, learning styles, and values. Choice, proponents argue, would produce schools organized around and committed to particular pedagogical methods, content specializations, or cultural orientations (Glazer, 1983).³⁸⁶ The act of choice defines a more equal relationship between parents and schools and implies a commonality among choosers. Theoretically, in schools of choice, fewer resources would go into conflict management and within-school groupings (eg. tracks) and more would go into teaching and learning.³⁸⁷

³⁸⁴ For a discussion of evidence relating teacher efficacy to student achievement and an empirical examination of links between organizational conditions and teacher efficacy, see Newmann, F., R. Rutter, and M. Smith (1987). See also Chubb (1988).

³⁸⁵ See Coleman's (1987) discussion of how functional communities created by conditions of choice and private support create positive climates for learning. Galganik and Karweit (1982) propose a theory of the effects of different forms of governance and authority on organizational commitment in private and public schools and the relationship of these forms to voluntarism. See also Argyris (1974), Duke (1978), and Nirenberg (1977) for theoretical and empirical treatments of differences in management structures between traditional schools and chosen alternative schools. Kottkamp and Nault (1982) discuss studies showing positive effects of choice processes on student achievement in situations where student can choose from among school-within-a-school programs.

³⁸⁶ Glazer writes, "Some degree of homogeneity is needed for an effective educational environment. In its absence, the schoolteacher must be concerned primarily with discipline, the slowest children, or must abandon them and concentrate on the brightest (Glazer, 1982:1)."

Murnane (1986) discusses the possible effects of matching (learning styles/needs to pedagogy), choosing, and being chosen, on both families and schools. For related work, see Dunn, Dunn, and Price (1979).

³⁸⁷ Odden (1985:139) claims school climate is the critical mediating variable in improvement through choice: "[E]ffective schools have distinctive cultures; students and teachers who do not fit the culture are uncomfortable

These views are an extension of the family sovereignty position described in Chapter 1 ("The political case for choice") viewing choice as an inherent good, part of what "liberty" means.³⁸⁸ Propositions discussed here, however, claim choice is also a mechanism of greater educational productivity. I will use the term "voluntarism" to refer to the process of choosing and the relations between families and schools claimed to be instrumental to increased productivity in education.

The monopoly critique in Chapter 1's "Economic case for choice" suggests competition is needed to improve public education. Public choice proponents argue that, unlike public schools, many non-public and public alternative schools are better schools as a result of their less protected status. Staff in these schools perceive a close connection between their performance and their organization's ability to continue to attract clientele and the likelihood of losing support and clients if they become uncompetitive. That schools of choice must compete for clients creates incentives encouraging attention to the needs and interests of parents who want to see evidence that they are getting an adequate return on their investment. Traditional public schools, with survival assured, have less reason to concentrate attention and resources on the task of responding to interests and expectations of clients.³⁸⁹

Erickson (1982) refers to the organizational effects of working in a school in a competitive environment as a state of "jeopardy." It can be considered an element of organizational climate and an outcome of awareness of school staff that their well being and job conditions are dependent upon client satisfaction and the quality of their school's image. Jeopardy refers to a heightened attentiveness to connections between organizational performance and client preferences, and a greater willingness to work hard and combat complacency. Also, jeopardy is a relative concept, not an either-or condition. It is an outcome related to the level of dependence of school staff upon their clientele (which necessarily relates the term to the level of competition between schools, since dependency upon clients results from their power of exit).

Accessible alternatives and an informed clientele are necessary to produce jeopardy, but are insufficient by themselves. One can conceive of a system

with it. Giving parents and students more choices regarding public schools to attend could not only strengthen the culture of each school, but also improve public satisfaction."

³⁸⁸ Similar to choice proponents' claims about the need for greater family sovereignty, underlying the position of some site autonomy theorists is a belief in worker control as an inherent right, regardless of efficiency outcomes (Duke et al., 1980).

³⁸⁹ Chapter 1 goes into more detail. See references cited *passim*.

containing many accessible educational options, but where staff are largely insulated from effects of family choices. Staff must also have a stake in the ability of their school to attract and retain families, that is, incentives to attract and satisfy families and to avoid losing their good will. Finally, staff must believe they have some control over how their organization is viewed and also have a way to assess how their collective performance is viewed by clients.

The above formulation identifies mechanisms -- voluntarism and competition -- theorized to produce gains in educational productivity. Although analysts tend to emphasize one set of factors or the other -- whether they are partial to sociological or economic viewpoints makes a difference -- organizational effects of voluntarism and competition are not at all independent. Competition can foster hard work and team spirit (the positive side of jeopardy), which in turn can have ramifications in the market through ideas and programs generated by more committed and inspired staff. Competition and too much jeopardy can also undercut morale, particularly if schools have competitive disadvantages. Nevertheless, voluntarism and competition are different ideas, have different theoretical bases, and should be distinguished.

In a moment I shall discuss data related to these proposed mechanisms of choice. First, however, since empirical questions about effects of choice are complex, a discussion of key theoretical questions and research needs is a useful introduction.

Public Choice Theory: Ideal Tests and Research Needs

Public choice theory is concerned with comparative efficiency (technical and allocative) of differentially structured educational systems. Educational outputs include academic achievement, citizenship learning, and character. Educational systems can be structured differentially on a number of dimensions relevant to public choice theory (discussed in more detail in Chapter 1). Briefly, educational systems, or specific proposals like tuition vouchers and tax credits, can vary on centralization of control over financing, curriculum, staffing, and attendance. Control on each dimension can be centralized or devolve more to market forces and individual family decisions. The research task is to identify natural variation (or to create variation)³⁹⁰ in systems on variables relevant to choice theory and to assess comparative efficiency. Comparative studies of *systems* of schools are needed to assess effects of differential relations between families, teachers, and administrators.

For instance, the Seattle public schools are contemplating ending their mandatory reassignment approach to school desegregation and implementing a

³⁹⁰ Experimental conditions are nearly impossible to achieve. Among numerous limitations, that students or schools cannot be randomly assigned to experimental and control groups is the most important. The Alum Rock study (see Chapter 1) attests to the difficulty of experimental studies of choice in education.

regulated choice program similar to MPS's. This is a ripe opportunity for a longitudinal study of effects (at multiple levels), though detailed data on changes in the composition of the school district and other potential intervening factors would be necessary.

MPS's admission-by-lottery process for over-subscribed magnets provides conditions that approximate random assignment to choice and non-choice "treatments" (magnet versus nonmagnets). One could track the progress of matched cohorts -- all of whom are "choosers" (though not equally lucky), but only some of whom are in magnets. That all are "choosers" matches the samples on those traits and family conditions that presumably distinguish choosers from non-choosers, and that complicate the interpretation of magnet versus nonmagnet comparisons, and all comparisons where self-selection occurs. Of course, one would need to know as much as possible about the subsequent conditions of schooling experienced by both samples, and be able to match the samples as much as possible on relevant social characteristics.

Comparative studies of districts with open enrollment programs to districts with mandatory assignment procedures are needed; so are ethnographic studies comparing magnets to nonmagnets or documenting the process of becoming a magnet.³⁹¹ Researchers are typically inclined toward studies of effects on organizational and student achievement outcomes; but, there is a pressing need for research on logistical and administrative changes introduced by choice³⁹² and on system-level distributive impacts and their political consequences. For instance, the new Postsecondary Enrollment policy in Minnesota puts postsecondary institutions and high schools into competition for state education aids. Though only two years old, the law has brought about some changes in how high schools view their relationship with these students and with postsecondary institutions, and has produced some institutional change.

These are a few examples of research needs. Because interest in and policies to implement choice in education seem to be on the rise, and because magnet schools and voluntary approaches to desegregation are also growing, better understanding of causes and consequences of these changes would have important theoretical and policy benefits.

Design and Methodology

Data Sources.

I draw upon several different data sources in this chapter. Data on the percent low-income and minority students in schools comes from MPS district

³⁹¹ See for example, Rosenbaum and Presser (1978); Marshall (1978); Metz (1986).

³⁹² For an example of administrative consequences of choice, see the Rand evaluation (Weiler, 1974) of the Alum Rock study, Appendix E.

records. Students are classified as low-income if they qualify for free or reduced price lunches. Qualification is determined by a formula based on family financial resources and the number of children in the family.

A survey of teachers was developed and administered by the Study Commission research project. All teachers in the metropolitan area were surveyed. Sixty percent (2,580) of the Milwaukee teachers responded to the survey.³⁹³ Items were developed by the research staff and drawn from several other surveys.³⁹⁴ Survey questions asked teachers about a variety of dimensions of organizational functioning including job satisfaction, teamwork, staff consensus, parental involvement, and professional autonomy. The survey items generally reflect an "effective schools" theory of organizational quality.

To interpret survey results, I draw on other qualitative data sources. These are described in the methodology section in Chapter 2. Briefly, I draw on approximately 100 hundred hours of interviews with about 65 teachers, principals, central office curriculum coordinators, and administrators, on my formal involvement in monthly Study Commission meetings, and on findings from Study Commission case studies of individual schools in which I participated (in high schools).

Study Design.

If beneficial effects on schools of voluntarism and competition are caused by the creation of conditions of choice in schooling, these processes should have measurable organizational effects in the MPS system. The magnet schools in particular should show effects of voluntarism and competition. The magnets operate in an open enrollment context, are distinctive and specialized schools, and are chosen under conditions of choice consistent with prescriptions of choice theory.

³⁹³ The Study Commission also surveyed all Milwaukee metropolitan principals. In MPS, 177 principals (75%) responded to the survey. I have not analyzed these results in depth. Findings from the principal survey were very consistent with the teacher survey, although the general pattern of responses was more positive (possibly due to respondents' concerns about anonymity, although it was guaranteed in writing on the survey). I will discuss results from the principal survey in places where the additional data can contribute information or insights.

³⁹⁴ Sources for questions were: Educator Opinion Poll; a 1984 national survey of 1,013 teachers and 919 principals by Educational Research Service; The Teacher's World, a 1979 survey of 921 Dade County Florida teachers; Administrator Questionnaire, a 1980 survey of all Dade County school administrators, by the University of Florida-Miami; A Study of Schooling, a survey of teachers in 38 schools by John Goodlad and Associates, institute for the Development of Educational Activities; and High School and Beyond, a yearly survey, since 1980, of 17,000 teachers and administrators by the Consortium for the Study of Effective Schools.

To explore outcomes of the conditions of choice in MPS and to relate these to the theoretical principles of voluntarism and competition in schooling, I will compare in Section II. magnets to nonmagnets on selected items and scales from the teachers' survey. The measures I use were developed from an "effective schools" frame of reference. The items measure organizational dimensions believed to reflect or contribute to school quality. Many of the items used are the sort currently advocated as school "quality indicators" by policy-makers and organizational theorists.³⁹⁵

That the items are not designed specifically to test public choice theory restricts the analysis somewhat. Items designed specifically to measure staff perceptions of competition with other schools, consequences of neighborhood versus non-neighborhood clientele, pedagogical consensus or broader value consensus within the school and between staff and parents, and psychological effects of choosing would yield useful information.

On the other hand, if the conditions of choice make a difference for magnets, the range of items I use should show it. The argument that voluntarism and competition have independent, beneficial effects on magnets, despite showing no differences on organizational quality items is plausible, but tenuous. If voluntarism contributes to cohesiveness or value consensus, an item asking teachers about the clarity of school goals and agreement on disciplinary policy should measure it. If magnets do not differ appreciably from nonmagnets on the survey measures used, given the magnets' apparent advantages, a case for the beneficial organizational effects of choice is difficult to sustain, at least under the conditions of choice in MPS. However, as I discuss next, if magnets do differ, it may or may not be a result of the theorized mechanisms of choice. Sorting out this issue is where more precise measures are needed.

There are reasons to predict more positive outcomes for magnets as compared to nonmagnets on the organizational measures, and reasons not to. Self-selection is one reason magnets might show more positive survey outcomes. Chapter 3 showed high representation of region C families in magnets and a positive association between College and Pmag (magnet participation), suggesting family choice in MPS favors magnets with students from better educated homes. Also, while all of the magnets are racially balanced (although several are composed of nearly 70% minority students), about a quarter of the nonmagnets are 90% or more minority children. The nonmagnet comparison group contains the inner city racially segregated schools discussed in Chapter 3. If, as some people believe, and the "ghetto school" stereotype would suggest, inner city schools are likely to have more frustrated or less effective staff, and if children from higher-education families contribute positively to organizational quality measures, these processes could account for more positive outcomes in magnets.

On the other hand, the Income variable in the regression equation in Part Two of Chapter Three did not seem to be strongly correlated with Pmag,

³⁹⁵ See for instance, Gottfredson (1984), Effective Schools User's Manual.

suggesting selection effects favoring magnets with more affluent children may be less a factor than is sometimes claimed. Further, the location of most magnets in the inner city, the observed heavily localized attendance patterns in most magnets, and their general accessibility -- registration is easy and magnets are not permitted to use entrance requirements³⁹⁶ -- are reasons that self-selection may be less significant than it could be under more restrictive conditions of access.

To help resolve this issue, Section II. compares magnets to nonmagnets, using school means on survey outcomes, and controlling for student composition variables to help control for selection effects. Because magnets may differ systematically from nonmagnets in "crowdedness" due to their formally distinctive status and separate enrollment process (stage I),³⁹⁷ I include a measure of this possibly relevant variable as a control. On the possibility that socio-cultural differences between Milwaukee's south and north side might show up in teachers' perceptions and ratings of their school and job, I include a north-south dummy variable in the regression equation.

If differences between magnets and nonmagnets disappear when school composition variables are controlled, the case for technique' efficiency gains through mechanisms of choice is weakened -- at least under the conditions of choice in MPS. However, two arguments in support of public choice theory could still be advanced:

1. The MPS case is not a fair test. Though open enrollment conditions exist, the school marketplace is heavily regulated and neither families nor schools have the required autonomy to allow the development of true forces of voluntarism and competition. There is merit to this argument. Magnet/open enrollment programs do not explicitly aim to implement free market principles in education. If this is true, however, it dictates caution in the kinds of efficiency benefits that can be attributed to magnet-type open enrollment designs.

2. While magnet-nonmagnet differences on *survey* outcomes might disappear with student composition controls, it could be argued there are important

³⁹⁶ Two exceptions are the Gifted and Talented schools at the elementary and middle school level. I should point out, however, that the Programs for the Academically Talented (PATs) provide competition for the magnet Gifted and Talented schools. One competitive advantage held by the PATs is that they are more geographically accessible because they are located in schools throughout the system (see Chapter 2 for data on enrollments in the PATs). A second advantage they might have in the eyes of white parents not favoring a desegregated environment is that they have lower percentages of black students than do the Gifted and Talented magnets, about 33% black as compared to the magnets' approximately 50% black.

³⁹⁷ For a description of the registration process for MPS schools, see Section V., Chapter 2.

benefits to students from magnet schooling that remain unmeasured. This Type II statistical error would suggest effects of school choice is mainly on students, and that measuring teachers "misses" these effects. This possibility exists; exploration of this hypothesis requires an experimental design beyond present data.

If a magnet effect persists after controlling for compositional variables, the case for choice is supported, but with two qualifications. First, magnets may do better only partly for reasons claimed by public choice theory. Voluntarism and/or competition might account for some effects, but controlling for minority and low-income composition cannot control for more subtle self-selection processes that may favor magnets with more supportive families and capable students. (Because discussions of self-selection processes usually concern research on private school-public school comparisons, it is well to keep in perspective magnets' accessibility and generally non-selective policies).

Secondly, inferences from magnet-nonmagnet comparisons must consider the interdependence of the comparison groups. Effects of magnet choices may not be confined only to magnets, but may adversely affect nonmagnets, either by depleting nonmagnets of good students (the self-selection processes described above),³⁹⁸ or by making nonmagnet staff feel like they teach in second-class schools. Using a separate school system as a comparison group would help alleviate this methodological problem, although it would introduce others. At issue here is the problem of assessing whether or not the conditions of choice result in a net gain to the system. If one views magnet gains as coming at the expense of the nonmagnets -- a zero sum view -- then the proposition that choice can make *systems* more technically efficient is rejected. However, if as choice theory suggests, conditions of choice are capable of creating more optimal matches between family preferences and school attributes and more constructive competition among all schools, then the effects of choice need not be confined just to magnets, even if, relatively, they have higher performance.

My data cannot fully resolve these issues, but can reveal organizational effects on magnets of certain factors in the conditions of choice in MPS, and to a degree, the comparative strength of different factors. Section III. will offer some interpretations of the regression results from Section II. Drawing on interview data, I will explore the role voluntarism and competition may play in bringing about differential organizational outcomes in magnets as suggested by survey data. At the conclusion of the comparative analysis, we will know more about effects of choice in magnet systems and be able to make some informed generalizations about the limits and possibilities of voluntarism and competition in the educational marketplace.

³⁹⁸ Note that this argument assumes that were it not for magnets, these students would remain in the system and be distributed at a larger number of schools where their presence would benefit their peers. However, a certain (unknown) fraction would not remain in the system.

SECTION II. A COMPARISON OF MAGNET TO NONMAGNETS ON SELECTED ORGANIZATIONAL VARIABLES RESULTS OF THE TEACHER SURVEY

Dependent Variables.

The dependent variables I use are selected from the 1985 Milwaukee Metropolitan Public Schools Study Commission Teacher Survey. The survey covers a wide variety of subjects of theoretical and policy significance. I have selected items and scales (13) with the highest "face validity" -- items which seem to have the most unambiguous meaning as indicators of organizational quality and that relate to predicted outcomes of voluntarism and competition. Results of a larger set of magnet-nonmagnet comparisons on survey items are shown in Appendix A.³⁹⁹

To aid interpretation, items are categorized into four a priori categories reflecting different organizational variables. The items in these categories are shown in Table 4.1. Each survey item asks the respondent for a rating of their agreement with a particular statement, or a similar sort of quantifiable judgment. Usually the rating is from "1" (strongly agree) to "6" (strongly disagree). Although nearly all 13 items and scales are generally viewed as indicators of organizational quality, I have arranged them in a sequence that begins with items more closely tied to the conditions of choice and that culminates with items that elicit relatively direct judgments of school quality.

Parent Involvement Items.

Magnets are freely chosen schools, often, if not always, chosen for pedagogical or broader quality criteria. According to choice theory, parent involvement and the quality of parent relations with staff should be higher than at schools chosen under the less optimal conditions of the stage II and III enrollment processes for nonmagnets.

The parent involvement items elicit teachers' ratings of parent involvement. The items have been combined to form two scales, "frequency" (#1) and "effectiveness" (#2). The "frequency" scale is composed of five items asking the teacher to rate ("weekly" to "not at all" on a four point scale) the frequency of occurrence of parent observation in the classroom, parent-teacher contacts, parent volunteers, teacher participation in PTA activities, and written communications between teacher and parent. The "effectiveness" scale asks for the teacher's rating of the "effectiveness" of parent volunteers, parent responsiveness to conferences, and, more generally, parent involvement in children's achievement.

³⁹⁹ The regression analyses described below use only elementary schools. The limited number of schools prevents a regression analysis of middle and high school survey results. However, middle school survey results as shown in Appendix A closely match the elementary results, suggesting magnet effects are not confined to the elementary level.

TABLE 4.1 ITEM AND SCALE CONTENT FOR TABLES 4.2 AND 4.3

#1 Parent Involvement-Frequency

- I have parents who observe their child in my classroom.
- I meet the majority of my students' parents.
- I have parent volunteers in my class.
- I communicate to parents in writing my academic expectation for their child.

#2 Parent Involvement-Effectiveness

- I find it effective to have parent volunteers in my classroom.
- Parents respond when I request a conference.
- I find it effective to involve parents when children are not achieving.
- It interferes with my class when a parent comes to observe his or her child.

#3 Leadership

- The principal sets priorities, makes plans, and sees that they are carried out.
 - The principal knows what kind of school he/she wants and has communicated it to the staff.
- (plus items #7, #8, and #13)

#4 Control ("How much influence do teachers have over...")

- Determining student behavior codes.
- Determining the content of inservice programs.
- Setting policy on grouping students in classes by ability.
- Establishing the school curriculum.
- Selecting textbooks and other instructional material.
- Selecting content, topics, and skills taught.
- Disciplining students.
- Determining the amount of homework assigned.
- Controlling the pullouts from my classroom.

#5 S/F beyond control

- My success or failure in teaching students is due primarily to factors beyond my control rather than to my own effort or ability.

#6 Teamwork

- All personnel in our building work together closely as a team.

(Table 4.1 continued...)

TABLE 4.1 ITEM AND SCALE CONTENT FOR TABLES 4.2 AND 4.3

- #7 Disciplinary agreement
In this school the teachers and the principal are in close agreement on school disciplinary policy.
- #8 Support of discipline
Teachers are supported when they enforce the school's discipline rules.
- #9 No preferential treatment
In my school building teachers are treated equally without preferential treatment.
- #10 Looking forward to work
I usually look forward to each working day.
- #11 Learning environment not conducive
The learning environment in this school is not conducive to school achievement for most students.
- #12 Educational climate
The general education climate in my school provides positive motivation for me to learn new things about the area I teach.
- #13 Clear goals
Goals and priorities for the school are clear.

Control Items.

Choice is advocated on grounds of professional autonomy. Magnets' pedagogical specializations and stage I open enrollment status may require greater site-level autonomy. If, as proponents of choice and site-autonomy argue, decentralization of control can heighten teacher efficacy, magnets should have higher ratings on items related to "control."

Control items elicit ratings of personal feelings of efficacy ("locus of control," #5) as well as ratings of more "objective" levels of control over building and classroom policy as measured by the "Control" scale (#4). Items eliciting teachers' ratings of the leadership qualities of their principal, making up the "Leadership" scale (#3), provide evidence of the extent to which magnet versus nonmagnet principals differ on practices that may reflect leadership autonomy and effectiveness.

Staff Relations and School Climate Items.

Schools of choice are said to be more cohesive, to have clearer goals and higher levels of consensus. Items in the following two categories elicit ratings that give evidence of the quality of staff relations and school organizational climate. If from the view of families, choosing a school, and from the view of staff, being a school of choice, makes a difference in feelings of community, efficacy, and pride, the magnets should have higher outcomes on the ratings in the staff relations and climate categories.

Staff relation items elicit teachers' ratings of agreement and teamwork among school staff. School climate items elicit diffuse affective responses to the educational climate and working conditions of the school. These items do not refer to other staff members, and so may elicit less of a personal reaction to other personalities and more of a judgment of the quality of the organization's task climate. (Table 4.1, items #6 through #13).

If the conditions of choice in MPS differentially affect the magnets in ways suggested by public choice theory, the magnets should show more positive outcomes on the organizational dimensions described above. If magnets do not show differential outcomes, we must consider reasons for the absence of effects. In Section III., by examining patterns of effects among items I will make inferences about specific causal processes which can be related to claims of choice theory.

Results of Magnet versus Nonmagnet Bivariate (Uncontrolled) Comparisons

Table 4.2 shows results of bivariate and multiple regression analyses of survey outcomes. First, let us look at results of the uncontrolled bivariate regression equation which compares the mean of magnet schools' rating to the mean of nonmagnet schools' rating with no control variables in the equation. The difference between the magnet and nonmagnet mean on items in column [1] is shown in column [2]. The only independent variable used in the equation producing the results in column [2] is *Mag.*, a magnet-nonmagnet dummy variable to enable comparing the magnets to the nonmagnets (magnets = 1;

nonmagnets = 0). P value ranges are denoted by asterisks as follows: *** less than or equal to .05; ** greater than .05, less than or equal to .10; * greater than .10, less than or equal to .15.⁴⁰⁰

To facilitate interpretation I will describe the difference of means (magnet versus nonmagnet) in relation to the standard deviation of the dependent variable. This produces a standardized measure of the differences of means based on the size of the regression coefficient and the standard deviation of the survey item. This is helpful because the dispersion of the values (the individual school means on each survey item) is different for each survey item, thus, a .5 unit magnet-nonmagnet difference (on the 1 to 6 scale) on one item may indicate a greater or lesser disparity between the two groups than a .5 difference on a different item depending on the extent of variation in values on each item. Thus, for instance, if the magnet regression coefficient is .4 and the standard deviation of values on the item is .8, the magnet mean is .4/.8's of a standard deviation larger than the nonmagnet mean, which I will report in standardized form as .5sd.⁴⁰¹ This enables comparison of magnet-nonmagnet differences (the "magnet effect") across items. In each case, a positive value (for the regression coefficient) in column [2] denotes a more favorable magnet rating.⁴⁰² Note that in Tables 4.2 and 4.3 the magnet effect is shown both as a metric regression coefficient and as a percent of the standard deviation of the dependent variable (the number in parentheses).

Results in Table 4.2 reveal a pattern of substantially, more positive outcomes for magnet schools. This is evident in the preponderance of positive values in column [2]. Because of the dominance of this pattern and the size of the magnet effect across items, items not showing differences invite comment. (Fuller interpretation of results is provided in Section III.) On two items (#6, Teamwork; #9, No Preferential Treatment) no differences occur. Teamwork reads, "All personnel in our building work together closely as a team." The absence of a difference suggests, whatever other organizational differences magnets may show, they do not differ greatly on the extent to which staff

⁴⁰⁰ Note that these means are averages of school means, whereas means shown in Appendix A group the survey results at each level according to whether the respondent is or is not a teacher in a magnet school.

⁴⁰¹ A full standard deviation difference would mean that the magnet mean is at the 84th percentile of the overall distribution of school scores, under the assumption that the scores are normally distributed.

⁴⁰² Although in the raw survey data, a more favorable rating can be a more positive or a more negative value depending on the wording of specific items, for ease of interpretation I have changed the signs for presentation in Tables 4.3 and 4.2 so that a more positive value means a more favorable (i.e. "better") rating for magnets. Thus if the difference between the magnet and nonmagnet mean is .5, the magnets' mean suggests a more positive rating on a particular organizational dimension compared to nonmagnets.

TABLE 4.2 REGRESSION RESULTS OF SURVEY OUTCOMES:
MAGNET EFFECT IN UNCONTROLLED AND CONTROLLED EQUATIONS

ITEMS [1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
	WITH MINORITY AND LOW-INCOME CONTROLLED								
	MAG.	MAG.	MIN.	MNSO	MNDM	HIMN	L.I.	S.D.	R ²
#1 P.I. Frequency	.19*** (1.00)	.16*** (.84)					-.003***	.19	.148
#2 P.I. Effectiveness	.18*** (.86)	.14*** (.57)	-.009	.573			-.005***	.21	.239
#3 Leadership	.42** (.48)	.49*** (.56)	-.011**				.012*	.88	.114
#4 Control Scale	.35*** (.90)	.35*** (.90)						.39	.089
#5 S/F beyond Control	.54*** (.79)	.57*** (.84)	.005					.68	.076
#6 Teamwork	.08 (.10)	.08 (.10)						.79	.014
#7 Disciplinary Agreement	.53** (.55)	.53*** (.55)						.97	.026
#8 Support of Discipline	.46** (.52)	.57*** (.64)	-.027***			.05	.011	.89	.055
#9 No Preferential Treatment	.05 (.06)	.05 (.06)						.85	.000
#10 Looking Forward to Work	.21 (.41)	.19 (.37)	-.003					.51	.011
#11 Learn Environment Conducive	.29* (.46)	.17 (.27)					-.01***	.63	.060
#12 Educational Climate	.58*** (.92)	.60*** (.55)	-.04*	2.3				.63	.113
#13 Clear Goals	.32* (.43)	.47*** (.63)	-.08***	4.96***			.01	.74	.090

Column Definitions

- [1] Abbreviations of survey items listed in Table 4.1. [1] is the dependent variable
 [2] Regression coefficient of magnet dummy variable (magnet = 1) in the bivariate equation: $Y = B + (\text{magnet})$.
 [3] Multivariate regression coefficient of magnet dummy variable in equation $Y = B + (\text{magnet}) + \text{variables [4] through [8]}$.
 [4] School percent minority. Note, in columns [4] to [8] only indep. variables with P values less than .20 are included in the regression equation.
 [5] School percent minority X School percent minority.
 [6] Dummy variable: school percent minority > 60% = 1.
 [7] HIMN = Minority - 60 when Minority > 60; otherwise HIMN is given the value zero.
 [8] School percent low-income.
 [9] Standard deviation of the dependent variable.
 [10] Adjusted R squared for the multivariate regression equation model of best fit. Numbers in parentheses in columns [2] and [3] result from dividing the regression coefficient of the magnet dummy variable by the standard deviation of the dependent variable, [9]. This expresses the magnitude of the magnet effect in standard deviation units, and permits comparisons of magnet effects between items.

"work like a team" -- eg. engage in collective planning and coordination of curriculum and instruction.⁴⁰³ Like most nonmagnet schools, in most magnets, the self-contained classroom is the dominant form of organizing work and providing instruction. It appears being a chosen school does not by itself produce more integrated forms of organizing work.

The other item showing no difference is, "In my school building teachers are treated equally without preferential treatment." On this particular source of employee aggravation, it appears magnets and nonmagnets do not differ. Both sets of means are close to the middle of the six point scale and the variance on the item is typical, suggesting an absence of strong feelings on this concern related to magnet status.

The remainder of the items and scales show strong and unambiguous magnet effects. Since a central issue concerns effects of selection and magnet successes are sometimes ascribed solely to the students they get, we turn now to results of comparisons which statistically control for student composition. I begin by describing independent variables.

⁴⁰³ Closer analysis of results suggests most teachers interpret 'personnel' in this question to mean "other teachers." At the middle school level, on items with an affective component referring to the principal, an unpopular principal in one magnet receives low ratings, reducing the gap between the magnet and nonmagnet means; however, teachers at the same magnet report "teamwork" to be high.

Two members of the university faculty with extensive field experience in schools whom I consulted on this item believe the interpretation of teamwork as coordination is warranted. However, the teamwork item probably should not be interpreted as a measure of the more affective constructs "camaraderie" or "team spirit." Support of this can be found in closer analysis of the item. The elementary magnet mean is influenced by extreme values from two elementary magnets. One of them is a popular magnet with high achieving students. This same magnet has very positive ratings on items reflecting teacher efficacy, school climate, and job satisfaction, but its teachers work very independently. The other magnet very low on the "teamwork" item has generally low scores on these other school quality items. Collaborative work of teachers at this second magnet is also low, but so too, apparently, is morale.

Also, note that when the survey data are not aggregated by schools as reported in Appendix A, the magnet mean on this item is more positive by statistically significant margins at both the elementary and middle school level. At the elementary level, then, the difference favoring magnets in Appendix A (teacher-level data grouped by category) results in part from magnets with larger staff reporting higher teamwork than magnets with smaller staff (on the assumption of equal response rates). This is an interesting, but possibly specious finding.

Introducing Control Variables: Student Composition, Demographic Effects, and Capacity

Independent Variables:

1. *Minority* = minority students (Black, Hispanic, Other)⁴⁰⁴ as a percent of total school enrollment. Minority's mean is 61.0%; the range is 28.6% to 99.9%; the standard deviation is 20.8%.

In order to account for as much of the variation in the dependent variable as possible, transformations of *Minority* were incorporated into the regression model. As with residential integration, people often talk of "tipping points" in desegregated schools. If a school surpasses a certain level in percent minority, usually near the point at which it becomes a predominantly minority school, it is commonly believed the flight of whites from the school accelerates. As a school becomes increasingly "a minority school," perceptions of the quality of the school can decline,⁴⁰⁵ which can in turn accelerate white flight, etc., in a positive feedback loop. On the possibility that staff attitudes and perceptions might be similarly affected in a non-linear way, three transformations of the *Minority* variable were computed.

1.A. $MnSq = Minority * Minority$. Combining this term with *Minority* creates a model specifying a curvilinear (parabolic) relationship between a school's minority composition and the dependent variable. In this model, effects on the dependent variable of increases in *Minority* are strongest at lower percentages and level off (increasingly) at higher percentages.

1.B. $MnDm$ is a dummy variable, with a value of 1 for *Minority* greater than 60%, and 0 for *Minority* less than or equal to 60%. This term makes it possible to assess an "either-or" threshold effect of *Minority*, controlling for other independent variables.

1.C. $HiMn$ (High Minority) = *Minority* - 60 for schools above 60% minority. If a school is 60% minority or below, it is given a value of 0. This technique estimates different linear slopes for different ranges on the independent variable, and makes it possible to assess if there is a different *linear* effect of minority on a dependent variable above 60% minority as

⁴⁰⁴ Students classified as Hispanic or Other constitute less than 10% of MPS's total enrollment.

⁴⁰⁵ See Scholfield's (1982) ethnographic account of racial relations in a magnet middle school for descriptions and discussions of the role of concerns about "tipping points" in the administration and politics of enrollment policies. Marshall's (1978) qualitative study also discusses this issue.

A central administrator for a magnet school program in a large eastern U.S. city told me of an unwritten policy of regulating enrollment to maintain a school's student composition at close to (50% minority - 50% white) to avoid the possible loss of white families.

compared to below or equal to 60% minority. Unlike 1.A., this model does not specify a progressively declining effect on a dependent variable with increases in Minority.

2. *Low-Income* = low-income students (subsidized lunch) as a percent of total school enrollment.⁴⁰⁶ Low-Income's mean is 53.2%; the range is 22.6% to 86.1%; the standard deviation is 14.4%.

3. *Capacity* = "total enrollment/number classrooms" measures how full a school is relative to its capacity. This is not a measure of class size; class size varies very little due to union regulations. It might be a loose measure of a school's popularity, although schools higher on the variable might simply be smaller schools or schools with a densely populated neighborhood. Nonetheless, on the possibility that systematic differences on the variable might account for some of the variation in survey outcomes, I include it in the regression analysis.⁴⁰⁷ Capacity's mean is 23.3; the range is 12.5 to 41.5; the standard deviation is 4.9.

4. *N.S.* is a North or South dummy variable (1 = south) to enable controlling for effects of geographical/cultural differences that may confound effects of other variables. There is a possibility that, reflecting cultural differences,⁴⁰⁸ north-side schools may differ systematically from south-side schools in ways that could affect outcomes on the teacher survey.

Results of Magnet versus Nonmagnet Multivariate Controlled Comparisons

Column [3] in Table 4.2 shows the magnitude of the magnet effect that remains after the regression "model of best fit" is constructed. Columns [4]

⁴⁰⁶ Percent low-income figures are from MPS records. Eligibility for subsidized lunch is based on a formula that includes a family's total household income and the number of dependent children. Because it takes into account income as well as family size it is a relatively good measure of a family's financial status.

⁴⁰⁷ Because all the schools in MPS are available under open enrollment conditions, an examination of the relationship between some measure of a school's "chosenness" (popularity) and its survey outcomes would be a desirable way to test the choice thesis. Theoretically, more chosen schools should have more positive outcomes. For reasons described in Chapter 3, Section II., application rates to magnets are not directly comparable to application rates to nonmagnets. This has to do with the different stages of the enrollment process in which the separate categories of schools are chosen and the different number of schools in each category.

⁴⁰⁸ The south side of Milwaukee is generally described as more traditional and conservative. See the analyses of Chapter 3 for more details.

through [10] show the independent variables I have used to account as fully as possible for effects of the magnet dummy variable. For each item, the model of best fit is the result of trying each of the independent variables in different combinations in order to develop the most parsimonious and fully specified regression model. Thus, for each survey item, only the independent variables that achieve or approach statistical significance and produce a significant increase in the explained variance on the dependent variable are shown in Table 4.2.

The main finding from the controlled regression analyses is that, overall, the magnet-nonmagnet differences do not change much with the introduction of the control variables. This can be quickly ascertained by comparing the uncontrolled regression coefficients in column [2] to the coefficients controlled for social composition in column [3]. In no cases does the sign of the coefficient change; in just a few cases does more than a very small change occur.

The Capacity variable and the North-South variable have virtually no significance. Schools operating closer to their enrollment capacity (that is, with more of their classrooms filled) cannot be distinguished from less filled schools on the basis of the controlled survey outcomes. The same is true for the North-South variable. "Mere" geographic location, after controlling for social composition variables and magnet-nonmagnet status, makes no difference on the survey outcomes.

Effects of the other independent control variables -- Minority, the transformations of the Minority variable, and the Low-Income variable -- are significant in a few instances, diminishing the magnet effect a little, but usually not enough to affect the statistical significance of the magnet school effect. In several other cases the magnet effect is increased by the Minority and Low-Income variables. In the following description of results, I concentrate on noteworthy changes in magnet-nonmagnet differences brought about by the control variables.

Parent Involvement.

Scales (#1 and #2) both show modest declines in the more positive magnet values when the control variables are introduced; but the differences that remain are substantial and statistically significant: .67sd on the scale measuring effectiveness of parent involvement, and .84sd on the scale measuring the frequency of parent involvement. The small decline in the magnet effect comes entirely from the Low-Income variable in equation #1 and almost entirely from Low-Income in equation #2. Thus, a small part of the more frequent and effective parent involvement in magnets when compared to nonmagnets stems from an inverse relationship between Low-Income and Parent-Involvement.

Control Items.

On this dimension (equations #3, #4, and #5), the more positive magnet values remain after introducing the control variables. Controlling for Minority and Low-Income, magnet school staff report a greater sense of efficacy (.84sd) in teaching and greater control over classroom- and building-level curricular

and disciplinary policy (.90sd).

The "principal's leadership" scale also shows a sizable magnet advantage which increases slightly from the uncontrolled equation (.48sd) to the controlled equation (.56sd). This scale includes items on the principal's disciplinary (student discipline) effectiveness (#7,#8), the "goal clarity" item (#13), and two other items for which regression equations were not computed. (These items are, "The principal knows what kind of school he/she wants and has communicated it to the staff." "The principal set priorities, makes plans, and sees that they are carried out.")⁴⁰⁹

Staff Relations Items.

These items, (#6 through #9, Table 4.2), show very little difference between the uncontrolled and the controlled differences (column [2] vs. column [3]) between magnets and nonmagnets. The two items that showed no advantage for either magnets or nonmagnets in the uncontrolled comparisons (#6-"teamwork", #9-"no preferential treatment by the principal"), do not change with the introduction of the control variables. The statistically significant magnet advantage on item #7 (.55sd on "disciplinary agreement among staff/principal") persists after introducing controls; the statistically significant magnet advantage on item #8 ("disciplinary support from the principal") increases from .52sd to .64sd after introducing control variables.

School Climate Items.

On one of the main school climate variables -- the conduciveness of the school's learning environment to achievement (Table 4.2, #11) -- Low-Income, but not Minority, has a substantial impact. The magnet effect is reduced from .29 (.46sd) to .17 (.27sd), a drop sufficient to eliminate statistical significance. This item, more than the others, reveals a relatively strong relationship between Low-Income and teachers' ratings on this item, and a benefit to magnets on this item of having somewhat lower than average percent of Low-Income students.⁴¹⁰

However, on two other school climate variables (#12, #13), the model of best fit increases the magnet effect. The magnet-nonmagnet difference on the two items -- (#12) a motivating climate (to learn new things about the area I teach) and (#13) goal clarity -- is larger when magnets are compared to nonmagnet schools of equal social composition than when magnets are compared to the total sample of nonmagnets. This indicates a "suppressor effect" of student composition variables on these outcomes: were it not for

⁴⁰⁹ Magnet-nonmagnet comparisons for these two items are shown in Appendix A.

⁴¹⁰ Scatterplots provide more detailed information on magnets' Low-Income and Minority composition relative to nonmagnets. See Figure 4.1 in the next section.

magnets' composition, they would evidence an even greater advantage than appears. While on both items, the regression coefficient is statistically significant, the increase from the uncontrolled bivariate equation to the controlled equation on "motivating climate (#12)" is negligible; but the increase in "goal clarity (#13)" is sizable, changing the level of statistical significance from .15 in the uncontrolled equation, to .04 in the equation controlling for Minority and Low-Income. However, while the effect of introducing the control variables is larger in the "goal clarity" equation, the magnitude of the controlled difference between magnets and nonmagnets is larger on the "motivating climate" item. The difference between the magnets and the nonmagnets on this item is almost a full standard deviation. On "goal clarity," the magnet-nonmagnet difference increases from .43sd to .64sd.

On "I usually look forward to work," (#10) the control variables have a small impact. The magnet mean drops from -.21 to -.19 (.41sd to .37sd) going from a questionably significant P value of .17 to .22. Thus, when magnets are compared only to schools similar in Minority and Low-Income (as opposed to all nonmagnets), the uncontrolled job satisfaction difference favoring magnets decreases slightly while the probability that the value is due to chance increases slightly.

In sum, controlling for Minority and Low-Income, magnet values on many survey items reflecting key dimensions of organizational quality remain more positive by statistically significant margins. This is an important finding. The magnets' higher organizational ratings are not merely a result of measurable student composition differences. Substantial differences remain (and in some cases increase) after controlling for Minority and Low-Income. Next, an additional step is taken to learn more about the effects of possible selection processes allocating to magnets more educationally prepared and manageable students.

Assessing Variation Within Magnets: The Effects of Students from High-College Attendance Areas

Chapter 3 showed dramatic differences in magnet participation (P_{mag}) from attendance areas differing in educational attainment (College). In particular, one region with high levels of education (region C) was highly disproportionately represented in magnets. Do these high-education families who actively seek out magnets and use pedagogical criteria in their choices account for the magnets' high survey outcomes? Controlling for Low-Income partially answers this question because income and educational attainment are related, but a more direct measure can yield additional evidence on this question.

The census data used to estimate the College variable for sending attendance areas in Chapter 3 cannot be used to control for parent educational attainment in the manner that Minority and Low-Income are used in the above

regression equations.⁴¹¹ However, the percent of students in each magnet from high-College attendance areas (henceforth, PHICOL) can be computed. If participation from high-College attendance areas is an important factor accounting for differential survey outcomes, there should be a relationship *within* the magnets between PHICOL and the survey outcomes. Also, exploring intra-magnet variation will yield data on the extent to which the aggregate magnet effect is coming from small clusters of high-performing magnets or is more evenly distributed among the magnets. If the aggregate magnet effect is largely from a few high-College magnets, support for the efficiency benefits of processes of voluntarism or competition is weakened.

To test the effect of PHICOL I divided the magnets into three groups based on the percent of students in each magnet coming from the top 23 attendance areas (out of 89 total). The 23 attendance areas, roughly the top quartile, are at or above 14% on the College variable, and are located geographically throughout MPS. Although the 14% cutoff point at the 75th percentile is somewhat arbitrary, the purpose is to avoid going too low on the College variable and dipping into the broad range of attendance areas in the 9 to 13% range,⁴¹² thereby including inappropriate attendance areas in the development of the PHICOL measure. On the other hand, I wanted to include enough attendance areas to include broad geographic representation of the higher-college attendance areas to minimize the over-representation of region C, and to maximize the likelihood that the educational level of sending attendance areas (College), and not proximity, was the main variable determining the classification of the magnets into groups. If the cutoff level was set too high, reducing the geographic dispersion of sending attendance areas, PHICOL would be confounded by proximity effects.

Once the PHICOL of each magnet was determined, the magnets were divided into three groups to maximize the inter-group variation on the variable (to maximize the homogeneity on PHICOL within each magnet subcategory). This resulted in two groups of five magnets, "HC" (High-College Magnet) and "MC" (Medium-College Magnet), and one group of two magnets "LC" (Low-College Magnet).

HC, MC, and LC were coded into dummy independent variables with the nonmagnets constituting the omitted category. The other independent variables are the same student composition variables described above. Table 4.2 shows the regression results.

⁴¹¹ This is because the College variable measures educational attainment in the census tracts making up a school's attendance area. Magnets have no attendance area.

⁴¹² There are 27 attendance areas in the 4 point range between 9 to 13%, 23 in the 41 point range between 14 to 55%.

Results of Regressions of Items on Magnet PHICOL Subcategories

The major finding from the uncontrolled equations (Table 4.3, column [2]) is the absence of a consistent monotonic increase in the magnet effect with increases in PHICOL, although on several items there are sizable differences between LC and the two higher-college categories, MC and HC. In general, HC's and MC's coefficients are more positive than the nonmagnets' by a sizable margin -- about three-quarters of a standard deviation on average. However, MC usually shows higher organizational ratings than HC -- not what would be expected if PHICOL is mainly responsible for higher organizational ratings. LC's organizational ratings are consistently lower than either MC or HC, and on six of the thirteen items, the sign of LC's coefficient is negative (although on three of the six, equations #2, #10, and #13, LC's coefficient is quite small -- between .00 and -.12). Where LC's coefficient is negative, this means teachers' ratings were lower than the nonmagnets' average ratings as well the ratings of the teachers in the other two categories of magnets (MC and HC).

Controlling for student composition, column [3] in Table 4.3, does not change this pattern very much. Magnet effects are reduced by the statistical controls only for the HC variable in equations #1, #2, and #11. In equation #11 -- the conduciveness of the school's learning environment to achievement -- the large (.79sd) uncontrolled effect of HC is cut almost in half (to .44sd) when Low-Income is controlled. This suggests the Low-Income effect on this item on the magnets as a group (see also Table 4.2) stems largely from the smaller group of HC magnets with percentages of low-income students that are substantially below system-wide averages.⁴¹³

In equations #1 (Table 4.3, parent involvement - frequency) and #2 (parent involvement - effectiveness), the very large coefficients for HC (1.58sd for frequency; 1.48sd for effectiveness) drop by about a third with the control variables, so they still remain large. In seven of the thirteen statistically controlled equations (#4, #5, #6, #7, #9, #10, and #12, in Table 4.3) there is no, or negligible, change with the introduction of control variables; and in three more (#3, #8, and #13) there are changes that increase the magnet effect on one or more magnet variables. These findings suggest that just as the student composition controls left a substantial portion of the magnet effect unexplained; neither does the PHICOL variable seem to account adequately for the magnet effect, although PHICOL clearly makes a difference. It distinguishes the Low-College magnets from the Medium- and High-College magnets, but does not consistently distinguish the medium- and high- College magnets from each other. The next section considers the implications of these findings for predictions about effects of voluntarism and competition on schools.

To conclude, the regression equations showed a substantial magnet effect on a range of organizational dimensions unaccounted for by measured student

⁴¹³ See Appendix C for a graphic on the relationship between Low-Income, Minority, and PHICOL.

TABLE 4.3 REGRESSION RESULTS OF SURVEY OUTCOMES:
MAGNETS IN HIGH, MEDIUM, AND LOW COLLEGE CATEGORIES

ITEMS [1]	[2]			[3]			[4]	[5]	[6]	[7]	[8]	[9]	[10]	
	HC	MC	LC	HC	MC	LC	MIN.	MNSQ	MNDM	HIMN	L.I.	S.D.	R ²	
WITH MINORITY AND LOW-INCOME CONTROLLED														
#1 P.I. Fre- quency	.30*** (1.58)	.11 (.57)	.21* (1.11)	.24*** (1.26)	.10 (.53)	.22** (1.16)						-.003**	.19	.158
#2 P.I. Effec- tiveness	.31*** (1.48)	.13* (.62)	-.05 (.24)	.20*** (.95)	.13* (.62)	-.01 (.05)	-.01	.52				-.004**	.21	.227
#3 Leadership	.24 (.27)	.72*** (.82)	.14 (.16)	.44 (.50)	.84*** (.95)	.14 (.16)	-.05**	3.13				.01	.88	.046
#4 Contrl Scale	.34** (.87)	.37*** (.95)	.30 (.77)	.34** (.85)	.37*** (.95)	.30 (.77)							.39	.058
#5 S.F beyond	.65*** (.96)	.52** (.76)	.52 (.76)	.71*** (1.04)	.54** (.79)	.53 (.78)	.01						.68	.061
#6 Teamwork	-.02 (.03)	.53* (.67)	-.80* (1.01)	-.02 (.03)	.53* (.67)	-.80* (1.01)							.79	.015
#7 Disciplnry Agreement	.16 (.16)	.92*** (.95)	.51 (.53)	.16 (.16)	.92*** (.95)	.51 (.53)							.97	.052
#8 Support of Discipline	.28 (.31)	.67* (.75)	.44 (.49)	.46 (.52)	.83*** (.93)	.41 (.46)	-.03***			.03*	.01		.89	.042
#9 No Preferen- tial Trtment	-.27 (.32)	.23 (.27)	.34 (.40)	-.27 (.32)	.23 (.27)	.34 (.40)							.85	.000

(TABLE 4.3 continued...)

TABLE 4.3 (...continued)

	[2]			[3]			[4]	[5]	[6]	[7]	[8]	[9]	[10]
	HC	MC	LC	HC	MC	LC	MIN.	MNSQ	MNDM	HIMN	L.I.	S.D.	R ²
#10 Looking For ward to Wrk	.38* (.75)	.18 (.35)	-.12 (.04)	.35* (.69)	.17 (.33)	-.13 (.25)	-.003					.51	.002
#11 Learn Env. Conducive	.50** (.79)	.47** (.75)	-.71* (1.13)	.28 (.44)	.42* (.67)	-.66* (1.05)					-.01**	.63	.088
#12 Educational Climate	.85*** (1.35)	.66*** (1.05)	-.27 (.43)	.84*** (1.33)	.73*** (1.16)	-.21 (.33)	-.04*	2.43*				.63	.120
#13 Clear Goals	.22 (.30)	.60** (.81)	-.08 (.11)	.43 (.58)	.62** (.84)	-.19 (.26)	-.01***				.01**	.74	.012

Column Definitions

- [1] Abbreviations of survey items listed in Table 4.1. [1] is the dependent variable
- [2] and [3] show regression coefficient of magnets coded into three groups (HC, MC, and LC) based on the percent of a magnet's student body living in AA's in the top quartile of AA's in educational attainment (% of adults over 25 with a college degree; viz. the College variable used in regressions reported in Tables 3.5 and 3.6). HC = high college; MC = medium college; LC = low college. Column [3] shows regression coefficients of the three groups of magnets (HC,MC,LC) in equations in which the control variables for student ethnicity and social background have been used (variables [4] - [8]; see Table 4.2, bottom for column definitions).
- [9] Standard deviation of the dependent variable.
- [10] Adjusted R squared for the multivariate regression equation model of best fit. Numbers in parentheses in columns under HC, MC, & LC result from dividing the regression coefficient of the magnet variable by the standard deviation of the dependent variable, [9]. This expresses the magnitude of the magnet effect in standard deviation units, and permits comparisons of magnet effects between items.

P<.15 P<.10 P<.05 N = 92

composition variables. Since the issue of resource differences frequently comes up in magnet-nonmagnet comparisons, I explored available data on this question. Feelings of efficacy and more positive ratings of climate, and perhaps ratings on other items, could be higher in schools better endowed with materials or enjoying smaller class sizes. Comparisons of budgets for materials, pupil/teacher ratios, class sizes, and other related variables show few differences; teacher survey data show magnet and nonmagnets equivalent on ratings of sufficiency of materials and complaints about paperwork and class size. See Appendix B for more details.

Are residual differences on the survey items between magnets and nonmagnets shown in the magnet effect in Tables 4.2 and 4.3 fully explicable by other student self-selection processes? Or, as proposed in public choice theory, can a case be made for voluntarism and competition contributing to the observed organizational differences? A closer look at the survey results and additional qualitative data can advance our understanding of the functioning of magnet schools, and open enrollment schools in general, and of the possibilities of voluntarism and competition as mechanisms of higher productivity in education systems.

SECTION III. IMPLICATIONS OF REGRESSION RESULTS FOR PRINCIPLES OF VOLUNTARISM AND COMPETITION

Introduction

The purpose of this section is to interpret the regression results shown in Tables 4.2 and 4.3. The regression results reveal three types of variation that invite further analysis: (1) the more positive ratings of the magnets compared to the nonmagnets; (2) variation among items within the magnet category; and, (3) variation between the PHICOL subcategories of magnets on individual items.

The first part of this section will concentrate on explaining the first type of variation (magnet versus nonmagnet). I will draw on interview data and on items in the Parent-Involvement and Control dimensions to explain the generally more positive pattern of magnet ratings. The question can be formulated as follows: In what ways other than selection effects might choice account for magnets' apparent higher organizational quality as suggested by their higher values on the "quality indicator" items in the Staff Relations and Climate dimensions? I focus on the role mechanisms of voluntarism and competition may play in shaping magnets' organizational characteristics. The theme here is the potentialities of choice. I defer to the next chapter a broader consideration of limits of choice.

The organizational environment of magnets differs from that of nonmagnets in three ways I describe below as (1) a more demanding clientele, (2) greater organizational autonomy, and (3) greater competition with other schools. These differences are suggested by choice theory and conform with results from the regression analyses and data from interviews.

A More Demanding Clientele

The most direct finding relating to effects of voluntarism is the generally high parental involvement and support of magnets. The largest difference across the items between magnets and nonmagnets occurs on the Parent Involvement dimension on the "frequency" and "effectiveness" scales (#1 and #2, Table 4.2 and 4.3). The large differences favoring magnets persist in the multi-variate comparisons after controlling for student composition; and the differences favoring magnets persist even when the magnets are broken down into subcategories on the PHICOL variable, with the single exception on the "parent-involvement-effectiveness" scale for the Low-College magnets, where the regression coefficient is an insignificant $-.01$. (Note also that on "frequency," the Medium-College magnets show a sizable $.53sd$ effect, but it falls short of statistical significance).

These results are consistent with interview data. Although the survey items stressed individual parent-teacher contacts, a theme that appeared in interviews is high involvement of magnet parents in projects. Parents talked about library activities,⁴¹⁴ performing arts projects for children, field trips, and other school support (bake sale-type) activities. These forms of involvement and support occur at nonmagnets, but almost certainly are higher in magnets.

Choosers of magnets are said in virtually all interviews to be a more demanding clientele. A sentiment expressed by one magnet school principal, and others in different ways, provides support for the effects of choice: "Parents feel entitled to greater involvement because they chose the school. It gives parents an unwritten right to be more present and demanding." A mother, who had previously been at the neighborhood school, said, "My opinion of why the specialty schools work is that they work as a team. There seems to be more cooperation [between parents and staff]...At [her former nonmagnet] I felt like I needed to get a pass to be there." Staff referred to the necessity of "having to be on your toes," being obligated to attend more meetings with parents (like PTA meetings), and dealing with more parent volunteers and parent-managed projects.⁴¹⁵ Said an elementary magnet principal, "At a

414 Where this subject came up in interviews, I discovered libraries in elementary magnets were typically operated by parents. MPS does not provide librarians in elementary schools. Thus, if parents do not take the initiative, it appears that staff must somehow shoulder the burden of managing a school library. I have no data on whether parents are as likely to operate libraries in nonmagnets. Doubtless, it depends on how much free time a school's parents have, and the importance they attach to a school library.

415 One large task of dealing with magnet parents begins before the parents have even made choices. This is in the December-January period prior to stage I when magnet registration begins. An elementary magnet principal at the time of my interview in late January told me the school had probably already had over 200 visitors in the school year. Another magnet elementary principal said about 50 people had visited his school in the two or three weeks

neighborhood school, parents won't come in and observe classes. Here they will. It's a subtle pressure teachers feel. They have to be on the ball." A teacher at a different magnet said essentially the same thing: "Magnet school parents are always watching everything. As soon as they see something they don't like they'll tell you about it." A high level central administrator stressed the importance of magnet principals having good parent and public relations skills.

Can the higher involvement and support of magnet parents be explained in terms of mechanisms of voluntarism or competition? In ways it can. As described in the previous chapter, interviews with well-educated, magnet parents showed that the choice process was taken seriously.⁴¹⁶ Having invested time and effort in information gathering, and having made a certain psychological commitment to a particular alternative, magnet parents may feel a greater right to involvement or obligation for support. As the principal stressed, "parents feel entitled to greater involvement because they chose the school." Perhaps also, out of a need to remain distinctive or emphasize individually distinctive "school identities," magnets may propagate projects which invite or require involvement. These explanations I believe account in part for magnet-nonmagnet differences, not only on the Parent-Involvement dimension, but probably also in general staff perceptions and ratings of school quality.

The other part of the explanation is that choosers of magnets relative to the entire population of school parents are unusually active in education. They are probably in many ways like choosers of private schools,⁴¹⁷ and would be

prior to the early February interview.

⁴¹⁶ While choosing on specific pedagogical criteria is less likely among lower SES parents, well-educated parents often made comments showing consideration of the match between pedagogical specializations and a child's learning needs or interests. One parent spoke of a difficult transition for her child from the non-competitive, grade-free, climate of the elementary open education magnet to the middle school gifted and talented magnet. "He's in the real world now. He's in with all these other kids who are busting their butts competing for good grades." Another parent expressed concern, even guilt, over the possibility that a choice for one of her children was ill-advised due to pedagogical considerations. The child turned out not to like the magnet's program. See Chapter 3, Part Two for more details on magnet parent interviews.

⁴¹⁷ See Levy's (1986) edited volume, Private Education: Studies in Choice and Public Policy. Erickson's six year comparative study of a new policy of public subsidization of private schools in British Columbia analyzes effects on parent-school relations. "Private school patronage," he writes, "represents a departure from conventional behavior and entails extra cost, trouble, and effort." On data from surveys and interviews he concludes the "active choosers" are "more thoughtful and concerned about their children's learning

unusually supportive whatever school they attended. I will return to the theoretical and methodological difficulty of sorting out this issue in the Conclusion.

I should point out that the high level of parent involvement in magnets is confined primarily to the predominantly the well-educated group of magnet choosers from outside the inner city, most of whom are white. However, informants saw no differences in black and white magnet choosers of middle-class backgrounds, suggesting this is a class phenomenon. At the non-inner city French Immersion elementary magnet, a parent involved in the PTA thought black parents from the several high-college neighborhoods on Milwaukee's west side, were more likely to come to meetings.

Though staff of inner city magnets I interviewed had varying explanations for the low level of inner city parent involvement, agreement prevailed that involvement was very low. This is also true for nonmagnets, leaving open the possibility that involvement of inner city black parents in magnets may be low relative to higher SES non-inner city parents, but higher than that of black parents who have chosen schools in stage II.⁴¹⁸

Greater Professional and Administrative Discretion

Table 4.2 shows in the controlled multi-variate regression equation, ratings on the Control scale (#4) are higher for magnets by almost a standard deviation. Table 4.3, reporting values for subcategories of magnets on the PHICOL variable shows the large magnet effect persists across the subgroups. The same magnitude of difference favoring magnets and persistence of effect in the controlled equations (including the PHICOL variable) occurs on the more psychological "sense of efficacy" item (#5). What accounts for this?

Almost certainly, part of the magnet effect comes from getting better behaved and prepared students. That such students can produce a greater sense of efficacy (#9) for a teacher is probably true, but is a less adequate explanation for the magnet effect on the Control scale. The Control scale is based on teachers' ratings of their control over policy. While teachers who report higher efficacy are more likely to report higher Control, the respective survey items do not measure the same thing as revealed by a relatively low correlation of .31 between Control and Efficacy.

Consistent with the virtues of decentralization suggested by public choice theory, magnets' specializations and open enrollment policies seem to make their programs less subject to the level of central control and policies of

than were people who simply followed the normal pattern of public school patronage, giving the matter little thought" (p.96).

⁴¹⁸ A study of site-autonomy involving a magnet school has also reported low levels of parent involvement on the part of lower-income black parents (Dixon, 1986).

standardization experienced by nonmagnets. This freedom to be different may enhance teacher efficacy and contribute to the general pattern of more positive organizational outcomes for magnets.⁴¹⁹

The central office regulates and supports magnets just as it does all schools, but magnet staff appear to have some unique responsibilities and engage in more independent program, parent, and recruiting-related tasks.⁴²⁰ The following curriculum and program-related activities are illustrative:

-Staff from the foreign language immersion schools along with the foreign language curriculum specialist have had to work together intensively over several years to collect and create curriculum because there is a lack of high quality immersion curriculum, particularly in German.

-The principal (a former open education teacher) and staff from an elementary open education school traveled together to England to visit and learn about the British Infant Schools. They remain committed to the open education philosophy in spite of the resurgence of more conservative educational views critical of child-centered teaching and espousing traditional teaching methods, more frequent testing, and classroom competition.

-In the Art magnets teachers of the basic subjects and the art specialists have had to devise unique scheduling procedures to accommodate the higher student movement between rooms and Art-oriented activities; and also have had to devote extra attention to the goal of integrating traditional content and art activities and keeping a desired balance between the two areas.

-At a magnet high school the principal and staff are working with community leaders and university faculty to reorganize the curriculum around five "strands" that will emphasize social, technological, and international affairs and utilize resources from the adjacent university.

419 Preliminary regression analyses of MPS teacher survey data I conducted for the Center for Policy Research's "Systems of Curriculum Control" project indicate Control has a strong independent relationship with "looking forward to work" (#10), "motivating educational climate" (#12), and "a learning environment conducive to achievement" (#11). In each of these equations Control's effect was highly statistically significant ($P < .001$), and large (BETA = .21 to .34). In order to control for confounding effects of more efficacious teachers reporting both higher Control and higher ratings on the dependent variables, the "efficacy" item (#5) was used as an independent variable. Years teaching, educational attainment, and class load of respondents were also controlled. "Efficacy" was positively related, though with weaker (but statistically significant) effects, to the dependent variables; the other three controls were insignificant. Note, however, that magnets were not coded into these analyses as dummy variables, and so some of the effects are likely to come from the magnet schools.

420 For more on the related area of site-autonomy and effects of decentralized decision-making, see White (1987); Duke, et al. (1980).

Another factor that may account for magnets' higher Efficacy and Control ratings is the possibility of higher professional involvement of magnet staff. Though I lack quantifiable comparative data, interviews suggest a more than average amount of involvement of magnet teachers in activities related to professional and program development. This includes continuing training in growing and emerging magnet specializations like computers, math/science, foreign languages, and international studies, and participation in national associations corresponding to the magnet school specializations: Montessori, IGE, foreign language immersion, computer education, and art to name some of the more prominent. Perhaps the magnet teacher's professional identity as not just "a teacher," but an "Open Education teacher," or a "Montessori teacher," etc., may provide a greater need and justification for outside professional activities. These activities may make magnet staff feel more professional so that they demand and are granted more autonomy.

The Leadership scale (#11, Tables 4.2 and 4.3) indicates the responsibilities of operating a relatively more autonomous school, a magnet, may conduce to more effective leadership. (Table 4.1 shows the scale's content). The controlled magnet effect on the Leadership scale is more positive for magnets (.56sd) by statistically significant margins, with the positive effect persisting across the subcategories defined by the PHICOL variable (Medium-College magnets showing the strongest effect). Thus, measurable student composition differences are not the explanation. One explanation for the Leadership difference is that, on average, men and women with better management and leadership skills are assigned to or choose to be considered for magnet principalships because the job entails greater responsibilities and challenges. These people would receive higher leadership ratings wherever they worked as principals.

Doubtless, this is part of the explanation. But conditions of choice -- a specialized curriculum and an open enrollment status -- may also demand or make possible more effective leadership. The magnet principalship is almost certainly a job with relatively greater responsibilities and probably higher stakes. One reason for this is the greater activism and educational involvement of magnet parents; another is the increased general public attention to magnet schools. I discuss this more in the next section on competition.

A particularly crucial administrative responsibility, and an area of discretion unique to magnets, arises out their promotion and recruiting needs. A magnet high school principal's statement reveals the importance of attention to promotion. ["Being a voluntary enrollment school, do you have to advertise?"] "Oh, yes, we're definitely in the marketing business. We send people to all the middle schools to hawk our wares. I try to send my best people. We [the high school] also send a newsletter to all 8th grade parents. This includes articles written by students about business and about the school...We do what we can to engineer coverage in the press. We get quite a bit of coverage in the business periodicals in Milwaukee. This publicity is good for us, and gives staff a big boost. Whenever there are stories about the school I always circulate them to the staff." A magnet middle school principal described their position as a "free market" school.

The responsibility of promotion may be particularly important at the elementary and middle school levels where recruiting is almost entirely under the control of the principal, who typically enlists the aid of teachers and supporting staff. As described in Chapter 2, advertising and recruiting takes place in many ways including formal presentations (sometimes in the evening to reach adults after business hours), dissemination of letters and documents, informal one-on-one meetings (for instance, with inner city ministers).⁴²¹

Management of advertising and recruiting also requires attention to "details." Magnet entrance ways, for instance, are important for making a good first impression. Because magnets expect visitors, their entrance and office areas typically exhibit slogans, student productions, and other artifacts expressing the principles of their respective specializations. Open education teachers developed a "Visitor's Guide to Open Education." Promotion is especially important for the magnets that do not automatically develop waiting lists each year.

The magnet specializations appear to contribute to additional curriculum responsibilities for principals. My interview data are less clear as to whether magnet principals, like magnet teachers, have greater control over curriculum. Several magnet principals interviewed were heavily involved in setting up their programs, but others were not at their present magnet school during the critical formative years. Still, curriculum decisions and projects do not end after a formative period. Due to costs, it has not been possible to analyze fully the Study Commission survey of MPS principals, although I was able to compare magnet to nonmagnet principals on two curriculum control items. On "establishing the school curriculum," elementary magnet principals reported more control by a .22sd margin, middle school magnet principals by .85sd. On "selecting instructional materials," elementary magnet principals reported more control by a .24sd margin, middle school magnet principals by .75sd.⁴²² These items suggest middle school magnet principals may have a greater role in curriculum relative to their nonmagnet counterparts than elementary magnet principals.

Can both magnet teachers and principals have greater curriculum control? While curriculum control for magnet teachers might arguably come at the

⁴²¹ The principal of a magnet middle school described efforts to inform inner city parents of the school by telling ministers of the school's open enrollment status and registration procedures. She believed inner city parents were less aware of magnets than other parents because they did not read or did not understand the MPS INFO publication or other bulletins.

⁴²² Sample sizes: Elementary nonmagnets, $N = 74$; elementary magnets, $N = 11$ (one missing magnet); Middle school nonmagnets, $N = 27$; middle school magnets, $N = 4$ (no missing magnets). The return rates are 83% for elementary nonmagnet principals and nearly 100% at the middle school level. Although the very small sample sizes in the magnet category make T-tests dubiously informative, none of the differences are statistically significant.

expense of curriculum control for magnet principals, it is more likely that curriculum control shifts more to the school level in magnets than nonmagnets and both magnet teachers and principals have increased control over curriculum. And it may be a matter, not so much of direct principal involvement in magnet curriculum, but of magnet principals using authority and control to help insure that teachers deliver the magnets' specialized curriculum. As one principal put it, "The specialty status attracts parents initially, but the program is what has to work. Principals of specialty schools have to deliver what the brochure says...They must believe in their specialty; they are the most important factor in the school."

In sum, it appears that teacher survey items in which magnet teachers say they have more control over curriculum, discipline, and program probably reflect objective differences in control. Magnet principals, too, probably have somewhat greater administrative autonomy, and thus control over their work, than nonmagnet principals. It appears magnet schools operate in a somewhat less bureaucratically restricted environment, and work in magnets seems to be characterized by greater professional discretion. Part of the reason for this may be that magnets get easier-to-manage students, but, as choice theory would stress, part of the reason may also be inherent in magnets' specialized programs and open enrollment status. It may be less possible to use standard hierarchical rules and procedures to control a less standardized school. Magnet parents and teachers may have certain preconceived expectations about curriculum. Magnet principals probably experience greater accountability to families because they have chosen the school, and probably require more autonomy to manage the specialized program and enrollment responsibilities of magnet schools.

Next I discuss competition. Competition, which also has implications for the nature of work in magnets, is central in theories of higher productivity through the creation of markets in educational systems. Though conclusions about the link between competition and productivity must await further study, certain insights can be gained about how competition works in magnet/open enrollment systems.

A More Competitive Environment

None of the survey items directly measure perceptions about or practices of inter-school competition. But magnets do seem to operate in a more competitive environment. Below I describe why, and at the end of the discussion suggest how this may relate to magnets' higher ratings on particular survey items.

One fact of existence in magnets that probably creates a more competitive atmosphere is that successes and problems are more visible. Magnets are more in the public eye. More than once, magnet school staff used the term "fishbowl" to describe work in a magnet school. Since their inception, the magnets have received some national and much local exposure for contributing to voluntary integration and the creation of educational

alternatives for families.⁴²³ Magnets also receive many visitors, both prospective applicants and educators interested in learning about magnets.

Because the number of magnets is relatively small and each has a distinctive name and identity the magnets are readily comparable. Criteria include application levels or test scores (which are published in the newspaper). There is also a loose informal prestige hierarchy familiar to most MPS teachers and administrators and those parents constituting the group of most informed and active choosers in the client population. Although among nonmagnets there are individual standouts and schools with negative reputations, because they number more than 100, nonmagnets tend to blend together as a large undifferentiated set of "traditional/regular" schools. That the magnet "audience" tends to be those in the city who are most attentive to school events and to indicators of quality to begin with, adds to the competitive relations among magnets and between magnets and nonmagnets.

Because magnets' performance is more noticeable, it is more consequential for staff. When good or bad things happen at a magnet, not only are more people likely to find out about it, it is likely to make more of a difference. On the favorable side, success confers personal and professional rewards. The higher status magnets tend to receive more laudatory media coverage and presumably their staff experience the informal perquisites of status stemming from their identification with a "prestige school." For those considered to be a factor in creating program success, there is the possibility of career advancement -- teachers can become curriculum coordinators or building administrators, building administrators get promoted to larger, higher grade level schools, or to central office administrative positions.⁴²⁴

There are also aversive consequences to avoid: ebbing popularity, dwindling applications, and staff cuts. In addition to hurt pride, dwindling applications result in teacher transfers. In addition to teachers, principals may lose counselors, specialists, or an assistant principal. (Often percentages of

⁴²³ Not all of the exposure is positive. On the front page of an inside section, one article asked in half-inch letters, "Do specialty programs drain other schools of their leaders?" It included a large table comparing the number of applications turned down at each magnet.

⁴²⁴ Principals in particular tend to be credited with "getting a program off the ground" -- and they can acquire an esteemed reputation for their ability to do this -- or are held accountable for problems. This came through clearly in an interview with the assistant superintendent.

This is also supported in another way in a discovery that bodes well for research methodology. I had interviewed a large number of principals and observed principals in advertising programs before findings from the teacher survey were available. I was struck by the consistency between my observations about several principals developed from qualitative data and the survey data which revealed similar judgments about the same principals made by their staff.

positions are lost or gained). Principals find such cuts hurt program quality and scheduling flexibility.

While most magnets receive a fairly predictable number of applications from year to year, survival is not guaranteed. Over the last decade, several magnet schools and programs have folded because they did not get enough applications. A planned marine science program in the late 70s and a planned high school magnet devoted to the medical sciences and professions never developed for lack of applicants. Difficulties of one of the open education elementary magnets were discussed in Chapter 3.⁴²⁵ Presently, at each level, a few magnets struggle each year to get enough students in both racial categories to achieve their projected enrollment level. These consequences of enrollment shortfalls are also experienced by nonmagnets, but on the whole, the nonmagnet enrollment process (stage II) is more centrally regulated and less subject to the efforts of individual nonmagnet schools. (See Chapter 2 and 3 for more details on enrollment policies and patterns).

The competitive nature of the magnet environment does not stem just from the need to get enough students -- for most magnets this is not a problem -- but also from the desire to get strong students.⁴²⁶ Nonmagnet staff, particularly those with large numbers of non-neighborhood children, also have reason to be concerned about who has picked their school. They also would prefer strong students. However, while magnets' control over their enrollment should not be exaggerated, through their recruiting efforts and opportunity to advertise unique programmatic qualities, magnets do influence their admissions.

Competition appears to be most keen among magnets rather than between magnets and nonmagnets. This is probably a result of their generally greater dependence upon recruiting, their stricter racial balance requirements, and their awareness that they compete to some degree for a finite subset of the population: families most attentive to information, interested in a pedagogical

⁴²⁵ The recently terminated open education magnet middle school in its last years had an enrollment of about 285, and the second lowest total enrollment/number of classrooms ratio among the middle schools.

In interviews in 1985, the principal and guidance counselor both expressed concern about the school's low enrollment. Part of the problem, they believed, was the image of the "open education" concept as "anything goes," which they refuted, contending their program was more structured. They believed the school offered a good program, good social relations, and a safe environment; but perceived difficulty selling this. They talked about the possibility of changing the name of the school's program specialization.

⁴²⁶ This is one reason the elementary gifted and talented school, which starts at third grade, has difficulty recruiting blacks. Other elementary schools like to retain their academically strong pupils, especially black ones. Except for benefits to the students, there are no incentives for the staffs of other schools to nominate their students for the gifted and talented program.

alternative, and willing to leave their neighborhood schools. The act of recruiting itself probably contributes to a certain competitive atmosphere. For instance, occasionally magnet representatives as a group are invited to one place (eg. a school or the central office) so prospective parents or students can efficiently "compare goods," as it were.

Competition appears to be keenest among the middle schools. At the middle school level the number of magnets is smallest, children at this age are more mobile, and a desirable pool of clients disposed toward magnets is readily identifiable and accessible -- the children in elementary magnets. This is probably one reason magnet middle schools recruit heavily at elementary school magnets. Although the great majority of elementary magnet parents will automatically choose a middle school magnet, which middle magnet is chosen can be subject to influence.⁴²⁷ (At the time of the study, the creation of a third college preparatory magnet high school seemed to be creating new competitive pressures in what formerly was a kind of College Bound H.S. - Technical H.S. oligopoly).

Magnet schools also are in competition with suburban schools for the applications of black students. Currently about 3,000 participate black students transfer to suburban schools as part of Wisconsin's Chapter 220 program. Transportation is provided. Interviews suggest some inner city black families pass over magnets for suburban schools, believing the latter to be better.

Do these conditions of competition create incentives contributing to educational effectiveness in magnets? This is a more difficult question. If magnet staff experience more pressure or incentives to maintain a successful school, it is probably not, except for a few cases, directly from a concern about getting enough applications. However, the conditions of competition I have described may exert a different kind of influence that could contribute to productivity in magnets.

In my open-ended interviews most respondents in magnet schools and the central office argued that working in a magnet school is more demanding than working in a nonmagnet. This has a particular meaning. Magnet staff readily acknowledge they get academically stronger, more cooperative students. But they may bristle at the insinuation that working in a magnet is "cushy," as one magnet teacher characterized how some nonmagnet teachers perceive work in a magnet. The difference lies in the nature of the work -- more time spent dealing with and accommodating parents, more things "going on," extra advertising and recruiting burdens, the extra work of implementing and maintaining pedagogical specializations. One magnet principal stated quite

⁴²⁷ According to 1984-85 enrollment data, of the 633 students who entered the sixth and seventh grades of the four main magnet middle schools, 56% were former magnet school students. The remaining 44% were from about 100 other MPS elementary schools, nonpublic sectarian schools, and several suburban elementary schools. Since 13% of students at the elementary school level are enrolled in magnets, any given middle school's "fair share" of magnet elementary students should be 13%.

Climate items and between PHICOL categories of magnets. The purpose is to emphasize that while magnet status may on average have the positive effects I have discussed; it does not guarantee positive outcomes on the organizational measures. Not doing well in the magnet competition for applications and desirable students can hurt, just as doing well strengthens the organization.

I should begin by pointing out that consistent with choice theory, there is some evidence that voluntarism can promote greater value consensus in schools. Of the 13 items and scales (Table 4.2), two items (#7 and #8) on school discipline and a third (#13) "clear goals" measure different elements of value consensus.⁴³⁰ The controlled magnet effect on "disciplinary agreement" is .55sd; "support of discipline," is .64sd. The controlled magnet effect on "clear goals" is .65sd.

These ratings suggest as a group magnet schools may be more cohesive and consensual organizations. Three general factors doubtless working in concert probably account for these higher ratings in magnets. First, the technical requirements of offering a specialized program and greater organizational autonomy may give magnet staff a clearer sense of purpose in their instruction and management. Second, more related to the discussion on competition, there is probably a greater incentive in magnets, felt most keenly by magnet principals, to prevent disorder which can be noticeable and adversely affect a school's reputation and ability to compete for applications.⁴³¹ Third, there is probably a self-selection of people (principals, teachers, and parents) to magnets above average in their commitment and ability to encourage student discipline and more in agreement to begin with regarding educational goals. Thus, a greater consensus probably comes about to some degree through processes suggested by public choice theory.

In contrast to the Control and Parent Involvement dimensions, where magnet values on the items were relatively independent of the PHICOL variable, on the School Climate dimension, the Low College magnets have

⁴³⁰ This assumes the "teamwork" item measures the level of group planned and executed curriculum and instruction (i.e. team teaching), and not consensus on purposes and methods. The lack of a difference on this item is discussed in Section II.

While "clear goals" is logically distinct from value consensus, it is reasonable to assume a school higher on "clear goals" is more likely to have a higher level of staff consensus on educational purposes than a school lower on "clear goals."

⁴³¹ During the "shopping around" time as one teacher called the month before the stage I registration, magnet schools receive visitors on a daily basis. The orderliness of students in the halls doubtless makes an important first impression on a visitor. Note, in Appendix A, magnet teachers' ratings of discipline problems suggest magnets are more orderly schools.

Several principals told me of the necessity of avoiding bad publicity just before the stage I registration period.

Climate items and between PHICOL categories of magnets. The purpose is to emphasize that while magnet status may on average have the positive effects I have discussed; it does not guarantee positive outcomes on the organizational measures. Not doing well in the magnet competition for applications and desirable students can hurt, just as doing well strengthens the organization.

I should begin by pointing out that consistent with choice theory, there is some evidence that voluntarism can promote greater value consensus in schools. Of the 13 items and scales (Table 4.2), two items (#7 and #8) on school discipline and a third (#13) "clear goals" measure different elements of value consensus.⁴³⁰ The controlled magnet effect on "disciplinary agreement" is .55sd; "support of discipline," is .64sd. The controlled magnet effect on "clear goals" is .65sd.

These ratings suggest as a group magnet schools may be more cohesive and consensual organizations. Three general factors doubtless working in concert probably account for these higher ratings in magnets. First, the technical requirements of offering a specialized program and greater organizational autonomy may give magnet staff a clearer sense of purpose in their instruction and management. Second, more related to the discussion on competition, there is probably a greater incentive in magnets, felt most keenly by magnet principals, to prevent disorder which can be noticeable and adversely affect a school's reputation and ability to compete for applications.⁴³¹ Third, there is probably a self-selection of people (principals, teachers, and parents) to magnets above average in their commitment and ability to encourage student discipline and more in agreement to begin with regarding educational goals. Thus, a greater consensus probably comes about to some degree through processes suggested by public choice theory.

In contrast to the Control and Parent Involvement dimensions, where magnet values on the items were relatively independent of the PHICOL variable, on the School Climate dimension, the Low College magnets have

⁴³⁰ This assumes the "teamwork" item measures the level of group planned and executed curriculum and instruction (i.e. team teaching), and not consensus on purposes and methods. The lack of a difference on this item is discussed in Section II.

While "clear goals" is logically distinct from value consensus, it is reasonable to assume a school higher on "clear goals" is more likely to have a higher level of staff consensus on educational purposes than a school lower on "clear goals."

⁴³¹ During the "shopping around" time as one teacher called the month before the stage I registration, magnet schools receive visitors on a daily basis. The orderliness of students in the halls doubtless makes an important first impression on a visitor. Note, in Appendix A, magnet teachers' ratings of discipline problems suggest magnets are more orderly schools.

Several principals told me of the necessity of avoiding bad publicity just before the stage I registration period.

negative values on several items on which the other magnets have positive values. Table 4.3, column [3] suggests, outside of the disciplinary agreement and support items (#7 and #8), the Low-College magnets appear not to benefit from condition of choice in MPS when compared to Medium and High College magnets on items #10 through #12. On the "discipline" items (#7 and #8) higher magnet ratings persist across the PHICOL categories. But, the Low-College magnets have a modest negative coefficient (i.e. below the nonmagnet mean) on "clear goals" (26sd.), and larger negative coefficients on each of the other Climate items, #10, #11, and #12. Medium-College and High-College have positive coefficients on each of these items.

Differences between the Low-College magnets and the Medium- and High-College magnets are largest on the two items that may most directly reflect teachers' ratings of school quality. Some of the disparities are very large. On "the conduciveness of the school's learning environment to achievement" the difference between Low-College and Medium-College is 1.71sd; on "a motivating educational climate" the difference between Low-College and High-College is 1.67sd. The remaining disparities are somewhat smaller, being the smallest on the "looking forward to work item" (.59sd).

That the two Low-College magnets have positive ratings on the disciplinary support and agreement items, but not the other items may stem from who chooses them and why they are chosen. These two magnets, unlike the other magnets have the least geographically dispersed clientele. Though both enroll white students, relative to the other magnets, they receive very low level of white applications from outside the immediate adjacent attendance areas. They are probably the two magnets chosen least for pedagogical characteristics.⁴³² However, this pattern appears to matter less in the area of discipline. Like the Medium- and High-College magnets, ratings suggest the Low-College magnets are comparatively orderly schools -- something a principal can accomplish and most parents of any SES background

⁴³² At one of these magnets, approximately one out of three of the randomly chosen parents from the school in the telephone survey (n=84) had not heard of MPS "magnet schools." Qualitative data from the case study of this school, consistent with the survey items (#7 and #8), show the principal to be a "strict disciplinarian." However, on the specialization, the researchers write, "We concluded that very little open education actually was occurring. (p.20) Many teachers were critical of other teachers (p.22). Teachers continually stressed that the match between the present student population and open education was not ideal" (p.23).

The second of these magnets, the south side Montessori, has a very large number of whites from the immediate attendance area enrolled in the school. As I described in Chapter 3, Part One, it appears this school, situated in a white, near-south side neighborhood, and enrolling large numbers of whites from the closest neighborhoods, is chosen largely for its neighborhood value (familiarity and logistical convenience), though possibly also for being a magnet. For the majority of parents, it seems unlikely that the school's pedagogical specialization is significant in their choices. The test scores of these two magnets lowest and third lowest among magnets.

will support. Clear goals, presumably, is more of a reflection of agreement on curricular or broader educational aims, as distinct from disciplinary agreement.

This lower ratings from the Low-College magnets may reveal negative effects of voluntarism and competition. The attitudes of teachers in these magnets may show effects of "losing" in the competition among magnets for applicants in general, and the "right kind" of magnet parents in particular -- that is, those parents coming closest to the model of pedagogical choosing, whether on broad or narrow criteria. Magnet staff on the whole take pride in their specializations and their magnet status. They like it when they are chosen for their pedagogical specializations. When, as is the case with the two Low-College magnets, pedagogical choosing plays less of a role in admissions, this can have a demoralizing effect on staff, particularly when they compare themselves to other magnets with longer waiting lists, well-developed programmatic specializations, and active parent support groups. That magnets are individually distinctive and "visible" schools, makes such "frog pond" comparisons all the more likely.

Alternative explanations are conceivable. The Low-College magnets' low ratings (and conversely the Medium-College and High-College magnets' high ratings) may result from factors having little to do with voluntarism or competition. The Low-College magnets' negative ratings result not so much from teachers' perceptions of lack of competitive success or their ailing morale due to not being chosen for the right reasons, but "merely" from a negative reaction to their lower-SES clientele. The shortcoming of this explanation is that it does not explain why the Medium-College magnets show a generally more positive pattern of outcomes than the High-College magnets. The simplest explanation of the Medium-College magnets' impressive results is that they are strongly influenced by the effects of several schools in the Medium-College category (Open Education and Spanish Immersion) that seem to operate as paragons of effective schools and choice theory. While the Medium-College schools as a whole are individually above average performers in the Staff Relations and Climate dimensions, these two schools show exceptionally high ratings.

The survey outcomes and the explanations I have offered in this section suggest voluntarism and competition can operate and make a difference in organizational quality. I have discussed how magnets operate in an organizational environment in which parent demands are greater, school staff have somewhat more autonomy, and staff (especially principals) appear to experience a closer connection between performance and organizational consequences.

Of broader theoretical significance, is the proposition that system-level relations between parents and schools, between schools and the central office, and among schools can be changed by conditions of choice. Effective schools theory focuses on technical practices -- how effectively teachers and principals perform technical tasks. Other social theories are resigned to the determinacy of family social background. The decisive variables of choice are not internal to schools as organizations, or located within the character or abilities of students. Choice theory emphasizes the meaning and incentives created by choosing and being chosen or not chosen.

It is important to keep the variables of choice theory in perspective. It is well to recognize the variation among magnets on the survey items. Some magnets have survey ratings that are lower than average for the elementary schools as a whole. Indeed the variation in performance among magnets is almost as great as the variation in the entire population of schools in the district. The conditions of choice in which magnets operate cannot overcome effects of bad leadership, low morale, or inadequate central support.

CONCLUSIONS

According to public choice theory, magnets should perform at higher levels than uniform, attendance area schools because magnets are distinctive schools chosen under open enrollment conditions. Theory and research on schools of choice has focused mainly on voluntarism and competition as mechanisms of improvement. While a specific theory of school effectiveness is lacking, several causal processes have been postulated either to predict higher levels of technical efficiency for schools under conditions of choice or to explain differential performance of schools of choice, such as private or alternative public schools. In theory, choice can improve education by increasing parent involvement, by producing a greater value consensus in schools, by increasing staff control over curriculum and school policy, and by infusing an element of "jeopardy" into school climate through competition.

The comparison of magnets to nonmagnets in Section II. examined whether the two categories of schools differ significantly on four major organizational quality dimensions measured by the teacher survey items. (Parent-Involvement, Control, Staff Relations, Climate). The presumption was that there ought to be differences, given the formally distinctive specializations of the magnets, their open enrollment status, and the preferred status of magnets among families from high-College attendance areas described in Chapter 3. A finding of no significant differences would seriously question the improvement potential of choice.

After finding significant differences on most items, I then assessed the extent to which magnets' more favorable organizational ratings could be attributed to self-selection processes. Magnets were compared to nonmagnets applying statistical controls for percent low-income, percent minority, and, among magnets, a proxy measure for the percent of students from high-College attendance areas. The positive magnet effect that persisted across most of the items lends support to public choice theory, although positive effects of unmeasured self-selection processes cannot be discounted.

Section III. offered some explanations for the differential organizational ratings that suggested the role of mechanisms consistent with public choice theory. The large size of the magnet effect on the Parent-Involvement and Control dimensions, their relative independence of student composition variables, and corroborating evidence from interviews indicate mechanisms of voluntarism and competition may account for some if not most of the magnets' more positive outcomes on the items in the Staff Relations and Climate dimensions that are more direct measures of organizational quality.

The PHICOL breakdowns revealed one particularly significant pattern. The two magnets in the Low-College category showed higher ratings than nonmagnets on the parent-involvement, control, and leadership scales, and on the efficacy and disciplinary agreement and support items; but on items more directly reflecting teachers' judgments of school quality the Low-College magnets had ratings below the nonmagnet mean. This may be a result of unmeasured compositional effects, or, an interpretation which supports choice theory more, the Low-College magnets' relatively low ratings may result from lack of competitive success or from relations with their clientele that are devoid of the voluntarism more characteristic of the Medium- and High-College magnets.

Because of my intent to explore mechanisms consistent with public choice theory that may account for magnets' higher ratings, this analysis has neglected some other factors that I shall now discuss. I have discussed specific causal processes: for instance, effects of voluntarism and distinctiveness on perceptions of control and efficacy; or consequences of competitive environment for principal/teacher attentiveness to school image; etc. It is necessary to take a broader and more integrated view of the organizational characteristics of magnets and how they result from the conditions of choice in MPS.

The problem with defining the question of magnet effects as either consequences of voluntarism and competition or self-selection processes is that it casts self-selection processes in a "rival hypothesis" role which is not entirely appropriate. As with debates over effects of self-selection on achievement in private versus public schools, one should not attribute outputs to organizational qualities when inputs are very different. The analogy in the case of magnets, and the hypothesis rivaling choice theory, is that teacher survey ratings might be a direct function of student characteristics which are closely related to SES (hence the need for statistical controls). This explanation suggests that no matter what school magnet choosers attend, they would confer the same benefits to organizational quality. This may not follow, even while it may be true that strong parent support and favorable student predispositions may impart to magnets substantial organizational advantages. The reason is that a key causal mechanism may lie in an interaction between magnet families and magnet principals and teachers. (Note that a similar argument applies to the claim that magnet schools' organizational qualities are "merely" a function of self-selected staff. This has also been implied in several passages above).

The interactive explanation -- a kind of matching hypothesis -- proposes that a factor in magnets' organizational qualities is the coming together of teachers, principals, and families with similar expectations. During and in the years following the formation of a magnet there is a "shake-up" where teachers not liking the new pedagogical specialization or different organizational demands transfer out. At the same time, requests for transfers to magnets can be motivated by an interest in the same occupational characteristics. The same kind of process doubtless happens with principals. Although both principals and teachers are allocated to and away from magnets by central assignment processes, these reassignments are not at all unrelated

to preferences and competencies.⁴³³ As discussed more extensively in Chapter 3, families attracted to magnets are self-selected on the basis of, among other attributes, particular pedagogical preferences, greater attentiveness to school information, and attitudes toward the neighborhood school. Like magnet staff, they also come to magnets with certain preferences and may approach their choice as an opportunity to fulfill certain expectations.

Thus, what may occur from the conditions of choice is a coalescence of people, self-selected on specific capacities and preferences to begin with, and seeking something they believe they are less likely to find in nonmagnet schools. These may be teachers and principals who prefer, and work more effectively with, more autonomy and parent involvement. They flourish at a magnet, and would feel stultified at another school with heavier central controls, no opportunity to recruit or advertise, and less parent involvement. Likewise, magnet-choosing families might not be just as supportive or committed at any school. The reason they leave a neighborhood school may be, not only that it lacks a pedagogical specialization they want, but also a belief the neighborhood school is less open to parent participation -- as the one parent suggested in saying she felt like she needed a pass to be there. In contrast to the selection explanation, then, it may not be valid to assume that those choosing magnets would necessarily confer the same organizational benefits to schools not meeting the expectations raised by the magnet name, specialized pedagogy, and open enrollment status. The interaction effect contributing to higher magnet ratings may well lie in the self-fulfilling nature of expectations of greater parent involvement, school-site decision making, and competition that inhere in the process of choosing magnets and in the organizational culture of magnet schools.

This supports the "net gain" thesis of the contribution of the magnets to educational productivity in the school system: organizational gains of magnets are not won at the expense of nonmagnets, but derive from processes intrinsic in a "magnet submarket." Theoretically, there is a segment of the market that under more centrally controlled conditions, without choice and educational alternatives, is prevented from realizing pedagogical preferences and particular organizational forms. The opportunities created by choice, by "deregulating" a portion of the schools, allows the realization of these preferences in ways that are reflected in the magnets' pattern of higher organizational ratings. Choice, in this view, removes barriers that would otherwise suppress interaction effects that occur when practitioners and families meet under the conditions and expectations supported in magnets. In the absence of these conditions, this segment of families and practitioners, confined to neighborhood schools, or assigned schools, might have to conform, from their point of view, to a less desirable and less productive organizational modus operandi. A certain fraction

⁴³³ It is necessary not to overstate the flexibility of personnel allocation processes. If a teacher has seniority and does not want to leave a magnet and a case for transferring the teacher cannot be easily made, the transfer will not occur. Teacher transfers into magnets are made on the basis of seniority when an opening has more than one applicant. Transfers of principals are made on the basis of multiple criteria.

could be expected to exit the system.

If the self-selection explanation's validity as a rival hypothesis to public choice theory can be questioned, a more serious complicating issue in interpreting the magnet effect stems from the interdependence of the comparison groups. Even if the magnets' positive outcomes do not derive merely from characteristics of their students, we must consider possible negative effects from ill-feelings among many nonmagnet teachers and principals from the belief that magnets skim off the best students and get more resources. It may be true that in the absence of magnets, those students would not be distributed at and appreciably improve working conditions at a larger number of schools. Further, that magnets get substantially more resources and have smaller classes seems, on the data available to me, not to be the case. Nevertheless, the beliefs are real, though how widespread they are and their significance is unclear. Still, the beliefs might contribute to some of the lower nonmagnet ratings. This issue, and the related question of system-level effects of choice in systems *without* formally distinguished schools, needs more research and cannot be resolved here.

A second challenge to the net gain thesis: it is difficult to assess the extent to which magnets' higher organizational ratings may stem from differential central support in ways more subtle than resources. For instance, the central office may respond to complaints or requests from magnets more quickly and effectively. If nonmagnets on average must contend on an ongoing basis with sizable differences in service from the central office, this too could be a source of aggravation likely to affect survey ratings.

These questions are testable and remain on the research agenda. Because public choice in education has not been the tradition in the United States, useful public choice research and theory is scarce. We need to learn more about the educational, administrative, and political consequences of differentiated schools, and about how choice affects relations between families and schools and how competition affects schools and school systems. Research on site-autonomy can show how public schools might operate under the more independent circumstances of markets. Studies in countries with voucher-like policies can provide some of the illuminating comparisons needed among districts and at larger units of analysis.⁴³⁴

⁴³⁴ See, for instance, Doyle (1984), or articles in Levy (1986).

CHAPTER 5

PROSPECTS AND ISSUES IN CHOICE THROUGH MAGNETS AND OPEN ENROLLMENT POLICIES

INTRODUCTION

There are important lessons from the MPS program of choice. This chapter draws from earlier findings and presents new ones to explore broader implications of choice for family sovereignty, equity, and technical efficiency. I focus particularly on distributional implications of the shift from centralized assignment to family choice, and from formally uniform to formally differentiated schools. In drawing conclusions, I use the two frames of reference that I have used throughout this dissertation. I compare conditions and consequences of choice in MPS to centralized mandatory assignment systems with uniform schools and to normative principles of choice theory.

Section I. describes how allocative efficiency can be conceptualized and how outcomes of choice in MPS compare to centralized assignment systems in allocative efficiency. This view of outcomes is based on a preference function model of family choice and emphasizes the system's goal of maximizing choice while achieving school desegregation. Since allocative efficiency has been dealt with more extensively in Chapter 3's conclusion, I will only briefly reiterate key points.

Section II. discusses implications for equity and technical system-level efficiency of allocating children to schools by family choice. The preference function model is a useful way to conceptualize the issue of maximizing choice in school systems, but it lacks an adequate conception of equity. This is addressed as I offer different ways to interpret self-selection and stratification in MPS.

Section III. examines limits to choice. Empirical findings compel speculation about how things might be improved. I discuss prospects for improved information and expanded magnet opportunities, and more general potentialities and limits of choice and decentralization as instruments of better public education.

SECTION I. A MORE ALLOCATIVELY EFFICIENT MATCHING OF PREFERENCES AND ALTERNATIVES

In contrast to centralized assignment systems with uniform schools, conditions of choice in MPS "redistribute" children among schools based on varying family preferences. Centralized assignment systems allocate children to school either exclusively on the basis of neighborhood boundaries, or on the basis of centralized reassignment decisions in the case of mandatory desegregation methods (e.g. pairing or clustering). Both of these assignment systems are attendance area-based, allocating children to schools based largely on where parents can afford (or choose) to live. With the exception of the wealthy who can choose schools by choosing neighborhoods and who do not want nontraditional alternatives, centralized assignment systems lack family choice as defined by public choice theory.

The differentiation of schools and the enrollment options in MPS provide each family with a number of alternatives. The main categories of choice were described in Chapter 2: the "regular" neighborhood school, or a nonneighborhood school that can be either (a) a magnet, (b) a nonmagnet school chosen for a formally distinctive within-school program (available on an open enrollment basis), or (c) a nonmagnet ("regular") school. Schools within each category vary on pedagogical (particularly magnets or schools with PATs), logistical convenience, neighborhood demographic, and student composition variables, as well as in more idiosyncratic ways.

Given the relative oneness and flexibility of the enrollment process and generally high levels of awareness of options, a preference function model explains variation in choices. Chapter 3 suggested the categories of choice above are salient in the decisions of families, and that choices for schools within categories are made on a variety of criteria. Choosers have different preference functions which differentially weight criteria including community ties, the importance of neighborhood classmates, a racially integrated school environment, logistical convenience, specific nontraditional pedagogical alternatives, the perceived academic abilities and attitudes of classmates, and other more specific attributes of alternatives.

Families differ in their values and needs and conditions of choice in MPS expand the range of available alternatives. As compared to either a neighborhood schools system or a mandatory reassignment system, the options in MPS probably more effectively accommodate the heterogeneity of values and interests that exist in the urban population. In this sense the system of open enrollment and differentiated schools can be described as increasing allocative efficiency. If family sovereignty is defined as the level of family control over school assignment and the opportunity to choose among alternatives that provide qualities that differ from the neighborhood school, then the conditions of choice in MPS, where awareness of options is adequate and access is sufficient, can be claimed to have enhanced family sovereignty.

Theoretically, on assumptions of choice theory, this would suggest a net reduction of dissatisfaction compared to mandatory assignment systems lacking school alternatives and open enrollment. On the other hand, if expectations rise, for instance as a result of the development of new school alternatives, dissatisfaction levels may not change appreciably. Viewed this way, allocative efficiency is an empirical question. The measure of this might be the retention of middle-income families, the level of racial conflict, the degree of family participation in schools in MPS as compared to comparable (size, SES, ethnic variables) mandatory systems.

In sum, the preference function model of allocative efficiency highlights the function of magnet-based voluntary desegregation as a solution to the political problem of maximizing choice in desegregation. Allocative efficiency assumes each school alternative has a set of attributes differentially weighted in family utility functions. The level of allocative efficiency achieved depends upon the system's ability to accommodate diverse family preferences in the context of the logistical and political constraints imposed on the system.

The preference function model is a useful way to conceptualize the question of how constraints and incentives can be designed to optimize the achievement of preferences. However, certain issues concerning assumptions of choice theory and outcomes of self-selection processes are raised by this study. School choice is not just a matter of shopping for a school with the right combination of pedagogical, social, and logistical attributes. In a school system, preferences do not have the degree of independence found in other private sector markets. The realization of preferences depends in part upon how other families choose. Moreover, as critics stress, some choosers make uninformed or highly constrained choices and get unpreferred schools. These issues are explored next in the context of an analysis of implications of family choice for equity.

SECTION II. IMPLICATIONS OF ALLOCATION BY FAMILY CHOICE FOR EQUITY: SORTING BY ACADEMIC PREFERENCES

Allocative efficiency as conceived above does not explicitly address the educational quality of schools families choose. Yet, the very success of the system in accommodating family preferences has important consequence for equity. Findings from Chapters 3 and 4 raise serious questions about who gets what school and why as a result of allocation processes in the MPS system. Magnet choosers seem to get the best schools; and those unaware of magnets or other school alternatives may choose schools they would avoid if they knew better.

In considering different ways to interpret consequences of family choice, it is necessary to describe more explicitly what sort of allocation processes raise issues of equity that may result from choice. Below I will suggest choice may result in a modest increase in segregation by what I will refer to as a "commitment to academic achievement" variable, and a modest reduction in segregation between schools by SES. Depending upon one's views, this pattern can be defined as a problem for equity or as progress in meritocratic allocation.

I begin with the assumption that families differ on an academic "commitment" variable. This might be thought as a kind of effort measure. Families high on the commitment variable are high on a subset of related factors: attentiveness to school information, preparedness for the early registration procedures necessitated by choice, assertiveness to influence administrative discretion to gain assent to family educational preferences, and support of school disciplinary and academic goals.

For heuristic purposes, the MPS family-choice assignment system can be viewed as a competition among families for the scarce resources of achievement-oriented classmates (children from higher commitment families). Families high on the commitment variable are at once more vigorous competitors and, for other families, are the objects of the competition.

Families lower on the commitment variable engage less in the search for the most achievement oriented classmates. As an example, described in Chapter 3, a parent interviewed had little knowledge of alternatives and admitted she

did not pay attention to the literature sent from the central office -- her children went to the high school she attended as a child. This parent is not alone in choosing in this way. Recall also the parent survey item showing most parents rate magnets higher in quality compared to their neighborhood school; yet far fewer apply than rate magnets higher, choosing instead the neighborhood school because it is part of the neighborhood and within walking distance.

Although it is sometimes difficult for academic maximizers to understand why, not all families conform to normative precepts of utility maximization with academic achievement as the goal. Although viewing choice as a competition for academically strong classmates emphasizes a single goal, in reality not all parents engage in a single-minded pursuit of the most academically effective school. Many believe their chosen school, neighborhood or otherwise, is adequate and prefer the set of attributes it offers. They represent a class of choosers, maximizing preferences perhaps, but not academic achievement to the same degree that other parents do. (To use Herbert Simon's terms, they are "satisficers" rather than "optimizers" of academic achievement). This view is consistent with the allocative efficiency model described earlier.

Under conditions of open enrollment and adequate information, this model of allocation, compared to neighborhood-based systems of assignment,⁴³⁵ increases diversity of SES within schools. This is based on the reasonable assumption that neighborhoods are fairly homogeneous in SES, and that SES is not perfectly correlated with the academic commitment variable. (This is not to say that SES no longer counts. SES is likely to be related to the commitment variable, but the relationship is far from perfect. At each level of SES there is variation among families on the commitment factors). At the same time, the extent of segregation by SES between schools decreases, but schools become more homogeneous with respect to the commitment variable.

The model of allocation based on the commitment variable is a simplification, but there are reasons to believe it reveals a possibly important difference between choice and neighborhood-based assignment systems, and reflects a property of allocation in the MPS system. Given variation among families on the commitment variable and an open enrollment system that draws large numbers of students, but only a fraction of the total, out of each neighborhood, it is plausible that families "high" on the commitment variable find each other. In an effort to gain access to a potent academic resource -- other academic-oriented families -- they are more likely to sort themselves into the same schools.

⁴³⁵ Assessing comparative differences is more complicated if a mandatory reassignment system with re-drawn attendance areas is assumed. In such a system, intra-school variation in SES composition also is likely to be less than under neighborhood assignment, because of the integration of lower-income blacks with higher-income whites. Intra-school variation in SES might decrease also from loss of middle-class residents.

Although the process is not confined to magnets, self-selection into magnets illustrates the process of families high on the commitment variable choosing each other.⁴³⁶ Families lower on the variable are selected out by factors such as attentiveness to information about alternatives, equipments of registration, and the necessity in most cases of leaving a neighborhood school. The location of magnets preponderantly in the inner city also selects out families who prefer a "regular" school (without a special status) with neighborhood kids, known values, and close to home over a special status school in an unpreferred location.

The "other side" of this self-selection story is that families lower on the commitment factors are also more likely, on average, to sort themselves into the same schools. Doubtless, they are unlikely deliberately to seek out less achievement-oriented classmates, although parents who avoid magnets because they believe the academic environment is too challenging for their child are doing this. Mostly, however, sorting processes on the commitment variable require only inaction with respect to non-neighborhood alternatives. If an attendance area loses families high on the academic commitment variable, and receives no students, or receives students from families lower on the commitment variable, the receiving school will become more homogeneous with respect to the variable.

Several examples of this self-selection process have been described. Inner city attendance areas lose large percentages of children. Those selecting magnets and suburban schools through the state's chapter 220 program are almost certainly, as a group, more like the higher commitment families of the allocation model. Those that remain, however, can be higher on different variables -- those underlying preferences for the community or a rejection of busing.

A second example of sorting processes with important implications is suggested by data on test scores. Chapter 3, Part One, presented data suggesting that inner city stage II choosers who select schools in high-College attendance areas in certain regions of Milwaukee may be seeking academically oriented classmates; applications to south side schools -- Milwaukee's south side has lower levels of educational attainment -- may be submitted on different criteria, or simply on the basis of less knowledge of where the most academically-oriented classmates are likely to be found. Also, inner city families choosing "late" are more likely to have to choose from remaining open schools which are preponderantly on the south side. The regression below indicates (Table 5.1), controlling for school (percent) Low-Income, 5th grade reading test scores of black students in nonmagnets on the south side are lower than test scores of black students in north side nonmagnets by a substantial margin (.77sd); this margin, is equivalent to the margin by which magnet test scores of blacks exceed those of blacks in nonmagnets (.75sd), with the other variables controlled. Comparing magnet test scores to

⁴³⁶ These sorts of selection processes are likely to occur wherever demand for a sought after good exceeds supply (e.g. seats in PATs, Four-year-old Kindergartens, nonmagnets with positive reputations).

=====

TABLE 5.1 REGRESSION RESULTS OF BLACK 5TH GRADE TEST SCORES ON PERCENT LOW-INCOME, NORTH-SOUTH DUMMY, AND MAGNET-NONMAGNET DUMMY VARIABLE

Dependent variable: Score (Iowa Test - Reading.)
 Minimum value = 115.3
 Maximum value = 145.8
 Standard Deviation = 4.82
 N = 99

Regression Results:

R SQRD=.28 · MLTPL R=.53 ADJST'D R SQR=.25
 STAND. ERROR OF EST.=4.17

<u>VARIABLE</u>	<u>COEFF.</u>	<u>S.E.</u>	<u>ST.COEFF.</u>	<u>P(2 tail)</u>
<u>Constant</u>	130.813	1.802	.000	.000
<u>Low-Income</u>	-.079	.031	-.234	.012
<u>North-South</u>	-3.727	.913	-.361	.000
<u>Magnet</u>	3.647	1.287	.257	.006

PEARSON CORRELATION MATRIX:

	<u>Score</u>	<u>Low-Inc.</u>	<u>N-S</u>	<u>Magnet</u>
<u>Score</u>	1.00			
<u>Low-Income^a</u>	-.26	1.00		
<u>N-S^b</u>	-.35	-.11	1.00	
<u>Magnet^c</u>	.34	-.25	-.07	1.00

- a Percent of children in the school on free and reduced cost lunches.
 b North=0 South=1
 c Magnet=1 Nonmagnet=0
- =====

nonmagnet south side test scores of blacks, then, the difference is a very large $1.52sd$.⁴³⁷

These self-selection processes are, of course, far from "perfect" in a purely statistical sense. The commitment variable is a parsimonious, but rough, theoretical construct. Moreover, sorting processes are never determined by selection on a single variable. Families low on the commitment variable can gain access to academic achievement-oriented classmates on logistical convenience criteria. Conversely, there are families who want badly to get into particular schools or programs and who may be "model" maximizers of academic preferences, but are unsuccessful due to reasons unrelated to their commitment -- random lottery processes for over-subscribed schools and prohibitive transportation burdens can reduce selection effects operating on the commitment variable. Nonetheless, logic and evidence suggest this selection model may capture a certain reality of allocation when family choice rather than attendance area boundaries places students in schools. Future studies need to investigate characteristics of academic choosers and distributional effects of system-level self-selection processes.

Note that in an open enrollment system formally differentiated alternatives probably facilitate the sorting-by-commitment processes described above by creating a set of non-neighborhood alternatives limited in availability through supply, information costs, and procedural requirements to access. In the absence of formally identified schools or programs -- that is, if the system just had open enrollment and did not change anything else -- high commitment families in high education neighborhoods would have little reason to leave neighborhood schools, other than the SES and racial composition of their school. There would be no reason for them to believe some other school was attracting academic achievement-oriented families. Magnets create this reason. As attractive formally identified non-neighborhood alternatives, they make people leave their neighborhood school if they want to attend a school where there is a higher probability of joining other families self-selected on the commitment variable.

It is likely, however, in an open enrollment system without magnets or other formally identified special programs, that better schools (academically) and similar self-selection processes would evolve. Some schools due to

⁴³⁷ These differences may reflect systematic differences in effectiveness of the categories of schools, thus confounding the interpretation that the test score differences reflect self-selection processes on the commitment variable. Because of the measurement properties of standardized tests, I suspect the above explanation is essentially accurate, but that the magnitude of the between-category differences may over-state the self-selection effects. That is, the between-category differences on the hypothetical commitment variable may be less than implied by the test score differences, say, a $.35sd$ difference on the commitment variable between, for instance, choosers of south side and north side nonmagnets. However, this does not make these attendance patterns any less of an issue. Indeed, this qualification suggests the self-selection processes can be negatively compounded by school effects.

supportive family involvement, effective policies, and better staff would distinguish themselves from the pack and become favored schools for academically-oriented families. Also, schools in affluent neighborhoods, or more likely high education neighborhoods, would be differentially sought after. Both these processes occur in MPS in the nonmagnet market. Because information acts as a selection factor, grouping of relatively more academically ambitious families in certain schools would be likely in any system of choice.

Interpreting Self-Selection: How Does It Compare to Central Assignment?

How one interprets self-selection processes produced by family choice depends upon how one views causes of the attendance patterns, the value one attaches to family sovereignty, and how one evaluates school quality under magnet/open enrollment conditions as compared to other alternatives, whether more or less centralized and regulated. I will discuss these considerations below in exploring consequences of choice for goals of equity and achievement.

The fact of unequal schools per se is not the issue here. Inequalities among schools in traditional systems also exist. Choice in MPS has neither eliminated quality distinctions among schools nor broken the link between student social background variables and a school's perceived quality. If choice, or more specifically magnet schools, do not eliminate inequality, they do not necessarily create, reinforce, or increase it.

The issue is one of comparative advantage. Which approach -- or more precisely what combination of choice and central control -- comes closest to achieving ideals of educational equity. This question must be addressed because decisions are currently being made by legislatures and school boards across the country on assumptions and arguments from choice theory. I cannot address internal processes in schools, with racial relations, tracking processes, and the like. However, school-level distributive effects of choice are a serious issue and need to be carefully examined.

Net Gain Versus Zero Sum.

The most pressing issue concerning inequality in systems of choice, one likely to arise in all education choice markets, concerns the quality of education for families who do not fare as successfully in the choice process -- put more bluntly, those who get "the leftovers." That not everyone gets the school they want or that not everyone cares most about academic quality, is less an issue if everyone gets a school where they can get a decent education. But, what if choice substantially increases stratification of quality among schools, depriving many families of an adequate education? Even if choice makes allocation of educational goods more meritocratic, it is unlikely increased stratification among schools would be an acceptable tradeoff.

This is a question of comparative technical efficiency of systems of choice and centralized assignment systems, where technical efficiency means comparative educational effectiveness given the same inputs. Findings and conclusions from Chapter 4 are relevant here. I suggested that magnets may benefit organizationally in ways that arise from the interaction of family

choice and self-selection processes. If this is true and magnets' qualities are not gained at the expense of nonmagnets', then a net gain argument can be made that choice through open enrollment and magnets, or similar policies, may provide a way for big city districts to accommodate needs and expectations of a fraction of families (and perhaps staff as well) for a certain kind of school -- one with a high level of parent participation, greater site autonomy, and demanding expectations. Choice may be able to produce excellence in big city districts by removing central guidance and restrictions from some schools that do better operating in a more free market-like environment. The net gain thesis is that these results can be achieved without compromising the quality of other schools. Choice releases potentialities already inherent in the system.

It is more debatable whether voluntarism or competition also works for nonmagnets. As discussed in Chapter 4, nonmagnets operate in a more traditional organizational environment. They lack a distinctive specialization to advertise; staff have less reason to feel chosen for particular programmatic or status qualities; and it appears nonmagnets operate less autonomously as organizations. It is unlikely nonmagnets, even though they are chosen schools, experience the form of competitive pressure and the favorable outcomes of voluntarism that seem to contribute to magnets' generally more positive organizational qualities. What remains unclear, however, is whether or not nonmagnets on the whole are worse off than they would be were they to operate under a mandatory reassignment policy.

This can be argued both ways. Supporting the net gain thesis, even if nonmagnets do not benefit in the ways magnets do from distinctiveness, competition, and autonomy, nonmagnets may benefit from voluntarism more generally. Under conditions of choice there is less state compulsion. Both blacks and whites not wanting to leave the neighborhood school in most cases do not have to. This is a good in itself, but may also yield a return to individual schools receiving a more voluntarily enrolled student body. Children and their resentful parents forced to leave a neighborhood school probably bring more problems to a receiving school than children of families volunteering to attend. Mandatory reassignment using school pairing or clustering is unlikely to produce the educational benefits accruing from gains in family sovereignty and allocative efficiency made possible through magnet-based open enrollment.

Secondly, in the absence of magnets, the system is likely to lose a portion of potential magnet families (and perhaps staff) to suburban schools. This is the argument referred to in Chapter 2 that magnets improve big city schools systems by introducing innovations and retaining middle-income families. Magnets probably retain in or attract to big city school systems families who would otherwise not enroll. Presently there are several hundred whites from Milwaukee's suburbs attending magnets as part of the state's Chapter 220 program. Clearly, retention of whites contributes to racial desegregation goals in Milwaukee (racially isolated white schools are not allowed).

Can retention of middle-income families in the system with magnets yield other system-wide benefits? The answer lies in a broader political and

economic analysis beyond the scope of this dissertation. We need to know if a larger middle-class political base helps the system in state-level education politics, if a larger middle class in a city the size of Milwaukee improves economic opportunities for teenagers or improves city services in ways that help education, and answers to related questions on which there is currently little research to my knowledge. Given that most analysts view "white flight" and middle-class migration out of big cities as a problem, policies that serve to retain whites and middle-class families in big cities would seem to be in order.

One can counter the net gain thesis with arguments claiming costs and benefits are more zero-sum in nature. Essentially, these arguments boil down to the claim that choice increases the extent of educational inequality within the system -- good schools and bad schools drift farther apart when families control allocation. The argument asserts both a direct negative effect of the development of visible quality distinctions among schools, and less direct negative effect of self-selection. First, without magnets, the system would be without the tensions created by a formally distinctive set of schools and the resentment and charges of "elitism" this provokes. Indeed, even some magnets faring poorly in the competition among magnets for status and applicants may suffer morale damage. As discussed in Chapter 4, if these outcomes impair educational effectiveness of some schools, this could offset magnets' gains.⁴³⁸

Second, and a related concern, is the possibility that families most uninformed about enrollment processes and about schools to choose or avoid, are most likely to end up in schools more astute choosers have avoided. Though this can happen throughout the system, effects of this may be most acute in the white south side, lower-income region E, and in a few other region E-like neighborhoods. Inner city lower-income white neighborhoods are relatively avoided by the more informed black choosers seeking to leave racially isolated schools. They go to magnets, nonmagnets in high-College white neighborhoods in Milwaukee (e.g. region C), or suburban schools through 220 transfers. At the same time, some of the more academically ambitious lower-income whites from inner city white neighborhoods have also left for magnets -- roughly 5%. Thus, schools in lower-income white neighborhoods are likely to enroll both blacks and whites who may come from the most ill-informed and educationally ill-prepared families. These circumstances present a serious handicap to efforts to promote genuine racial integration, much less to achieve educational goals.⁴³⁹

⁴³⁸ Advocates of more competition and accountability through mechanisms of family choice might contend such outcomes are inevitable and necessary, and in the long run beneficial to education. Bad schools should expire, and send a signal to others to create incentives to stay competitive. Section III. discusses this in more detail.

⁴³⁹ Because magnets are usually placed centrally in cities and because low-income black and white neighborhoods are often adjacent, this outcome of patterns of self-selection is probably not peculiar to Milwaukee.

More study of these complex comparative questions is in order. There is an egalitarian instinct to assume uncritically that the kinds of sorting processes I have described are inequitable; in fact we do not know. It needs to be recognized that it is not just the fact that families lower on the academic commitment variable are more likely to choose on criteria that group them together, that is the issue, but how the average level and the distribution of achievement compares under conditions of choice to conditions of centrally controlled assignment.

The Significance of Family Sovereignty

How we view outcomes of choice compared to more centralized systems does not hinge entirely on empirical questions of comparative technical efficiency and stratification. Another consideration in comparing outcomes under choice to centralized systems is the goal of family sovereignty. Under certain conditions, family sovereignty could be regarded as sufficiently important that choice should be preserved, even if some people choose in ways inconsistent with normative views on pedagogical choosing. I discuss next how one's position on family sovereignty might influence one's interpretation of technical outcomes of choice in MPS.

Chapter 2 showed information on magnets and other alternatives is accessible in Milwaukee. Information is widely disseminated through mail to schools and families, and through electronic media and formally announced presentations at schools. If this is assumed to be sufficient, and it is assumed families share responsibility for information in systems of choice as a condition of greater sovereignty (as in all markets), then imperfect awareness of alternatives is not necessarily a deficiency of the market. That some families appear not to choose in their own interests could be viewed as a necessary tradeoff accompanying the expansion of choice and the enhancement of family sovereignty for the majority in the system.

Part of what choice means is the choice to learn or not to learn about alternatives. Utility maximization is an ideal; in practice people never exhaustively gather information and analyze all possible alternatives before making decisions. Information gathering has a cost, and people may believe school quality differentials are small enough (and difficult enough to assess) that additional investments in information gathering are not warranted. This belief may be wrong, but principles of consumer sovereignty imply responsibility for decisions. Viewed this way, that less than 100% of families choose well and get first choices should not necessarily be defined as a problem of the choice system.

Under different conditions of choice this view is more tenable, but there are problems with applying it in the MPS case. Choice implies added family responsibility, but it also implies stronger forms of family empowerment. MPS remains a relatively centralized system with a conventional range of alternatives compared to normative principles of public choice. Lower SES families compared to higher SES families in MPS have more difficulty assessing alternatives on the basis of information that is disseminated through mail, formal information programs, and other media, and they have less access to

informal information networks utilized advantageously by higher SES families. Under these conditions which fall well short of normative conceptions of family empowerment, interpreting all student assignment outcomes as products of willful choices entails significant theoretical concessions. If one claims family decisions made under inadequate conditions of information are what is meant by choice, then choice does not aspire to very much. Also, it truncates the possibility that under different conditions the liberation thesis and pedagogical choosing model might be more substantially borne out.

Under a more genuinely decentralized market, one in which families and schools exercise a level of control in accordance with normative principles of choice theory, conceptions of family authority and accountability may legitimately change. Family choices that are informed and purposeful, even if disapproved or seemingly dysfunctional by outside observers' definitions, are theoretically more justifiable. In the case of a family choosing an academically weak school, but one that promotes deeply held moral values, family sovereignty might be held to be the paramount principle and thus the cost (to the state) of a weaker education is traded off against the gain in family sovereignty.

Can Choice Change Conceptions of Family Accountability?

This change in the relationship of the family to the state has other important implications, some favorable, others potentially more pernicious. In present systems, with control centralized in district and state bureaucracies, most significant administrative and pedagogical decisions are out of parents' hands. As control ascends to higher and more centralized levels, so too it seems does the presumption of responsibility. Choice can change views about accountability, reflected in "caveat emptor."

Choice in education increases family responsibility, but we have insufficient experience to assess where this might lead under more deregulated conditions.⁴⁴⁰ If the malady called parent apathy is a result of the gradual inurement of parents to exclusion from meaningful participation in school affairs, choice might provide an antidote. It is conceivable decision making and registration processes entailed in choice could give parents a greater justification for and right to involvement. For this to happen, however, families must have access to better information. Values of pedagogical choosing that at present guide the decisions and actions of families with higher levels

⁴⁴⁰ This has emerged as an issue in the recent Minnesota Postsecondary Enrollment Options law. De facto responsibility for decisions of high school students to enroll in college courses and for their educational success has shifted to families; but questions of responsibility are still being worked out. Receiving postsecondary institutions like the extra enrollments (and dollars), but are reluctant to take on added responsibility of 16 and 17 year olds on campus. One response, which represents a departure from the original intent of the law as conceived by some, has been to institute admissions requirements, thereby decreasing the incidence of student failure and the likelihood of accusations of institutional abnegation of responsibility for preventing failure.

of educational attainment must be more widely inculcated.

A less favorable picture emerges if choice only changes assumptions about accountability without really changing schools and family-school relations. In the absence of some structural changes, the theory of family sovereignty could deteriorate in practice to families acquiring greater responsibility, but without acquiring commensurate gains in power and prerogatives. Families forced, because there are inadequate information or quality control mechanisms, to choose among poorly functioning schools could wind up being faulted for their lack of perspicacity in exercising choice.⁴⁴¹

The next section further explores issues related to family sovereignty, equity, and efficiency. This section has offered an interpretation of conditions and outcomes of choice in MPS. It appears parents have gained significant control over which school their children will attend, and for those informed and so inclined, distinctive alternatives to the neighborhood school are available. In the magnets at least, choice appears to have fostered effective family-school relations. It remains to be seen, however, if choice makes much of a difference in family-school relations beyond the subset of schools and families that do well under conditions of choice. The next section considers routes and barriers to improvements in conditions of choice.

SECTION III. CONSTRAINTS ON CHOICE AND PROSPECTS FOR IMPROVEMENT

Can the benefits of choice be extended to a larger share of families in the system? This section examines practical and political issues raised by measures aimed at enhancing family awareness of alternatives in the MPS system and discusses limits to open enrollment and magnets as instruments of choice. Theoretically, greater family awareness of school alternatives and enrollment procedures could equalize access to magnets and other open enrollment options and promote more informed and selective pedagogical choosing. Further, better information about quality characteristics of all schools in the system might bring the force of exit more effectively to bear on schools and the district to improve technical efficiency. Discussing constraints to these public choice measures provides a vehicle to contemplate broader theoretical implications of conditions of choice in MPS, and the potentialities of choice under less regulated and centralized arrangements in public education. I begin discussing the prospect of opening access to magnets, and then discuss the role of school quality information more generally in improving efficiency.

⁴⁴¹ To the extent that relations between families and educational practitioners became more explicitly contractual, mechanisms of accountability employed in the private sector might become more legitimate such as medical malpractice suits and manufacturer liability laws designed to protect consumers. However, proven medical and manufacturing technologies justify accountability for expected results. This expectation does not exist to the same extent in education due to the lack of a proven technology and the influential role of non-school factors in learning and development.

Limits on Information and Family Awareness of Magnets

As described in Chapter 2, magnets are important to big city school systems, but create political tensions by establishing a formally distinguished set of schools. Serious conflicts are avoided by adhering closely to racial quotas, by maintaining openness of access to magnets, and by avoiding communications that would indicate selectivity of magnets. Magnet advertising avoids loaded terms that might suggest differential support or quality of magnet schools. The message aimed for, though not always received, is that magnets are different but not differentially treated. As long as magnets are not widely perceived as an upper, exclusive track in a two-track system, tensions they create are manageable.⁴⁴²

The delicate, but valued, position of the magnets puts the district in somewhat of a "catch 22" concerning information dissemination. Enough people must know about magnets and favor them over their neighborhood school to maintain sufficiently high, racially balanced enrollment levels; but, there are not enough seats for everyone, and as long as the magnets are filled and successful, there is little incentive to try to create higher levels of awareness among the less informed. Looking at this more closely, there are at least four issues raised by the theory of empowering with better information those currently unaware of magnets.

The first arises from resource constraints. Families unaware of magnets are likely to be the most expensive to inform. They are less likely to seek out actively information (some because they are satisfied with their present school), and less likely to be able to understand magnet information. This is especially true in the poorest black neighborhoods where literacy levels are low and residential mobility is very high (thus mail is not received). Still, more

⁴⁴² Several interviews concerning influences of magnets on relations within the system produced examples of actions taken by the central office to assuage nonmagnet staff's perceptions that magnets were getting more than their fair share. A few examples concerned budget allocations for facility improvements for nonmagnets. One example concerned the open enrollment Programs for Academically Talented which are in nonmagnets. During the years of the study proposals were made and accepted to increase the number of schools offering PATs, one reason being, in the words of a curriculum coordinator, "to spread the sugar around" -- that is, to help nonmagnets compete more successfully for more academically able students.

During the year of this study, the admissions requirements for the two dominant magnet high schools (College Bound and Technical High School described in Chapter 3) were eliminated. A special section in the advertising tabloid (INFO) describes administrative policies for entrance, recommending only "good guidance" in considering enrollment in a these magnets. While the previous admissions requirements were not particularly stringent, the school board decided the requirements were inconsistent with principles of open access. A consideration of the interests of nonmagnets cannot be discounted as a factor in this decision.

steps could be taken utilizing churches and community centers and information channels accessible to the poor. Technically this is not out of the question; but is there an incentive?

Magnets give big city districts, which have long suffered through invidious comparisons to suburban and private schools, schools to be proud of. With magnets the system can compete against private and suburban schools for the share of the market with the motivation and means to exit the system for preferred school alternatives. For the most part information dissemination is sufficient to inform this set (in a general sense, not a specific number) of families. As described in Chapter 4's conclusion and in the previous section, these academically ambitious families help make magnets what they are.

Information equalizing awareness of magnets could diminish magnets' specialness by lowering barriers to access and increasing the proportion of applications from families less likely to support academic achievement and the magnets' specialized programs. This would undermine the very processes instrumental to magnets' educational effectiveness and ultimately tarnish their reputations. If this impaired the district's ability to attract and retain higher (on average) SES families, it would be viewed as a cost in quality and status to the district. Surely the incentive to risk this is not strong.

A third constraint against greater promotion of magnets is the danger of aggravating existing tensions between magnets and nonmagnets. Most nonmagnet staff believe magnets get enough attention as it is. Once, for example, to encourage applicants to consider a newly established magnet high school, the central administration sent letters describing the new program to parents on waiting lists for other magnet schools. In one sense, this was an efficient way to communicate with a group of parents who had already made the decision to attend a magnet, and, also, to improve the new magnet's chances of success, because the students were already self-selected magnet choosers. However, this irritated principals from nonmagnets who jointly signed a letter to the superintendent articulating their displeasure with this central initiative. Their concern was over the indirect channeling of generally above average students into another magnet. It is unlikely the same level of concern would have been expressed had the students notified come from families otherwise unaware of magnets -- students, for instance, missing the enrollment period and applying over the summer or in early September.

Finally, efforts to promote wider awareness of magnet schools would likely in the short term produce more rejected applications and disgruntled parents, and additional managements burdens stemming from extra notification, waiting list, and re-application procedures. Increasing magnet capacity can mitigate this problem, but the time this takes does not help in the short term, and there are limits to expansion of magnet capacity.

Limits To Magnet Supply

The above discussion tends to assume magnet supply is fixed. Since we have seen (Chapter 3) there is a high potential demand for magnets, can magnet supply increase to expand the alternative offerings and educational benefits magnets provide? Within limits, there is flexibility to expand capacity.

At the time of this study, proposals were being reviewed for an elementary computer magnet, an expanded International Studies magnet at the middle school level, and several others.⁴⁴³ However, there are important limits on the elasticity of magnet supply.

First, there are practical and political issues involved in creating a magnet once it is decided that demand warrants it. This involves planning and occasionally difficult decisions regarding matters including site selection, staffing, training, and funding.⁴⁴⁴ Site selection can be a lengthy and negotiative process. Backers of a new magnet must consider the probable response or contend with the actual response of nonmagnet staff and parents (sometimes other magnet staff and parents) who believe their interests might be compromised. Neighborhood parents and teachers may oppose conversion of their school to a magnet, because of, respectively, enrollment and job uncertainties this can create.⁴⁴⁵ In at least one instance it inspired parents to march with placards.

A second limit to magnet supply and a fuller realization of potential demand for magnets arises from the requirement of managing system-level politics of equity and distribution. The same sort of interests that impose limits on promotion of magnets probably also impose an upper limit on the percentage of schools in a district that can be magnets. As long as the percentage does not get too high, magnets are tolerated because the majority of people are in the same boat -- not in magnets. They are therefore not likely to feel relatively deprived vis-a-vis most parents in the system. However, if the percentage of schools that are magnets rises too high, say a third or more of the schools, the majority of parents (and staffs) may begin to

⁴⁴³ These are described in Milwaukee Public Schools: Planning for the 1985-86 School Year, Office of the Superintendent of Schools, Milwaukee Public Schools. For additional discussion and data, see Chapter 2, Section IV; Chapter 3, Part One, Section I.

⁴⁴⁴ For some qualitative descriptions and analyses of the process of developing a magnet, see Marshall (1978), Metz (1984, 1986), and Schofield (1982).

⁴⁴⁵ The difficulty of finding sites for new magnets should not be understated. Backers of particular magnets have on occasion spent years in negotiations with the school board and representatives from different neighborhoods in efforts to secure a site for a proposed magnet school. Neighborhood parents are reluctant to have their school converted to a magnet because of enrollment unpredictabilities (the certainty of getting their own younger children into the building is decreased) and concerns about the uncertain consequences of changes in the status and student composition of the school. Staff may perceive the possibility of transfers. The central administration is wary of creating magnets that fail to achieve the promise claimed by backers.

experience a level of status threat that presses the limits of tolerance.

There is a third constraint on the extent to which expansion of supply can satisfy demand. Part of what is sought after in a magnet are services and opportunities which derive value from scarcity. With increases in supply, the value of the magnet status may decrease,⁴⁴⁶ although there are complicating factors of magnet location and pedagogical identity. Individual "elite" magnets with an established reputation and a recognized pedagogical identity would almost certainly continue to attract large numbers of applicants, irrespective of the supply of other magnets. However, the ability of lesser known magnets to attract applicants would probably be adversely affected by an increase in magnet supply, extraordinary promotional efforts notwithstanding. Several magnets in MPS, for instance, already operate at sub-capacity, suggesting upper limits of supply are being approached.

The role of magnets' voluntary desegregation function is important in placing limits on supply. Several inner city magnets have difficulty attracting sufficient numbers of whites to achieve racial balance. Although there is high potential demand among blacks for inner city magnets (which may mostly be a preference for a desegregated *and* a logistically convenient "walking-distance" school), the demand cannot be satisfied without white applications to the inner city. But it appears there are not many more whites who will choose an inner city school in Milwaukee -- although mandatory reassignment remains an option for the state.

Magnets in white neighborhoods easily attract whites, but do not serve to attract whites into black neighborhood schools, which is a primary function of magnets. Since blacks are considerably less reluctant to leave inner city schools to begin with, there does not appear to be much of a call for expansion of non-inner city magnets. Large numbers of inner city blacks willingly leave their racially isolated schools for non-inner city desegregated schools, and politically it is much more difficult to justify creating additional non-inner city magnets. Thus, even if the supply of magnets could be readily expanded, there is no guarantee applications would follow.

We should not assume, however, that the central office wants more magnets. Indeed, there may be an interest in preserving the scarcity and value of magnets. If an increase in magnet supply dilutes magnets' specialness, this, in turn, could undercut political benefits accruing to the district from the attractive qualities that magnets as a group provide.⁴⁴⁷

⁴⁴⁶ It would be informative to assess judgments of relative quality of magnets versus nonmagnets (or one's particular nonmagnet neighborhood school) in districts varying in the percent of schools that are magnets. Theoretically, the higher the percent, the smaller the perceived quality differential.

⁴⁴⁷ Levine and Campbell (1977) discuss how this concern influenced the development of enrollment policies for a magnet school in Chicago.

In sum, in light of these constraints, it is difficult to envision a rationale for devoting appreciably more resources to raising awareness of and demand for magnets. Most families know about magnets. In the interest of promoting more equal access to magnets, targeted information to families most isolated from print and electronic media could occur. But it would be an expensive and labor-intensive activity, for which support might be difficult to mobilize. With weak incentives and pressures, and scarce resources, prospects for promoting more informed magnet choosing and expanding access to magnets seem rather remote. Information about magnets is sufficient to sustain demand, but there seems to be a point of diminishing returns to the district on additional investments in promoting access to or expanding supply of magnets.

While there is differential access to magnets related to family socio-economic variables, the liberating effect of magnets for families from all strata should not be overlooked. Magnets differ from exclusive neighborhood and private schools in that they are accessible to the non-wealthy and operate under racial balance guidelines. Families high on the academic commitment variable, but of modest means, have access to magnets. If it is true the hypothesized academic commitment variable exists and is not highly correlated with SES, choice may liberate families who are genuinely trapped, and would actively seek out a school where other higher academic commitment families are believed to attend. In some ways, magnets are like free, socially and ethnically heterogeneous, private schools.

Can School Performance Information Improve Family Decision Making and School Accountability?

Theoretically the central office could disseminate performance information on all schools, as proponents of choice have proposed, so family choices could be better informed and schools would become more accountable for their performance. Potentially, this also could improve matching of family preferences and pedagogical alternatives. This section discusses constraints to greater accountability as suggested by conceptions of family empowerment through improved information on school quality.

Presently, school performance information in MPS, as in virtually all big city systems, is available (with some effort) at the central office, but its purpose is not to promote competition among schools nor to encourage comparative shopping and more informed family choosing. It is used for research and evaluation purposes by administrators and researchers.⁴⁴⁸

⁴⁴⁸ Performance information is used by the central office internally to identify and improve low performing schools. Central administrators in staff meetings compare performance data across schools and may provide additional support or bring formal authority or social pressure to bear on staff they feel should be doing a better job. School and staff recognition programs and the School Improvement Plans required of schools are other examples of use of school performance data in competitive ways. (The "School Improvement Plan" is a management by objectives procedure required of all schools).

described in Chapter 2, the information that is disseminated to families is descriptive, programmatic information or procedural registration information. The main purpose is to fill and racially balance schools as early in the spring and summer and as efficiently as possible. This reduces early fall administrative burdens and school enrollment disruptions from placing late applicants and managing last-minute transfers of both students and teachers.

Public dissemination of school quality information is a very different matter. Unlike choice advocates, school system administrators are more likely to view family empowerment with school quality information as a problem than a solution. According to a director of research and evaluation in another big city school system with magnets and an open enrollment program, the use of school profile information for school choices, "opens up a can of worms." Explicit comparisons and heightened public attention to quality indicators probably would not sit well with school site staff, many of whom would feel unjustly evaluated. Most parents would focus on standardized test scores, but test scores are weak measures of school quality because they are so heavily influenced by student family background factors. Principals and teachers in schools with comparatively low test scores would be unlikely to support such efforts since their schools, and thus implicitly their work, would be labeled inferior. It would also disadvantage schools with alternative pedagogy that emphasize forms of learning standardized tests do not measure well. This could undercut the potential of choice to spawn alternative paths to learning and achievement.

Public release of school level achievement data also can provoke community activists and controversies over equity. Official promotion of such information for enrollment choices would openly contradict the principle of equal schools. Magnets already imbalance relations among schools in the system, but for legitimation can take recourse to the pedagogical choosing rationale and their role in helping voluntary desegregation. It would be a different matter for the central office to publicly expose low performing schools, yet at the same time continue to operate and accept applications to such schools. This would likely position the system uncomfortably close to the role of accomplice in unequal opportunity.

A related issue is raised by disaggregation of achievement data by ethnic or SES categories. (MPS does not disaggregate achievement data past the school level in its school profile reports). Disaggregation of test data for publication in school profiles is politically volatile and the subject of recent discussion among district administrators and specialists in the assessment field.⁴⁴⁹ Wary of negative political and administrative consequences, research

⁴⁴⁹ I attended a panel discussion by the Division H group on the subject of disaggregation of school-level performance data at the 1987 American Educational Research Association meeting in Washington, D.C. Several big city school district research and evaluation directors described pros and cons of disaggregation of school performance data by race and income. Most of the discussion focused on potential political difficulties. See also, Association for the Supervision of Curriculum Development, Update, March, 1987.

and evaluation directors are generally reluctant to encourage unlimited public access to such information. Some conflicts have occurred in a few big city districts that make disaggregated data available to the public (though not strictly for school choice purposes).

Finally, as with the magnets, there is the problem of too many or too few applications. Success of information dissemination in informing and influencing choices raises the possibility of a highly uneven distribution of applications across schools. Presently, MPS has 152 buildings distributed throughout the city, each of which must operate at a certain minimum percentage of capacity to justify overhead costs. Big information-induced shifts in preferences could leave some schools bereft of applicants, and others inundated. This would pose difficulties for management of facilities and school-site personnel. If jobs were threatened, the teachers' and principals' association would have to be reckoned with.⁴⁵⁰ If school buildings were to be closed, neighborhood parents would be angry. Desegregation goals could also be jeopardized. Given these potential problems, from the perspective of the institution's functional needs, it is logical to avoid information that might create unmanageable fluctuations and excessively uneven distributions in applications among schools.

Concluding Comments

Limits described in this section to higher ideals of choice suggest a certain inevitability to the status quo of conditions and outcomes of choice in MPS. Compared to normative conceptions, deficiencies include the chronic awareness gap between higher and lower SES families, the generally meager supply and limited accessibility of school quality data, and the weak forms of pedagogical choosing. These conditions in consequence weaken the effectiveness of exit as a mechanism of school accountability or improvement.⁴⁵¹

⁴⁵⁰ It should be noted that, presently, teacher transfer rules accommodate shifts in applications. Each May, after the enrollment process is over, principals submit a "tentative teacher needs list" to the central office. This list states staffing needs. If a school's applications are low, a teacher(s) is "excessed" (at this point on paper); if applications are high, a new teacher(s) is requested. Regarding excessing, first volunteers are solicited, then seniority criteria are employed. Teachers receive notices, beginning in May, of open positions at other schools and submit applications. Excessed teachers may get their job back if over the summer or the first three weeks of September, their school gains applications (which often happens). Teachers can be transferred until the third Friday in September, at which point each school's enrollment is set and reported to the central office, and teachers can no longer be transferred for enrollment reasons. MPS, with about 5500 teachers handles about 800 teacher transfers per year, of which somewhat less than half are due to shifts in applications.

⁴⁵¹ These are not the only conditions that limit the extent to which open enrollment makes exit a source of leverage for families. Other constraints include bureaucratic restrictions on the control of school staff over their

These deficiencies derive from political conflicts of interest and constraints of resources and technology. Politically, constraints arise from conflicts in preferences of different groups: rich and poor, black and white, neighborhood and non-neighborhood, and producers and clients. The system as a whole is constrained in maximizing choice by fixed budgets for information, counseling services, transportation, processing of applications, and program and personnel development in specialized areas. With greater resources, system capacity in each of these areas to support choice could be enhanced, and some of the tensions between conflicting system goals could be alleviated. But this is not the main issue.⁴⁵²

While it is possible to improve conditions with greater resources, the more appropriate perspective is the comparative one: within the givens of

curriculum and school enrollment, regulatory constraints on families' flexibility in choosing schools, and broader political factors that are discussed in Section IV. of this chapter. See also the discussion of forces of competition and the practice of exit in MPS in Section III. of Chapter 4.

⁴⁵² In fact, the metropolitan voluntary transfer options (Chapter 220) and Milwaukee's magnet-based voluntary desegregation program -- the incentives and policies to maximize choice, accommodate heterogeneous preferences, and reduce compulsion -- come at an extra financial cost to the state when compared with simpler mandatory reassignment systems. The state chose a more costly option, in effect, purchasing conflict reduction, national recognition, and possibly a net gain in quality to the system compared to outcomes that might have occurred had the state pursued different options in 1976 when the desegregation began. On the latter possibility, we can only speculate.

The 1976 crisis is over, black protest marches and desegregation violence recede in memory, and times change. The Wisconsin state legislature is currently wrestling with the question of whether the level of state money to aid desegregation in the Milwaukee metropolitan area is excessive, as a number of key legislators now believe. Of the state money spent on desegregation Murphy and Pawasarat (1986:44) write, "In the 1983-84 school year (the most recent year for which statistics are available), the state spent \$26 million on Chapter 220. The majority of that -- \$17.6 million -- paid for busing within the City of Milwaukee...Meanwhile, the suburbs 'made out like bandits,' as James Sensenbrenner, then a state senator, exclaimed in 1976. In 1976-77, for instance, suburban schools received 708% more in state aids for Chapter 220 students than for resident pupils. In future years these costs could skyrocket...to at least \$40 million."

Legislators are also sensitive to political costs at the state level stemming from friction created between Milwaukee and districts that have in effect "lost" state money that has gone to support choice and desegregation in MPS. Minnesota has recently had similar state level debates, with out-state districts arguing that disproportionate funds are consumed by desegregation efforts in the Twin Cities (both of which are expanding choice in their programs).

political and practical realities, how does choice compare to more centrally controlled systems as an instrument for the production and allocation of social goods? Earlier in the discussion of allocative and technical efficiency, I offered an interpretation of outcomes of choice in MPS compared to mandatory assignment systems. It is worthwhile now to question some bureaucratic givens and consider educational implications of greater restructuring along lines suggested by choice theory.

SECTION IV. POTENTIALITIES OF GREATER DECENTRALIZATION AND DIFFERENTIATION

Relative to uniform schools and mandatory assignment systems, MPS has introduced significant choice-expanding changes, but beyond the open enrollment policies and the magnets' relative autonomy, the system has not changed most basic givens of central control and structural and curricular standardization. Many of the critics cited in Chapter 1 would contend the system has lost few of its monopolistic properties, and that many of the barriers to better information and greater family sovereignty are products of the system and are not necessarily inherent in markets. If prevailing forms of central control and standardization are not taken as given, greater potentialities of choice may be realized.

First, with greater decentralization, a more heterogeneous menu of educational alternatives might develop. A shift in authority to control curriculum and school governance policies to school staff and families would probably also necessitate some school control over admissions -- the authority to screen applicants or counsel out students on the basis of compatibility with school goals. While this raises the possibility of screening primarily for well-behaved children to make work easier, or other biases, it is difficult to dispute that education can benefit from focusing on clearer and more specific goals. Presently, for instance, there may be unfulfilled demand for a Sumner school, a conservative quasi-religious school, or a school devoted to black culture and history. It is not far-fetched to conceive of pride and clarity of purpose in a school of choice staffed by tough teachers working with tough kids. Beyond these curricular possibilities are structural variations. There may be interest in a school run by, say four teachers and ten aides, or by parents, or by outside professionals working with administrators. Note that a shift toward decentralization is a matter of degree and need not apply equally to all schools in a system. The state might set aside a fraction of school aids to support a small number of more differentiated and autonomously operated schools.

Under these more market-like conditions a popular type of school could independently respond to demand; or it would produce competitors aiming to satisfy the demand. It is difficult to assess a priori whether demand for more extreme variations exists, but it should not be assumed that the absence of such schools is evidence of an absence of demand. Until families and professionals have direct access to and control over sufficient funds to try such alternatives, the question of demand is open. The opportunity to own and operate a public school may be the stimulus to mobilize interest and challenge preconceptions about what is possible in schooling. Magnets provide alternatives to traditional neighborhood schools, but as presently structured

and controlled for the most part cannot provide more extreme variations in curriculum and pedagogy.⁴⁵³ If as a result of reduced central control, programmatic qualities became more salient in family choices, the ideal of different-but-equal schools might be more reasonably reflected in practice than occurs under present circumstances with magnets, which create a comparatively more stratified set of schools.

Second, greater decentralization might affect the role of information in choosing schools. Presently, standardization of curriculum and testing legitimate uni-dimensional ranking of schools; but, because schools are supposed to be equal and because conventional standardized test scores correlate highly with SES, use of test score data is politically volatile and consequently carefully managed by administrators.

To the extent schools pursue divergent academic and social goals, and become more differentiated, arguments against standardized measures of performance become more persuasive; audiences may more readily accept variety and complexity in school goals and learning outcomes. A Summerhill school would advertise intellectual freedom and unconventional social norms, a conservative quasi-religious school would advertise obedience and moral authority, and a computer school, programming and software. School characteristics and goals might be advertised with diverse indicators of the quality of the educational climate or in exhibitions of practical and scholarly accomplishments.⁴⁵⁴ Faced with the obviousness of school pedagogical differences and the necessity of choosing, parents might be forced to learn more about pedagogical and school differences and to reflect more carefully on their own needs and values concerning the education of their children.

Systems with differentiated schools and a norm of choice would create a need for impartial information providers. In some voucher models, an independent information agency is proposed. It would be authorized to perform audits and collect performance data from schools, and insure public access to such information. The agency would have little stake in mediating inter-school

⁴⁵³ Metz's (1986) ethnographic study of magnets discusses environmental constraints on magnets' distinctiveness. She describes how district desegregation goals required in some cases moving magnet programs, and teacher union goals (job security) greatly curtailed the recruiting of optimal staffs for magnets. These presented major obstacles to the development of the magnets' distinctive programs.

⁴⁵⁴ There is a growing interest in the exploration and use of alternative approaches to assess academic achievement. It is believed assessment should promote more authentic forms of academic achievement and more diverse forms of competence than is presently allowed by standardized testing. Work on this has been done by the National Center on Effective Secondary Schools (Archbald and Newmann, 1988) and by Ted Sizer's Coalition of Essential Schools affiliated with Harvard University. The ideas have been put to practice in a number of schools throughout the country.

relations or the survival of particular programs. Compared to information impoverishment in present big city school open enrollment systems, families would have access to information permitting both pedagogically more informed choosing and putting more accountability pressure on schools.

A third approach to decentralization with potential to build market forces is a response to how buildings are currently used and to conventional assumptions about what a school should look like. Like all school systems, MPS has a huge investment in the construction and maintenance of neighborhood school buildings. This creates an incentive to manage information in the interest of filling all buildings regardless of family needs and preferences. Public choice theory would suggest the problem is not information threatening to disrupt the distribution of applications among schools, but the investment in large (20 to 100 classrooms) unadaptable buildings. Theoretically, under deregulated conditions, without a central bureaucracy responsible for managing information, applications, and buildings, more demand-responsive educational facilities would be produced by market forces.

In this view, constructing and maintaining special structures for schooling when there is existing unused capacity in cities is inefficient. Taxpayers pay for school buildings, while excess space in commercial buildings, churches, and other government buildings goes unused. Though feasibility questions arise, more use of existing facilities housing smaller schools is not inconceivable. Commercial day care centers, alternative schools, colleges, and private schools have much experience capitalizing on existing unused space.⁴⁵⁵ While the use of smaller facilities might be seen as a diseconomy of scale, costs of depersonalization and alienation associated with size and bureaucratization might be reduced, thereby increasing efficiency in other ways.

Thinking Realistically and Comparatively About Choice

How much control would devolve to schools and families under more open market conditions, how much schools would differentiate, and what educational and political consequences would result from greater decentralization and family choice are matters of conjecture with elusive answers. It is important, however, to recognize limits to ideals of choice having little to do with monopolistic properties of school systems -- limit that would persist however public education is provided.

As is evident in MPS, tensions between the academic and political "haves" and the "have-nots" will shape the development of all systems of choice. Families with more academic and political resources have greater "purchasing

⁴⁵⁵ In MPS, as in all school systems, the number of buildings is responsive to enrollment demands, of course. According to the MPS's 1983 "Five Year Plan," 11 of MPS's 152 schools were recommended for closing. Though I do not know the circumstances behind the recommendation for these particular schools, the criterion appears not to be just demand -- several of the schools are not in low population areas. One factor is building age, which means high operating (especially energy) costs.

power" and prefer to have similar classmates. Under conditions of school choice these families tend to find each other and protect their hold over their schools. Wealthy neighborhood schools protected by attendance area boundaries and private schools do this. The requirements of knowing when and how to register for good schools (e.g. magnets) in systems of choice have the same effect. That elementary magnets tend to develop feeder patterns, guaranteeing entry to a middle school magnet, illustrates the kinds of mechanisms that evolve that, while technically justifiable, help protect differential access, by reserving years in advance a spot in a preferred school. Periodically, admissions requirements (tests, auditions, interviews) are proposed for magnets. Though to date always turned down by the central office in MPS, these proposals reveal the tendency of magnet schools and magnet families to want to control access to their academic goods.⁴⁵⁶

Decentralization by itself will eliminate neither the exclusionist tendencies rooted in parents' interests in getting the best for their children, nor the preferred customer status of parents with academically talented and well-behaved children.⁴⁵⁷ Conceptions of operating markets in education can assume equalized awareness and purchasing power, but in implementation, mechanisms of exclusion and differential access are inevitable. "Street-level bureaucrats" (producers) have built-in information advantages.⁴⁵⁸ Counseling unpreferred students away from a school to protect its reputation, selective use of information, and other strategies can operate beyond the reach of formal policy. And at the level of policy formation, community and interest group representatives will protect their interests in the politics of developing information systems, enrollment rules, and curriculum policies, which in practice inevitably create selection processes allocating higher SES children to

⁴⁵⁶ These efforts to regulate access should not be viewed necessarily as "elitist" or exclusive. There is a legitimate justification for preserving the integrity and quality of a specialized content program or pedagogical philosophy when staff are strongly committed to it, and choosers deliberately seek it out on pedagogical grounds. However, it is a fine line between selecting for commitment to a particular educational philosophy and selecting out students who might be unpreferred because they are less than ideal students in behavior and skills, as private schools often do and as the suburban public schools receiving Milwaukee black children in the Chapter 220 program have done.

⁴⁵⁷ In recognition of this, some tuition voucher and tax credit designs give poorer families more purchasing power, thereby making them more attractive to schools. Theoretically, this measure equalizes access. Whether or not such plans could survive the politics of policy formation is another question.

⁴⁵⁸ Lipsky (1980) offers an incisive analysis of mechanisms of client control, including use of information, that serve interests of public service bureaucracies with dysfunctional consequences for formal bureaucratic goals.

schools with better reputations.

Second, while more and better information for choosing can be produced -- to some degree this is a technical problem -- the state has much less control over how people use information. It is not a foregone conclusion that with more information families would effectively exert leverage to improve school quality. Despite a prodigious supply of letters and flyers to all MPS households and in-school information efforts, parent knowledge of MPS magnets, while sufficient to generate enough applications to fill magnets, is far from the optimal levels suggested in choice theory. People tend to use information, even when it would seem to be in their interest, far less than normative economic models of rational value-maximization would suggest. This is especially true of the poor and the poorly educated.⁴⁵⁹

Coupling access to good schools with the ability and motivation to collect and interpret school performance data would be an effective screening mechanism against parents unable or unmotivated to review performance data. Indeed, requirements such as interpreting complex school profiles, could be a surrogate for an admissions test to high performing schools. Lower SES families would be disadvantaged in the information arena; how much so, would depend on the content and dissemination channels of information.

This is not to argue against potentialities of better information, but to temper naive expectations that sophisticated forms of pedagogical choice can be the norm and work miraculous transformations of quality and equity in education. Also, as described previously, how serious these issues are perceived to be depends both upon values as well as empirical outcomes. The concerns outlined above are less of a problem if one believes the system as a whole benefits in technical efficiency, if good information is logistically very accessible, and if one believes choice and family sovereignty entail a higher degree of family responsibility for educational outcomes.

Finally, a word on more fundamental limits to diversity in education is necessary. Public choice theory has a tendency to assume away the problem of standardization and uniformity in education with the different-but-equal scenario. Standardization, in choice theory, is a product of bureaucratic monopoly interests and a faulty theory that schooling can be efficiently mass produced and centrally administered by the government.⁴⁶⁰ The attempt to force all schools and all students to fit into the same mold and to compete

⁴⁵⁹ My conversations with professionals in other fields attest to the general difficulty of information dissemination to improve consumers' decision making and promote state purposes. Currently there are state published guides for legal and medical advice, buying homes, saving money through energy-proofing homes, and so on. There is a whole literature in rural sociology about the problem of information dissemination for the purpose of improving agricultural practices of farmers.

⁴⁶⁰ This is discussed in more detail in Chapter 1.

against a single yardstick, makes stratification in education inevitable. Choice, it is claimed, would produce multiple definitions of "school," diverse educational goals, and varied forms and indicators of achievement. Education would be more like art, with diverse tastes and forms, and less like sports, with vertically ranked winners, losers, and also-rans. But how much will decentralized education markets really liberate a demand for new and different forms of schooling?

Barriers to family choice and greater differentiation in public education cannot be explained solely by bureaucratic interests in control. The state, with Constitutional authority over public education, has a legitimate interest in controlling public education to achieve purposes that transcend the particularistic interests of groups and individuals. The state's role is to use its authority to protect equality of opportunity, to promote democratic political values, to insure mass literacy and functional competence, and to advance technological and economic progress by selecting and training talent for professional, technical, and leadership positions in society.

Given these purposes, the state will not leave completely to market forces control over attendance, curriculum, staffing, and information. Laws and regulations are necessary. State-mandated functional competency requirements and the state's need to monitor school quality invariably lead to the use of standardized tests, permitting comparisons across schools, and standardizing curriculum in the process. Universities, guardians of disciplinary and professional knowledge and of the credentials that are the tickets to society's elite positions, also produce and preserve uniformity. Their influence prevents schools from straying too far from the straight and narrow of traditional definitions of achievement in reading, writing, mathematics, and the other core academic subjects. Like the state, universities also want comparative performance information on schools and individuals to know who among the flock of high school graduates are the most talented and deserving of admission. Other state regulations press for uniformity on grounds of equality of opportunity and quality control -- licensing requirements for personnel, building regulations, due process laws, and funding equalization formulas.

These standardizing influences are structured by deeply institutionalized practices and beliefs in American education.⁴⁶¹ They profoundly resist change. Although American society is heterogeneous and choice in education would likely produce more heterogeneous schooling, public education appears destined

⁴⁶¹ For a theory of the institutional functions of formal education and the consequences this has for the structure of schools and school systems, see Meyer and Rowan (1978). As Metz (1988) puts it, there is a "common script" with a powerful hold over how people construe "real" school. She writes of a case study school in black and poor inner city neighborhood that the common script of traditional academic education is played out with a ritual-like quality that stands in contradiction with the abject conditions of learning in the school. Although compromises are rife to accommodate tardiness, truancy, high dropout rates, and students' poor academic skills, the basic givens of the form of high school goes unquestioned.

to be dominated by its traditional, standardized form. It is probably "at the margins" where choice could most help the cause of family sovereignty and satisfaction of divergent family preferences.

To identify reasons the theory of choice will in practice fall short of ideals of dynamic markets of diverse schools does not mean choice cannot work. This position is no more tenable than identifying flaws in prevailing practice and concluding common school ideals have failed. While the point is made in more detail in Chapter 1, it is well to re-emphasize that choice should not be cast as an either-or question. There are more options than either complete centralized control over standardized systems or completely deregulated systems.

The comparative point of view is crucial. It is important to think about choice as a range of options for administrators, teachers, and families that need not be wholesale transformations of school systems. In most cities there are many professionals and families discontent with traditional public schooling, who want particular educational alternatives, but who lack options. Giving them choices -- the resources and freedom to try to improve education -- can be accomplished without taking the position that tuition vouchers or tax credits are the answer. It may be that relatively small changes of policy and allowances for diversity can accomplish a lot by releasing the energies of families and professional feeling most stultified by the structure and sameness of traditional public schooling. If the net gain thesis is valid, choice may be a way to mobilize the ideas and commitments of those who are inevitably in the minority in any school system, but can make excellence possible and visible, and provide leadership for the majority.

We spend from 3000 to 4000 dollars per child per year in addition to the money spent indirectly on building facilities and other forms of educational support. To simplify, given 60,000 to 80,000 dollars per year and the task of sheltering and educating 20 children, there probably are alternate routes that have not been tried, but that could be at least as effective as what is achieved in a year in many public schools. There is probably no single formula for success for all children; most children may do best in the setting of the traditional neighborhood school. But it seems worthwhile to find out, and the only way is to experiment. As in all new endeavors in all fields, we will learn as much from failure as success.

BIBLIOGRAPHY

- Adams, B. & Stein, J. (1983) *Who owns the children? Compulsory education and the dilemma of ultimate authority*. Grand Junction, CO: Truth Forum.
- Alves, M. (1986) Controlled choice assignments: a new and more effective approach to school desegregation. Unpublished draft of a manuscript accepted for publication in *Urban Review*.
- Archbald, D. & Witte, J. (1985) *Metropolitan Milwaukee specialty schools and programs*. Milwaukee, WI: Report prepared for the Milwaukee Metropolitan Public Schools Study Commission.
- Archbald, D. & Newmann, F. (1988) *Beyond standardized tests: improving the assessment of academic achievement in high schools*. Reston, VA: National Association of Secondary School Principals.
- Archbald, D. (1988) *The minnesota postsecondary enrollment options act: Origins, enactment, implementation, and political issues*. Center for Policy Research in Education, University of Wisconsin-Madison.
- Arons, S. (1986) *Compelling belief: The culture of American schooling*. New York: McGraw Hill.
- Arons, S. & Lawrence, C. (1982) The manipulation of consciousness: a First Amendment critique of American schooling. In Robert E. Lerner (Ed.) *The public school monopoly*. (pp. 225-268). Cambridge: Ballinger.
- Aquila, F. (1978) *U.S. versus Board of Commissioners, Indianapolis: a case in point*. Paper presented at American Educational Research Association Conference, 1978, Toronto, Canada.
- Averch, H. (1971) *How effective is schooling? A critical review and synthesis of research findings*. Santa Monica: Rand Corp.
- Barr, R. (1982) Magnet schools: an attractive alternative. *Principal*, 61(3), 37-40.
- Bastion, A. et al. (1985) *Choosing equality: The case for democratic schooling*. Philadelphia, PA: Temple University Press.
- Berg, I. (1970) *Education and jobs: The great training robbery*. New York: Praeger.
- Berman, P. & Mclaughlin, M. (1978) *Federal programs support educational change*. Washington D.C.:U.S.O.E
- Bidwell, C. (1965) Schools as formal organizations. In J. March (Ed.) *Handbook of organizations* (pp. 972-1022). Chicago: Rand McNally.
- Bidwell, C. & Kasarda, J. (1975) School district organization and student achievement. *American Sociological Review*, 40, 55-70.

- Binderman, M. (1972) The failure of freedom of choice: Decision-making in a southern black community. *Social Forces*, 50, June, 487-498.
- Bingham, R., Haubrich, P. & White, S. (1986) *School community survey, Part I*. Milwaukee, WI: Urban Research Center, University of Wisconsin-Milwaukee.
- Blank, R., Dentler, R., Baltzell, C. & Chabotar, K. (1983) *Survey of magnet schools: Analyzing a model for quality integrated education*. Prepared by Abt Associates for U.S. Department of Education, Wash. D.C.
- Borcherding, T. (Ed.) (1977) *Budgets and bureaucrats*. Durham, North Carolina: Duke University Press.
- Bortin, B. (1982) *Magnet school program... evaluation report, 1980-81*. Madison, Wisconsin: Wisconsin Department of Educational Research and Program Assessment.
- Bott, E. (1971) *Family and social networks*. NY:Free Press.
- Boyd, W. (1976) The public, the professionals, and educational policymaking: who governs? *Teachers College Record*, 77, 568-90.
- Boyer, E. (1983) *High school*. NY: Harper and Row.
- Brandl, J. (1986) *On being through with muddling through*. Prepared for the Center for Policy Research in Education, University of Wisconsin-Madison.
- Breneman, D. (1983) Where would tuition tax credits take us? In T. James & H. Levin (Eds.) *Public dollars for private schools* (pp. 101-114), Philadelphia: Temple University Press.
- Bridge, G. & Blackman, J. (1978) *A study of alternatives in American education*. Santa Monica: Rand.
- Butts, R. (1979) Educational vouchers: the private pursuit of the public purse. *Phi Delta Kappan*, 61(1), September, 7-9.
- Campbell, C. & Levine, D. (1977) Whitney young magnet high school of Chicago and urban renewal. In D. Levine & R. Havighurst (Eds.), *The future of big city schools* (pp. 139-150). Berkeley: McCutchan.
- Carlson, R. (1965) *Adoption of educational innovations*. Eugene, Oregon: Center for the Advanced Study of Educational Administration, University of Oregon.
- Carrison, M. (1981:34) Do magnet schools really work? *Principal*, January, 32-35.
- Center for the Study of Public Policy (1970) *Education vouchers*. Cambridge, Massachusetts.

- Chambers, J. (1981) An analysis of school district size under a voucher system. *Educational Evaluation and Policy Analysis*, 3, 29-40.
- Chubb, J. (1988) Why the current wave of school reform will fail. *The Public Interest*, 90, 28-49.
- Citywide Educational Coalition, (1978) *Survey of magnet school parents in three cities*. Report of the Mass. Dept. of Education. Boston, MA.
- Clinchy, E. & Cody, E. (1978) If not public choice, then private escape. *Phi Delta Kappan*, 60(4), December, 270-273.
- Clinchy, E. (1984) Yes, but what about Irving Engelman? *Phi Delta Kappan*, 61, April, 542-545.
- Cohen, D. & Farrar, E. (1977) Power to the parents? -- the story of education vouchers. *The Public Interest*, 48, Summer, 72-97.
- Coleman, J. (1981) Private schools, public schools, and the public interest. *The Public Interest*, 64, 19-30.
- Coleman, J., T. Hoffer, & S. Kilgore (1982) cognitive outcomes in public and private schools. *Sociology of education*, 55, April/July, 65-76.
- Coleman, J., Hoffer, T. & S., Kilgore (1982) *High school achievement*. New York: Basic Books.
- Coleman, J. (1987) Families and schools. *Educational Researcher*, 16(6), 32-39.
- Coleman, J., & Hoffer, T. (1987) *Public and private high schools: The impact of communities*. NY: Basic Books.
- Comerford, J. (1981) *Parental perceptions and pupil characteristics of a senior high magnet school program*. Paper presented at annual meeting of the American Educational Research Association meeting, Los Angeles, California.
- Coons, J. & Sugarman, S. (1971) Family choice in education: a model state system for vouchers. *California Law Review*, 59, 2, 321-438.
- Coons, J. (1981) Making schools public. In Edward Gaffney Jr. (Ed.) *Private schools and the public schools*, (pp. 91-105). Notre Dame: Notre Dame University Press.
- Coons, J. & Sugarman, S. (1977) *Education by choice*. Berkeley: University of California Press.
- Craig, W. & Pederson, S. (1985) *Minnesota citizen attitudes towards education*. Minneapolis, MN: Center for Urban and Regional Affairs, University of Minnesota.

- Crain, R. & Hawley, H. (1981) *Assessment of current knowledge about the effectiveness of school desegregation strategies: An agenda for further research on desegregation strategies*. Nashville: Vanderbilt University, Institute for Public Policy Studies, Center for Education and Human Development Policy, April.
- Crozier, M. (1964) *The bureaucratic phenomenon*. Chicago: The Chicago University Press.
- Cunningham, C. (1978) *An evaluation of Houston's magnet school program*. Paper presented at annual meeting of the American Educational Research Association, Toronto, Canada.
- Davies, D. (1977) The efficiency of public versus private firms: The case of Australia's two airlines. *Journal of Law and Economics*, 14, 149-65.
- DCD, (1983) *The Milwaukee urban atlas*. Department of City Development, Milwaukee, WI.
- Deutscher, I. (1973) *What we say/What we do*. Glenview, IL: Scott Foresman.
- Doob, H. (1977) *Evaluations of alternative schools*. Arlington, VA: Educational Research Service.
- Dornbusch, S. & Scott, W. (1975) *Evaluation and the exercise of authority*. San Francisco: Jossey Bass.
- Doyle, D. (1984) *Family choice in education*. Washington, D.C.: National Institute of Education.
- Duke, D. (1976) Challenge to bureaucracy: the contemporary alternative school. *The Journal of Educational Thought*, 10, 34-48.
- Duke, D., Showers, B. & Imber, M. (1980) *Teachers as school decision makers*. Stanford University, Stanford, CA: Institute for Research on Educational Finance and Governance.
- Duke, D. & Muzi, I. (1978) How effective are alternative schools? -- A review of recent evaluations and reports. *Teachers College Record*, 79(3), 461-486.
- Dunn, R., Dunn, K. & Price, G. (1979) Identifying individual learning styles, in *Student learning styles*. Reston VA: NASSP.
- Edelman, M. (1964) *The symbolic uses of politics*. Urbana: University of Illinois Press.
- Edelman, M. (1977) *Political language: Words that succeed and policies that fail*. New York: Academic Press.
- Edelman, M. (1971) *The politics of symbolic action*. New York: Academic Press.

- Elmore, R. (1987) *Options for choice in education*. Center for Policy Research in Education, University of Wisconsin-Madison.
- Erickson, D. (1982) Disturbing evidence about the one best system. In Robert Everhart (Ed.) *The public school monopoly*, (pp. 393-418). Cambridge: Ballinger.
- Estes, N. & Waldrip, D. (Eds.) (1977) *Magnet schools: Legal and practical implications*. Annual International Conference on Magnet Schools, Dallas, Texas.
- Evans, C. (1978) *Elementary magnet/vanguard plan evaluation: 1976-77, Year II*. Fort Worth Independent School District. ERIC No. ED 140 496.
- Everhart, R. (Ed.) (1982) *The public school monopoly*. Cambridge: Ballinger.
- Everhart, R. (1985) On feeling good about one's self: practical ideology in schools of choice. *Sociology of Education*, 58 (October), 251-260
- Fantini, M. (1973) *Public schools of choice*. New York: Simon Schuster.
- Fantini, M. (1976) *Alternative education: A sourcebook*. New York: Doubleday
- Feagin, J. (1980) School desegregation: a political-economic perspective. In W. Stephan & J. Feagin (Eds.) *School desegregation: Past, present, and future*, (pp. 25-50). New York: Plenum Press.
- Finn, C. (1985) *Education choice: Theory, practice, and research*. Testimony of Chester Finn, Assistant Secretary, Office of Educational Research and Improvement, U.S. Department of Education before the Senate Subcommittee on Intergovernmental Relations Committee on Governmental Affairs.
- Finn, C. (1987) *Education Week*, 6(39), June 24, Sec. C.
- Foster, G. (1973) Desegregating urban schools: A review of techniques. *Harvard Educational Review*, 43(10), 5-38.
- Freeman, R. (1982) Educational tax credits. In Robert Everhart (Ed.) *The public school monopoly*, (pp. 471-499). San Francisco: The Pacific Institute for Public Policy Research.
- Friedman, M. (1962) *Capitalism and freedom*. Chicago: Chicago University Press.
- Friedman, M. (1973) The voucher idea. *New York Times*, Sep. 23.
- Friedman, M. & Friedman, R. (1981) *Free to choose*. NY: Avon Books.
- Fuchs, E. (1969) The free schools of Denmark, *Saturday Review*, 52, August 16.

- Fuerst, J. & Pupo, D. (1983) Desegregated schooling: The Milwaukee experience. *Urban Education*, 18(2), 229-244.
- Fullington, G. (1977) *Magnet schools: What are they? Where are they going?* OSSC Bulletin, 21, No.3.
- Gaffney, E. (Ed.) (1981) *Private schools and the public good*. Notre Dame: University of Notre Dame Press.
- Gallup, G. (1982) Fourteenth annual Gallup poll of the public's attitude toward the public schools. *Phi Delta Kappan*, 64(1), 23-38.
- Ginzburg, E. (1973) *Teachers College Record*, 72(3), 372-382.
- Glazer, N. (1977) Public education and American pluralism. In *Parents, teachers, and children: Prospects for choice in American education*. San Francisco, CA: Institute for Contemporary Studies.
- Glazer, N. (1983) The future under tuition tax credits. In Thomas James and Henry Levin (Eds.), *Public dollars for private schools* (pp. 87-100). Philadelphia: Temple University Press.
- Glenn, J. (1978) Legislative implications of magnet schools. In Estes, N. and D. Waldrip (Eds.) *Magnet schools: Legal and political implications*. Piscataway, NJ: New Century.
- Gottfredson, G. (1984) *The effective school battery: User's manual*. Center for the Study of Social Organization: John Hopkins University.
- Gratiot, M. (1979) *Why parents choose nonpublic schools: Comparative attitudes and characteristics of public and private school consumers*. Unpublished Ph.D. dissertation, Stanford University.
- Graubard, A. (1972) *Free the children*. NY: Pantheon.
- Greeley, A. (1987) Freedom of choice: our commitment to integration. In *Parents, teachers, and children: Prospects for choice in American education* (pp. 183-207). San Francisco: Institute for Contemporary Studies.
- Greeley, A. (1981) Catholic high schools and minority students. In Edward Gaffney (Ed.) *Private schools and the public good*, (pp. 6-16). Notre Dame: University of Notre Dame Press.
- Gross, N., Mason, W., & Mceachern, A. (1958) *Explorations in role analysis: Studies of the superintendency role*. New York: Wiley.
- Gross, R. & Gross, B. (1971) *Radical school reform*. New York: Simon & Schuster.
- Hanim, C. (1982) Constraints on parents' rights concerning the education of their children. In M. E. Casimir (Ed.) *Family choice in schooling*, (pp. 71-84). Lexington, MA: Lexington Books.

- Hannaway, J. (1978) Administrative structures: why do they grow? *Teachers College Record*, 79(3), 413-436.
- Hawley, W. et al. (1983) *Strategies for effective desegregation*. Lexington, Massachusetts: D.C. Heath and Company.
- Heath C. & Nielson, M. (1974) The research basis for performance-based teacher education. *Review of Educational Research*, No. 4, Fall, 463-84.
- Hentoff, N. (1977) Who's to blame? The politics of educational malpractice. *Learning*, 6(2), October, 40-50.
- Hillocks, G. JR. (1978) Books and bombs: Ideological conflict and the schools - a case study of the kanawha county book protest, *School Review*, 86, August, 632-654.
- Hirschman, A. (1970) *Exit, voice, and loyalty*. Cambridge, Mass.: Harvard University Press.
- Hoachlander, E. & Choy, S. (1984) Work-based attendance: a new approach to expanding parental choice in education. *Phi Delta Kappan*, 66(1), 57-62.
- Illich, I. (1971) *Deschooling society*. New York: Harper & Row.
- ICS, (1977) *Parents, teachers, and children: Prospects for choice in American education*. San Francisco, CA: Institute for Contemporary Studies.
- James, T. & Levin, H. (Ed.s) (1983) *Public dollars for private schools: The case of tuition tax credits*. Philadelphia, PA: Temple University Press.
- James, E. (1986) Public subsidies for private and public education: the Dutch case. In Levy, D. (Ed.) *Private education: Studies in choice and public policy*, (pp. 113-137). New York: Oxford University Press.
- Jencks, C. & Areen, J. (1971) Educational vouchers: a proposal for diversity and choice. *Teachers College Record*, 72, 327-336.
- Jencks, C. (1970) Giving parents money for schooling: Education vouchers. *Phi Delta Kappan*. 52(1), 49-52.
- Jencks, C. et al. (1976) *Who gets ahead?* NY: Basic Books.
- Jenkinson, E. (1979) *Censors in the classroom*. Carbondale: Southern Illinois University Press.
- Joffe, C. (1977) *Friendly intruders*. Berkeley: University of California Press.
- Katz, E. & Danet, B. (1968) *Bureaucracy and the public*. New York: Basic Books.
- Kerr, N. (1964) The school board as an agency of legitimation. *Sociology of Education*, 33, 34-59.

- Kirst, M. (1981) . Loss of support for public secondary schools: Some causes and solutions. *Daedalus*, Summer, 45-56.
- Kirst, M. (1983) The rise and fall of PPBS in California. In J. Baldrige & T. E. Deal (Eds.) *The dynamics of organizational change in education* (pp. 127-136). Berkeley: McCutchan.
- Klees, S. (1974) *The role of information in the market for education services*. Stanford University: Occasional Paper in the Economics and Politics of Education.
- Kohn, M. (1969) *Class and conformity: A study in values*. Homewood, IL: Irwin-Dorsey.
- Kohn, M. & Miller, K. (1983) *Work and personality: An inquiry into the impact of social stratification*. Norwood, NJ: Ablex
- Kolderie, T. (1985) *Two alternatives routes to the improvement of education: Part II*. Report of the Public Services Re-design Project. Minneapolis, Minnesota: Humphrey Institute, University of Minnesota.
- Kolderie, T. & Olson, R. (1986) A different approach to professionalism: teachers in private practice. *Educational Leadership*, 44(1), 67-70.
- Kottkamp, R. & Nault, R. (1982) Salient considerations in program choice. In M. E. Manley-Casimir (Ed.) *Family choice in schooling*, (pp. 99-118). Lexington, Massachusetts: Lexington Books.
- Kozol, J. (1972) *Free schools*. Boston: Houghton Mifflin.
- Krashinsky, M. (1986) Why education vouchers may be bad economics. *Teachers College Record*, 88(2), 139-167.
- La Noue, G. (1972) *Educational vouchers: Concepts and controversies*. New York: Teacher's College, Columbia University.
- Lareau, A. (1987) Social class differences in family-school relationships: the importance of cultural capital. *Sociology of Education*, 60, April, 73-85.
- Larson, J. (1981) *Takoma park magnet school evaluation*. Rockville, Md.: Dept. of Educational Accountability, Montgomery, Co. Public Schools.
- Levin, H. (1983) Educational choice and the pains of democracy. In T. James & H. Levin (Eds.) *Public dollars for private schools* (pp. 17-38). Philadelphia: Temple University Press.
- Levin, H. (1979) *Educational vouchers and social policy*. Stanford University: Institute for Research on Educational Finance and Governance.
- Levine, D. & Eubanks, D. (1980) Attracting nonminority students to magnet schools in minority neighborhoods. *Integrated Education*. 18, 52-58.

- Levine, D. (1975) Home environment of students in a high achieving inner city parochial school and a nearby public school. *Sociology of Education*, 45, Fall, 435-445.
- Levine, D. & Havighurst, R. (1977) *The future of big city schools: Desegregation policies and magnet alternatives*. Berkeley: McCutchan.
- Levine, D. (1980) *A study of selected issues involving magnet schools in big city school districts*. Kansas city: Missouri University Center for the Study of Metropolitan Problems in Education.
- Levinsohn, F. & Wright, B. (1976) TV's deadly inadvertent bias. In F. Levinsohn, & B. Wright (Eds.) *School desegregation: Shadow and substance* (pp. 85-96) Chicago: University of Chicago Press.
- Levy, D. (1986) *Private education: studies in choice and public policy*. New York: Oxford University Press.
- Lieberman, M. (1985) *Beyond public education*. New York: Praeger.
- Lindelow, J. (1979) *Educational vouchers*. Burlingame, California: Association of School Administrators.
- Lines, P. (1978) an equal choice plan for eliminating school desegregation. *Texas Law Review*, 56(6), 1245-1269.
- Lines, P. (1987) An overview of home instruction. *Phi Delta Kappan*, March, 510-517.
- Lippitt, R. (1965) Roles and processes in curriculum development and change. *Strategy for curriculum change*. Wash. D.C.:ASCD.
- Lipsky, M. (1980) *Street level bureaucracy*. New York: Russell Sage Foundation.
- Longanecker, D. (1983) The public cost of tuition tax credits. In Thomas James and Henry Levin (Eds.) *Public dollars for private schools* (pp. 115-129). Philadelphia: Temple University Press.
- Lortie, D. (1975) *Schoolteacher: A sociological study*. Chicago: University of Chicago Press.
- Loveridge, R. et al. (1978) *Parent perceptions of magnet schools as a method of desegregation*. Paper presented at annual meeting of the American Educational Research Association, Toronto, Canada.
- Manley-Casimir, M.(Ed.) (1982) *Family choice in schooling*. Lexington, Massachusetts: Lexington Books.
- March, J. (1978) American public school administration: a short analysis. *School Review*, 86, 217-250.

- Marshall, K. (1978) The making of a magnet school: A personal account of the journey from chaos to quality. *Journal of Education*, 160, May, 19-35.
- Mayeske, G. (1973) *Study of achievement of our nation's students*. Dept. of Health, Education, and Welfare, Washington, D.C.: U.S. Government Printing Office.
- McAdams, J. (1974) Strategies for integration: Can open enrollment work? *The Public Interest*, 37(1), Fall, 69-88.
- Mcdermott, J. (1976) *Indeterminacy in education*. Berkeley: McCutchan.
- McMillan, C. (1980) Magnet schools: an approach to voluntary desegregation. *Phi Delta Kappa Educational Foundation*, Bloomington Indiana.
- Mcgraw, O. (1978) *Family choice in education: The new imperative*. Washington, D.C.: Heritage Foundation.
- Mcclaughry, J. (1985) Who says vouchers wouldn't work? *Reason*, January, 24-32.
- MDE (1987) *Postsecondary Enrollment Options Program Final Report*. Minnesota Department of Education, St. Paul, Minnesota.
- Metz, M. (1984) The life course of magnet schools: Organizational and political influences. *Teachers College Record*, 85(3), Spring, 411-430.
- Metz, M. (1986) *Different by design*. New York: Routledge & Kegan Paul.
- Metz, M. (1988) *The American high school: A universal drama amid disparate experience*. Paper presented at the American Educational Research Association, New Orleans, April, 1988.
- Meyer, J. & Rowan, B. (1978) The structure of educational organizations. In Marshall Meyer and associates (Eds.) *Environments and organizations* (pp. 78-109). San Francisco: Jossey Bass.
- Meyer, J., Scott, N., Cole, S., and Intili, J. (1978) Instructional dissensus and institutional consensus in schools. In Marshall Meyer and associates (Eds.) *Environments and organizations* (pp.233-263) San Francisco: Jossey Bass.
- Meyer, J. & Rowan, B. (1977) Institutionalize organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340-363.
- Meyer, M. et al. (1985) *Limits to bureaucratic growth*. New York: Walter de Gruyter.
- Michaelson, J. (1981) A theory of decision making in the public schools: a public choice approach. In S. Bacharach (Ed.) *Organizational behavior in schools and school districts*, (pp. 208-244). New York: Praeger.

- Miller, K. & Kohn, M. (1983) The reciprocal effects of job conditions and the intellectuality of leisure-time activities. In M. Kohn and C. School (Eds.) *Work and personality* (pp. 217-241). Norwood NJ: Ablex.
- Missal, G. (1977) *Schools and programs of choice: Voluntary desegregation in Massachusetts*. Boston: Massachusetts Department of Educational Opportunities.
- Moore, D. (1988) *The new improved sorting machine*. Paper presented at the Education Writers' Association, New Orleans, April 15, 1988. Paper prepared for the National Center on Effective Secondary Schools, University of Wisconsin-Madison.
- Morgan, I. & England, R. (1982) Large district school desegregation techniques. *Social Science Quarterly*, 63, 688-700.
- Moynihan, D. (1978) The case for tuition tax credits. *Phi Delta Kappan*, December, 274-276.
- Muller, C. (1983) The social and political consequences of increased public support for private schools. In T. James & H. Levin (Eds.), *Public dollars for private schools: The case of tuition tax credits* (pp.39-54). Philadelphia, PA: Temple University Press.
- Murnane, R. (1986) Family choice in public education: the roles of students, teachers, and system designers. *Teachers College Record*, 18(92), 169-189.
- Murphy, J. & Pawasarat, J. (1986) Why it failed: School desegregation in Milwaukee 10 years after the landmark ruling. *Milwaukee*, 11(1), September, 34-52.
- Nathan, J. (1983) *Free to teach*. New York: Pilgrim Press.
- National Governors' Association (1986) *A time for results: The Governors' 1991 report on education*. NGA task force on parent involvement and choice, NGA center for policy research and analysis, Washington, D.C.
- Nault, R. & Uchitelle, S. (1982) School choice in the public sector: A case study of parental decision making. In Michael E. Manley-Casimir (Ed.) *Family choice in schooling*, (pp. 85-90). Lexington, Massachusetts: Lexington Books.
- Newmann, F., Rutter, R., & Smith, M. (1987) *Teachers' sense of efficacy and community as critical targets for school improvement*. Paper prepared for the National Center on Effective Secondary Schools, University of Wisconsin-Madison.
- NIE (1976) *The desegregation literature: A critical appraisal*. Washington D.C.: H.E.W.

- Nirenberg, J. (1977) A comparison of the management systems of traditional and alternative public high schools. *Educational Administration Quarterly*, 13(1), 86-104.
- Niskanen, W. (1971) *Bureaucracy and representative government*. Chicago: Aldine.
- Odden, A. (1985) Supporting effective school management and classroom instruction, in *Reaching for excellence: An effective school sourcebook*. Washington, D.C.: NIE.
- Olivas, M. (1981) Information inequities: a fatal flaw in parochial plans. In E. Gaffney (Ed.) *Private schools and the public good*, (pp. 132-152). Notre Dame: University of Notre Dame Press.
- Orfield, G. (1978a) *Must we bus?* Washington, D.C.: Brookings Institute.
- Orfield, G. (1978b) Research, politics, and the anti-busing debate. *Law and Contemporary Problems*, 42(4), 141-175.
- Orfield, G. (1983) *Public school desegregation in the united states, 1968-1980*. Washington, D.C.: Joint Center for Policy Studies.
- Pacheco, A. (1980) Educational vouchers and their implications for equity. Institute for Research on Educational Finance and Governance, Stanford University.
- Parkinson, N. (1957) *Parkinson's law*. New York: Ballantine.
- Perrow, C. (1979) *Complex organizations: A critical essay*. Glencoe, Ill.: Scott, Foresman, and Company.
- Peshkin, A. (1978) *Growing up American*. Chicago: University of Chicago Press.
- Peterson, P. (1983) Is there a crisis in American education? In Twentieth Century Fund Task Force, *Making the grade* (pp. 27-36). New York: Twentieth Century Fund.
- Pincus, J. (1974) Incentives for innovation in the public schools. *Review of Educational Research*, 1, 113-114.
- Postman, N. & Weingartner, C. (1973) *The school book*. New York: Delta.
- Popkewitz, T., Tabachnik, R., & Wehlage, G. (1982) *The myth of educational reform*. Madison, Wisconsin: The University of Wisconsin Press.
- Powell, A., Farrar, E. & Cohen, D. (1985) *Shopping mall high school*. Boston, Houghton Mifflin.
- Power, J. (1979) Magnet schools: Are they the answer? *Today's Education*, September, pp 68-70.

- Premazon, J. & West, P. (1977) Requiem or rebirth? From voucher to magnet. *Clearinghouse*, 51(1), 38-40.
- President's Commission On School Finance (1972) *Final report: Schools, people and money, the need for educational reform*. Washington D.C.: Government Printing Office.
- Raywid, M. (1985) Family choice arrangements in public education. *Review of Educational Research*, 55(4), Winter, 435-467.
- Rebell, M. (1982) Educational voucher reform: Empirical insights from the experience of New York's schools for the handicapped. *The Urban Lawyer*, 14(3), 441-467.
- Reimer, E. (1970) *An essay on alternatives in education*. Cuernavaca: CIDOC.
- Rossell, C. (1979) Magnet schools as a desegregation tool: the importance of contextual factors in explaining their success. *Urban Education*, 14(3), October, 303-320.
- Rossell, C. (1985a) *The effectiveness of school desegregation plans as determined by community response*. A report to the U.S. Commission on Civil Rights from Systems Development Corporation.
- Rossell, C. (1985b) What is attractive about magnet schools? *Urban Education*, 20(1), April, 7-22.
- Rowan, B. (1981) The effects of institutionalized rules on administrators. In Bacharach, S. (Ed.) *Organizational behavior in schools and school districts*, (pp. 47-75). New York: Praeger.
- Royster, E. Baltzell, C. & Simmons, F. (1979) *Study of the emergency school aid act*. Washington, D.C.: U.S. Office of Education.
- Saiganik, L. & Karweit, N. (1982) Voluntarism and governance in education. *Sociology of Education*, 55, April/July, 152-161.
- Schofield, J. & Sagar, A. (1977) *Interracial behavior in a magnet school*. Paper presented at the 85th annual convention of the American Psychological Association, San Francisco, California.
- Schofield, J. (1982) *Black and white in schooling: Trust, tension, or tolerance?* NY: praeger.
- Schwartz, A. (1978) Social science evidence and the objectives of school desegregation. In J.E. McDermott (Ed.) *Indeterminacy in education*, (pp. 73-113). Berkeley: McCutchan.
- Shannon, T. (1986) Finn's voucher plan invites disaster. *Instructor*, April, 18-20.

- Sharp, R. & A. Green (1975) *Education and social control*. London: RKP.
- Shavelson, R. (1981) *A study of alternatives in American education, Vol. VIII: Conclusion and Policy Implications*. Santa Monica, CA: RAND.
- Sherman, J. (1982) *Public finance of private schools: Observations from abroad*. Institute for Research on Educational Finance and Governance, Stanford University.
- Sieber, S. (1975) Organizational influences on innovative roles. In J.V. Baldrige and T.E. Deal (Ed.) *Managing change in educational organizations*, (pp. 75-97). Berkeley: McCutchan.
- Sizer, T. & Whitten, P. (1968) A proposal for a poor children's bill of rights. *Psychology Today*, 2, Aug., 59-63.
- Sizer, T. (1984) *Horace's compromise*. Boston: Houghton Mifflin
- Smith, A. (1952) *Wealth of nations*. Chicago: Great Books Edition. Encyclopedia Britannica.
- Smith, P. (1977) Voluntary participation and public opinion in Milwaukee school desegregation. *Integrated Education*, 15, 89-91.
- Smylie, M. (1983) Reducing racial isolation in large school districts: The comparative effectiveness of mandatory and voluntary desegregation strategies. *Urban Education*, 17(4), January, 477-502.
- Snider, W. (1987) The call for choice. Special report in *Education Week*, June 24, Sec. C.
- Sowell, T. (1983) Do private schools produce higher levels of academic achievement? New evidence for the tuition tax credit debate. In *Parents, teachers, and children: Prospects for choice in American education* (pp.165-183). San Francisco: Institute for Contemporary Studies.
- Spann, R. (1977) Public versus private provision of government services. In T. Borcharding (Ed.) *Budgets and bureaucrats*, (pp. 71-89). Durham, North Carolina: Duke University Press.
- Staff, R. (1977) The growth of educational bureaucracy: Do teachers make a difference? In T. Borcharding (Ed.) *Budgets and bureaucrats*. Durham, North Carolina: Duke University Press.
- Stanley, C. (1982) *Parent and student attitudes toward magnet schools--do decision-makers care?* Paper presented at annual meeting of the American Educational Research Association, Austin, Texas.
- Stephan, W. & Feagin, J. (1980) *School desegregation: Past, present, and future*. New York: Plenum Press.
- Stephans, J. (1967) *The process of schooling*. New York: Holt, Rinehart, and Winston.

- Stern, D. & Timar, T. (1981) *Conflict and choice in public education*. Stanford University, Institute for Research on Educational Finance and Governance.
- Sullivan, D. (1974) *Public aid to nonpublic schools*. Toronto: Lexington Books.
- Sullivan, D. (1983) *Comparing efficiency between public and private schools*. Institute for Research on Educational Finance and Governance, Stanford University.
- Sussmann, L. (1977) *Tales out of school*. Philadelphia: Temple University Press.
- Taylor, B. (1981) The St. Thomas Community School: a Harlem success story. In E. Gaffney (Ed.) *Private schools and the public good*, (pp. 44-48). Notre Dame: University of Notre Dame Press.
- Terrell, H. (1974) *A comparison of the characteristics of elementary school students who chose to participate in a selected alternative schools program*. Unpublished Ph.D. Dissertation, University of Minnesota.
- Thompson, M. (1979) Milwaukee's specialty school plan promotes learning and integration. *School Board Journal*, 166, May, 30-33.
- Turner, R. Et Al. (1986) Policy strategies, teacher salary incentive, and student achievement: An explanatory model. *Educational Researcher* 15(3), 5-11.
- U.S. Commission On Civil Rights (1979) *Desegregation of the nation's public schools: A status report*. Washington, D.C.: U.S. Government Printing Office.
- Van Geel, T. (1976) *Authority to control the school program*. Lexington PA: Lexington Books.
- Vitullo-Martin, T. (1980) How federal policies discourage the racial and economic integration of private schools. In Edward M. Gaffney (Ed.) *Private schools and the public good*, (pp. 25-43). Notre Dame: University of Notre Dame Press.
- Wagner, R. (1977) American education and the economics of caring. In *Parents, teachers, and children: Prospects for choice in American education* (pp.111-128). San Fransisco, CA: Institute for Contemporary Studies.
- Walberg, H. & Fowler, W. (1987) Expenditure and size efficiencies of public school districts. *Educational Researcher*, 16(7), 5-16,
- Walsh, D., Zahorik, J., Phillips, S., & Haertel, S. (1985) *The elementary schools: Four case studies*. Milwaukee, WI: Metropolitan Milwaukee Public Schools Study Commission.

Warren, C. (1978) *The magnet school boom: Implications for desegregation*. New York, Columbia University. ERIC No. ED 157 965.

Weatherly, R. (1979) *Reforming special education: Policy implementation from state level to street level*. Cambridge: Massachusetts Institute of Technology Press.

Weber, W. (1977) The eclipse of education vouchers in America: the East Hartford case. *Journal of Education*, 159(2), 36-42.

Weaver, R. (1979) *Magnet school curriculum: Distinctly different?* Paper presented at annual meeting of the American Educational Research Association, San Francisco, California. ERIC No. ED 173 468.

Weick, K. (1976) Educational organizations as loosely coupled systems. *Administrative Science Quarterly*, 22,1-19.

Weiler, L. (1974) *A public school voucher demonstration: The first year at Alum Rock*. Santa Monica: Rand.

West, E. (1986) An economic rationale for the public schools: The search continues. *Teachers College Record*, 88(2), 152-162.

West, E. (1982) The public monopoly and the seeds of self-destruction. In Michael E. Marry-Casimir (Ed.) *Family choice in schooling*, (pp.185-198). Lexington, Massachusetts: Lexington Books.

Willie, C. (1984) *School desegregation plans that work*. Westport, CT.: Greenwood Press.

Wise, A. (1975) *Legislated learning: The bureaucratization of the American classroom*. Berkeley: University of California Press.

Witte, J. (1986) *Race and metropolitan inequalities in Milwaukee: evidence and implications*. Prepared for the National Conference on School Desegregation Research, The University of Chicago, September 5, 1986.

Witte, J. & Backus, J. (1986) *Metropolitan Milwaukee teacher survey report*. Milwaukee, WI: Metropolitan Milwaukee Public Schools Study Commission.

Wolcott, H. (1977) *Teachers vs. Technocrats*. Eugene, Oregon: Center for Education Policy and Management.

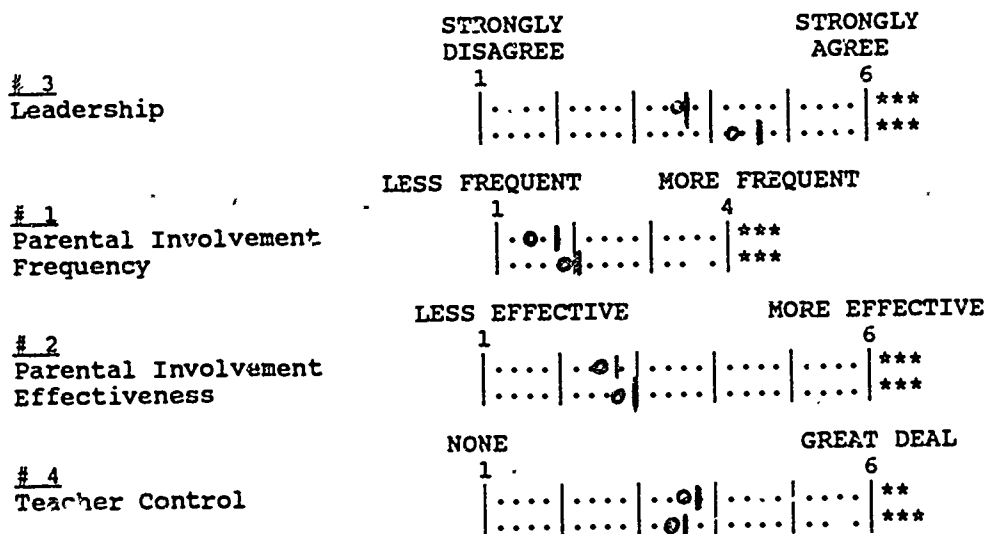
Wortman, P. & St. Pierre, R. (1977) The educational voucher demonstration: A secondary analysis. *Education and Urban Society*, 9(4), August, 471-492.

Wright, J. & Wright, S. (1976) Social class and parental values for children: A partial replication and extension of the Kohn thesis. *American Sociological Review*, 41, 527-537.

APPENDIX A

TEACHER SURVEY RESULTS:^a
ELEMENTARY AND MIDDLE SCHOOL MAGNET VERSUS NONMAGNET

The following scales are constructed from sets of interrelated survey questions. On the following scales higher values are more positive outcomes. The number above each scale or item (eg. #3 above Leadership) corresponds to the scale/item number in Tables 4.2 and 4.3. On each item or scale the upper dotted line shows middle school responses; the lower line shows elementary school responses. The circle on the scale denotes the mean response of nonmagnet teachers; the vertical line denotes the mean response of magnet teachers. Note: these results, unlike the results reported in Tables 4.2 and 4.3 in Chapter 4, are not averages of school means. Thus, larger schools have a greater influence on the group mean (assuming response rates are equivalent).



^a Sample sizes are as follows: traditional middle schools = 350; magnet middle schools = 54; traditional elementary schools = 1050; magnet elementary = 161. Response rate = 60%.

Significance levels (two-tailed, pooled variance difference of means) are denoted by: P<.05 * ; P<.01 ** ; P<.001 ***

	STRONGLY AGREE	STRONGLY DISAGREE
#10 I usually look forward to each working day.	1 |.....|:|.....|:|.....|:|.....|:|.....|:|.....| |.....|:|.....|:|.....|:|.....|:|.....|:|.....|	6 |.....|:|.....|:|.....|:|.....|:|.....|:|.....| |.....|:|.....|:|.....|:|.....|:|.....|:|.....|
If you have, or would have a daughter or son, would you like them to enter the teaching profession.	1 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|	6 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|
#11 The learning environment in this school is not conducive to school achievement for most students.	1 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|	6 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|
#12 The general education climate in my school provides positive motivation for me to learn new things about the area I teach.	1 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|	6 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|
#13 Goals and priorities for the school are clear.	1 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|	6 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|
# 7 In this school the teachers and the principal are in close agreement on school disciplinary policy.	1 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|	6 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|
# 9 In my school building teachers are treated equally without preferential treatment.	1 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|	6 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|
Staff member are recognized for a job well done.	1 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|	6 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|
# 3 (In Leadership scale) The principal sets priorities, makes plans, and sees that they are carried out.	1 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|	6 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|
# 3 (In Leadership scale) The principal knows what kind of school he/she want and has communicated it to the staff	1 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|	6 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|
# 8 Teachers are supported when they enforce the school's discipline rules.	1 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|	6 |.....|:|.....|:|.....|:|.....|:|.....|:|.....|

	STRONGLY AGREE 1						STRONGLY DISAGREE 6						
The district administration's behavior toward the staff is supportive and encouraging.	|	....	|	....	|	. . . .	|	o . . .	|	....	|	***
		|	....	|	....	|	o . . .	|	....	|	|	*
The physical environment in my school lends itself to learning.	1	|	....	|	....	|	. . . .	|	o . . .	|	....	|	6
		|	....	|	....	|	. . . .	|	o . . .	|	....	|	6
<u># 6</u> All personnel in our building work closely together as a team.	1	|	....	|	....	|	. . . .	|	o . . .	|	....	|	**
		|	....	|	....	|	. . . .	|	o . . .	|	....	|	*
I am familiar with the content of the classes taught by other teachers in my department or grade level.	1	|	....	|	....	|	. . . .	|	o . . .	|	....	|	6
		|	....	|	....	|	. . . .	|	o . . .	|	....	|	6
My principal is not familiar with the content of the courses I teach.	1	|	....	|	....	|	. . . .	|	o . . .	|	....	|	6
		|	....	|	....	|	. . . .	|	o . . .	|	....	|	6
<u># 5</u> My success or failure in teaching students is due primarily to factors beyond my control rather than to my own effort or ability.	1	|	....	|	. . . .	|	. . . .	|	o . . .	|	....	|	**
		|	....	|	. . . .	|	. . . .	|	o . . .	|	....	|	***
When a child is not learning well in the classroom, I am primarily responsible for improving the situation.	1	|	....	|	. . . .	|	. . . .	|	o . . .	|	....	|	6
		|	....	|	. . . .	|	. . . .	|	o . . .	|	....	|	6

To what degree do you consider each of the factors below to be a problem that detracts from your ability to do the best possible job of teaching your students?

	MAJOR PROBLEM	MINOR PROBLEM	NO PROBLEM
	1	3	3
Inadequate student preparation for grade level.	| . 0 | | ... |	| . 0 | | ... |	| *** |
Students who do not understand the material because they cannot read.	| . 0 . | | ... |	| . 0 . | | ... |	| *** |
Disruptions due to classroom discipline problems.	| . 0 . | | ... |	| . 0 . | | ... |	| *** |
Lack of concern/support from parents.	| . 0 . | | ... |	| . 0 . | | ... |	| *** |
Lack of general support from the community.	| ... 0 | | . . |	| ... 0 | | . . |	| *** |

APPENDIX B

Magnet Versus Nonmagnet Differences: Resource Inputs

My interviews produced enough complaints from nonmagnet staff about magnets' greater resources and smaller class sizes that this subject merits empirical examination.¹ Large resource differences favoring magnets could be a factor explaining magnets' higher values on survey items related to organizational quality.²

To explore resource disparities between magnets and nonmagnets I compared the pupil/staff ratios and the non-personnel resource expenditures of MPS elementary and middle school magnets and nonmagnets over a three year period.³ Table B.1 (top) indicates that the magnets on average have a slightly lower pupil per teacher ratio; in the high schools, magnet pupil/staff ratios are slightly higher. The disparities between magnets and nonmagnets are relatively minor -- by themselves probably negligible in producing objectively significant different work loads. (Because of the complexities of staffing, it is not certain that these disparities affect class size). The relative disparity is greatest at the middle school level. The difference of .7 in the pupil/teacher ratio between magnet and nonmagnet middle schools is about a 5% difference favoring magnets. The difference in the pupil/teacher ratio at the elementary level is 1.8%. At the high school, a 1.8% difference favors nonmagnet high schools. Adding aides in the calculations does not change the ratio at the elementary level. At the middle school and high school level, the differences between magnets and nonmagnets on the Pupil/Teachers + Aides variable change by a few percentage points, favoring middle school magnets and high school nonmagnets.

¹ There is a large body of "input-output" research showing weak, and often no, relationships between input characteristics such as teachers' experience, per-pupil expenditures, class size, physical resources, and outputs, usually test scores. (This is within the level of naturally occurring variation). See, Averch (1971); Mayeske (1973).

² Published accounts often describe magnets outfitted with various "extras." See, for example, descriptions of magnets started in Houston (Campbell and Brandsetter, 1977) and Chicago (Campbell and Levine, 1977). Schofield's (1982) ethnographic study also implies this. Magnets may be provided with extra classroom aides or special staff positions to facilitate the development of the magnets' special programs. Sometimes, to support individualized instructional programs -- a common magnet specialty -- smaller class sizes are made possible.

³ These data are from the MPS Division of Research and Program Assessment "School Profiles" document.

Non-personnel expenditures (Table B.1, middle) favor elementary magnets by about 20%, but in the middle and high schools are essentially the same for magnets and nonmagnets. At the elementary level the expenditure difference gives magnets on average about seven more dollars per year to spend per pupil on equipment and supplies. Whether or not this makes a perceptible difference in working conditions in elementary magnets is difficult to assess. Clearly, an extra \$2,100 available to an elementary school of 300 students (\$7/student X 300 students) in one year can purchase some tangible goods. However, it is a different matter if the extra money is sufficient to account for the elementary magnets' more positive survey outcomes. Note that the middle school magnets, which have only a 1% non-personnel expenditure advantage over nonmagnets, still show large differences on the school quality survey items in Appendix A.

Four survey items (Table B.1, bottom) lend further credence to the probable substantive negligibility of material resource differences between magnets and nonmagnets. These items assess teachers' subjective response to their work load. Only one item produces a statistically significant difference ($P = .01$), and it suggests magnet elementary teachers feel more over-burdened. Magnet elementary teachers claim "insufficient preparation time" is a bigger problem in detracting from their "ability to do the best possible job of teaching [their] students." On the other hand, nonmagnet teachers rated "too many students in each class," as a slightly greater problem, though differences are not statistically significant. On the items "too much paperwork," and "insufficient resources, eg. textbooks and supplies," magnet and nonmagnet responses were the same. (Note that where differences occur, they may reflect differences in expectations between the two groups of teachers, not necessarily objective differences in conditions).

Finally, exploring the possibility that magnet teachers themselves may differ systematically in ways contributing to the survey differences on the organizational measures, I compared teachers' ages, years experience as a teacher, and educational attainment (Table B.2). Although some differences were discovered, it seems unlikely these differences are the reason for the higher magnet values on the school quality survey items in Tables 4.2 and 4.3.

There is a small difference in age and length of teaching experience at the elementary level. Magnet teachers on average (based on teacher survey data) are younger by about two years (35.50 compared to 37.75 years of age); and magnet teachers have slightly over two years less teaching experience (13.57 compared to 16.03 years of experience). These differences could reflect a variety of factors. Possibly teachers in the schools that became magnets were younger to begin with. Most magnets are inner city schools, and teacher turnover tends to be higher in inner city schools; it is not uncommon for staff in inner city schools to be somewhat younger (Greenberg and McCall, 1974). Thus, when converted to a magnet, the school starts off with a younger staff. Another possibility is that turnover in the magnets is a little higher than average, although this would seem inconsistent with the magnets' more positive survey results. Teacher recruitment practices or self-selection are other possibilities. Whatever the reason, the age differences are small. My purpose is not to account for differences in teacher characteristics between magnets and nonmagnets, but to consider their possible significance as a source of the

differential survey outcomes.

The 5% difference in teachers with a Master's degree at the middle school level is noteworthy. This probably reflects extra training and certification of specialist teachers at the magnets.⁴ After a school becomes a magnet there are typically training requirements for teachers previously in the school who wish to remain, but lack specific certification in the specialty focus of the school. At the same time, recruitment and self-selection processes are likely also to affect the composition (in terms of educational attainment and other attributes) of magnet faculty.⁵

Although differences on measurable characteristics of teachers are not large, these data do not permit certainty in discounting the significance of these factors. If magnet teachers differed in age from nonmagnet teachers by, say, five or more years or differed in educational attainment (percent with Master's degree) by at least 15 or 20%, effects of such differences would require serious exploration. However, the small differences found seem unlikely to explain the magnets' significantly more positive survey outcomes.

Unmeasured differences between magnet and nonmagnet teachers may be more important in accounting for differential school performance. If, as a result of several parallel processes -- differential recruitment, self-selection, and additional training -- magnet teachers on average have a higher level of personal competence, expert knowledge, or commitment to teaching, then a strong case can be made for the contribution of these factors (which may or may not relate to the above measurable characteristics) to differential

⁴ At the high school level, for instance, the percentage of Teachers with a Masters degree in the College Bound magnet high school is about 15% higher than in the other high schools in the district (Archbald and Witte, 1985).

⁵ An issue that arises with magnets concerns staffing and a conflict of interests between administrators (and indirectly parents) and the teacher's union. When a school is converted into a magnet, the question of how well matched the school's existing staff is to the proposed magnet specialization is a concern to the principal, the central administration, and the parents backing, and sometimes initiating, the proposed magnet. A principal charged with the responsibility of starting a magnet and allied parties want staff trained and interested in the magnet's specialization. However, teachers do not like to be involuntarily transferred; and sometimes resent having to get further training to maintain a position in a building.

A school board-union agreement for the 1976-77 school year when the bulk of the magnets were set up permitted 10% of teachers system-wide to be selected and placed by administrators for the purpose of staffing magnets. Since then, regulations have been developed which specify particular training requirements for each magnet. Also, to accommodate staffing needs of magnets, there is a special type of teacher transfer policy (281-T) that permits teachers to transfer (or be transferred) out of magnets on program incompatibility grounds.

organizational characteristics. My data are insufficient to deal with this question.

If there are significant resource differences between the magnets and nonmagnets, these data do not show them. It is possible there are budgetary expenditures not recorded in the school profiles document from which the funding data were drawn. This may be possible where federal funds are used to support special magnet features. For instance, MPS received 7 to 8 million dollars per year in the early years of its desegregation program through the federal Emergency School Aid Act (Fuerst and Pupo, 1983). Central administrators told me that, in addition to transportation, information dissemination, and planning some of the dollars went to support the needs of program specializations and certain "extras" magnets offered to help attract parents from their neighborhood schools, such as additional materials and part-time staff help (aides, a program coordinator). Apparently, these funds were primarily intended to help with start up costs of magnets and were granted mainly to school districts in the beginning stages of magnet programs.

Without undertaking a detailed budget analysis, it is not possible to account for the programmatic or organizational effects of these federal funds. While such funds probably help in the early stages of program development, given both considerable staff and student turnover in magnets and the withdrawal of federal dollars over the ten years, it seems less likely these monies could account for the differential survey ratings.

In sum, because measurable resource differences appear quite small, do not consistently favor either group, and do not show up as unequal problems on the survey ratings, I do not use school resource variables in the regression equations. By all indications, they do not account for the magnet-nonmagnet differences.

TABLE B.1

1983/1984 RATIOS OF PUPILS TO TEACHERS AND PUPILS TO TEACHERS PLUS AIDES FOR MAGNET AND NONMAGNET SCHOOLS

P/T = Pupils/Teacher P/T+A = Pupil/Teachers + Aides

	Elementary		Middle		High School	
	P/T	P/T+A	P/T	P/T+A	P/T	P/T+A
Magnet	20.6	18.6	13.2	11.3	16.9	16.3
Nonmagnet	21.2	19.2	13.9	12.4	16.6	15.2

1980-81, 1981-82, AND 1982-83 NON-PERSONNEL PER PUPIL EXPENDITURES IN MAGNET AND NONMAGNET SCHOOLS (all figures below in dollars)

		80-81	81-82	82-83	Average
Magnet	Elementary	32.60	39.80	46.60	39.70
Nonmag.	Elementary	28.20	31.70	37.80	32.40
Magnet	Middle	63.00	74.30	81.90	73.10
Nonmag.	Middle	59.50	74.60	80.80	71.60
Magnet	High	102.40	123.70	132.80	119.60
Nonmag.	High	92.20	145.50	123.60	120.40

SURVEY RESULTS PERTAINING TO RESOURCE COMPARISONS: MAGNET VERSUS NONMAGNET

Magnet versus nonmagnet teachers' reported problems based on responses to: "To what degree do you consider each of the factors below to be a problem that detracts from your ability to do the best possible job of teaching your students?"

(M = Middle School; E = Elementary School)
 (Dot = Nonmagnet; Vertical Line = Magnet)
 (P<.05 * ; P<.01 ** ; P<.001 ***)

	MAJOR PROBLEM	MINOR PROBLEM	NO PROBLEM	
	1	2	3	
Insufficient time for class preparation.	| .....φ.....|	| .....|	| .....|	M
	| .....φ.....|	| .....|	| .....|	E**
Too many students in each class.	| .....φ.....|	| .....|	| .....|	M
	| .....φ.....|	| .....|	| .....|	E
Too much paperwork required of teachers.	| .....φ.....|	| .....|	| .....|	M
	| .....φ.....|	| .....|	| .....|	E
Insufficient resources, e.g. textbooks, supplies.	| .....|	| .....φ.....|	| .....|	M
	| .....|	| .....φ.....|	| .....|	E

TABLE B.2

**1983/84 PERCENTAGE OF TEACHERS
WITH A MASTERS DEGREE OR MORE IN THE AVERAGE
MAGNET SCHOOL AND THE AVERAGE NONMAGNET SCHOOL**

	<u>Elem.</u>	<u>Middle</u>
Magnet	17.0%	23.5%
Nonmagnet	16.5%	18.5%

**AVERAGE AGE, YEARS OF EXPERIENCE, AND EDUCATIONAL
ATTAINMENT OF MAGNET COMPARED TO NONMAGNET TEACHERS
AS REPORTED ON TEACHER SURVEY**

Average Age

	<u>Elementary**</u>	<u>Middle</u>
Magnet	35.5	36.1
Nonmagnet	37.8	36.2

Average Years of Teaching Experience

	<u>Elementary***</u>	<u>Middle</u>
Magnet	13.6	14.5
Nonmagnet	16.0	15.3

Average Educational Attainment

	<u>Elementary</u>	<u>Middle*</u>
Magnet	2.3	2.6
Nonmagnet	2.3	2.2

2=Bachelor's plus 16 or more credits

3=Master's degree

(Response values ranged from 1 to 6)

($P < .05$ * ; $P < .01$ ** ; $P < .001$ ***)

SOURCE: MPS Division of Research and Program Assessment, "School Profiles."

APPENDIX C SCATTERPLOT OF STUDENT COMPOSITION VARIABLE FOR ELEMENTARY MAGNETS AND NONMAGNETS

