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AUTHOR Bridge, R. Gary; Blackman, Julie
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ABSTRACT

Originating in the Rand Corporation's evaluation of the voucher demonstration project in the Alum Rock Union School District (California), this study of family choice in schooling focuses on these questions: Are parents motivated and competent to make intelligent choices among competing educational alternatives? What kinds of schools do parents pick when they have free choices? What factors influence their choices? Is segregation by race, sex, or social class exacerbated by allowing parents free choice? Most of the data for the study came from the Alum Rock project, with additional information from the Minneapolis Southeast Alternatives program and the Mamaroneck (New York) school district. The report describes the three family choice systems in these districts and presents findings on parents' information levels, choice processes, and satisfaction, obtained through questionnaire responses. Findings and implications are discussed in detail and supported by tables. Appended are a model of parents' choice behavior, a sample questionnaire, and ethnographic data for Alum Rock students. (WD)

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A STUDY OF ALTERNATIVES IN AMERICAN EDUCATION, VOL. IV: FAMILY CHOICE IN SCHOOLING

PREPARED FOR THE NATIONAL INSTITUTE OF EDUCATION

R. GARY BRIDGE, JULIE BLACKMAN

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PREFACE

This report is the fourth volume of a series documenting a study of alternative schools in American education, sponsored by the National Institute of Education under Contract B2C-5326. There are six other volumes in the series, all published or forthcoming under the general title, *A Study of Alternatives in American Education:*

Vol. I: *District Policies and the Implementation of Change*, by G. Bass, R-2170/1-NIE.

Vol. II: *The Role of the Principal*, by M. Thomas, R-2170/2-NIE.

Vol. III: *Teachers' Responses to Alternatives*, by R. Rasmussen, R-2170/3-NIE.

Vol. V: *Diversity in the Classroom*, by P. Barker, T. K. Bikson, and J. Kimbrough, R-2170/5-NIE.

Vol. VI: *Student Outcomes in Alum Rock, 1974-1976*, by F. J. Capell, R-2170/6-NIE.

Vol. VII: *Summary and Policy Implications*, by D. Weiler, R-2170/7-NIE.

Study Background

This study had its origins in 1972. In April of that year, the Office of Economic Opportunity (OEO) funded an education voucher demonstration in Alum Rock, California, and awarded a study and evaluation contract to The Rand Corporation. Voucher systems require that funds for education be distributed directly to families in the form of certificates, which families can then use to purchase education at schools of their choice.[1] The government wished to test a voucher model that

[1] Findings for the first year of the voucher demonstration (1972-73) are reported in Daniel Weiler et al., *A Public School Voucher Demonstration: The First Year at Alum Rock*, The Rand Corporation, R-1495-NIE, June 1974, 4 vols. Alum Rock is an independent elementary school district in San Jose, California.

included competing public and private schools, with complex regulations designed to protect and advance the interests of disadvantaged families.[1] But the OEO agreement with Alum Rock did not require immediate implementation of this model. In lieu of private schools participating in the demonstration, Alum Rock was to encourage parent choice and stimulate competition between schools--two key objectives of the voucher plan--by creating multiple programs within the public schools. Parents would be informed about their options and encouraged to select the programs they preferred for their children. Alum Rock and OEO agreed that this "public schools only" model was to be a "transition" toward a more complete voucher demonstration, and OEO continued to seek additional demonstration sites for a more extensive test of the voucher idea. The demonstration began in September 1972 with six schools, organized as twenty-two "minischools" offering a variety of educational approaches.

By the end of the second year of the demonstration--spring 1974--sponsorship of the voucher program had been assumed by the National Institute of Education. The transition to a full-scale model in Alum Rock had not taken place, and no new sites had joined the demonstration. Rand and NIE agreed, however, that while a more complete voucher test might still be arranged in Alum Rock or elsewhere, the existing demonstration was of interest in its own right: Thirteen public schools were offering forty-five program options to parents.[2] In effect, Alum Rock was testing a variant of an innovation that a number of observers had argued could improve the quality of public education--alternative schools.

It was agreed that while the main study would continue to concentrate on Alum Rock in 1974-75, a small side study would be undertaken to explore the nature of the alternative schools movement in other districts. This study identified a number of areas where further analysis

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[1]The "regulated compensatory" voucher model was originally proposed in a 1970 study commissioned by OEO. See Center for the Study of Public Policy, *Education Vouchers: A Report on Financing Elementary Education by Grants to Parents*, Cambridge, Mass., December 1970.

[2]There were at one time more than fifty minischools available to participating parents, in fourteen demonstration schools. Ten Alum Rock schools never joined the demonstration.

might yield a better understanding of the issues associated with implementing alternative schools. Many of these issues had already surfaced in Alum Rock.

By the fourth year of the demonstration (1975-76), prospects for creating a more comprehensive test of the voucher model had diminished appreciably, while the work that had already been accomplished in Alum Rock constituted a useful base for a modest comparative study of alternative schools. Accordingly, some project resources were shifted in that year toward the study of three new sites where alternative schools were being tried: Cincinnati, Ohio; Eugene, Oregon; and Minneapolis, Minnesota.[1] Data collection from these sites and Alum Rock was completed in 1976-77.

Alternative Schools

Alternative schools or educational programs--variously defined--can now be found in perhaps one out of every four school districts in the country.[2] These schools and programs serve a number of different client groups, offering some form of teaching style and method or curriculum content differing in important respects from the mainstream of educational programs in those districts. They have been created in response to a variety of social and political pressures, and are usually designed to meet some or all of the following objectives:

- o Social Equity: Extending to all parents the right to choose among educational alternatives that they consider best suited for their children, and/or reinforcing area- or district-wide desegregation plans by providing "magnet" programs.

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[1] Criteria and methods for site selection are discussed in Chapter I of Vol. I in this series: *District Policies and the Implementation of Change*, by G. Bass.

[2] National School Boards Association, *Alternative Schools*, Research Report 1976-3, Evanston, Illinois, 1976, p. 5.

- o Accountability. Creating schools that are more directly responsive to parent and student desires and needs, and more visible and open regarding their educational operations.
- o Incentives To Innovate. Providing expanded opportunities for teachers and administrators to offer new and different educational programs, where rewards for successful innovation are tied in part to extrinsic evaluations of success (parent and student demand) rather than (exclusively) to intrinsic criteria (administrator and colleague approval).
- o Diversity. Introducing program variety on the assumption that a uniform approach to education may be inefficient where the student clientele is socially and ethnically diverse, with a range of skills and interests that should be matched to appropriately varied educational opportunities.
- o Constituency Satisfaction. Increasing student, parent, teacher, and community satisfaction with the educational system, both as a desirable social goal in itself and as the means to other desirable objectives: increased social stability in the schools, greater parent support of school activities, and more community willingness to provide financial support for education.
- o Improved Student Outcomes. Improving student cognitive and noncognitive growth through better matching of students to programs, through improved teacher and administrator incentives to innovate, and through greater system accountability.

For the purposes of this study, an alternative school or program is defined as having at least three essential characteristics:

- o It is an educational program that is distinctly different in some way from the majority of programs in that district.
- o It is available to students on a voluntary basis.

o It is a full-time educational program.

The study is confined to alternatives that meet this definition.[1]

Study Goals and Constraints

As noted, this study had its origins in Rand's evaluation of the voucher demonstration in Alum Rock. In that district, rapid and complex changes in organization and procedure raised many questions about the problems that a district might encounter in attempting to implement a system of alternative schools. These questions became the main focal points of the research, as hypotheses generated on the basis of Rand's study of Alum Rock were tested against the experiences of other districts that have tried some version of an alternative schools program. We asked: What district strategies are most likely to lead to the successful implementation of alternatives under different circumstances? What are the effects of alternative programs on teacher behavior, and how do teachers influence the outcomes of such programs? What role does--or should--the school principal play? How do parents react--do they understand their choices? If so, how do they exercise their options? Is real diversity possible within the public schools, with the many internal and external pressures to conform to a common program?

The seven reports in this study address these and related questions. The study is aimed at practitioners and community groups who may be contemplating the initiation of alternative schools, and at state and federal policymakers who may be asked to support alternatives and would like to be aware of the obstacles and opportunities that this innovation can create.

The study draws no conclusions about the relative desirability of alternatives; this is a value judgment that citizens and professionals

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[1] In practice, we were obliged to select districts for the study on the basis of *claimed* and *apparent* program distinctiveness; the extent of actual distinctiveness was then treated as an issue to be explored in the course of the analyses. A discussion of the recent history of the alternatives movement will be found in Chapter I of Vol. I of this series.

must make on the basis of what they want from their schools. Thus, although individual authors have tried to make their own normative positions clear, nothing in these reports should be interpreted as representing a Rand position on alternatives as an innovation in public education. Nor is this an evaluation: We have studied four districts to gain insight into common (and uncommon) problems; nothing in these reports should be construed as presenting evaluative judgments about the advisability or wisdom of any district policy. Finally, this study is not an assessment of the educational impact of alternatives on students. With the exception of Alum Rock--a unique case--the study did not have access to the longitudinal student outcome data that would have to be analyzed to make such an assessment.

The study utilizes a small purposive sample that was designed to select sites where an important effort had been made to implement alternatives. For reasons explained in a number of the reports, we believe that it is legitimate to assume that many of the study's findings will have wide applicability. Nevertheless, the reader should bear in mind the limited and selective nature of this sample when considering the generalizability of study results.

Organization of the Study

The study findings are organized as a series of reports on the issues of implementing alternatives from the perspectives of major participants: district administrators, principals, teachers, and parents. A fifth report focuses on the extent of program diversity achieved in the Alum Rock minischool system, a sixth report presents an analysis of student outcomes in Alum Rock, and a final report provides an overview of the entire study. The reports are related, but each is also designed to be read as an independent study. The reader who completes the entire series will therefore notice some redundancy: Each report begins with a similar discussion of study methods and study site settings. There is also some inevitable overlap in the discussion of key issues, since a report that deals with any part of the educational system must to some extent discuss other aspects of the system as well.

Thus, for example, the report that focuses on the role of the principal can hardly avoid discussing the views of teachers, and vice versa. In the interest of writing reports that are independent research documents as well as part of a general study topic, we have made no attempt to eliminate these redundancies.

Since 197?, this study has produced 39 informal Working Notes for client (OEO and NIE) use, mostly on selected aspects of the Alum Rock demonstration. These documents, together with project Administrative Reports and original materials (documentary materials, surveys, and field notes) form an extensive primary and secondary data base, which has been drawn on as needed by the authors of study reports, largely without specific citation. Where it is appropriate to call the reader's attention to a particular source of evidence in the informal secondary materials, the latter are cited as unpublished papers. These and related unpublished materials are available from the National Institute of Education.

The introductory chapter of each report in the series provides further details about the particular focus, methods, and limitations of that report.

Daniel Weiler
Study Director

SUMMARY

In recent years, many public schools have broadened the number and kinds of alternative programs they offer, and at the same time they have increased parents' opportunities to choose programs for their children, or for older students to select their own courses. At least four arguments have been advanced to justify this increased family choice in schooling:

First, some choice schemes are devices for giving parents more control over schools; the assumption is that student performance will improve if teachers work harder, and that teachers will work harder if they can be cast into a competitive market arrangement.

Second, creating alternatives and letting parents choose schools may serve as an "institutional safety valve" in communities that have groups who hold different and conflicting objectives for the public schools.

Third, empowering parents to make schooling decisions may reduce feelings of powerlessness--alienation--and hence may increase their participation in their children's schooling, which in turn could lead to improved student performance.

Fourth, allowing parents to select different educational programs may maximize the overall performance of students in the school district, if the parents do a better job than the schools of matching children's learning styles with instructional arrangements that maximize learning. Of course, this assumes that teaching methods vary from school to school and that there are significant interactions between learning styles and teaching methods.

Critical Issues

Increasing family choice in schooling raises certain thorny issues that can be summarized as follows:

First, are parents motivated and competent to make intelligent choices among competing educational alternatives? Information levels

provide a minimal index of decisionmaking competence, since it is impossible to make intelligent decisions without adequate information about one's alternatives.

Second, what kinds of schools do parents pick when they have free choices, and what are the factors that influence parents' choices? Do parents pick classrooms on the basis of educationally relevant differences between the alternatives, or are they overly influenced by glib claims or irrelevant features of the schools?

Third, is segregation by race, sex, or social class exacerbated or attenuated by allowing parents to choose schools, and what are the social implications of these individual decisions? These are the kinds of questions that this report considers.

Data Sources

The bulk of the data used in this study was collected in sample surveys of parents who were involved in the Alum Rock (San Jose, California) Elementary Education Voucher Demonstration, a five year project funded initially by the Office of Economic Opportunity and later by the National Institute of Education. During the first four years of the demonstration, parents could choose minischool programs for their children and had choices both within and between neighborhood schools. Each voucher school (there were eventually 14 out of 24 district schools) covered three to five minischools, and parents could choose minischools in any voucher school; free transportation was provided for students who attended nonneighborhood schools, so the various minischools represented about equal cost alternatives for all parents.

The data were analyzed in a quasi-experimental design that compared three treatment groups: *old voucher parents*, those who had choices from the beginning (Year 1) of the demonstration; *new voucher parents*, those who had choices beginning in Year 2 of the demonstration; and the comparison group of *nonvoucher parents* who had no choices until Year 5, when the entire district shifted to a limited open enrollment plan.

Two other sites provided some additional data. The Southeast Alternatives (SEA) project, an open enrollment plan in Minneapolis, and the Mamaroneck (New York) "schools within schools" system provided an opportunity to test the external validity (generalizability) of the Alum Rock findings.

Findings

The results of these analyses can be summarized in the form of propositions about parents' behavior in family choice schooling systems. Only those propositions that were supported by the available data are summarized here:

1. Parents in an alternative education system vary widely in their awareness of their schooling alternatives and in the accuracy of their information about the rules governing choice. Specifically, information levels are higher among socially advantaged families, and parents' educational background is an especially important factor.

2. Over time, the differences between parents' information levels are reduced as parents gain more experience with the choice system, given that the rules of the system stay relatively constant.

3. Regardless of educational background, mothers are more involved in schooling decisions than fathers are, if who signed the program selection cards is any indication of involvement. In intact families, mothers were four times as likely as fathers to sign.

4. Less educated fathers, those with a high school education or less, appear to be somewhat more involved with their sons' education than with their daughters'.

5. More educated families have more sources of information than others.

6. In learning about schools, more educated parents put more reliance on printed materials from the schools.

7. Less educated parents put more reliance on information they glean from personal contacts, particularly contacts with school personnel.

8. Even when schools provide free transportation for children who attend nonneighborhood schools, the geographical location of the alternative schools is the most important factor in parents' placement decisions.

9. The more highly differentiated the alternative programs, the less important the geographical location of the schools in parents' placement decisions.

10. The older the child, the less important the school location in determining parents' placement decisions.

11. On the whole, curriculum factors are less important than noninstructional factors (ethnic or social class composition of the school, the desire to keep siblings or friends together, the location of the school, etc.) when parents choose programs for their children.

12. Less educated parents are more likely to emphasize children's obedience and respect for authority (politeness) than are more educated families, who are more likely to encourage creativity (imagination) and reliance upon internally set standards (independence).

13. As a consequence of the influences identified in proposition 12, we would expect that when both open and traditional classrooms are available at equal cost, children of more educated parents will be overrepresented in less structured, "open" classrooms, and children of less educated parents will be overrepresented in more structured, "traditional" classrooms.

14. Parents' global evaluations of the schools are generally lower than their evaluations of the classroom teachers who come in contact with their children.

15. The more alienated parents are, that is, the greater their feelings of powerlessness, the less satisfied they tend to be with the educational system and the performance of school personnel.

16. In general, parents' satisfaction with the schools increases substantially at the outset of an innovation and then falls when the innovation does not live up to their inflated expectations.

17. Parents' satisfaction with the schools falls when their schooling alternatives are constrained after a period of many choices.

Implications

These findings have both basic and applied implications. On the one hand, most of the propositions were derived from theory, and hence the results contribute to our basic understanding of some important social behaviors. For example, the results provide some support for Kohn's theory of social class and conformity, in that parent's choices of open or traditional classrooms were predicted from knowledge of the link between social class and childbearing values.[1] Similarly, some evidence of task specialization within families was detected, and this is congruent with earlier research by Barry, Bacon, and Child.[2]

On the other hand, the results have implications for local schools. The following discussion is aimed specifically at local school leaders who are considering family choice in schooling plans. Some of the comments apply to choice systems in general, whereas others are aimed at specific kinds of school districts, because the nature of the choice system that is implemented depends in large part upon the subpopulation(s) served and the educational objectives of the schools.

1. Parents, especially the parents of elementary school children, will be more likely to choose schools on the basis of educationally relevant differences between the alternatives, if the choices are offered *within* schools (e.g., minischools) and not simply *between* schools.

2. Family choice systems may be politically difficult to reverse, at least in the short run, because once parents have had choices, the district cannot eliminate the choice system without some decrease in parents' satisfaction with the schools. But allowing parents some continued role in school decisionmaking, even if it does not involve the selection of programs, may offset some of the dissatisfaction that

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[1] M. L. Kohn, *Class and Conformity: A Study in Values*, Irwin-Dorsey, Homewood, Illinois, 1969.

[2] H. H. Barry, M. K. Bacon, and I. L. Child, "A Cross-Cultural Survey of Some Sex Differences in Socialization," *Journal of Abnormal and Social Psychology*, Vol. 55, 1957, pp. 327-332.

accrues from restricting choices. Parents are most interested in influencing curriculum decisions and least interested in hiring and firing teachers and principals.

3. In a heterogeneous school district, socially disadvantaged familes will be at somewhat of a short term handicap in getting the best schools, especially if the alternatives are continually changing. In the short run, they will be less informed about their alternatives, and hence their children will be more likely to end up in the least desirable classrooms, or in classrooms that are good but not well suited to their needs. Over time, the vast majority of parents will come to understand the choice system and how to get what they want (or at least compete effectively for what they want), and the more consistent and stable the choice system is, the faster they will learn about it.

4. The time required to learn about the choice system can be reduced significantly if the school district tailors its information dissemination policies to fit the habits and preferences of different subpopulations of parents. For example, different subpopulations rely upon different information networks to learn about schools. In general, less socially advantaged families rely upon personal contacts and disregard printed materials, whereas more socially advantaged families tend to rely upon printed materials. With this in mind, local schools might communicate with parents more effectively by sending printed materials to everyone, and then following up with personal contacts (through telephone calls or counselor visits) directed to less socially advantaged families. School aides and paraprofessionals also present an often overlooked opportunity for school officials to communicate with parents, since aides and paraprofessionals represent links between the schools and the communities they serve (see Litwak and Meyer).[1]

5. One reason that socially disadvantaged parents have less information than others in the short run may be that they bear higher

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[1] E. Litwak and H. J. Meyer, *School, Family, and Neighborhood: The Theory and Practice of School-Community Relations*, Columbia University Press, New York, 1974.

costs of collecting information. Thus, one strategy for raising information levels is to reduce the real and "psychic" costs of information collection. In practice, this means that schools should consider keeping school offices open on weekends or during evening hours, so that hourly workers do not have to lose income in order to contact the schools. Similarly, efforts should be made to accommodate language minorities in their dealing with the schools.

6. The less socially advantaged the population, the more that must be spent on information dissemination and parent education, so it is reasonable to argue that the greater the proportion of disadvantaged in the population, the higher the costs of operating the information component of a family choice system.

7. Alternative education systems may diffuse tensions between groups of approximately equal political power that hold different and conflicting objectives for the public schools. But given the differential ability of advantaged and disadvantaged families to participate effectively, at least in the short run, the use of alternative education schemes as "institutional safety valves" is most defensible in more affluent communities.

8. Parents will choose programs that reinforce their values, given the opportunity to do so. Less advantaged children are most likely to end up in structured programs that stress the 3Rs, and more advantaged children are most likely to end up in less structured programs that stress social relationships, independence, and imagination. This presents something of a philosophical dilemma.

On the one hand, school performance, as measured by standardized achievement tests, should increase, on the average, because of the propensity of less socially advantaged parents to choose highly structured classrooms that stress the 3Rs. This is based on two assumptions, both of which have been validated by recent research[1];

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[1] David E. Hunt, *Matching Models in Education*, The Ontario Institute for Education, Monograph Series 10, Toronto, 1971; and David E. Hunt, "Person-Environment Interactions: A Challenge Found Wanting Before It Was Tried," *Review of Educational Research*, Vol. 45, 1975, pp. 209-230.

(a) children who are operating at a low conceptual level tend to do better in highly structured classrooms, whereas children who are operating at a high conceptual level tend to do equally well in high or low structure settings, or better in the latter; and (b) conceptual level is highly and positively correlated with social class or social advantage. Increased school achievement is presumably a desirable outcome especially if it reflects higher average performance among low achievement children.

On the other hand, increasing family choice in schooling may have negative consequences if socially disadvantaged children are isolated from advantaged children, and hence have fewer opportunities to acquire the social beliefs, attitudes, competencies, and acquaintances that facilitate social mobility, assuming that their parents desire this mobility for them.

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All of these people contributed in significant ways, and their contributions are gratefully acknowledged. Of course, they are not responsible for any errors in the final product.

CONTENTS

TABLES

I. INTRODUCTION

In recent years many public schools have changed in two important ways. First, they are offering more highly differentiated school programs, programs that vary in instructional method or program content rather than learning speed. Second, they are offering greater opportunities for families to choose schools for their children or opportunities for older students to choose their own programs, subject to parental approval. These two features--a greater range of instructional offerings and greater freedom to choose programs--are the hallmarks of family choice in schooling.

Family choice in schooling arrangements may be found under a number of "brand names": education vouchers, open enrollment plans, alternative schools, minischools, schools-within-schools, and magnet schools. These are terms that are commonly used to identify systems in which parents may choose programs from a number of options. In 1975, over 5,000 of the 15,000 American public school districts offered alternative education programs of one kind or another. The proponents of increasing family choice in schooling cover a broad political spectrum although they differ in the benefits they believe will accrue from allowing parents to choose schools.[1]

Objectives of Family Choice in Schooling

The theoretical arguments for increasing family choice in schooling fall into four categories. First, some systems are viewed as devices for giving parents more control over teachers. Education vouchers, for example, equip parents with funds that can be ued to pay school

[1] See, for example, Friedman (1962, 1973); Jencks (1966, 1968, 1970); Areen and Jencks (1971); Fantini (1969, 1970, 1971); Coleman (1967, 1977); Coons and Sugarman (1971, 1977); Guthrie (1971); Levin (1970); Reimer (1971); Lekachman (1971); and Overlan (1972).

tuition. In theory, teachers' income depends upon these funds, so they will be more responsive to parents' desires. Presumably, parents will use this control to select effective teachers and to make teachers work more diligently.

Second, some family choice plans serve as institutional safety valves. This is especially true in communities that have (a) factions of approximately equal size or power that (b) hold divergent and conflicting goals for the schools, and (c) few if any nonpublic schools are available. The relative power of the conflicting groups is important. If their relative power is greatly disparate, one group can impose its views on the others through political control of the school organization. If the groups are of equal size or power, they can avoid conflicts by establishing diversity in schools and empowering parents to choose among these alternatives.

Third, some people argue that giving parents direct control over schools should reduce their feelings of powerlessness, one type of "alienation" (Seeman, 1959). As powerlessness decreases, there should be an increase in the attention that parents devote to schooling matters and the academic progress of their own children. This should lead to more active involvement of parents and a subsequent increase in student performance (Rand, 1972). The reduction of "powerlessness" is a key premise underlying many compensatory education programs; and this is the basis, at least in part, for the requirement that compensatory education programs provide for the "maximum feasible participation" of parents in program decisions (Wilson, 1968).

Finally, systems that provide many instructional options offer the possibility of matching students' characteristics with particular instructional arrangements in order to optimize student outcomes. Not everyone learns equally well under the same instructional regimen, and accommodating children's individual differences may improve the overall effectiveness of the schools. (See, for example, Hunt, 1971, 1975; Hunt and Sullivan, 1974; Cronbach and Snow, 1979; Witkin et al., 1977.

There is some controversy about the frequency with which aptitude-treatment interactions (student-classroom interactions) occur and hence the amount of improvement we may expect from matching (Glass, 1970;

Bracht and Glass, 1968), and there is also some controversy over which student characteristics should be used in matching. Family choice schemes assume that matching is not only desirable but that parents are the best judges when it comes to matching particular children with particular instructional arrangements.

In sum, the potential benefits of increasing family choice in schooling may include: (a) increased parental control, which may be used to make teachers work harder and hence increase students' achievement, (b) increased choices, which may reduce potential conflicts among different groups of parents, (c) reduced alienation of parents if they are empowered to make school choices, and (d) improved placements, which may occur if parents, and not just schools, match children's learning styles with particular teaching arrangements. But family choice in schooling is not without potential problems, too. Perhaps the single biggest worry is that parents' placement decisions will exacerbate racial and social class segregation, which in turn would reduce the likelihood that disadvantaged children would achieve as much as they might in integrated classrooms. This is based on the tenable yet unproven assumption that integration is beneficial for disadvantaged children (see Bridge, Judd, and Moock, 1979, Chapter VIII, for a review of this evidence). Of course, there are many kinds of voucher plans, and they are thought to offer different combinations of potential benefits and drawbacks.

Varieties of Family Choice Plans

The programs that are supposed to increase family choice in schooling vary widely in their objectives and their organizational arrangements, and four dimensions seem to account for most of the variation in these programs. These four characteristics are: (a) proportion of students involved, (b) parents' power to make final decisions, (c) physical location of the programs, and (d) grade range involved. The importance of each of these characteristics is discussed below.

Proportion of Students Involved

The vast majority of alternative school systems involve only a small number of children, because most programs are aimed at students with special needs (e.g., those who have had trouble with the regular instructional program) or at those with special interests (e.g., students who want training in the performing arts).

Other alternative school schemes are designed only for children who meet the school's special requirements for students of a certain race or sex. This is especially true in districts that are desegregating and wish to avoid "forced busing" by inducing families to voluntarily redistribute themselves across schools.[1]

Finally, there are a few districts that offer all families their choice of schools or programs. Prototypes would be the open enrollment systems in Minneapolis, Minnesota; Eugene, Oregon; and East Lansing, Michigan; and the education voucher demonstration in Alum Rock (San Jose, California).

The important distinction in this: Among those districts that offer alternative programs, some permit all students to choose programs, whereas other districts' alternative programs are open only to certain children with specific needs, interests, or characteristics.

Locus of Decisionmaking

In some cases, parents or older students can request particular programs, whereas in other districts the schools recommend enrollment in a particular program. These differences in locus of decisionmaking are important, especially when considered in relation to parents' power to make decisions. In some districts, parents' (or students') program

[1] A magnet school in New York City provides a typical example. White flight from a public junior high had created a situation in which 70 percent of the residents in the area were white but only 15 percent of the school population was white. To attract white students, the school was designated a magnet school with special programs for gifted children, and enrollment was open to people who lived outside the regular attendance zone. This resulted in a shift in enrollment, so that now the school population, like the surrounding neighborhood, is 70 percent white.

requests are granted automatically, subject only to the availability of openings. That is, families' requests are filled according to predetermined rules, and in the final analysis the locus of decisionmaking rests with the family. In other cases, parents can make requests or respond to schools' suggestions, but the schools can put children wherever they see fit, and there is little parents can do about it.

Physical Location of Alternatives

The programs parents can choose among are sometimes housed *within* a single building (e.g., minischools or schools-within-schools), and in other cases each school offers only one program, but there are differences *between* schools (e.g., open enrollment plans). In still other cases, minischools are clustered within different buildings and parents have choices both *within and between* schools.

The physical organization of the alternatives is important for two reasons. First, the geographical location of the schools translates into costs; and hence the organization of the alternatives will, to some extent, influence what kinds of children end up in what kinds of programs. If a family chooses a nonneighborhood school, there may be large transportation costs involved, and in part these costs are financial (e.g., bus fare) and in part they are "psychic" (e.g., worry about travel safety). These hidden costs are very real to parents who are considering different schools; and hence access to the alternatives or the cost of the alternatives may vary widely for different families, even though all programs are supposedly open without cost to all families. District policies can affect these costs. For example, in the Alum Rock voucher demonstration, free transportation was provided for all children who attended nonneighborhood schools, and this eliminated some of the financial cost variations between different schools.

Second, the organization of the school has an impact on staff cohesiveness and school stability. It is less stressful, understandably, to deal with people who share common goals and means; mixing different instructional philosophies or value systems within a single school can

raise interpersonal stresses.[1] "External attacks" may increase the cohesiveness of the individual minischool but at the same time decrease the cohesiveness of the school as a unit. This has implications for the stability of the overall school social system.[2]

Range of Grades Served

Some districts offer choices at almost every grade level from kindergarten through twelfth grade, whereas others offer alternative programs only at the elementary or only at the secondary level. The latter are probably more common than the former. A K-6 choice system probably builds pressure to have 7-12 choices, but a 7-12 choice system probably does not generate similar pressures for elementary school choices.

Taken together, these four dimensions describe the distinctions among a minimum of 24 different family choice systems, as can be seen in Table 1. In this report, we will concentrate on principles that apply to a wide range of family choice systems, but the data used to test these principles represent a limited number of systems. Specifically, in these choice systems (a) all families in the district have

[1] Bass (1978) discusses teachers' reports of interprogram tensions in three school districts that operated multiple programs within single buildings. In these surveys, a large percentage of teachers in alternative schools thought that tensions between programs were a major or minor problem: 80 percent in Eugene, 81 percent in Alum Rock, and 97 percent in Minneapolis' seven multiprogram elementary schools. Thomas (1978) also discusses the sources and palliatives for interprogram tensions: Specifically, she emphasizes the crucial role of the school principal. The principal's role is quite different in single program and multiprogram buildings, according to a study by Pellegrin (1975). In the latter case, principals share influence with other unit leaders; therefore a hierarchical division of power or an authoritarian style of decisionmaking cannot be maintained easily.

[2] For reviews of the group cohesiveness literature, see Cartwright and Zander (1968), Collins and Raven (1969), or Hare (1976). Of particular relevance is the work by Raven and Rietsma (1957), which shows why some groups become more cohesive under threat of external attack and others become less cohesive.

Table 1

FOUR CHARACTERISTICS DIFFERENTIATING FAMILY CHOICE IN SCHOOLING PLANS

Characteristic I: Proportion of Students Involved

A. All students at a particular grade or age level,

or

B. Selected students at a particular grade or age level.

Characteristic II: Locus of Decisionmaking

A. Parents have primary power to choose schools, and requests are filled according to predetermined rules,

or

B. Schools have the final say about placements.

Characteristic III: Physical Location of Alternatives

A. Alternatives are offered only *within* schools.

B. Alternatives are offered only *between* schools.

C. Alternatives are offered *both within and between* schools.

Characteristic IV: Grade Range Served

A. K-12 children have alternatives,

or

B. Selected grades have alternatives.

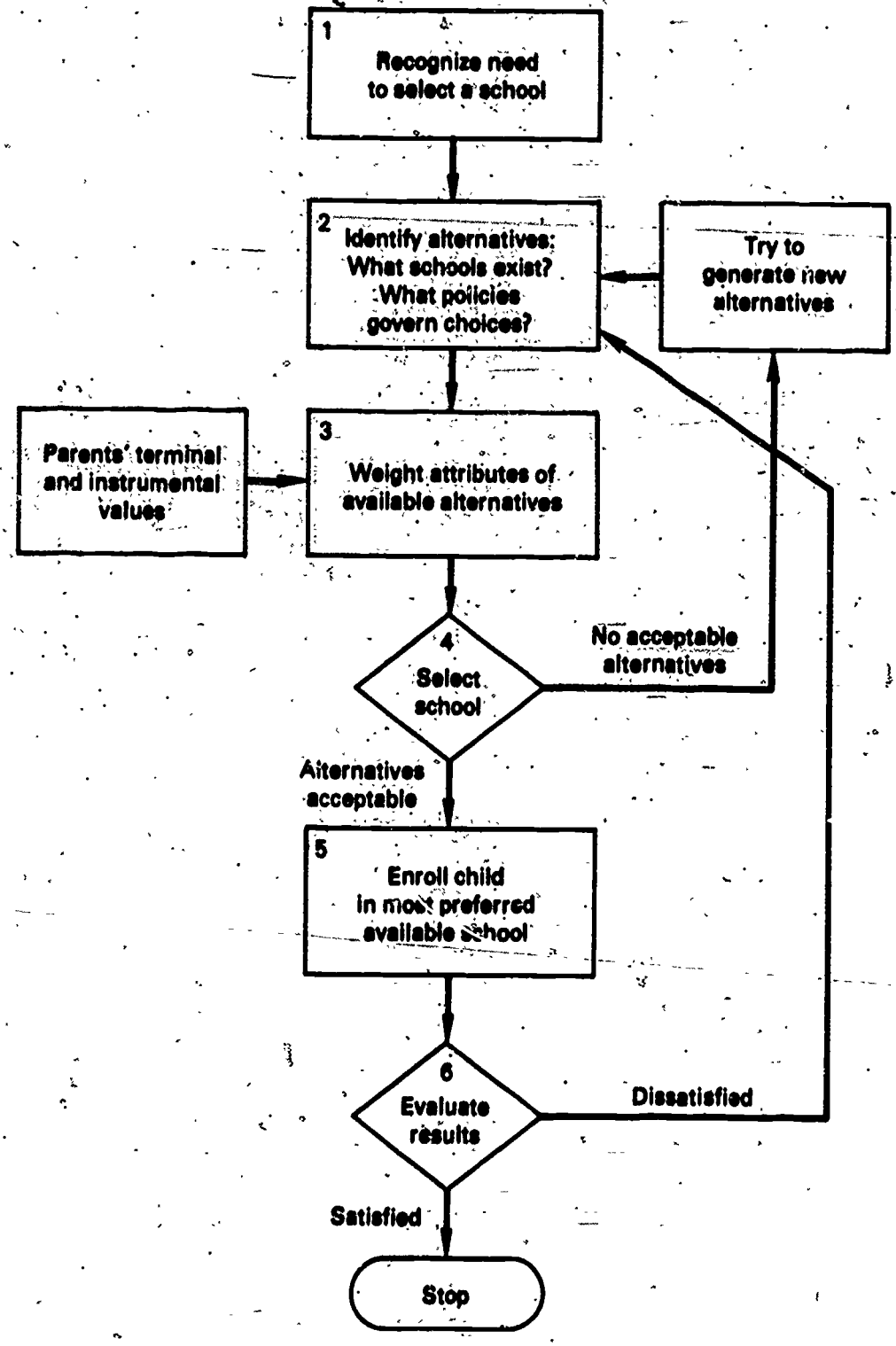
choices, (b) parents can request specific schools, and (c) their requests are filled according to predetermined rules.

A Model of Parents' Choice Processes

How do parents choose schools for their children? The easiest way to answer this question is to break the choice process into a series of sequential subprocesses or steps. The following figure presents one way of looking at the choice process.

This model starts with the assumption that parents recognize the need to choose a school (Step No. 1). In most cases, parents simply send their child to the nearest neighborhood school, and they give the matter little thought unless the assigned school is entirely unsatisfactory to them. But families have choices even if they live in traditional school districts. In theory, parents can exert some control over their children's schooling by: (a) moving the family residence to a preferred attendance area (lying about one's address will accomplish the same thing); (b) requesting an interschool transfer; (c) asking for a particular teacher, classroom, or program, assuming that the school has more than one class at each grade level; (d) going outside the public school system to private schools, if any are available; or (e) keeping the child out of school altogether. Parents have these choices, but in most cases they will not be motivated to make active choices among these alternatives, unless their neighborhood public schools are very bad. But we are interested in districts that routinely offer alternatives, and in these cases parents must think about their alternatives and make active choices.

Once the decision process is stimulated, parents must identify their alternatives and the important features or *attributes* of these alternatives (Step No. 2). It is unclear at this point what attributes parents look for in schools, but we suspect that parents vary widely in the number of attributes they attend to and the amount of information they collect. More educated parents probably have more differentiated views of the educational alternatives available.



A model of the choice process

The next step in the decision process is to weight each of the attributes of each of the schools by some value (Step No. 3). The overall preference for a given alternative school may be conceptualized as the sum of these weighted attributes. Appendix A uses hypothetical data to illustrate the decision processes of two parents who are deciding between two alternative classrooms for their children. This example shows how two people can reach different decisions even though they have similar information about their alternatives. The differences result from differences in the weights they assign to the classrooms' attributes.

An obvious question is, "Where do the attribute weights come from?" The answer, in part, is that parents' instrumental and terminal value hierarchies are translated into evaluations of each of the schools' attributes, and these evaluations may be viewed as weights. Social influences also play a role in how people weight the attributes of schools. Parents will adjust their evaluations (weights) somewhat in response to conformity pressures from other parents or referents, and this is most likely to occur when the attribute in question is very important to the group,[1] or the attribute is based only on opinion or "social reality" (consensus), which cannot be verified empirically.[2]

According to our model, parents will select the school that has the highest overall preference rating, as determined by the sum of the weighted attributes (Step No. 4). Presumably, parents will enroll their children in the most preferable, available school (Step No. 5). If no school receives some acceptable minimum rating, parents will keep their children out of school or work to create new alternatives.

The final step (Step No. 6) occurs when parents evaluate the results of their choices. If the schools meet or exceed their expectations, they will be satisfied. If the schools fall below their

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[1]For a brief overview of the literature on conformity and group pressures to uniformity, see reviews in Cartwright and Zander (1968), Kiesler and Kiesler (1969), or Krech, Crutchfield, and Ballachey (1962).

[2]See Festinger's (1954) "social comparison theory" or Pettigrew's (1967) "social evaluation theory."

expectations, they will be dissatisfied and motivated to reconsider their original placement decisions. If their first choice produces results that are lower than what they believe they can get elsewhere, the parents will choose another school.

Here is where the question of measuring weights and evaluations comes in. Do parents merely judge programs as satisfactory/unsatisfactory, or do they make fine distinctions between *degrees* of satisfaction? The former case has been labeled *satisficing* by Simon (Simon, 1955, 1957; Simon and Stedry, 1969), and this contrasts with the latter case, which may be labeled *optimizing* or maximizing outcomes. This issue is of practical importance. If parents make only gross, good/bad or satisfactory/unsatisfactory judgments about alternative schools, we would expect them to shift schools much less frequently than they would if they were trying to pick the single *best* school. Many schools may be "acceptable"; and if that is all that parents ask, they should be reasonably satisfied with any one of a number of choices, and hence they will not shift schools or reverse their decisions very often. However, if they are after the one best school available, we would expect to see a good deal of switching between programs over time.

Like any heuristic device, this model falls far short of completely describing the process by which parents choose schools, and more could be done to specify the details of each of the subprocesses. For example, we could spend more time on a perceptual submodel that explains how people perceive and organize the attributes of the various alternative schools.[1] But more precision at this point would be misplaced, because the available data simply do not warrant a more detailed model. If the present model succeeds at all in explaining a significant amount of the variance in parents' placement decisions, it will be a positive step forward.

Critical Issues

Advocates of increasing family choice in schooling make certain assumptions about parents' willingness and competence to choose school

[1] For a more elegant model, see Howard (1977).

programs for their children. The model presented in the preceding section was an attempt to specify some of the common assumptions about the way parents behave when allowed to choose schools. Faced with proposals for particular alternative school plans, policymakers must answer certain questions, or at least assume that they have answered certain questions, about parents' behavior in free choice situations. The following issues must be addressed, implicitly or explicitly, in every proposal to allow parents to choose from competing alternative programs of approximately equal cost:

1. Are parents accurately informed of their alternatives and the rules governing the exercise of choice? How do parents learn about their alternatives? Do different subpopulations have different sources of information, and how can school systems adapt their information dissemination policies to reach different subpopulations effectively?
2. Are some subpopulations, particularly socially disadvantaged families, less informed about their alternatives, so that their children are at a marked disadvantage in a competitive scramble for scarce school resources? In what ways can the choice system be organized to reduce or eliminate these disadvantages?
3. What factors influence parents to choose certain kinds of instructional programs for their children? Do parents choose programs that contribute to the attainment of their long-term goals for their children?
4. What kinds of children end up in what kinds of programs when parents have free choices? Is segregation by race, sex, or initial ability exacerbated or attenuated when parents are allowed to choose schools for their children?

These are the kinds of questions we address in this report.

Assumptions and Organization of the Report

The data used in this study came from three widely disparate family choice in schooling arrangements; but the Alum Rock elementary education voucher system, a five year demonstration project, provided most of the original data. The voucher system served children in grades K-8, and parents had choices both within and between 14 schools. Additional original data were gathered in Larchmont-Mamaroneck, New York, where the public school district offered mini-school alternatives within each neighborhood school but did not permit choices outside of assigned attendance zones. The Minneapolis Southeast Alternatives (SEA) open enrollment system was a third source of data, although these data are of limited scope, quality, and usefulness. The SEA demonstration involved four elementary schools, each of which offered a single kind of instruction, and a high school which offered different programs within a single school.

It is important to note that general statements about the concept of family choice in schooling are valid only to the extent that all family choice systems have similar properties. In most cases, conclusions must be stated in terms of assertions about particular kinds of family choice systems. The data, while not covering all possible kinds of choice systems, do represent the most dramatically different choice systems--those that involve all students and provide for significant inputs from families.

Note also that family choice schemes are not aimed solely at compensatory education objectives, but most of the interest in these ideas at the federal level has been in the context of compensatory education--narrowing the gap between socially advantaged and disadvantaged students' school outcomes and life chances.[1] We will concentrate on the implications

[1]The term socially disadvantaged, as used here, refers to the simple fact that the likelihood a child will attain a given level of education is predictable even before he or she enters the educational system, further, even before he or she leaves the womb, and educational attainment is a crucial determinant of social status in adulthood. Blau and Duncan (1967) and Duncan, Featherman, and Duncan (1972) provide basic models of social status transmission; and Elder (1968), Sewell, Haller,

for compensatory education of increasing family choice in schooling, but at the same time, we acknowledge that family choice schemes are not inherently restricted to these social objectives.

This interest in compensatory education objectives obligates us to pay special attention to between-group differences in parents' attitudes and behavior. If some families are continually at a disadvantage in the choice system (e.g., in securing good teachers or facilities), the potential benefits of increasing family choice in schooling will be lost. At this point in our social history, there are certain characteristics that reliably differentiate between socially advantaged and disadvantaged children; these include ethnicity/race, income, parents' educational background, and occupational status. These characteristics provide proxy variables that can be used in making between-group comparisons.

It is also important to define what this report is *not* about. This is not an evaluation of the education voucher idea in general or the Alum Rock voucher demonstration in particular. Nor is this a comparison of the student outcomes in various kinds of alternative schools. While some attention is devoted to understanding why parents pick either "open" or "traditional" classrooms, it is not our purpose to compare the impact of these instructional arrangements (or any others)

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and Ohlendorf (1970), and Sewell, Haller, and Portes (1969) have added psychological and social psychological variables to account for more of the variance in occupational status attainment. Although most of the evidence for these models is based on samples of white, mostly nonfarm males, Porter (1974) has generalized the models to black males and has found important racial differences, but McClendon (1976) found no major differences in white male and female status attainment processes. The gist of these findings is that certain family background characteristics are predictably related to educational attainment, which in turn is related to occupational status attainment. It is clear that not all children have the same likelihood of achieving a given level of education or occupational status, and hence it seems reasonable to call children disadvantaged if they have a low likelihood of attaining the higher levels of education that are associated with higher social status. Since parents' occupational status and education are good predictors of the child's educational and occupational attainment, we refer to families that are low on these variables as socially disadvantaged.

on student achievement or affective outcomes.[1] And finally, this is not a contextual analysis of all the elements in a family choice school system. We are concentrating on parents' behavior, and the other elements in the school social system--teachers, principals, counselors, school board members, and so on--are not considered here, except when parents' behavior is immediately and obviously affected by one of these entities.

The report is divided into seven chapters. The next chapter details the history and characteristics of the three school districts that provided the data for this study. This chapter also describes the datasets that are available for each system, and the operational definitions of most of the basic variables are introduced.

Chapters III through V use a common format. First, we present a number of propositions about parents' behavior in alternative school systems, and then we examine the available evidence in order to test the propositions. Chapter III examines parents' *information levels and information-seeking habits*. Chapter IV, the most detailed chapter, describes some of the major *determinants of parents' program choices*, and Chapter V examines parents' *satisfaction* with the choice system over time. All of the propositions and supporting evidence are summarized in Chapter I, and the last chapter (VII) speculates about the consequences of increasing family choice in schooling and identifies some policy implications of various choice schemes.

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[1] Wortman and St. Pierre (1977) provide a comparison of some of the achievement test results for traditional and nontraditional programs in Alum Rock.

II. THREE MODEL FAMILY CHOICE SYSTEMS

Most of the data used in this study came from the Alum Rock Elementary Education Voucher Demonstration. In addition, small amounts of data were drawn from the Minneapolis Southeast Alternatives open enrollment demonstration and from a suburban New York school district (Larchmont-Mamaroneck), which uses a minischool plan in the elementary schools. The three sites all involve public elementary schools, but are very different in terms of the plans they use and the populations they serve, yet all three meet our criteria for a true family choice system: They offer all families within specified catchment areas free choices among diverse instructional arrangements, and parents are allowed to choose programs for their children.

This chapter briefly describes the three family choice systems. In each case, we describe the district and the population it serves, the choices available to parents, and the rules governing the exercise of choice. Finally, we describe the available data for each district and identify the strengths and potential weaknesses of these data. The Alum Rock voucher demonstration is considered first, because it provided the bulk of the data used in this report.

The Alum Rock Education Voucher Demonstration

The basic idea of education vouchers is simply that school districts provide parents with direct grants of money to implement their choices among schooling alternatives. In theory, providing parents with direct money grants to buy schooling sets in motion a complex causal chain that results in improved student performance and increased parental satisfaction. Supposedly, the use of vouchers to purchase educational services will cause a broader range of schools to enter the educational marketplace, and because parents will have direct control over school purse strings, teachers and administrators will be more responsive to parents' wishes and children's needs. This should lead to instructional innovations that will result in improved student performance

and increased parental satisfaction. What these educational innovations might be is not clear; however, most people seem to think that it is mainly a matter of more faithfully applying the teaching technology that we have, not developing new systems. Stated differently, the premise is that in a voucher system, students will perform better if schools try harder, and schools will try harder if they are directly accountable to parents who control finances and can exact performance. The voucher scheme is merely a means of giving parents financial power.

The basic voucher idea, of course, is not new. Adam Smith and Thomas Paine in the eighteenth century and John Stuart Mill in the nineteenth century argued for such a system. Several alternative versions of the basic voucher idea have been proposed, and the assumptions vary widely about how each version will operate and what each will achieve. Additional information about voucher systems, including education vouchers, may be found in Bridge (1977). In the present report, we are not concerned with the pros and cons of the voucher idea per se, but we are interested in the Alum Rock voucher demonstration, because it is one of the longest lived, largest and certainly best-documented family choice systems that has ever been implemented.

The Alum Rock Elementary Education Voucher Demonstration began operation in 1972-1973 and lasted five years. The purpose of the project was to test a "transition model" of education vouchers. The Alum Rock School District lies within the city of San Jose, California, and the 24 elementary schools in the district serve an estimated 14,500 students in grades K-8. The community is relatively poor, and the ethnic distribution of the school population is approximately 55 percent Mexican-American, 12 percent black, and 33 percent "other" including "Anglos" (i.e., whites excluding Spanish-surnamed people).[1] The

[1] Ethnicity was determined by self-assignment in the question: "Which of the words on the card best describes your race or ethnic background? Mexican American/Chicano, Other white/Anglo, Black/Negro, Oriental (Japanese/Chinese/Filipino/Korean), American Indian, Latin, Other?" (Q78). To facilitate analysis, the categories were collapsed into: Anglo, Black, Mexican-American, and Other. The Mexican-American category was further subdivided into two groups: those interviewed in English and those interviewed in Spanish. In each survey, about 14 percent of the sample were interviewed in Spanish at their own request.

transition voucher system involved only public schools, and it began (Year 1) with 22 minischools ("programs") distributed across six schools. Parents were allowed to enroll their children in any available minischool, and free transportation was provided to nonneighborhood schools. In the second year of the demonstration, seven more schools joined the voucher system, and altogether there were 45 minischools available. The third year, another school joined the demonstration, and this brought the number of minischools to 51. In the last year of the demonstration (Year 5), the district disbanded the voucher system and shifted to an open enrollment plan; nine of the schools in the district offered more than one program, but the majority of schools reverted to homogeneous programs. The history of the Alum Rock voucher demonstration is detailed elsewhere (Weiler et al., 1974; Levinson, 1976; Bass, 1978). The important questions, from our standpoint, are: (a) did parents have real choices among equal cost alternatives, and (b) what rules governed the exercise of choice in this system?

Choices

The choices that parents had varied widely from year to year, and there is an obvious question about the ways in which the minischools differed from one another. Did parents have really significant choices, or were the programs different only in name? We have three kinds of evidence on this question. First, teachers who were surveyed each year during the demonstration (Rasmussen, 1978; Weiler et al., 1974) said that the minischools were significantly different.

Second, the majority of parents who were surveyed in Years 2, 3, and 5 of the demonstration thought that the minischools offered sufficient choices, although parents thought that the voucher system, which operated in Years 1 through 4, offered more choices than the open enrollment system, which was instituted in Year 5.[1]

[1] The percentage of parents who thought that they had "too many" or "just about the right number of minischool choices" (Q103) was 89 percent in Year 2 (751/841), 89 percent in Year 3 (287/323), and 71 percent in Year 5 (245/345).

Finally, observational evidence was collected in a sample of Alum Rock classrooms in Years 3 and 4 of the demonstration. The observational evidence, described by Barker et al. (1978), suggests that the minischools did not vary as much as parents or teachers thought they did, but they tended to fall along a *classroom structure* dimension.

Policies Governing the Exercise of Choice

Understandably, the Alum Rock voucher demonstration changed over time, and it is impossible to talk about a single set of policies that governed parents' choices. The rules varied from year to year, but, in general, the system was characterized by these policies during Years 1 through 4 of the project: (a) parents could choose minischools for their children, and requests were granted automatically in the vast majority of cases; (b) transfers from one minischool to another could be requested at any time during the school year; (c) free transportation was provided to children who attended nonneighborhood schools, so that the various minischools represented roughly equal dollar cost alternatives; (d) families had "squatter's rights;" that is, children were guaranteed a place in the school or program in which they had been the year before, and they were not forced to join the lottery that was used to assign admissions to oversubscribed programs; and (e) kindergarten children and first graders were guaranteed admission to schools in which they had older siblings.

In the last year of the demonstration (Year 5), the range of choices was reduced, and mid-year transfers were made more difficult. Parents could still request a particular school or program within a school, but there were no guarantees that requests for programs outside the neighborhood school would be honored.

Data Base

The families in Alum Rock can be divided into three groups, according to their school catchment areas. Six schools began the voucher choice system in Year 1, and we call these *old voucher schools*. Seven more schools joined the demonstration in Year 2 and a fourteenth joined in Year 3; we call these *new voucher schools*. Schools that did not join

the choice system until Year 5, when the district shifted to an open enrollment plan, are called *nonvoucher* or *control schools*. The term "voucher school" subsumes both old and new voucher schools, and "voucher households" refers to all of the households living within the catchment zones of these voucher schools.

Probability samples of voucher and nonvoucher school parents were surveyed several times during the voucher demonstration, and many of the same items were asked in each survey, so there is some basis for comparisons across time. The samples in each survey were drawn independently, although some panel data were also collected.[1] The data used in this report consist of four parent surveys that were conducted in the fall (October-November) of 1972 (Year 1), 1973 (Year 2), 1974 (Year 3), and 1976 (Year 5). Table 2 summarizes the research design, shows the sample size for each survey, and describes the samples' demographics.

All of the respondents were interviewed personally in their homes, and the completion rate in all surveys exceeded 80 percent, so the data should be of excellent quality. In each family, one school-age child was selected randomly according to a plan proposed by Kish (1965); and this child ("KISHKID") was the subject of many of the questions.

The questionnaires were somewhat different for voucher and nonvoucher parents, and of course some questions were dropped and others were added as the research progressed. But all forms contained some common items so that between-group comparisons are possible, as are longitudinal comparisons within groups. Each item was assigned a unique identification number, so that no matter in what form or year the question was asked, it always had the same code number. For example, Q9 always referred to to the question: "Do you think the principal is doing a very good job,

[1] Panel survey data were collected in the fall and spring of Year 1, and again in the fall of Year 2, but the sample sizes were too small to permit meaningful multivariate analyses. For example, considering only two factors--ethnicity (5 levels) and education (3 levels)--we have 15 subcategories of respondents, so a sample of 65 translates to less than five respondents per cell. Originally, much larger panel samples were planned, but budget constraints forced us to drop the panel portion of the survey effort in Year 3.

Table 2

DEMOGRAPHIC CHARACTERISTICS OF SAMPLES SURVEYED IN YEARS 1, 2, 3, AND 5 OF THE ALUM ROCK EDUCATION VOUCHER DEMONSTRATION

Parent Characteristic	Year 1			Year 2			Year 3			Year 5		
	Old	New	Control	Old	New	Control	Old	New	Control	Old	New	Control
Ethnicity												
Anglo	34% 205	24% 59	28% 49	33% 104	30% 179	53% 38	25% 39	26% 54	35% 47	26% 69	23% 66	39% 106
Black	11% 64	6% 15	7% 12	9% 30	12% 73	6% 4	13% 20	12% 26	11% 14	11% 30	10% 29	9% 24
Mexican-American (English interview)	31% 184	45% 109	52% 91	40% 127	38% 222	35% 25	40% 62	42% 87	37% 49	28% 74	31% 90	28% 75
Mexican-American (Spanish interview)	13% 80	14% 34	5% 8	8% 27	10% 57	3% 2	16% 24	12% 24	5% 6	18% 48	25% 71	11% 29
Other	11% 67	10% 25	8% 14	10% 32	10% 56	4% 3	7% 10	9% 18	13% 18	17% 46	12% 34	13% 35
Education												
Less than high school	54% 325	64% 154	46% 80	57% 181	58% 342	49% 35	53% 83	60% 124	53% 71	51% 138	66% 190	39% 106
High school diploma	27% 159	20% 47	28% 48	27% 87	23% 134	28% 20	27% 42	23% 49	28% 38	26% 70	19% 56	33% 89
More than high school	19% 115	17% 40	26% 46	16% 51	19% 110	24% 17	20% 31	17% 35	19% 25	22% 60	15% 43	28% 74
Sex												
Male	49% 293	46% 111	43% 74	3% 10	7% 39	26% 19	46% 72	6% 13	31% 41	34% 92	35% 101	41% 109
Female	51% 307	54% 131	57% 100	97% 311	93% 548	74% 53	54% 84	94% 196	69% 93	66% 176	65% 189	59% 160
Totals	600	242	174	321	587	72	156	209	134	268	290	269

a good job, a fair job, or a poor job?" Appendix B shows the exact wording of the items that are used most frequently in this report.

The Alum Rock survey data were analyzed in terms of a quasi-experimental design (Campbell and Stanley, 1966) with three groups: old voucher households, new voucher households, and nonvoucher (control) households. The analysis was complicated by certain conditions that are largely unavoidable in real-world research where policies are implemented without regard to researchers' needs or preferences. The first problem was that we were trying to assess the impact of an intervention--a "treatment" in experimental terms--that changed constantly during the life of the demonstration. The treatment varied across time, so the delayed impact of previous policies and the impact of current policies could not be separated easily. At the very least, we must assume that the voucher system, which operated in Years 1 through 4, and the later open enrollment plan were two entirely different choice systems. This complicated trend analyses, or at least shortened the period over which trends could be tested.

Second, 10,000 Alum Rock households supposedly received the interventions (i.e., choices) at different times, and in principle they should represent parallel but lagged effects in response to the intervention. That is, in theory, all of the households can be divided into three groups according to their school cacchment areas: "old," "new," and "nonvoucher" households.[1] The nonvoucher parents can be used as a comparison group to detect the effects of having choices and not having choices. The problem with this three-group design is that the people in different groups were not isolated from each other or from the mass media, so each group learned from other groups' experiences. The unique results of the treatments are difficult to separate out when information flows back and forth across conditions, and all of the groups have access to each other's experiences and opinions. In short, it was difficult to identify the unique impact of the treatments, because they were not applied randomly to completely insulated groups.

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[1] Data for families living in the catchment area of the one school that joined the voucher demonstration during Year 3 have been excluded from this analysis, because the sample sizes were too small to permit meaningful multivariate analyses.

Finally, the analysis was made more complex by the fact that households were not randomly assigned to the three groups of old, new, and nonvoucher parents. Table 2 shows that the different groups were not initially equivalent in terms of demographic characteristics, and this meant that controls had to be used in an attempt to equate the groups statistically. Parents' education and ethnicity were the two most important control variables.

Minneapolis Southeast Alternatives

Southeast Alternatives (SEA) was an open enrollment plan that began in 1971 with funding from the U.S. Office of Education, and subsequently from the National Institute of Education (NIE). The system continued with local funds when federal funding expired in 1976-1977. SEA originally involved four elementary schools, each of which offered a single kind of instructional program, and a 7-12 high school, which offered alternatives. We will limit our attention to the elementary schools for two reasons: (a) these provide some comparability with the Alum Rock population, and (b) parents' decisionmaking is easier to measure in the elementary school setting than in secondary school settings; because in the latter case students are highly involved in the choice process.

Choices

The four elementary schools in SEA are difficult to categorize. One school, Marcy Open School, purports to follow an open education or "integrated day" philosophy. A second school, the Southeast Free School, is the least structured of the four schools and operates with ungraded classes and large blocks of unstructured time during which students can pursue personal interests. Two schools, the Pratt Continuous Progress School and the Tuttle Contemporary School, use individualized teaching methods, and students are assigned to self-contained classrooms or homerooms. However, it would be wrong to call these traditional classrooms because children move between

classrooms and resource centers. Both programs, however, emphasize basic skills, the traditional 3Rs.

Policies Governing the Exercise of Choice

Families living in the SEA catchment area are invited to visit the various schools during the spring, as are parents who would like to transfer their children into the SEA system. Once they have selected a school, they complete an *option card* to request a school assignment, and these requests are filled automatically, space permitting.

In 1976, Minneapolis adopted a district-wide open enrollment plan and the SEA schools merged with the West Area of Minneapolis for administrative purposes. Hence, the number of alternatives in the Minneapolis open enrollment system grew, at the same time as the number of alternatives in the Alum Rock system decreased.

Data Base

The raw data available to us consist of two parent surveys, one conducted in the spring of 1974 and the other conducted a year later in the spring of 1975. Both were mail surveys, and for various reasons, the data are of rather low quality. First, the response rate in the 1974 survey was low, and therefore the results are of little use due to nonresponse bias (Bridge, 1974a). Second, the surveys used different items in 1974 and 1975, so longitudinal comparisons are impossible. And finally, parents in the four different SEA elementary schools received different questionnaires, and the various forms had very few items in common. This makes it impossible to make comparisons between the SEA school populations.

The 1975 parent survey data have some limited value to us, in that they show what kinds of people chose "open" as opposed to "traditional" classrooms for their children. But this is not the only source of information. Several reports (based on survey and record data) were compiled by the SEA internal evaluation team,[1] and these are of

[1]The internal evaluation team was staffed by school district employees and was concerned mainly with formative evaluation tasks. In addition, an outside contractor was retained by NIE to provide a summative evaluation.

good quality and relevant to our questions. Also a dissertation by Terrell (1974) summarizes SEA attendance and achievement data that bear on questions about the kinds of schools parents chose. Together these data and reports provide a reasonably reliable source of information about the Southeast Alternative demonstration.

Mamaroneck, New York, Minischool Plan

The third source of data is a schools-within-schools (minischools) plan in an affluent, suburban New York public school district. Larchmont-Mamaroneck, which is located approximately 25 miles from New York City, is approximately 41 percent Catholic, 32 percent Jewish, and 27 percent Protestant. The median income of families with children attending public schools was approximately $29,000 in 1975. Additional information about the school district and the community may be found in Crawford (1977).

Choices

The school district includes four elementary schools (K-6), a middle school (7-8), and a high school (9-12). A small proportion of the high school students are enrolled in "alternative education" programs, but only at the elementary school level do all families have clear-cut choices. Each of the four elementary schools offers both "open" and "traditional" classrooms, and team teaching arrangements are available in some grades in two schools. The vast majority of the children, however, are enrolled in either "open" classrooms (31 percent) or self-contained, "traditional" classrooms (55 percent). Note that choices are available only *within* a school attendance zone; special permission is required if a child wishes to attend a nonneighborhood school.

Policies Governing the Exercise of Choice

Each spring, parents are informed of their alternatives and invited to express their preferences for one classroom type or another, but school committees, consisting of principals, teachers, and school psychologists, make the final decisions. The vast majority of requests are approved, so in general children end up in the classrooms their

parents select. Compared with the other two family choice systems, this schools-within-schools arrangement allows more parent choice than Alum Rock's current open enrollment system but less than the old voucher system or the Minneapolis Southeast Alternatives open enrollment plan.

Data Base

A sample of mothers was surveyed by mail in the spring of 1975, and 886 mothers responded after one follow up. This amounts to a 73 percent completion rate. The systematic random sample used in this survey was drawn from a complete listing of all of the mothers of children in the four elementary schools in the district.

The questionnaire contained several items from the Alum Rock parent surveys, as well as the Rokeach (1967, 1973) *Value Survey* instrumental values subscale, and standard demographic questions. Record data, namely, standardized achievement test scores and listings of placement decisions were added to the data file.

Analysis Plan

The following three chapters present our findings about parents' information levels, choice processes, and satisfaction, respectively. The strategy is the same in each chapter. First, we present a series of theoretical propositions, then we turn to the Alum Rock data for evidence about these propositions. In Chapter IV (determinants of parents' choices), we examine data from the other two choice systems in order to assess the external validity of the Alum Rock findings.

III. PARENTS' INFORMATION LEVELS AND INFORMATION SEEKING HABITS

Family choice schemes assume that parents can make intelligent choices for their children, but to make intelligent decisions, parents must have accurate *and* timely information about their alternatives. If they exist, information imperfections present a particularly difficult problem for family choice in schooling plans, because a lack of information among parents--the people who choose schools--means that some children, perhaps the children who can least afford it scholastically, are likely to end up in programs that are not good for them. They may fail to get into appropriate programs because their parents are the last to find out about these opportunities. Klees (1974) has addressed this issue with particular regard to education vouchers:

> Although it may be generally agreed that imperfect information can be a source of inequities and inefficiencies as previously described, the position is often taken that these imperfections are temporary and the situation will correct itself over time. In some cases this may well be true . . . . However, this will generally be the case only in a static market . . . .
>
> A system of educational vouchers is intended to give rise to a dynamic market situation. On the supply side, new schools enter the market and continuously engage in changes and innovations designed to meet consumer demand. On the demand side, the number and composition of consumers is far from static as families move in and out of the education market . . . or a particular geographical area. Therefore, it is conceivable that the information problem in this type of market may not be self-correcting [pp. 6-7].

Even if we assume that there are plenty of openings in all of the instructionally sound programs, parents' ignorance can still cause a child to end up in a program that is totally mismatched to his or her needs and abilities. This can happen if parents do not adequately understand the features of the various alternative schools.

Family choice schemes become less viable if a large proportion of the parents do not understand their choices. The issue is not simply the proportion of informed parents, but rather which parents are informed. There is some reason to believe that socially disadvantaged families--the ones who are supposed to benefit the most from the compensatory education objectives of increasing family choice in schooling--may be less informed than advantaged families, unless the schools take steps to communicate with disadvantaged families. Forty years of empirical research has shown that not all parents are equally well informed about the schools or the effects of different childbearing practices (Mann, 1974; Anderson, 1936; Kohn, 1969; Bridge, (1978). Information levels tend to increase with education, income, and occupational status, and they tend to fall as feelings of "alienation" increase.

Alienation, by which we mean powerlessness (Seeman, 1959), is probably a key mediating variable between educational background and information levels. More educated people probably tend to have fewer feelings of powerlessness, and hence they seek information for its potential control value. This has been shown in a series of correlational studies by sociologist Melvin Seeman (1972), who found that people who score high on powerlessness scales are less likely than others to seek task-relevant information. This is understandable for if one feels that events are uncontrollable or unpredictable, it makes no sense to seek information, because by definition it has no control value.

In sum, information imperfections pose a potential problem for any family choice in schooling plan, especially those that have compensatory education objectives. It may be that, at least in the short run, poorer families are at a disadvantage in family choice systems in which resources are scarce, because these families tend to have less information about school policies, and they tend to rely upon informal information networks rather than official school publications.

Fortunately, parents' information levels are manageable to some extent. Schools can increase information levels by tailoring their information dissemination policies to reach different groups of parents more effectively. For example, they can send the same information through different media, and they can offset slow information processing habits by sending the same information more frequently to groups that need added exposure to the information.

The following propositions concern parents' information-seeking habits and the distribution of information across different parent segments:

3.1[1] *Parents vary widely in their awareness of their schooling options and in the accuracy of their information about the rules governing the exercise of choice.*

3.1.1 The amount of information parents have about school matters is positively related to their educational background.

3.1.2 The amount of information parents have about school matters is positively related to their household income.

3.1.3 The amount of information parents have about school matters is positively related to their occupational status.

3.1.4 The amount of information parents have about school matters is negatively related to their level of "alienation."

3.1.5 The amount of information parents have about school matters is positively related to their expectations for their children's academic success.

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[1] Each proposition carries a unique identification number. The first digit refers to the chapter in which the proposition is first presented, and the remaining digits provide a unique identifier for each proposition.

3.2 Over time, the differences between parents' information levels will be reduced as more parents gain experience with the choice system. In other words, the difference between the information levels of advantaged and disadvantaged parents will be reduced over time as the socially disadvantaged parents gain experience with the system. They learn what is going on, but they do it more slowly than advantaged families.

3.3 More educated and socially advantaged parents have more sources of information about school matters than other families do.

3.4 Different groups of parents rely on different sources of information to learn about their alternatives.

3.4.1 More educated parents, relative to others, put more reliance on printed materials from the schools.

3.4.2 Less educated families, relative to others, put more reliance on information they glean from personal contacts, particularly contacts with school personnel.

In brief, the propositions address four issues: (a) the *accuracy* of parents' information about their alternatives, (b) the *number of sources* that parents used to learn about their alternatives, (c) the *sources* parents actually used to learn about their alternatives, and (d) their *preferred sources* of information.

Note that these propositions do not speak to the *quality* of parents' placement decisions. We cannot say that the programs parents pick for their children are any better or any worse than the programs that children would have been assigned to in traditional schools. We have no outcome measures to use as standards for comparing the impact of parents' decisions versus schools' decisions, nor do we have a true experimental design that compares the outcomes

of randomly created, equivalent groups in choice and no choice conditions. We are asking only a very basic question about the ability to make decisions, any decisions. We therefore concentrate on the measurable facts that parents have about their alternatives. It seems safe to assume, and almost tautological to say, that one cannot make informed decisions without accurate and timely information about ones choices; and when decisions are made without benefit or information, they are more random and less likely to achieve one's goals, whatever these goals may be.

Three measures of parent awareness are used in this section: Q38 measured awareness of the choice system, Q48 measured knowledge of the district's free transportation policy, and Q55B measured knowledge of district's transfer rules.[1] Respondents also identified the sources of information they used to learn about the choice system (Q40), and they indicated which single source they found most useful (Q40B). And finally, the number of sources used was computed and used as an index of information levels.

Awareness of Alternatives

Tables 3-5 show the percentages of parents in each survey and each group (old, new, and nonvoucher control) that were aware of (a) the existence of the choice system, (b) the availability of free transportation to nonneighborhood schools, and (c) families' transfer rights, respectively.

Three trends are immediately apparent in these tables. First, *awareness was higher among voucher than nonvoucher parents*. This is to be expected, since voucher parents were subjected to a steady stream of communications about the choice system. Second, *voucher parents' information levels improved over time*. Consider parents' information about free busing (Table 4) as an example. Every year between Year 1 and Year 3, a greater percentage of voucher parents

[1] The exact wording of the items is shown in Appendix B.

Table 3

PARENTS' AWARENESS OF THE CHOICE SYSTEM (Q38)

(Shaded cells indicate parents had choices)

Parent Group	Year 1	Year 2	Year 3	Year 5	Chi Square Within Groups Across Years (df = 3)
Old voucher parents	82.5% 495/600	96.3% 309/321	96.2% 150/156	42.0% 113/269	$\chi^2 = 314.585$ $p < .001$
New voucher parents	40.9% 99/242	91.8% 439/587	98.6% 206/209	38.3% 111/290	$\chi^2 = 466.316$ $p < .001$
Nonvoucher parents (controls)	50.6% 88/174	48.6% 35/72	75.4% 101/134	45.7% 123/269	$\chi^2 = 33.593$ $p < .001$
Chi square between groups within years (df = 2)	$\chi^2 = 161.242$ $p < .001$	$\chi^2 = 154.587$ $p < .001$	$\chi^2 = 63.121$ $p < .001$	$\chi^2 = 3.181$ ns	--

Table 4

PARENTS' AWARENESS OF FREE TRANSPORTATION TO NONNEIGHBORHOOD SCHOOLS (Q48)

(Shaded cells indicate parents had choices)

Parent Group	Year 1	Year 2	Year 3	Year 5	Chi Square Within Groups Across Years (df = 3)
Old voucher parents	58.6%	72.3%	82.7%	59.1%	$\chi^2 = 42.10$ $p < .001$
New voucher parents	48.5% 48/99	71.6% 420/587	85.2% 178/209	58.0% 167/288	$\chi^2 = 62.788$ $p < .001$
Nonvoucher parents (controls)	48.9% 43/88	38.9% 28/72	47.8% 64/134	36.3% 97/267	$\chi^2 = 7.273$ $p < .06$
Chi square between groups within years (df = 2)	$\chi^2 = 5.422$ $p < .07$	$\chi^2 = 34.08$ $p < .001$	$\chi^2 = 68.19$ $p < .001$	$\chi^2 = 35.67$ $p < .001$	--

Table 5

PARENTS' AWARENESS OF THEIR RIGHTS TO TRANSFER CHILDREN BETWEEN SCHOOLS (Q55B)

(Shaded cells indicate parents had choice)

Parent Group	Year 1	Year 2	Year 3	Year 5	Chi Square Within Groups Across Years (df = 3)
Old voucher parents	47.7% 286/600	66.7% 214/321	68.0% 106/156	—	$\chi^2 = 40.79$ $p < .001$
New voucher parents	26.5% 64/242	63.9% 375/587	69.4% 145/209	—	$\chi^2 = 115.89$ $p < .001$
Nonvoucher parents (controls)	24.1% 42/174	30.9% 17/55	67.5% 54/80	—	$\chi^2 = 11.06$ $p < .005$
Chi square between groups within years (df = 2)	$\chi^2 = 51.26$ $p < .001$	$\chi^2 = 42.79$ $p < .001$	$\chi^2 = 33.51$ $p < .001$	—	—

became aware of the free busing provision. In contrast, the information level of parents in the nonvoucher catchment area--the control group families--did not improve over time. Third, *the accuracy of parents' information about the schools fell sharply in Year 5, when the voucher school minischool program was supplanted by a limited open enrollment plan.* Year 5 represents a clear break in the trends that began in Year 1.

At any given time, some groups of parents were better informed than others, and it is important to understand where information levels were the lowest, so that these groups can be targeted for extra attention in information campaigns. Table 6 shows how awareness of the choice system, knowledge of free busing, and knowledge of transfer policies were related to parents' ethnicity, education, income, occupational status, "alienation," and aspirations and expectations for their children. Again, the patterns are remarkably consistent.

- Parents' *expectations* for their children were related to all three kinds of information. The more years of

Table 6

PERCENTAGES AND FREQUENCY DISTRIBUTIONS OF INFORMED PARENTS

Parent Characteristic	Existence of Alternatives (Q38)		Availability of Free Transportation (Q48)		Parents' Rights to Transfer Children (Q55B)	
Ethnicity	p < .001				p < .001	
Anglo	78%[a]	799	60%	583	51%[a]	(398)
Black	75%	258	63%	200	50%	(129)
Other	63%	228	59%	191	51%	(125)
Mexican-American (English interview)	69%	836	62%	647	50%	(478)
Mexican-American (Spanish interview)	63%	260	68%	241	68%	(180)
Education	p < .001					
Less than high school	66%[a]	(1217)	61%	966	52%	731
High school diploma	76%	(645)	64%	505	51%	322
More than high school	79%	(517)	63%	390	54%	254
Income	p < .001					
≤ $7499	67%[a]	768	62%	612	52%	469
$7500-$9999	71%	397	66%	323	53%	234
$10,000-$14,999	78%	672	63%	510	54%	370
≥ $15,000	71%	415	59%	325	48%	166
Alienation			p < .04			
Low	72%	1258	64%[a]	1015	53%	679
High	70%	1125	60%	850	51%	632
Aspirations for Child	p < .001		p <.001			
Some high school	65%[a]	22	59%[a]	17	56%	14
High school diploma	67%	551	57%	417	50%	299
Some college	74%	374	67%	302	58%	226
College graduate	73%	1015	64%	798	55%	548
Postgraduate	78%	270	72%	227	53%	145
Expectations for Child	p < .001		p < .001		p < .03	
Some high school	64%[a]	91	62%[a]	73	52%[a]	58
High school diploma	69%	929	61%	720	51%	507
Some college	78%	341	65%	266	57%	181
College graduate	75%	632	66%	511	58%	349
Postgraduate	86%	125	70%	94	52%	63

[a]Indicates significance level of chi square test.

education they *expected* their children to attain, the more informed they were.

- With regard to *aspirations*, the same relationships hold for two of the three information items. The more education parents *wanted* their children to attain, the more informed they were about the choice system (Q38) and the availability of free transportation (Q48).
- *Alienation* was negatively related to information levels. Highly alienated people tended to be less informed, but the differences were small and in only one area (Q48, transportation) were they statistically significant
- *Education and income* were positively related to awareness of the choice system (Q38) but not to information about busing (Q48) or transfer rights (Q55B).
- *Ethnicity* was related to awareness of the system (Q38) but nothing else. Anglos and blacks tended to be the most aware of the choice system.

All of these factors--ethnicity, education, income, alienation, aspirations, and expectations--are intercorrelated. Trying to determine the unique contribution of each factor (i.e., each independent variable) is difficult because of multicolinearity problems. But taken together, the pattern of findings suggests that, where information levels were related to family background, socially advantaged families were better informed.[1]

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[1]The one exception was that non-English-speaking Mexican-Americans were apparently much more informed than others about their transfer rights. This may indeed have been the case, or it may be that this is a spurious finding (the proverbial one-in-twenty error) or an artifact of the wording of the Spanish language form of the questionnaire or the way in which these respondents were interviewed. One thing that suggests that the finding is spurious is that the percentage of people who were aware of the choice system was lower than the percentage who knew about the district's rules. This is illogical, since general knowledge of the choice system should be higher than knowledge about specific rules, and, in fact, this was the case in every other ethnic category.

In sum, the survey data seem to suggest four conclusions: First, awareness was higher among voucher than nonvoucher parents. Second, as predicted by Proposition 3.2, voucher parents' information levels improved over time. Third, the accuracy of parents' information about the schools deteriorated sharply when the voucher choice system was supplanted by a district-wide open enrollment system. And finally, as predicted by Proposition 3.1, socially advantaged families--that is, the better educated, higher income, non-Mexican-American respondents--were generally better informed about the voucher choice system.

Sources of Information

We have seen that disadvantaged families learned about school policies, but they did so at a slower rate than others. This may be explained, in part, by the nature of the information networks that tied Alum Rock parents together with each other and the schools. This subsection of the report describes the number and nature of the information networks that different groups of parents used to learn about the schools.

The discussion is limited to households that had choices. This includes: (a) all households in the "old voucher" sample, (b) all households in the "new voucher" catchment area *except* those interviewed in Year 1 before the group entered the voucher system, and (c) all families interviewed in Year 5, when everyone in the district was eligible for the open enrollment plan. Furthermore, the sample has been restricted to respondents who were aware of the choice system. This is logically necessary, because it makes no sense to ask people where they learned about something that they say they know nothing about. Altogether, the subsamples used in this subsection represent about 55 percent (2046/2725) of all the parents who were surveyed between Years 1 and 5.

First, we consider the *number* of sources of information that different groups of parents used. Next, we consider their *exposure to various sources* of information, and finally we describe their reported *preferences* among different information sources.

Number of Sources

The average aware parent used four different sources of information to learn about the Alum Rock choice system, ($\bar{X}$ = 4.07, SD + 2.44); but the number of sources varied with ethnicity and education. Table 7 shows that Anglos and more educated respondents had access to more sources of information. This explains, in part, why these groups were generally better informed.

Both education and ethnicity appear to be important explanations of parents' information sources, but these two background variables are interrelated. A further analysis shows that parents' education, rather than ethnicity, "explains" most of the variance in the number of information sources parents used. Table 8 shows the mean number of information sources used by different ethnic and education groups.

Table 7

MEAN NUMBER OF INFORMATION SOURCES USED BY AWARE PARENTS, PRESENTED ACCORDING TO ETHNICITY AND EDUCATION

Parent Characteristic	Mean	SD	n	ANOVA Summary Source	SS	df	F	P
Ethnicity								
Anglo	4.34	2.53	664	Total	12129.73	2043	5.94	--
Black	3.80	2.26	223	Ethnicity	131.54	4	5.59	.001
Other	4.10	2.65	201	Error	11998.20	2039	--	--
Mexican-American (English interview)	4.10	2.34	702	--	--	--	--	--
Mexican-American (Spanish interview)	3.49	2.35	244	--	--	--	--	--
Education								
Lesa than high school	3.93	2.40	1074	Total	12096.92	2041	5.93	--
High school diploma	4.10	2.40	547	Education	64.72	2	5.48	.005
Some college	4.39	2.54	421	Error	12032.20	2030	--	--

Table 8

MEAN NUMBER OF INFORMATION SOURCES PRESENTED ACCORDING TO PARENTS' EDUCATION AND ETHNICITY, INCLUDING ALL AWARE PARENTS IN TREATMENT CONDITION

Education		Ethnicity				
		Anglo	Black	Other	Mexican-American (English Interview)	Mexican-American (Spanish Interview)
Less than high school	$\bar{X}$	4.12	3.88	4.16	4.01	3.45
	SD	(2.45)	(2.31)	(2.55)	(2.36)	(2.35)
	n	244	64	99	468	217
High school diploma	$\bar{X}$	4.31	3.51	3.74	4.25	3.57
	SD	(2.53)	(2.15)	(2.77)	(2.16)	(2.36)
	n	243	80	46	157	21
Some college	$\bar{X}$	4.59	4.00	4.33	4.34	5.00
	SD	(2.60)	(2.32)	(2.72)	(2.53)	(2.65)
	n	196	89	55	76	5

Source	df	MS	F	p
Total	2039	5.88	--	--
Ethnicity	4	5.11	0.87	ns
Education	2	20.29	3.46	.03
Ethnicity and education	8	4.71	0.80	ns
Error	2025	5.87	000	--

Exposure to Different Sources

To determine how aware parents learned about the Alum Rock choice system, respondents were asked to identify which of eleven sources they had used. The results are summarized in Table 9. *School publications* were the most frequently used source of information, and over half of the aware parents had talked with teachers or principals. Formal meetings—*PTA meetings, school board meetings,* and *special parent meetings* provided information to relatively few people—never more than a third of the aware parents. *Newspaper articles* reached about one-third of the families, but *radio and TV* coverage of the Alum Rock demonstration reached only one in ten households.

Table 9

AWARE PARENTS' EXPOSURE TO DIFFERENT SOURCES OF INFORMATION ABOUT THE ALUM ROCK CHOICE SYSTEM

Information Source	Frequency of Use (Percent)	Rank
Official school publications about the choice system	93.6	1
Special school bulletins	60.5	2
Radio-TV	15.3	10
Newspaper articles	33.2	6.5
PTA meetings	27.3	8.5
Special parent meetings	33.6	6.5
School board meetings	10.3	11
Talks with teachers and principals	53.1	3
Talks with parent counselors	45.2	4
Talks with friends and neighbors	43.0	5
Talks with children	27.8	8.5

Preferred Sources of Information

Three sources were most frequently mentioned when parents were asked to name the single "best source of information about the schools" (Q40B). About 30 percent listed *school publications*, whereas 22 percent mentioned *parent counselors*, and another 22 percent mentioned *teachers and principals* as their best sources of information.

Preferences for one or another source of information were related to ethnicity and educational background. Table 10 shows that respondents who had more than a high school education preferred school publications and talks with teachers more than others did, whereas less educated parents preferred parent counselors more. Table 11 shows that Anglos used school publications more than other ethnic groups did, especially Mexican-Americans interviewed in Spanish. Supposedly, all school publications were available in Spanish, but this may not have been the case. An alternative explanation is that

Table 10

AWARE PARENTS' PREFERRED SOURCES OF INFORMATION (Q40B)
PRESENTED ACCORDING TO PARENTS' EDUCATION (EDUC3)

Source	Education		
	Less Than High School	High School	Some College
School publications	29.7%	30.1%	35.0%
	251	121	109
Counselors	23.7%	24.1%	16.4%
	200	97	51
Teachers	20.1%	20.9%	26.7%
	170	84	83
Other sources	25.4%	24.9%	21.9%
	223	100	68

NOTE: $\chi^2 = 14.896$, df = 6, $p < .02$.

Table 11

AWARE PARENTS' PREFERRED SOURCES OF INFORMATION (Q40B)
PRESENTED ACCORDING TO ETHNICITY

Source	Ethnicity				
	Anglo	Black	Other	Mexican-American (English Interview)	Mexican-American (Spanish Interview)
School publications	34.4%	30.6%	26.9%	31.7%	20.5%
	176	56	39	180	31
Counselors	19.5%	30.6%	16.6%	22.6%	25.8%
	100	56	24	128	39
Teachers	23.8%	19.1%	20.7%	21.0%	21.2%
	122	35	30	119	32
Other sources	22.3%	19.7%	35.9%	24.7%	32.5%
	114	36	52	140	49

NOTE: $\chi^2 = 34.184$, df = 12, $p < .001$.

literacy, rather than language, was the factor that limited some non-English-speaking Mexican-Americans' use of school publications. Blacks, although only a small sample, seemed to give more credence to parent counselors, and there were only small variations in the extent to which the different ethnic groups listed teachers as the "best source" of information.

Further analysis showed that the relationship between ethnicity and preferred sources did not hold for more educated respondents. Among those with more than a high school education, ethnicity was unrelated to preferred information sources, and in general this group put more credence in school publications and teachers than other groups did.

Conclusions

The four Alum Rock parent surveys contain data about parents' information levels, their exposure to different sources of information, and their preferred sources of information. The results suggest the following conclusions:

1. Awareness of the choice system was higher among treatment group parents (i.e., those who had choices) than among control group parents.
2. Treatment group parents' information levels improved over time, as more parents became aware of the choice system and their options under the choice system.
3. The accuracy of parents' information fell sharply in Year 5 when the voucher system was replaced by an open enrollment system that permitted fewer choices. Year 5 represents a kind of replication of the Year 1 situation; information levels returned to Year 1 baseline, and some groups were better informed than others.
4. Where family background factors were related to information levels, socially advantaged families were generally better informed than others.

5. The average aware parent used four different sources of information to learn about the Alum Rock choice system, but the number of sources varied with ethnicity and education. Anglos and more educated respondents in other ethnic groups tended to have more sources of information, but education--rather than ethnicity--appears to be the important factor.
6. Aware parents' exposure to various sources of information ran from a high of 94 percent for official *school publications* to a low of 10 percent for *school board meetings*. About half of the aware parents had talked over their choices with *parent counselors*, *teachers*, or *principals*. Surprisingly, the mass media--*radio-TV* and *newspapers*--were used relatively infrequently.
7. Aware parents were asked to identify their single best source of information about the schools, and the most frequently mentioned sources were *school publications* (30 percent), *parent counselors* (22 percent), and *teachers* and *principals* (22 percent). The more educated the parents, the more likely they were to prefer school publications or talks with teachers; and conversely, the less educated the parents, the more likely they were to prefer talks with parent counselors. This probably reflects, at least in part, the parent counselors' tendency to concentrate on the families that needed the most help, the less educated parents who had troubles with the official school publications and shied away from formal meetings with teachers and principals.

IV. DETERMINANTS OF PARENTS' PROGRAM CHOICES

We begin with the assumption that parents' choices among alternative schools (or at least types of schools) are important, because schools can make a difference in children's behavior and life chances. Debates about the effects of racial and social class isolation, ability grouping, aptitude-treatment interactions, and the effects of classroom organization are all predicated upon the common assumption that different kinds of schools have different kinds of effects on children. If one accepts this assumption, it follows that one must be concerned about what kinds of children receive what kinds of instruction when parents have equal cost alternatives. It is therefore important that we understand *why* parents choose the schools they choose for their children. This is the issue we shall consider in this chapter: *what determines parents' choice of classrooms when they have equal cost alternatives?*

One way of conceptualizing the process of choosing a school is to assume that parents weight each of the attributes of the alternative programs and then arrive at some overall rating of each program. The program with the highest global rating is their first choice, the program with the next highest rating is their second choice, and so on. Discovering how parents weight the different features of alternative schools is one objective of this research. Presumably, different groups of parents look for different things when they choose schools. We are interested not only in learning how parents, in general, choose schools, but also in identifying important differences in the way various groups of parents choose schools.

We have two kinds of data about the way parents choose schools. First, we have parents' self-reports of what they looked for when they chose programs for their children. Second, we can infer certain things from the pattern of placement decisions that parents made for their children. The analysis is guided by certain theoretical ideas, which are summarized at the beginning of each of the following subsections. These four subsections make these arguments:

1. School location is the major determinant of parents program choices, especially at the outset of the choice system or when young students are involved.

2. Noninstructional factors are more important than curriculum issues when parents choose schools, but to the extent that instructional arrangements are important, three factors seem to prevail: (a) broadness of curriculum content, (b) content acceptability, and (c) classroom "permissiveness."

3. Parents' program choices result in nonrandom clusterings of students according to family background factors like income, education, and attitudes.

4. Parents' program choices are "explained," at least in part, by their childrearing values; they choose schools that reinforce their values, and these values tend to vary with family background.

Propositions About the Location of Alternatives

The geographic location of the alternative programs undoubtedly influences parents' choice of schools for their children. Picking a nonneighborhood school may raise certain problems, including increased transportation costs and worries about travel safety. District policies (e.g., free busing) can reduce transportation costs, but it is more difficult to reduce the other worries that arise when students attend nonneighborhood schools.

The importance of school location in placement decisions has been observed before. Jerdee and Rosen (1973), for instance, found in their decision simulations that, for Anglo parents, a 45 minute bus ride was a more important consideration than either the ethnic mix of the student body or the instructional arrangement. Similarly, Binderman (1972), and Weinstein and Geisel (1962), in their studies of black parents' decisions in southern "freedom of choice" districts, found evidence that school location was the predominant factor in placement decisions, although cognitive distortion of the distances to black and white schools apparently occurred in many cases.

In designing the standards for the first voucher demonstration, the Center for the Study of Public Policy (1970, p. 59) anticipated that school location would be the dominant factor in placement decisions, at least in the early stages of the demonstration. They argued that this would merely reflect parents' initial inability to see significant differences among the different schools (see Jencks, 1971, pp. 10988-10989).

The next three propositions summarize our predictions about the effects of school location on parents' placement decisions:

4.1 Even when schools provide free transportation for children who attend nonneighborhood schools, the geographic location of the alternative schools is the single most important factor in parents' placement decisions.

4.2 The more highly differentiated the alternative schools, the less important the geographic location of the schools in parents' placement decisions.

4.3 The older the child, the less important school location in determining parents' placement decisions.

Evidence: Location

The Center for the Study of Public Policy (CSPP, 1970; Jencks, 1971) argued that, at the outset of a voucher system, parents would be unable to distinguish between different alternatives, and therefore their school choices would be based largely on simplistic and educationally irrelevant considerations like school location.[1] The first two years of the Alum Rock voucher demonstration seemed to

[1] By labeling these factors as "educationally irrelevant," we are not saying that they are unimportant. They are extremely important to a parent who is comparing various alternative schools, but no theory of learning that we know of would say that the school location *per se* has an impact on learning.

follow the predicted pattern. Among old voucher parents, there was a significant decline in the percentage who thought that "for most parents, how close a school is to home is the most important reason for choosing a school for their children to attend" (Q55H). Consistent with this apparent shift in attitudes, the percentage of parents who chose nonneighborhood schools for their children rose from 11 percent in Year 1 to 18 percent in Year 2. Beginning with Year 3, the pattern was disrupted and it is difficult to interpret the attitudinal data on school location. In that year there was a marked increase in the percentage of old voucher parents who thought that school location was the single most important factor in choosing programs.

Table 12 traces parents' changing attitudes toward school location, and Table 13 shows the percentage of voucher children who reportedly attended nonneighborhood schools in each year of the demonstration. These tables suggest three conclusions: First, the initial shifts in attitudes and willingness to seek out nonneighborhood schools suggest that over time parents came to understand and value the differences between the alternative minischools. This is consistent with the predictions of Jencks and CSPP. Second, the data for the new voucher parents are difficult to interpret. One possible explanation is that one of the new voucher schools was particularly disliked, and therefore parents, who were trapped in this school before the voucher plan began, fled when they got the opportunity. Third, comparing Year 1 with Year 5, it appears that, in general, school location was less important at the end of the demonstration, although this is true only of the "treatment" groups, the people who had accrued some experience with choosing schools. In sum, the evidence roughly approximates the predicted pattern.

The importance of school location depended, in part, upon the age of the child. The older the child, the less important school location was, and the more willing parents were to consider nonneighborhood schools for their children. The percentage of parents who thought that "school location is the single most important reason

Table 12

PERCENTAGE OF PARENTS WHO SAY SCHOOL LOCATION IS THE "SINGLE MOST IMPORTANT FACTOR" IN SELECTING A SCHOOL (Q55H)

Parent Group	Year 1	Year 2	Year 3	Year 5	Chi Square Within Groups Across Years (df = 3)
Old voucher parents	75.3% 452	69.5% 223	81.4% 127	66.9% 180	$\chi^2 = 14.323$ $p < .003$
New voucher parents	74.4% 180	69.5% 408	76.1% 159	62.2% 179	$\chi^2 = 14.335$ $p < .003$
Nonvoucher parents (controls)	72.4% 126	84.7% 61	70.9% 95	73.4% 196	$\chi^2 = 5.226$ ns
Chi square between groups within survey year (df = 2)	$\chi^2 = 0.615$ ns	$\chi^2 = 7.455$ $p < .03$	$\chi^2 = 4.429$ $p < .11$	$\chi^2 = 8.017$ $p < .02$	--

Table 13

PERCENTAGE OF VOUCHER CHILDREN ATTENDING NONNEIGHBORHOOD SCHOOLS (Q50)

Parent Group	Year 1	Year 2	Year 3	Year 5	Chi Square Within Groups Across Years
Old voucher parents	11.2% (55)	18.4% (59)	21.8% (34)	12.4% (33)	$\chi^2 = 15.73$ df = 3 $p < .002$
New voucher parents	---	24.2% (142)	17.3% (36)	31.5% (90)	$\chi^2 = 15.73$ df = 2 $p < .002$
Nonvoucher parents (controls)	---	---	---	11.2% (30)	---
Chi square between groups within survey year (df = 2)	---	$\chi^2 = 4.116$ df = 1 $p < .04$	$\chi^2 = 1.395$ df = 1 ns	$\chi^2 = 47.594$ df = 2 $p < .001$	---

for choosing a school" was 76 percent for parents of children 6 and 7 years old, 73 percent for children 8 to 10, and 70 percent for children 11 and over ($\chi^2 = 5.996$, df = 2, $p < .05$; gamma = .08, $p < .02$). Parents' program choices were congruent with these attitudes toward school location. The older the child, the more likely the parents were to pick a nonneighborhood school. The percentage of children in nonneighborhood schools was 14 percent for children 6 to 7, 13 percent for children 8 to 10, and 25 percent for children over 10 ($\chi^2 = 54.32$, df = 2, $p < .001$).

School location seems to be most important when parents have had little experience with choosing schools or they cannot distinguish between the various alternatives available to them. But in every group and every survey, the majority of parents agreed with the assertion that, "for most parents, school location is the most important reason for choosing a school." By any standard, school location was an important determinant of parents' school choices.

Propositions About Curriculum Content and Classroom Organization

A number of terms have been used to describe the differences between classrooms: teacher-centered or child-centered, heterogeneous grouping or homogeneous (ability) grouping, "academic" or "practical," and more recently "open" or "traditional." Classroom typologies have been generated both on theoretical grounds (e.g., Barth, 1972) and empirical grounds (e.g., Barker et al., 1978).

In most parents' minds, classrooms probably vary in two basic ways: (a) curriculum content (*what* is taught), and (b) classroom organization (*how* the subject is taught). Moreover, these may be independent factors in theory, but they are probably highly correlated in practice. Highly structured instructional programs probably tend to emphasize the 3Rs, whereas music, art, and social studies tend to receive more attention in less structured programs. Because those dimensions appear to be correlated, people tend to think in terms of a single dimension, which might be labeled as "hard-soft." The "hard" subjects, which require convergent thinking, tend to be taught in more

structured, "hard" settings, whereas "soft" subjects, which require divergent thinking, tend to be emphasized in less structured, "soft" settings. The major propositions about curriculum factors are as follows:

4.4 On the whole, curriculum factors are less important than noninstructional factors (e.g., ethnic/social composition of the school, the desire to keep siblings together, location of the schools).

4.5 Parents vary in the importance they place on classroom structure, and these preferences are correlated with family background.

Evidence: Curriculum Factors

We have three pieces of evidence about the way parents' decisions were influenced by curriculum variations in the alternative schools. First, parents in all three groups--old, new, and nonvoucher families--were more interested in influencing curriculum matters than any other area of school decisionmaking (see Table 14). This is congruent with the findings of the Gallup Poll of Public Attitudes Toward Education (Gallup, 1974). In this national survey, 64 percent of the parents of public school children said they wanted more information about schools; and when asked what kind of information would be of particular interest, the most frequent answer was "information about the curriculum." Topics like "more information about my child," "information about grading," and "information about how parents can become involved in school activities" were ranked 10, 12, and 14, respectively, even though one might expect these issues to take precedence over curriculum concerns.

Second, an open-end question (Q49R), which was used in the Year 2 survey, asked voucher parents to explain their reasons for choosing particular minischools for their children. Only one-third of the

Table 14

RESPONDENTS' ATTITUDES TOWARD PARENTAL INVOLVEMENT IN SCHOOL DECISIONS

	Percentage of Parents Who Responded "Yes" to:	Year 1	Year 2	Year 3	Year 5
Q36A.	Do you think parents should be able to help decide which teachers get hired or fired in their children's schools?	37.5% 381	49.2% 482	47.3% 236	45.8% 379
Q36B.	Should parents be able to decide whether a principal is hired or fired?	53 4% 542	62.8% 615	61.3% 306	54.5% 451
Q36C.	And should parents be able to help decide what should be taught in school?	60.0% 610	68.6% 672	79.2% 316	67.8% 561
Q36D.	Should they be able to help decide how the school spends its money?	54.9% 558	61.2% 600	61.9% 309	65.6% 543

parents mentioned anything to do with curriculum, and this is using a generous definition of "curriculum." Table 15 presents the relevant data. It appears that curriculum factors were less important than other factors (e.g., school location) when it came to choosing mini-schools, but recall that these data were collected at the early stages of the voucher demonstration, and perhaps parents had not yet learned to distinguish between different schools. Curriculum matters may have become more important criteria after parents gained experience in the voucher system.

Third, all parents in Years 3 and 5 were asked to indicate preferences among competing curriculum emphases (e.g., teaching 3Rs only versus teaching a broad range of subjects). Table 16 shows the

Table 15

PARENTS' REPORTED REASONS FOR SELECTING SCHOOLS, FALL 1973 (Q49R)

Program Attributes	Number and Percent of Parents Who Mentioned[a]: f	%
Location close to home, no transportation problems.	173	70.9%
Principal is good, like the principal; teachers good, cooperative, helpful.	44	18.0%
Good school, one of the best; like the staff there; well organized.	46	18.9%
Friends go there, want to be with friends; child, siblings had gone there; was happy there and didn't want to change; child liked it there, more familiar with it.	75	30.8%
Program features: program suited child's interest; individualized instruction, independent learning; offers basics wanted, reading, 3Rs, languages; offers enrichment program; learn by doing; open activity.	78	32.0%

[a]Excludes 32 parents, 11.6 percent of sample, who said they had no choice about which school their child attended.

percentage of parents in Year 5 who endorsed each of the curriculum alternatives.[1]

A factor analysis of these seven items produced a three-factor solution, and the items that loaded heaviest on each factor were summed to provide indices of curriculum preferences. This provided three scores for each respondent:

[1]The data have been aggregated across survey years and treatment groups because subanalyses showed no significant differences between groups or within groups across time.

Table 16

PARENTS' PREFERENCES FOR AN IDEAL SCHOOL (Q135A-G), ALUM ROCK, YEAR 5 SAMPLE

	Question	%	f
Q135A.	What kind of school would you want it to be:		
	A. A strict school where students were always well-behaved, or.....	62.7%	527
	B. A free-school where students could act naturally.....	37.3%	313
Q135B.	A. A school where the students took only three subjects, reading, writing, and arithmetic until they really learned them, or.....	50.3%	423
	B. A school where the students took a lot of different subjects every day such as foreign languages, current events, history, science, and health.....	49.7%	418
Q135C.	A. A school where students concentrated on learning from books almost all the time, or.....	63.4%	528
	B. A school where students spent a lot of time doing things like playing music, putting on school plays, taking art classes or playing sports.....	36.6%	305
Q135D.	A. A school where the students spend a lot of time listening to their teacher, or.....	58.9%	492
	B. A school where the students spent a lot of time studying by themselves or in small groups.....	41.4%	343
Q135E.	A. A school where the teacher decided what the students should learn most of the time, or.....	68.3%	573
	B. A school where the students could choose what they wanted to learn most of the time.....	31.7%	266
Q135F.	A. A school where students take a lot of time learning about problems such as pollution, race relations, energy, world peace, or.....	64.7%	545
	B. A school where students didn't spend much time on controversial problems like these.....	35.3%	297
Q135G.	A. A school where students learn practical things they could use when they got out of school, or.....	67.5%	566
	B. A school where students study academic subjects most of the time.....	32.5%	273

1. *A broadness index* (Q135F and C) measured preferences for broad curriculum content or narrow, 3Rs content.
2. A subject matter *controversy index* (Q135F) measured tolerance or intolerance for controversial subjects.
3. A classroom *permissiveness index* (Q135A, D, and E) measured parents' attitudes toward classroom structure.

Each of the indices was crosstabulated by parents' ethnicity, education, income, occupational status, and aspirations and expectations for their children. The results are summarized in Table 17, and they suggest these conclusions:

- The various ethnic groups varied in their attitudes toward curriculum broadness. Anglos and English-speaking Mexican-Americans favored a broad curriculum content, whereas Mexican-Americans who were interviewed in Spanish tended to favor a narrow curriculum content.
- The permissiveness index (labeled PINDEX3) appears to have measured attitudes toward children's *obedience*. The index is highly correlated with another, more direct measure of attitudes toward obedience (Q29F) (gamma = .55, $p < .001$), and this provides some evidence of validity.
- Parents' scores on the permissiveness index varied with education, ethnicity, and occupational status. Blacks, Anglos, and English-speaking Mexican-Americans tended to be more permissive than others. White-collar workers tended to be more permissive than blue-collar workers, and parents who had more than a high school education were more permissive than less educated parents.

Parents' attitudes toward classroom "permissiveness" were correlated with ethnicity, education, and occupational status; this implies that given the opportunity, different kinds of parents would choose

Table 17

SUMMARY OF CHI-SQUARE STATISTICS FOR RELATIONSHIPS BETWEEN FAMILY BACKGROUND CHARACTERISTICS AND CLASSROOM PREFERENCES

Index	Ethnicity (ETHS)	Blue/White-Collar Household (RQ69A)	Education (EDUC3)	Importance of Children's Obedience (RQ297)
(PINDEX1) broadness of curriculum	$p < .001$ Anglos and English-speaking Mexican-Americans liked broad curriculum content. Mexican-Americans interviewed in Spanish wanted narrow content.	ns	ns	ns
(PINDEX2) controversy of curriculum subject matter	ns	ns	ns	ns
(PINDEX3) classroom permissiveness	$p < .001$ Blacks and English-speaking Mexican-Americans had highest permissiveness scores, whereas Mexican-Americans interviewed in Spanish had lowest permissive scores. Anglos fell in between.	$p < .09$ White-collar workers had higher permissive scores than blue-collar workers.	$p < .05$ More educated parents had higher permissiveness scores than parents with less than a high school education.	$p < .026$ Parents who emphasized obedience (Q29F) scored low on the permissiveness index.

different kinds of schools for their children. The Alum Rock survey data provide a direct test of this implication, and the Mamaroneck and Minneapolis survey data allow us to test the generalizability of this proposition.

Propositions About Parents' Classroom Choices

4.6 *Parents' free choices among diverse alternative programs will result in statistically nonrandom clusterings of children according to social background factors.*

In all three family choice systems, parents' classroom selections resulted in a nonrandom clustering of children according to family background factors such as parents' income, education, religion, and occupational status.[1]

To permit comparisons with other school systems, the characteristics of Alum Rock families who chose open or traditional classrooms are summarized in Table 18. These data suggest that children in open classrooms came from families that were relatively more likely to be white-collar workers, non-Mexican-American, higher income, and higher occupational status. The same pattern occurred in the suburban New York minischool system. The data in Table 19 show that open classrooms tended to draw children from relatively wealthier, higher occupational status homes; and school choices were related to religion, whereas in Alum Rock they were related to language used in the home.

Finally, the Minneapolis SEA data reinforce our conclusions that children from relatively advantaged families are overrepresented in open classrooms. Parents' education, as reported in a 1974-1975 parent survey, provided a proxy measure of social class. According to these data, 91 percent of the children in open classrooms had at least one parent who was a college graduate, whereas the comparable figure for children in traditional classrooms was 71 percent ($\chi^2 = 27.56$, df = 3, $p < .001$).

A dissertation by Terrell (1974) provides additional evidence. His analysis of SEA school record data showed that (a) fathers of children in open classrooms were significantly higher in occupational status than fathers of children in traditional classrooms; (b) students in open classrooms scored higher than those in traditional classrooms on the Metropolitan Reading Readiness Test, the Gates-McGinite Reading Test, and the Modern Mathematics Supplement to the Iowa Basic Skills Tests; and (c) children in open classrooms had significantly higher absenteeism rates than children in traditional classrooms. Terrell concluded that "Based on the findings of this

[1] Appendix D provides an analysis of the degree to which Alum Rock schools and minischool programs were segregated by ethnicity/race and sex.

Table 18

CHARACTERISTICS OF PARENTS CHOOSING OPEN AND TRADITIONAL CLASSROOMS IN ALUM ROCK SAMPLE

Parent Characteristic	Type of Classroom				P
	Traditional		Open		
Family income: percent over $15,000	40%[a]	(83)	64%	(29)	.01
Education: percent attended college	18%	(40)	30%	(16)	.04
Aspirations: percent who want college education for child	73%	(157)	82%	(44)	ns
Expectations: percent who expect child to attain a college education	50%	(103)	60%	(32)	ns
Speak other than English in home	39%	(84)	15%	(8)	.01
Occupation: percent blue-collar	71%	(139)	55%	(29)	.03

[a]Note that in this and all other tables that present dichotomous data, only one percentage and associated cell frequency is presented. This permits parsimony in presentation and discussion, and no information is lost. The unreported percentage and cell frequency can be inferred easily. For example, in the table above, 83 parents, 40 percent of the sample, had incomes over $15,000, so we can infer that 60 percent, or 125, had incomes of $15,000 or less. The unreported cell frequency is computed as: .4N = 83, therefore N = 208; and (.6) (208) = 125.

study it can be implied that there is a relationship between alternative education programs and the kind of student who chooses to attend them. Higher achievers tend to choose schools which are less structured, such as the Open School. Lower achievers tend to choose schools which are more structured . . . and have a more traditional background, as evidenced by the fact that they missed fewer days from school . . . . The students who choose the less structured programs are usually from homes with parents who have high professional occupations or backgrounds."

The patterns from the three sites were remarkably consistent, given that the districts were very different in terms of demographics and alternative school arrangements. In all three districts, allowing

Table 19

CHARACTERISTICS OF PARENTS CHOOSING OPEN AND TRADITIONAL CLASSROOMS IN MAMARONECK SAMPLE

Parent Characteristic	Type of Classroom				P
	Traditional		Open		
Family income: percent over $15,000	80%	(380)	85%	(228)	.09
Education: percent attended college	86%	(408)	93%	(248)	.008
Aspirations: percent who want college education for child	97%	(457)	100%	(263)	.04
Expectations: percent who expect child to attain a college education	94%	(440)	99%	(263)	.0009
Occupation: percent blue-collar	19%	(90)	13%	(34)	.01
Religion: percent Catholic	45%	(201)	34%	(88)	.0001
Jewish	26%	(118)	42%	(107)	
Protestant	29%	(129)	24%	(61)	

parents to choose schools resulted in nonrandom classroom groupings. "Open" classrooms and "traditional," self-contained classrooms were available in all three districts, and this provides a good basis for cross-district comparisons. *In every case, open classrooms tended to attract children from higher socioeconomic status homes.* The question is, How do we explain the consistent link between family background and preferences for certain kinds of classrooms? Parents' childrearing values may be an important mediating factor, and this is the issue we examine next.

Propositions About Childrearing Values

Parents' social backgrounds--their occupational status and education in particular--lead to certain childrearing values, and these values influence their program choices. This is not to say that the characteristics of individual children are irrelevant; parents do consider these factors, and they may choose one kind of program for one child and another kind of program for a second child. But it is also true that there are some consistent preferences or values operating.

Of course, people's preferences vary with the times, and preferences tend to vary cyclically between highly structured ("hard") and "permissive" ("soft") approaches. Childrearing practices--like parents' preferences for different types of schools--tend to shift across time, and Urie Bronfenbrenner (1958) has shown that middle-class parents are the first to shift. There are at least three tenable explanations for this finding:

1. Bronfenbrenner attributes this to middle-class families' greater exposure to "experts'" opinions about how to raise children, but why experts keep changing their opinions is unclear. Unfortunately, Bronfenbrenner may have made an unwarranted causal inference. Middle-class families may lead in childrearing value changes, and they may have more information about experts' opinions; but both of these observations may reflect another fact, i.e.,

2. Perhaps middle-class families are more attuned to long-term variations in the economy and hence they may tend to shift their childrearing practices and their school preferences to emphasize the skills that they believe are in demand. According to this view, when jobs are plentiful, the emphasis will be on "developing the complete person," affective education, and the like. When times are rough, the emphasis is on developing salable skills for a competitive market.

3. Perhaps changes in childrearing values result for a kind of educational dialectic. That is, changes are cyclical because an

idea comes into fashion, it is implemented and then carried to excess, which creates a demand for movement in the opposite direction, which eventually leads to overcorrection, which leads to a move in the other direction, and so on. It is easy for schools to fall into a cycle of fads because anything that looks "new" or "innovative" seems to raise outcomes somewhat (or at the very minimum it raises satisfaction with the schools). These changes are probably due in large part to Hawthorne effects, i.e., novelty motivates people to produce more or to try harder. According to this argument, changing instructional methods is a viable motivational strategy, and schools can rely upon this strategy to produce short-term gains (if not in achievement, at least in satisfaction). Middle-class parents, being better "plugged into" school information networks, will be the first to see shifts in educational values, and they will be the first to change their childrearing practices to emphasize the skills that will lead to "success" in school, as defined by the emerging standards.

All three of these theories--Bronfenbrenner's "expert opinion" argument, the adjustment to economic conditions argument, and the cyclical fad argument--lead to similar conclusions: namely, *the content emphases and approaches that schools use (and parents adopt in their childrearing) shift cyclically,* and *middle-class families will be the first to shift.* We have no data with which to prove or disprove any of these alternative hypotheses. The value changes in question happen slowly over time, and certainly require more than the five years to demonstrate. Of more immediate interest are current childrearing values that might explain parents' program choices in Alum Rock, Minneapolis, and Mamaroneck.

Against the continuous process of cyclical change, one can detect some stable, relative differences between the childrearing practices of working and middle-class parents. Melvin Kohn (1969) has theorized that middle-class parents emphasize children's *independence* and *imagination* (creativity), whereas working-class parents put more emphasis on children's *obedience* and *respect for external authority* (politeness). This, according to Kohn, is because parents want "success"

for their children, and their own occupational experience (and correlated social background) has taught them that certain behaviors lead to "success." Working-class occupations usually involve highly routinized work that can be supervised closely, and obeying authority leads to job security. In contrast, most middle-class occupations cannot be routinized, and they require the worker to make decisions under conditions of uncertainty. Imagination and independence are valuable traits in these jobs. Kohn's theory suggests that parents pass on their values to their children, so that the children become equipped to operate in the same social milieu as their parents. This helps explain why children tend to acquire the same social position in adulthood that their parents held.

Occupation, specifically "job structure," according to Kohn, is the important mediator of differences between working-class and middle-class families' values. But Kohn's own evidence (Chapter 11), as well as more recent evidence reported by Wright and Wright (1976) and Bridge et al. (1976), seems to indicate that parents' *education* accounts for more of the variance in values than occupation does.

Childrearing values vary with social class, and so does the degree of *task specialization* between mothers and fathers. Working-class mothers and fathers tend to have more distinctly different roles than do middle-class mothers and fathers. The degree of task specialization also tends to vary across cultures, and it appears that the more economically developed the society, the less specialization occurs (Barry et al., 1957, 1959). Task specialization is probably less common in the United States than in most other countries, but still there are apparent differences in the division of labor within working-class and middle-class families. Who makes schooling decisions in a family may vary with social class, as well as the sex of the child in question, but on the whole, school decisions, like other child care functions, probably fall most often to mothers.

The way childrearing values accrue from social and occupational experience is an important issue, and one that has implications for our understanding of the way parents choose schools in alternative education systems. The following propositions seem tenable:

4.7 Relative to middle-class parents, working-class parents are probably more likely to emphasize children's obedience and respect for authority (politeness). In contrast, middle-class families are probably more likely to encourage creativity (imagination) and reliance on internally set standards (independence).

4.8 As a consequence of the influence identified in 4.7, we would expect to find that, when both open and traditional classrooms are available, middle-class children will be overrepresented in less structured, open classrooms; and working-class children will be overrepresented in more structured, traditional classrooms.

4.9 In general, mothers are more often the principal decisionmakers in matters of schooling, although there is more joint decisionmaking in middle-class homes than in working-class homes. Moreover, working-class fathers may be more interested in the education of their male children than their female children. Therefore, in explaining parents' involvement in choosing schools, we predict a three-way interaction between the sex of the parent, the sex of the child, and the educational background or social class of the family.

Evidence: Childrearing Values

Family background characteristics predict parents' choice of schools, where alternative schools are defined in terms of classroom structure; and childrearing values may mediate the effects of background on school choice. The evidence for this proposition is substantial. First, parents' childrearing values vary with education and other background characteristics; and second, parents who choose

open classrooms hold different values than parents who choose traditional classrooms. A third, and more speculative conclusion, is that mothers are most often the chief decisionmakers in matters of schooling, but there is also a complex interaction between parents' sex, the child's sex, and the family's social class or educational background. Less educated fathers seem to be more interested in the education of their sons than their daughters.

Values and Educational Background

The evidence for the first conclusion comes from the Year 5 Alum Rock survey and the Mamaroneck survey. Both surveys included the instrumental values subscale of the Rokeach (1973, 1967) *Value Survey*. Table 20 shows the median rankings of the 18 values grouped according to Alum Rock parents' years of schooling.[1] The importance of six values increased monotonically with education. These were: independent (3.6), imaginative (2.7), intellectual (2.5), logical (1.7), responsible (1.4), and self-controlled (1.4). The importance of four values decreased with education: clean (4.4), obedient (3.1), cheerful (1.5), and forgiving (1.1).

The Mamaroneck survey (see Table 21) produced similar results. The importance of eight values increased monotonically with education: broadminded (3.3), capable (3.1), courageous (2.5), helpful (1.3), imaginative (4.6), independent (3.7), intellectual (4.3), and loving (1.4). Four values decreased in importance as education increased: ambitious (2.2), clean (5.0), obedient (7.7), and polite (6.6). Honest (1.1, ns) and forgiving (0.4, ns) showed nonsignificant trends.

The consistency of the linear relationships is quite remarkable, given the radical differences in samples. One is quite affluent (median income = $29,000, median education = 16.5 years), while the

[1]The values in parentheses represent the difference in median ranks for the most and least educated groups.

Table 20

ALUMROCK PARENTS' MEDIAN INSTRUMENTAL VALUE RANKING PRESENTED ACCORDING TO PARENTS' EDUCATIONAL ATTAINMENT (YEAR 5)

Value	Educational Attainment						Difference Between Most and Least Educated Groups[a]
	Less Than High School n = 430		High School Diploma n = 212		Some College n = 175		
Ambitious	5.91	(2)[b]	5.94	(3)	6.35	(4)	0.44
Broadminded	10.50	(13)	9.91	(9)	10.35	(11)	0.15
Capable	9.57	(9)	9.26	(8)	9.73	(7)	0.16
Cheerful	11.46	(16)	12.44	(16)	12.92	(18)	1.48
Clean	7.88	(5)	9.93	(10)	12.29	(16)	4.41
Courageous	10.81	(14)	11.56	(15)	9.88	(8)	0.93
Forgiving	11.14	(15)	11.43	(14)	12.20	(15)	1.06
Helpful	9.70	(10)	11.32	(13)	10.72	(13)	1.02
Honest	4.59	(1)	3.56	(1)	3.96	(1)	0.63
Imaginative	13.33	(17)	12.69	(17)	10.59	(12)	-2.74
Independent	9.50	(8)	8.58	(6)	5.95	(3)	-3.55
Intellectual	10.43	(12)	10.00	(11.5)	7.96	(6)	-2.47
Logical	14.42	(18)	13.80	(18)	12.70	(17)	-1.72
Loving	10.18	(11)	10.00	(11.5)	10.32	(10)	0.14
Obedient	7.08	(4)	8.65	(7)	10.17	(9)	3.09
Polite	8.30	(6)	8.00	(5)	11.03	(14)	2.73
Responsible	6.30	(3)	5.30	(2)	4.86	(2)	-1.44
Self-controlled	9.12	(7)	7.95	(4)	7.73	(5)	-1.39

[a]Differences of approximately $|1.2|$ or more are statistically significant at the $p < .05$ level, according to *median tests* (Siegel, 1956).

[b]Composite ranking.

Table 21

MAMARONECK MOTHERS' MEDIAN INSTRUMENTAL VALUE RANKING PRESENTED ACCORDING TO MOTHER'S EDUCATIONAL ATTAINMENT

Value	Mother's Educational Attainment			Difference Between Most and Least Educated Groups
	High School or Less n = 165	College n = 390	Postgrad. n = 202	
Ambitious	8.92	9.30	11.13	2.21
Broadminded	11.14	9.07	7.81	-3.33
Capable	9.78	7.57	6.70	-3.08
Cheerful	8.89	10.28	9.93	1.04
Clean	11.85	15.98	16.85	5.0
Courageous	9.85	8.69	7.37	-2.48
Forgiving	10.81	11.04	11.17	0.36
Helpful	11.28	10.96	9.97	-1.31
Honest	3.02	3.22	4.07	1.05
Imaginative	12.38	9.67	7.75	-4.63
Independent	6.57	4.05	2.90	-3.67
Intellectual	10.78	8.45	6.44	-4.34
Logical	11.25	11.27	10.72	-0.53
Loving	5.91	4.61	4.56	-1.35
Obedient	8.38	13.50	16.06	7.68
Polite	7.44	12.10	14.03	6.59
Responsible	4.91	4.86	4.66	-0.25
Self-controlled	11.08	10.90	11.93	0.85

other is relatively poor (median income = $10,000, median education = 11 years). Yet, the directions of the linear trends across education groups were identical for 11 of the 18 instrumental values. Table 22 summarizes the results.

Table 22

SUMMARY OF TRENDS IN MEDIAN RANKS OF ROKEACH INSTRUMENTAL VALUES AS RANK ORDERED BY ALUM ROCK AND MAMARONECK SAMPLES

Value	Alum Rock Year 5	Mamaroneck, New York
The importance of these values increased with education.		
Imaginative	2.7[a]	4.6
Intellectual	2.5	4.3
Independent	3.6	3.7
Logical	1.7	0.5 (ns)
Responsible	1.4	0.3 (ns)
Broadminded	0.2 (ns)	3.3
The importance of these values decreased with education.		
Obedient	3.1	7.7
Clean	4.4	5.0
Polite	2.7	6.6
Ambitious	0.4 (ns)	2.2
Cheerful	1.5	1.04 (ns)

[a]Difference between most and least educated groups' median rankings. An absolute difference greater than 1.2 is significant at the $p < .05$ level.

These patterns are exactly what one would predict according to Melvin Kohn's theory of class and conformity. According to Kohn (1969, 1976), working-class parents tend to emphasize children's obedience and conformity to authority because they have learned through their occupational experience in highly structured jobs that

conformity leads to "success" (e.g., job security). Middle-class families, on the other hand, emphasize creativity (imagination), independence, and intellectual performance because these are the qualities that lead to "success" in their middle-class occupations. Unlike working-class jobs, which are highly structured, middle-class jobs generally entail synthesizing principles under conditions of great uncertainty, and by definition the work cannot be supervised rigidly.

"Job structure" is the key family background factor which determines childrearing values, according to Kohn's theory; but, of course, education and job structure (and to some degree, occupational prestige) are correlated. However, Kohn's own data (1969, Chapter 11) as well as more recent analyses of National Opinion Research Corporation (NORC) surveys (Wright and Wright, 1976), suggest that parents' education is probably as important as job structure or occupational status.

Values and School Choices

Family background factors like education are correlated with childrearing values; this was demonstrated in the last subsection. Now the task is to investigate whether childrearing values are related to parents' school choices, where alternatives are defined in terms of classroom structure. In the Mamaroneck sample, parents' classroom choices were known, and they fell into three groups: traditional classrooms, open classrooms, and team teaching classrooms. The latter group, which enrolled less than 14 percent of the sampled children, was excluded from the analysis. Table 23 compares the median value rankings of the parents who chose open or traditional classrooms for their children. The patterns are clear: *people who chose open classrooms placed relatively more emphasis on children's independence, imagination, and intellectual behavior, and those who chose traditional classrooms placed relatively more emphasis on obedience, politeness, and cleanliness.*[1]

[1]"Clean" may mean "orderliness" in this context.

Table 23

MAMARONECK MOTHERS' MEDIAN RANKINGS OF INSTRUMENTAL VALUES PRESENTED ACCORDING TO PARENTS' SCHOOL CHOICES

(Low value indicates greater importance)

Value	Classroom Type	
	Traditional	Open
Obedient	12.9	15.5
Polite	11.6	13.8
Clean	15.6	16.5
Self-controlled	11.0	13.0
Independent	4.8	3.7
Imaginative	10.7	9.1
Intellectual	8.7	7.9
Capable	8.3	7.2

These findings are consistent with our argument that parents' educational experience and their subsequent occupational experience fosters certain instrumental values, and these values guide their childrearing practices. In choosing a school program, as in choosing toys or books or neighborhoods to live in, parents make choices that are consistent with their basic values. Of course, their decisions are not based solely on their values alone. Their alternatives--the things that they can choose among--are determined at least in part by exogenous factors (e.g., the state of the economy and legal restrictions), but given people with similar alternatives (as in the Mamaroneck and Alum Rock choice systems), we would expect to find, and we did find, that (a) people with different backgrounds hold different values, (b) people with different values choose different kinds of classrooms for their children, and (c) on the face of it, parents' classroom choices are congruent with their childrearing values. Less-educated parents, who generally hold lower status, more structured jobs, tend

to emphasize children's obedience and respect for authority, and they tend to choose more structured classrooms for their children. In contrast, more educated parents, who generally hold higher status, less closely supervised positions, tend to emphasize children's independence and imagination, and they tend to choose less structured classrooms for their children.

The classroom choices of Mamaroneck parents were consistent with our theoretical predictions, but this does not prove that values actually mediated the effects of family background factors. Conceivably, education and occupational background could have determined both choices and values, and values may have had no independent effect on choices.

Mothers and Fathers' Involvement in the Choice Process

Proposition 4.9 was based on two assumptions: (a) school matters fall to mothers more often than fathers[1] (Bridge, 1976), and (b) task specialization is probably greater in working-class homes than middle-class homes (Barry et al., 1957). These assumptions suggest two predictions. First, mothers are probably more involved than fathers when it comes to choosing schools. And second, working-class fathers are probably more interested in the education of their male children than female children, and therefore in explaining parent participation in choosing schools, we expect a three-way interaction between the sex of the parent, the sex of the child in question, and the social class of the family.

One way of testing these propositions is to examine the Alum Rock data on who signed each child's classroom selection form (voucher). Presumably, the person who signed the form is the more involved of the two parents, although this does not mean that they were the sole decisionmaker. Of particular interest is the interaction between

[1] To be more precise, "in most 'intact families,' mothers carry the chief responsibility for making day-to-day school decisions and processing school information, but when a perceived crisis occurs, or a non-routinized decision must be made, fathers may be drawn into the picture." (Bridge, 1976, p. 370.)

the child's sex and parents' sex and educational background. Education is a proxy for social class in this case. We predicted that fathers, especially less-educated fathers, would sign the vouchers more often for their sons than their daughters, but in all social classes, mothers would be more likely to sign than fathers. The data in Table 24 support these predictions.

Table 24

PERCENTAGE OF FATHERS AND MOTHERS IN "INTACT FAMILIES" WHO SIGNED CLASSROOM SELECTION CARDS FOR THEIR SONS AND DAUGHTERS

Parents' Education	Fathers Signing for:				Mothers Signing for:			
	Sons		Daughters		Sons		Daughters	
High school or less	232	13.2%	100	5.7%	875	49.6%	556	31.5%
More than high school	55	11.8%	47	10.1%	228	48.8%	137	29.3%

The most obvious finding is that mothers were more likely than fathers to sign the classroom selection forms, in fact the ratio was 4:1. But the data also show that fathers with a high school education or less were two times as likely to sign for their sons as their daughters. This suggests that less educated fathers are more involved in schooling matters when the child in question is a boy. Of course, this is correlational evidence, and the data are consistent with a number of alternative explanations.

Conclusions

1. For most parents, the *geographical location* of the alternative schools was the single most important factor in their choice of programs, but the importance of school location declined somewhat as parents gained experience with the choice system. Presumably they

learned to differentiate between alternative schools. Also, school location was less important when parents were picking schools for children over ten.

2. *Curriculum factors--what* is taught and *how* it is taught--were important for only about one-third of the parents. *Non-instructional factors* like school location (mentioned by 71 percent of the parents), and the desire to keep siblings and friends together (mentioned by 31 percent), were as important or more important than curriculum factors (mentioned by 32 percent) or school personnel (mentioned by 18 percent).

3. What did parents look for when they considered the offerings of different schools? The Alum Rock results suggest that Anglos and Mexican-Americans who speak English wanted a relatively *broad curriculum*, whereas Mexican-Americans interviewed in Spanish wanted a restricted, *narrow curriculum* content. Attitudes toward *classroom structure*--"permissiveness"--also varied with ethnicity, as well as occupational status and educational background. Blacks and English-speaking Mexican-Americans scored higher on the permissiveness index than Anglos and much higher than Mexican-Americans interviewed in Spanish. White-collar workers scored higher on the permissiveness index than blue-collar workers did; and the more educated parents tended to have higher permissiveness scores.

4. In principle, attitudes toward classroom structure--permissiveness--should predict parents' choice between structured, traditional classrooms or less structured, open classrooms; and the enrollment patterns support this assumption. In Alum Rock, the children in open classrooms tended to come from significantly better educated, wealthier, white-collar households. In the Mamaroneck sample, children in open classrooms tended to come from wealthier, better educated, white-collar families, and their parents tended to have significantly higher hopes and expectations for their children's educational attainment. In Minneapolis, the children in open classrooms were more likely than others to have at least one parent who was a college graduate (91 percent versus 71 percent), and Terrell (1974) showed that children in SEA's open classrooms came from higher

occupational status homes and had higher achievement test scores than children in more structured classrooms. All of the data suggest the same conclusion: *when parents have choices between open and traditional classrooms, children from socially advantaged families tend to be overrepresented in less structured, open classrooms.* The obvious question is, Why are parents from socially advantaged households more likely to choose less formally structured classrooms for their children?

5. Parents' childrearing values may mediate the effects of family background factors on classroom choices. These background experiences--notably education and occupational experience--teach parents that certain behaviors lead to "success," and they incorporate these lessons into their terminal and instrumental values which in turn guide their childrearing practices.

The Rokeach (1973) *Value Survey* instrumental values subscale was administered in the Mamaroneck survey and the Year 5 Alum Rock parent survey, and although the communities were vastly different, the survey data yielded a consistent picture. The more educated the parents, the more they tended to emphasize children's *independence, imagination, intelligence, logical thinking, responsibility,* and *broadmindedness*; whereas the less educated parents put relatively more emphasis on children's *obedience, politeness, cleanliness, ambition,* and *cheerfulness.*

These data are consistent, at least in a correlational sense, with sociologist Melvin Kohn's (1969) thesis that parents learn their values from their occupational and educational experiences and then pass these values on to their children, so that the children come to hold the values, attitudes, beliefs, and competencies required for "successful" performance in the same social niche that their parents occupied. On the whole, working-class parents work in jobs that are routinized and therefore easily subject to close supervision, and they learn that obedience and respect for external authority lead to job "success" and hence security. In contrast, the work of most middle-class parents is not easily routinized, and it tends to involve the creative synthesis of general principles under conditions of uncertainty. Independence, imagination (creativity), and broadmindedness

tended to lead to success in these occupations, and middle-class parents pass these lessons on to their children. Kohn's theory suggests that working-class parents will prefer traditional structured classrooms for their children, whereas middle-class parents will prefer less structured, open classrooms; and the data from all three family choice school sites confirm this prediction.

6. Mothers in "intact" homes were four times more likely than fathers to have signed their children's program selection card (voucher), and from this we infer that school decisions fall more to mothers than to fathers. The data also suggest that less-educated fathers were more involved in the schooling of their sons than their daughters, because these fathers were twice as likely to have signed the voucher for their sons. Of course, these are correlational data, and alternative interpretations are plausible.

V. PARENTS' SATISFACTION WITH ALTERNATIVE EDUCATION

Supposedly, parents like schools better when they can choose programs for their children, or at least that is the common lore among proponents of family choice in schooling. Three points must be made in considering parents' satisfaction with the schools.

First, we must distinguish between different aspects of the educational system. In principle, parents might hold different views about different aspects of the schools. That is, they may have different feelings about the scholastic progress of their own child, the overall quality of the schools, or particular teachers or school personnel. But there is another view that holds that a person's satisfaction ratings are so highly intercorrelated that to know one makes it possible to predict all of the others. This is commonly known as a *halo effect*. The degree to which parents do or do not have highly differentiated evaluations of the schools is an empirical question. We will assume a middle ground position and attempt to document it with data. Our view is that parents' satisfaction ratings can be divided into at least two categories: (a) evaluations of particular school personnel, and (b) global evaluations of the schools.

Second, we must weigh the significance of "parent satisfaction" as an outcome of public schooling. Obviously, policymakers would like parents to be satisfied rather than dissatisfied. But maximizing parents' satisfaction with the schools is not the only objective or even the most important objective of schools; student achievement and effective outcomes are also important.

Third, in the Alum Rock case, methodological problems, which will be detailed shortly, make it difficult if not impossible to infer why satisfaction ratings changed or did not change over time. Statistically, we can detect and describe shifts in satisfaction ratings, but the data do not permit us to infer causal relationships with a high degree of confidence. Because of these considerations, especially the second and third points, we will devote relatively little space to the matter of parents' satisfaction with the Alum Rock voucher demonstration.

As a starting point, the following propositions seem tenable:

5.1 *It is possible to differentiate between various kinds of satisfaction with the schools, although ratings of the various aspects of the schools will be somewhat positively correlated because of (a) halo effects, and (b) common method variance.*

5.2 *Parents' satisfaction with the schools will be negatively related to their education, income, and occupational status, and positively related to feelings of "alienation." This somewhat counterintuitive proposition is based on the assumption that the higher a person's expectations, the higher the probability that a given aspect of the schools will not live up to their expectations.*

5.3 *In general, parents give higher ratings to school personnel (e.g., their children's teachers and principals) than other more distant aspects of the school system. This is based on the assumption that parents wish to avoid cognitive inconsistencies ("dissonance"); to believe that school personnel are incompetent is dissonant with parents' desires for their children. Of course, grossly incompetent personnel will be negatively evaluated (and avoided if possible), but through a wide range of "normal" levels of competence, parents will tend to be satisfied with the people who supervise their children.*

5.4 *The more difficult it is for parents to reverse a placement decision, the more positively they will evaluate their choice of programs. This is because cognitive consistency needs are served most easily by "rationalization" when decisions are largely irrevocable.*

5.5 *In general, parents' satisfaction with the schools increases substantially at the outset of an innovation and then falls when the situation does not live up to their inflated expectations.*

Methodological Considerations

Explaining parents' satisfaction ratings poses some thorny problems, because there are no objective benchmarks against which these ratings can be judged. If one is dealing with parents' awareness of their choices, one can use the number of choices they actually had as a measure of their awareness. But in the case of satisfaction ratings, we have no objective measures to use as validity criteria. This is only part of the problem.

When year-to-year comparisons show apparent differences, we must consider a series of rival hypotheses:

1. Are the changes "real" or are they simply due to normal sampling variations? This question can be answered statistically, although the answer is a probability estimate rather than a simple yes or no.
2. If the changes are "real" (that is, probably not due to sampling variations alone), are the changes due to exogenous factors that are operating in the society at large (i.e., history artifacts)? Or,
3. Are the apparently "real" changes due to Hawthorne effects, that is, reactions to being in a much publicized experiment? Or,
4. Are the "real" changes due to the effects of giving parents choices? In other words, did the treatment--the choice system--have an effect?

In principle, we cannot separate out hypotheses three and four, but these can be separated from hypothesis two by comparing the treatment groups (those families that had choices) with the comparison group (those families that had no choices). This would be easy to do, except that in Alum Rock the treatment and comparison groups were not completely insulated from each other, and events in the treatment group spilled over to the comparison group and changed their attitudes. This problem was discussed in Chapter II. Another, more severe problem is that the treatment--having choices--changed from year to year,

and hence satisfaction ratings reflect more than simply the availability of choices; the particular rules governing choices also had an effect.

These methodological considerations should be kept in mind as the data on satisfaction ratings are presented below. The format is as follows: First, we describe the satisfaction measures and how they are interrelated. Next, we show how satisfaction with the Alum Rock schools and satisfaction with specific school personnel varied with family background factors. The last two subsections show how two kinds of satisfaction measures varied over time.

Interrelationships

The four parent surveys contained a number of items that were supposed to measure satisfaction. Four items were selected for intensive analysis because (a) they represented a priori categories, (b) data were available for all groups in all survey years, and (c) the measures showed sufficient variance to be interesting.

Satisfaction with the educational system in Alum Rock was measured by two items, *"In general, how satisfied are you with the kind of education your child(ren) can get in Alum Rock--are you very satisfied, somewhat satisfied, somewhat dissatisfied or very dissatisfied?"* (Q30), and *"In general, do you think that the education (CHILD) is getting at (SCHOOL NAME) is very good, good, fair, or poor?"* (Q8). The idea here was to measure *global* evaluations of the educational system rather than satisfaction with specific characteristics of the schools.

The last two items measured satisfaction with key school personnel. One item asked, *"Do you think the principal is doing a very good job, a good job, a fair job, or a poor job?"* (Q9), and the other item was worded the same way but concerned the selected child's *teacher* (Q10).

The intercorrelations between these four items, pooled across survey years, are shown in Table 25; and the results suggest that the satisfaction items have more than face validity. The intercorrelations between the four items range between .24 and .54, with a median gamma

Table 25

INTERCORRELATIONS BETWEEN MEASURES OF PARENTS' EXPECTATIONS FOR THE SCHOOLS AND THEIR SATISFACTION WITH THE SCHOOLS, SCHOOL PERSONNEL, AND THEIR NEIGHBORHOODS[a]

	Question	Q8	Q30	Q9	Q10	Q125
Q8:	Satisfaction with child's education	--	.382	.488	.536	.224
Q30:	Satisfaction with education in Alum Rock	--	--	.243	.230	.167
Q9:	Satisfaction with child's principal	--	--	--	.436	.094*
Q10:	Satisfaction with child's teacher	--	--	--	--	.149
Q125:	Satisfaction with neighborhood	--	--	--	--	--

[a]All gammas were significant at $p \leq .001$, except one marked with an asterisk (*), which was significant at $p \leq .05$.

of .44. Interestingly, the neighborhood satisfaction item (Q125),[1] which was included here for comparison purposes, was significantly correlated with the other satisfaction items (because of the large sample sizes) but the correlations were weak (median $\gamma = .12$), so we are not measuring generalized satisfaction-dissatisfaction with life.

Satisfaction and Family Background Factors

Before we consider how the choice system changed people's satisfaction ratings, we must ask a more basic question: Were some groups more satisfied than others with the schools and school personnel? The answers to this question can be seen in Tables 26 and 27. In these

[1]The specific wording of this question was, "Overall, how satisfied are you with this neighborhood as a place to live--very satisfied, satisfied, dissatified, or very dissatisfied?"

Table 26

PARENTS' SATISFACTION WITH THE SCHOOLS CROSS-TABULATED BY FAMILY BACKGROUND FACTORS

Parent Characteristic	Percent of Parents Who Said Child's Education Was "Good" or "Very Good" (Q8)		Percent of Parents Who Were "Satisfied" or "Very Satisfied" with Alum Rock Schools (Q30)	
Ethnicity	[a]p < .07	---	[a]p < .001	---
Anglo	78.8	786	79.8	812
Black	72.5	243	77.9	265
Other	77.6	270	86.6	311
Mexican-American (English interview)	76.0	897	86.5	1041
Mexican-American (Spanish interview)	80.1	323	91.8	379
Education	[a]p < .008	---	[a]p < .001	γ = .20, p < .001
Less than high school	76.1	1369	87.5	1610
High school diploma	81.0	670	82.6	693
More than high school	75.0	476	76.9	500
Income	[a]p < .008	γ = .04, ns	[a]p < .001	γ = -.168, p < .001
≤$7,499	77.2	859	87.1	993
$7,500-$9,999	79.5	435	86.1	483
$10,000-$14,999	77.9	673	83.2	729
≥$15,000	73.4	417	78.9	457
Alienation (Powerlessness)	[a]p < .001	γ = .258, p < .001	[a]p < .001	γ = .280, p < .001
Low	81.6	1712	87.8	1285
High	72.4	1556	80.3	1525
Occupational Status	---	---		
Blue collar	75.9	920		
White collar	76.2	221		
Aspirations for Child	---	---	---	---
Some high school	63.6	21	76.5	26
High school diploma	76.6	617	86.8	722
Some college	78.9	492	85.9	432
College graduate	77.0	1376	83.4	1157
Postgraduate	77.7	268	83.5	294
Expectations for Child	---	---	[a]p < .001	γ = -.10, p < .05
Some high school	71.4	100	81.8	117
High school diploma	76.2	1010	86.4	1167
Some college	75.4	325	86.2	441
College graduate	79.6	667	82.2	692
Postgraduate	80.1	113	79.3	115

[a]Indicates significance level of chi square test

Table 27

PARENTS' SATISFACTION WITH SCHOOL PERSONNEL CROSS-TABULATED BY FAMILY BACKGROUND FACTORS

Parent Characteristic	Percent of Parents Who Were "Satisfied" or "Very Satisfied" with Child's			
	Q9 Principal		Q10 Teacher	
Ethnicity	[a]p < .005	--	[a]p < .001	--
Anglo	85.4	758	87.0	859
Black	76.1	216	78.7	262
Other	83.4	272	85.7	294
Mexican-American (English interview)	81.5	834	83.8	963
Mexican-American (Spanish interview)	84.4	320	90.2	360
Education	--	--	--	--
Less than high school	82.0	1323	84.8	1493
High school diploma	84.5	621	87.2	714
More than high school	82.3	452	83.9	528
Income	--	--	--	--
≤$7,499	83.2	820	84.9	934
$7,500-$9,999	82.4	411	85.3	458
$10,000-$14,999	84.1	638	85.5	726
≥$15,000	81.6	412	85.2	476
Alienation (Powerlessness)	[a]p < .001	γ = .254 p < .001	[a]p < .001	γ = .261 p < .001
Low	86.2	1316	88.5	1494
High	78.9	1085	81.8	1248
Occupational Status	--	--	--	--
Blue collar	82.1	868	84.5	1006
White collar	82.2	212	85.4	246
Aspirations for Child	--	--	--	--
Some high school	71.4	20	93.3	28
High school diploma	80.2	575	83.2	657
Some college	83.1	358	86.8	429
College graduate	83.7	1036	85.8	1157
Postgraduate	82.0	251	83.7	283
Expectations for Child	--	--	[a]p < .001	γ = .089 p < .04
Some high school	75.4	95	76.6	105
High school diploma	82.7	977	84.7	1099
Some college	81.3	314	86.3	366
College graduate	83.3	622	87.0	718
Postgraduate	85.0	108	83.6	117

[a]Indicates significance level for chi square test.

tables, the dependent variables--general school satisfaction, and satisfaction with school personnel--are cross-tabulated by a number of family background factors, including parents' ethnicity, education, income, "alienation," occupational status, and the parents' academic aspirations and expectations for their children, summed across years.

The results of the individual analyses are brought together in Table 28, which identifies the significant relationships (as tested by chi square statistics) and the strength of these relationships (as indicated by gamma statistics). The results can be summarized as follows:

1. *"Alienation,"* by which we mean "powerlessness," was consistently important. The more alienated people claimed to be, the less satisfied they were with the schools, and the less satisfied they were with their child's principal and classroom teacher. The relationships are noteworthy, ranging from a gamma of -.25 through -.28.
2. Parents' *education* was correlated with their general satisfaction with the schools but nothing else; the more educated the parents, the *less* satisfied they were with the schools, as predicted. (Proposition 5.2).
3. Family *income* was related to general satisfaction with the schools, but *not* to satisfaction with teachers or principals. The more affluent the family, the *less* satisfied they were with the Alum Rock schools.
4. *Occupational status* and parents' *aspirations* for their children, as measured in this study, were *unrelated* to satisfaction ratings.
5. *Ethnicity* was a consistently significant factor, even though the various ethnic groups showed relatively little variation in satisfaction. Mexican-Americans interviewed in Spanish and Anglos tended to be the most satisfied, and blacks tended to be the least satisfied. We tend to attach relatively little importance to these findings, because (a) the differences between the highest and lowest groups are statistically significant but relatively small in magnitude, and (b) differences

Table 28

SUMMARY OF RELATIONSHIPS BETWEEN EXPECTATIONS AND SATISFACTION RATINGS AND FAMILY BACKGROUND FACTORS

Question	Ethnicity (ETH)	Education (EDUC3)	Income (INC4)	Alienation (Powerlessness) (ALIEN)	Occupational Status (HHOCC2)	Aspirations (RQ18A)	Expectations (RQ18B)
Q30 Satisfied with education in Alum Rock	$^{a}p < .001$	$^{a}p < .001$ $\gamma = -.251$	$^{a}p < .001$ $\gamma = -.164$	$^{a}p < .001$ $\gamma = -.280$	ns	ns	$^{a}p < .02$
Q8 Child is getting good education in (School)	$^{a}p < .07$	$^{a}p < .008$	$^{a}p < .09$	$^{a}p < .001$ $\gamma = -.258$	ns	ns	ns
Q9 Satisfaction with principal	$^{a}p < .005$	ns	ns	$^{a}p < .001$ $\gamma = -.254$	ns	ns	ns
Q10 Satisfaction with teacher	$^{a}p < .001$	ns	ns	$^{a}p < .001$ $\gamma = -.261$	ns	ns	$^{a}p < .03$ $\gamma = .089$

^{a}p indicates significance level for chi square test. Only gammas (γ) significant at $p \leq .05$ are shown. The letters ns indicate statistically nonsignificant findings.

between Mexican-Americans interviewed in Spanish and other groups may be due to differences in the questionnaires or interviewing procedures rather than to real differences in opinions.

In sum, satisfaction ratings did vary by ethnicity, education, income, and especially parents' "alienation," and all of these relationships were in the directions predicted in Proposition 5.2. The question is, How did the availability of minischool choices affect parents' satisfaction with the schools and key school personnel? To answer this question, we will examine trends across time.

Satisfaction with Alum Rock Schools

Here we will present evidence from two questions that ask for general evaluations of the education available in Alum Rock. One item asked, *"In general, how satisfied are you with the kind of education your child/children can get in Alum Rock?"* (Q30), and the other asked, *"In general, do you think that the education (child) is getting at (school) is very good, good, fair, or poor?"* (Q8). The analysis procedure involved three steps: First, chi square statistics, a measure of independence, were computed *between groups in each survey year*. This told us whether the three groups--old, new, and nonvoucher parents--held different evaluations at a given point in time. Next, tests were conducted *within groups across years* to see if a group changed its opinions, on the average, over time. A third step was undertaken when significant trends across time were detected; the within group chi square statistic was partitioned into linear and nonlinear components according to a method supplied by Maxwell (1961). This partitioning tells us whether the observed trends were relatively constant across the demonstration (i.e., a linear trend) or changed up and down at different times (i.e., a nonlinear trend).

The analysis described above produced the following conclusions about parents' general sacisfaction with the schools:

1. Across time, voucher parents--old and new alike--experienced significant changes in their satisfaction with the schools. Like expectations, the satisfaction of voucher parents rose in Year 2 and then hit bottom in Year 5, when the voucher choice system was replaced by the limited open enrollment plan.
2. The satisfaction of nonvoucher parents--the "comparison group"--fell slightly but consistently across time, and although the linear trend is significant, the magnitude of the drop is quite small.
3. Even in the periods of least satisfaction, no less than 65 percent of any group expressed satisfaction with their children's school (Q8), and no less than 76 percent expressed satisfaction with the quality of education available in Alum Rock (Q30). All things considered, the majority of parents in every group and every survey year were satisfied with the Alum Rock schools.

Table 29 presents the data for Question 30 ("...how satisfied are you with the education..."), and these data show that the comparison group (nonvoucher parents) remained unchanged in terms of global satisfaction with the schools. (The trend appears to be steadily downward, but it is not statistically significant and therefore represents no "real" change in satisfaction.) On the other hand, voucher parents did change during this period: They were most satisfied in Year 2, and after that their satisfaction returned to Year 1 baseline levels. The Maxwell tests, which are summarized in Table C.1, confirmed the presence of curvilinear trends in the voucher parents' satisfaction with the schools.

The other measure of overall satisfaction with the schools (Q8) shows essentially the same pattern (see Table 30). Nonvoucher, comparison group parents remained unchanged; although the pattern again appears to be monotonically decreasing, it does not reach statistical significance and is therefore deemed steady. But voucher parents' satisfaction changed during this period, hitting a peak during Years 2 and 3 and then returning to Year 1 levels in Year 5. Maxwell tests,

Table 29

PERCENTAGE OF PARENTS WHO WERE "SATISFIED" OR "VERY SATISFIED" WITH ALUM ROCK SCHOOLS (Q30)

Parent Group	Year 1	Year 2	Year 3	Year 5	Chi Square Within Groups Across Survey Years df = 3
Old voucher parents	86.8% 520	90.0% 289	87.2% 136	81.47% 219	$\chi^2 = 9.523$ $p < .02$
New voucher parents	80.1% 193	87.2% 512	86.6% 181	78.67% 228	$\chi^2 = 14.545$ $p < .003$
Nonvoucher parents (controls)	85.8% 145	80.3% 57	79.1%	76.5% 205	$\chi^2 = 5.659$ $p < .13$ ns
Chi square between groups within a survey year (df = 2)	$\chi^2 = 6.207$ $p < .05$	$\chi^2 = 5.337$ $p < .07$	$\chi^2 = 4.577$ $p < .10$	$\chi^2 = 1.960$ ns	--

Table 30

PERCENTAGE OF PARENTS WHO THOUGHT THEIR CHILD WAS GETTING A "GOOD" OR "VERY GOOD" EDUCATION (Q8)

Parent Group	Year 1	Year 2	Year 3	Year 5	Chi Square Within Groups Across Survey Years (df = 3)
Old voucher parents	76.8% 443	82.9% 262	83.0% 127	75.7% 199	$\chi^2 = 7.767$ $p < .05$
New voucher parents	70.6% 168	81.3% 462	83.7% 174	64.7% 185	$\chi^2 = 39.530$ $p < .001$
Nonvoucher parents (controls)	80.7% 138	78.9% 56	78.0% 103	72.3% 193	$\chi^2 = 4.703$ ns
Chi square between groups within a survey year (df = 2)	$\chi^2 = 6.077$ $p < .05$	$\chi^2 = 0.738$ ns	$\chi^2 = 1.894$ ns	$\chi^2 = 8.450$ $p < .02$	--

shown in Table C.2, confirmed the presence of curvilinear trends in the voucher parents' overall satisfaction with the schools. The new voucher parents showed the biggest swings in satisfaction; their overall satisfaction with the schools showed a big jump when they joined the voucher demonstration and then showed a big drop when the district shifted to a limited open enrollment plan.

Satisfaction with School Personnel

Two items were used to measure parents' satisfaction with their school's principal and child's teacher. One item asked, *"Do you think the principal is doing a very good job, a good job, a fair job, or a very poor job?"* (Q9), and the other item (Q10) was similarly worded but asked about the *teacher's* performance. The percentages of parents in each group and survey year who were "satisfied" or "very satisfied" with their school's principal are shown in Table 31, and parents' ratings of teachers are shown in Table 32. Collectively, these data suggest the following conclusions:

1. Overall, the ratings of principals and teachers are very similar. The vast majority of parents were highly satisfied with their principals and teachers.
2. The comparison group tended to be more satisfied than others during the first year of the demonstration, but between-group differences subsequently disappeared. This homogenization represented both a decline in the comparison group's satisfaction and an increase in others' satisfaction.
3. The comparison group's satisfaction with their school principals declined steadily throughout the demonstration, but there was no significant change in their ratings of the teachers.
4. The new voucher parents' ratings of principals (but not teachers) jumped when they entered the voucher choice system but then returned to prevoucher levels.

Table 31

PERCENTAGE OF PARENTS WHO THOUGHT THEIR CHILD'S PRINCIPAL WAS DOING A "GOOD" OR "VERY GOOD" JOB (Q9)

Parent Group	Year 1	Year 2	Year 3	Year 5	Chi Square Within Groups Across Survey Years (df = 3)
Old voucher parents	83.7% 448	88.3% 256	83.3% 120	80.6% 175	χ^2 = 5.858 ns
New voucher parents	73.6% 156	83.3% 409	84.0% 157	74.2% 184	χ^2 = 15.518 p < .002
Nonvoucher parents (controls)	90.1% 137	93.1% 54	82.8% 96	82.3% 195	χ^2 = 8.068 p < .05
Chi square between groups within a survey year (df = 2)	χ^2 = 18.304 p < .001	χ^2 = 6.471 p < .04	χ^2 = 0.076 ns	χ^2 = 5.324 p < .07	--

Table 32

PERCENTAGE OF PARENTS WHO THOUGHT THEIR CHILD'S TEACHER WAS DOING A "GOOD" OR "VERY GOOD" JOB (Q10)

Parent Group	Year 1	Year 2	Year 3	Year 5	Chi Square Within Groups Across Survey Years (df = 3)
Old voucher parents	82.2% 476	87.3% 269	89.3% 134	86.1% 223	χ^2 = 7.319 p < .06
New voucher parents	82.5% 193	85.9% 477	86.7% 176	81.0% 222	χ^2 = 4.841 ns
Nonvoucher parents (controls)	90.5% 153	93.1% 67	85.0% 113	86.3% 226	χ^2 = .640 ns
Chi square between groups within a survey year (df = 2)	χ^2 = 6.982 p < .03	χ^2 = 2.899 ns	χ^2 = 1.229 ns	χ^2 = 3.632 ns	--

The statistical evidence for these conclusions is detailed below. First we consider parents' ratings of their school principals, and then we consider their ratings of classroom teachers.

Principal Ratings

Chi square statistics for the data shown in Table 31 indicate that there were differences between the three groups during Years 1 and 2; nonvoucher comparison group parents tended to be most satisfied with their school principal, and new voucher parents tended to be least satisfied. But new voucher parents were more satisfied with their school principals after they joined the demonstration, although their satisfaction level returned to prevoucher levels in Year 5. For reasons that are unclear, the comparison group showed a small but consistent decline in their satisfaction with their principals, and a Maxwell partitioning of the chi square statistics (see Table C.3) showed this to be a significant linear trend.

Teacher Ratings

The satisfaction ratings of teachers were more clear-cut than the ratings of principals, as can be seen in Table 32. In the first year of the demonstration, the comparison group parents tended to be more satisfied than other groups, but after the first year, there were no significant between-group differences. The data also suggest that old voucher parents were somewhat happier with the teachers after the first year of the demonstration.

Conclusions

Two kinds of evaluations were examined intensively in this chapter. Two items measured general *satisfaction with the Alum Rock schools* (Q8 and Q30), and two measured parents' *satisfaction with their child's school principal and classroom teacher* (Q9 and Q10, respectively). These items were selected because they (a) were asked of all groups in all survey years, (b) appeared to have adequate face validity and some evidence of construct validity, and (c) showed sufficient variance to be interesting. The analysis suggested these conclusions:

1. Satisfaction with the schools peaked in Year 2 among voucher parents and then fell. The comparison group's satisfaction declined steadily over time, although the decline was relatively small. But even at the lowest point, the majority of parents in every group were satisfied with the schools. No less than 65 percent in any group or year were satisfied with their child's school (Q8), and no less than 76 percent expressed satisfaction with "the education available in Alum Rock" (Q30).
2. Satisfaction tended to be *lowest* among (a) parents who had more than a high school education, (b) those with family incomes of over $15,000 (the top quarter of households in Alum Rock), (c) parents who were highly "alienated," and (d) Anglos, as opposed to Mexican-Americans, blacks, and others. All of these relationships were statistically significant but very small, except for the association between alienation and satisfaction (gamma = -.26 and -.28).
3. "Alienated" (i.e., "powerless") parents also tended to be dissatisfied with their children's principal (Q9) and classroom teacher (Q10), and again the associations were in the area of gamma = .26. As a group, black parents were more dissatisfied than other ethnic groups, but in all survey years, the majority of parents were "satisfied" or "very satisfied" with the staff in their child's school.
4. Parents rated principals and teachers very similarly, but there were some variations over time. The comparison group became increasingly less satisfied with their school principals as the demonstration progressed, but there were no changes in their feelings about classroom teachers. In contrast, the new voucher parents' ratings of their principals jumped when they joined the choice system and then returned to prevoucher levels over time. Ratings of teachers remained very steady in all groups, although there was a slight increase in old voucher parents' satisfaction with the teachers beginning in Year 2.

5. Interestingly, parents were somewhat more satisfied with their child's principal and classroom teacher then they were with the educational system in Alum Rock. There are a number of possible explanations for this, but two are particularly plausible. First, they were more familiar with their child's principal and teacher than they were with other elements of the educational system, and in one regard, "to know them is to love them." Familiarity may lead to attraction. Second, and perhaps most likely, is that parents rated school personnel higher than the school system as a whole because they wanted to believe that their child was getting a good education, regardless of what else was happening in the district. This avoids cognitive dissonance; wanting a lot for one's child is dissonant with the idea that the child's teachers and principal are incompetent, and in the absence of objective measures of incompetence, parents probably project a picture of a good school staff, regardless of what they think of the rest of the school system.

The satisfaction data probably have limited relevance to policy-makers, because the data are so specific to the Alum Rock education voucher demonstration. It is unclear how many of the changes that were observed are characteristic of all educational innovations, and how many of the changes simply reflect reactions to changes in the district's policies. If there are any generalities to be found in these data, they are probably twofold: (1) parents are less satisfied with the educational system when their choices are restricted; and (2) parents tend to be somewhat more favorably disposed toward specific school personnel than toward the educational system as a whole.

VI. PARENTS' "ALIENATION"

The term "alienation" appeared repeatedly in earlier chapters, and it was used as a synonym for "feelings of powerlessness," a particular kind of alienation. The sociological concept of "powerlessness" is very much akin to the psychological concept of "internal-external locus of control expectancies." Stated simply, people who believe that most of their good and bad outcomes are beyond their personal control--are determined by fate, luck, chance of powerful other people--are categorized as having high feelings of powerlessness (high alienation) or an "external locus of control." In contrast, people who believe that most of their outcomes are under their personal control are said to have low feelings of powerlessness (low alienation) or an "internal locus of control."

There is a large literature on "alienation," which includes the concept of powerlessness[1] (see Seeman, 1972; NIMH Bibliography, 1968) and an even larger literature on internal-external control (see Rotter, 1966, 1975; Lefcourt, 1976, and Joe, 1971, for reviews, or Throop and MacDonald, 1971, for an extensive bibliography). In general, the research indicates quite clearly that relatively internal people--those with low feelings of powerlessness--are more likely than others to collect task-relevant information and to act in order to secure their goals.

As one would expect, alienation or locus of control beliefs are not randomly distributed across the population. Low feelings of powerlessness or internal control are positively correlated with income, education, ethnicity, and other proxies for social advantage in American society. Logically enough, the more influence or social advantage one has, the more likely one is to have low feelings of

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[1] Seeman (1959), in a classic article, delimited five kinds of alienation: (a) feelings of powerlessness over one's outcomes, (b) normlessness, (c) meaninglessness, (d) isolation, and (e) self-estrangement.

powerlessness or internal locus of control expectancies. Increasing parents' school choices, as the voucher system does, was expected to have a measurable impact on parents' feelings of powerlessness. Specifically, it was hypothesized that as parents became increasingly adept at making school decisions for their children, the feelings of powerlessness that are statistically characteristic of lower socio-economic status parents would decrease significantly.

The data collected in the present study are partially consistent with this hypothesis. Before these results are summarized, we must briefly describe our operational definition of "powerlessness."

Alienation Index

A number of questions, cast in a Likert-type format (strongly agree-strongly disagree), were included in the parent questionnaires in order to measure feelings of powerlessness. Most of these items had been used previously in political surveys conducted by the University of Michigan's Survey Research Center. All of the data from the parent surveys were treated as one dataset in the construction of the alienation index. First, the attitude items were factor-analyzed (using a minimum residual extraction method (Harman, 1967), and then the resulting factor solution was rotated orthogonally (using the varimax routine). Five items[1] proved to form a single factor, and this factor accounted for the bulk of the explained variance in the factor analysis.

The respondent's answers to each of these items were summed to form a single index. Then the distribution of alienation scores was examined, and a median split was used to categorize the respondents as "relatively low on powerlessness" (low alienation) or "relatively high on powerlessness" (high alienation). Note that there is no absolute measure of "alienation." We are talking about relative

[1]The items were Q29G, Q35A, F, H, and J. The exact wordings of each item is shown in Appendix B.

comparisons whenever we use the terms "high" and "low alienation." This must be kept in mind when reading the survey results presented below.

Alienation as an "Explanatory" Variable

In earlier chapters, the alienation index was used as an independent variable in an attempt to "explain" various dependent variables such as information levels and parents' satisfaction. These findings are brought together in this section. Alienation was cast as an intervening variable in the original Rand (1972) model of the voucher scheme. Giving parents choices was supposed to reduce their feelings of powerlessness, and this in turn was supposed to increase their information-seeking and participation in school affairs, which eventually was supposed to lead to improved student outcomes. While the present data do not bear on the matter of student outcomes, they do allow us to assess changes in parents' information-seeking and participation in school affairs, and the role that "alienation" plays as an intervening variable.

Before we consider changes in alienation during the voucher demonstration, let us summarize briefly the earlier findings about alienation as an independent variable.

1. People who were classified "low" on the alienation index were slightly more knowledgeable about the free busing feature of the voucher system (64 percent of the lows versus 60 percent of the highs were aware ($p < .001$)), but these differences did not extend to general awareness of the voucher program or knowledge of district transfer policies.

2. Less alienated parents were more satisfied with the "education children can get in Alum Rock" (Q30); 88 percent of the low alienation parents and 80 percent of the highs were "satisfied" or "very satisfied" ($\gamma = -.28$).

3. Less alienated parents were more satisfied with their child's education (Q87) 82 percent of the low and 72 percent of the high powerlessness parents said that the education was "good" or "very good."

4. Low alienation parents were more satisfied with their school's principal than were highly alienated parents (86 percent versus 79 percent, $\gamma = -.25$).

5. Low alienation parents were more satisfied with their child's classroom teacher than highs were (89 percent versus 80 percent, $\gamma = -.26$).

Changes in Parents' Alienation

Did giving parents free choices among schools decrease their feelings of powerlessness, as predicted? To answer this question we must compare the alienation scores of cross-sectional samples of parents who had choices with those who did not have choices in each of the four survey years. These comparisons are fraught with technical difficulties. These the reader should recall from the earlier discussion in Chapter V, pp. 75 to 76. With these constraints in mind, let us examine changes in the alienation scores of old, new, and nonvoucher (control) parents surveyed in Years 1, 2, 3, and 5 of the voucher demonstration. Table 33 shows the percentage of people in each group and each survey year who were classified as "high" on the alienation index.

Table 33

PERCENTAGE OF OLD, NEW, AND NONVOUCHER PARENTS WITH HIGH ALIENATION SCORES

Parent Group	Year 1	Year 2	Year 3	Year 5	χ^2	ρ (df = 3)
Old voucher parents	51.6% (309)	45.5% (145)	44.2% (69)	42.5% (114)	7.81	$\leq .05$
New voucher parents	51.5% (124)	49.1% (288)	49.5% (103)	51.9% (150)	0.76	ns.
Nonvoucher parents (controls)	42.5% (74)	40.3% (29)	56.0% (75)	39.8% (107)	26.42	$\leq .001$

These data suggest three conclusions: First, the level of powerlessness remained stable among *new* voucher parents; having choices neither increased or decreased their feelings of powerlessness, as measured by the alienation index. Second, the old voucher parents' feelings of powerlessness decreased consistently, in a linear fashion,[1] across the five year voucher demonstration, although we cannot state conclusively that this was caused by their having choices among schools. And third, the control group remained quite stable in terms of alienation scores, except for Year 3, in which there was a large increase in alienation. A review of events that occurred during the summer and fall before the Year 3 survey provides no clues to possible causes of this sharp increase in nonvoucher parents' feelings of powerlessness; and hence we offer no explanations other than perhaps statistical chance--the proverbial one-in-twenty "errors" that we expect due to sampling variations.

The old voucher parents' data are the most interesting, because they seem to show a steady decline in alienation, although we do not believe that this is a direct result of having choices. Another group that had choices, the new voucher parents, did not shift when they joined the voucher demonstration, so the old voucher parents' drop in alienation is apparently not a product of having choices per se.

The apparent decrease in average alienation scores of old voucher parents is accounted for by changes in one specific group--parents with more than a high school education. These relatively more educated parents showed a marginally significant, linear decrease in alienation, as the data in Table 35 show. But again, we cannot infer that these decreases in alienation were *caused* by the voucher demonstration. It is just as likely that they are a product of shifting economic or political fortunes of this social group.

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[1]The evidence that these changes were linear is presented in Table 34, where the significant chi square statistic for alienation by survey year is partitioned into linear and nonlinear components. This test detected a significant linear trend, and no significant nonlinear component appeared.

Table 34

MAXWELL TESTS FOR LINEAR AND NONLINEAR TRENDS IN PARENTS' ALIENATION SCORES ACROSS FOUR SURVEY YEARS

Parent Group	Linear Component	df	p	Nonlinear Component	df	p	Total	df	p
Old voucher parents	--	1	--	--	2	ns	7.81	3	.05
Nonvoucher parents	--	1	--	--	2	--	26.42	3	.001

Table 35

PERCENTAGE OF OLD VOUCHER PARENTS WITH HIGH ALIENATION SCORES IN FOUR SURVEY YEARS

Education	Year 1	Year 2	Year 3	Year 5	χ^2	df	p
Less than high school	56.0% (182)	49.2% (89)	3.0% (44)	44.9% (62)	5.58	3	ns
High school	42.8% (68)	42.5% (37)	31.0% (13)	45.7% (32)	2.99	3	ns
More than high school	51.3% (59)	37.3% (19)	38.7% (12)	33.3% (20)	6.87	3	.10

Conclusions

Alienation was negatively related to parents' satisfaction with the Alum Rock schools ($\gamma = -.28$), the education their children were receiving ($\gamma = -.26$), the performance of their child's principal ($\gamma = -.25$), and their child's teacher ($\gamma = -.26$). In theory, giving parents choices should have reduced their feelings of powerlessness and eventually increased their participation in school affairs. In fact, old voucher parents did show a significant decline in feelings of

powerlessness; but, contrary to predictions, the new voucher parents remained stable, even after they had joined the family choice system. Hence, we have no reliable evidence that the decline in old voucher parents' feelings of powerlessness was in fact *caused* by the voucher demonstration. These reductions in alienation occurred only among more educated parents in old voucher households, and probably was not a product of the voucher demonstration per se.

VII. CONCLUSIONS AND IMPLICATIONS

The results of our analyses are summarized in Chapter III (Information Levels), Chapter IV (Determinants of Choices), and Chapter V (Parent Satisfaction), and there is no need to reinterate these specific findings. Instead our conclusions will be offered as a set of propositions that appear to be supported by the available data from the Alum Rock education voucher demonstration, the Minneapolis Southeast Alternatives open enrollment plan, and the Mamaroneck minischool plan.

Four annual surveys of Alum Rock parents provided the bulk of the data used in this analysis, and unless otherwise noted, the propositions are based on Alum Rock's experience with an education voucher choice system (Years 1 through 4) and an open enrollment choice system (Year 5). The essential features of the voucher years were: (1) the schools offered "minischools" that were clustered in various school buildings, (2) parents were allowed to choose schools and minischools for their children, and (3) free transportation was provided for children who attended nonneighborhood schools. The open enrollment system greatly restricted the range of alternatives, and most schools offered only one kind of instruction. But parents were still allowed to choose schools, and the district continued to provide free transportation to nonneighborhood schools.

The external validity--generalizability--of the Alum Rock experience is a valid point of debate, but we do have two pieces of evidence that suggest that the Alum Rock situation is instructive for a wide range of family choice schemes, especially those with compensatory education objectives. First, the Alum Rock demonstration contained the major features of the strongest family choice schemes.[1] The Alum Rock demonstration offered a large number of

[1] See Chapter I for a typology of family choice systems

alternatives, especially in Years 1 to 4, and parents felt they had choices during this time; parents were the primary locus of decision-making, and the vast majority got the programs they asked for; and the availability of free transportation meant that the alternatives were of approximately equal dollar cost for all families.

Second, we have some comparable data from other choice systems (the Minneapolis Southeast Alternatives plan and the Mamaroneck, New York, minischool plan), and the Alum Rock data are confirmed by the experiences of these other districts. The similarities of findings from these three sites are all the more striking because of the large disparities between the sites. Alum Rock is relatively poor, whereas the New York district is quite wealthy. Common findings from the three sites suggest that the Alum Rock experience has some external validity and hence some general relevance to other choice systems, but it is impossible to tell at this time how far these results can be generalized.

Conclusions

Keeping the caveats stated above in mind, the following summary propositions are offered as general statements about parents' behavior in family choice schooling systems:

Parents' Information Levels

7.1 Parents in an alternative education system vary widely in their awareness of their schooling options and the accuracy of their information about the rules governing choice. Specifically, information levels are higher among socially advantaged families, and parents' educational background is an especially important factor.

7.2 Over time, the differences between parents information levels are reduced as parents gain more experience with the choice system.

The evidence here is quite clear. Awareness of the choice system, the district's transfer policies, and the availability of free transportation to nonneighborhood schools increased among voucher parents, so that between-group differences in information levels were erased by the second year of the demonstration. The end of the voucher system and the onset of the open enrollment system reintroduced large between-group differences in information levels, and this is, in a crude way, a replication of the Year 1 situation.

7.3 More educated families have more sources of information than others have.

The mean number of sources cited by "aware" parents was 3.9 for those with less than a high school diploma, 4.1 for those with a high school education, and 4.4 for those with more than a high school education. Ethnicity was also a factor, but education was statistically more important than ethnicity.

7.4 More educated parents, relative to others, put more reliance on printed materials from the schools.

7.5 Less educated families, relative to others, put more reliance on information they glean from personal contacts, particularly contacts with school personnel.

The evidence suggests that more educated parents preferred school publications as sources of information more than others did, but they also preferred talks with teachers somewhat more than other groups did. As predicted, less educated parents (those with a high school education or less) were more likely than others to prefer talks with parent counselors as a source of information.

Determinants of Program Choices

7.6 Even when schools provide free transportation for children who attend nonneighborhood schools, the geographical location of the alternative schools is the most important factor in parents' placement decisions.

7.7 The more highly differentiated the alternative schools, the less important their geographical location in parents' placement decisions.

7.8 The older the child, the less important school location in determining parents' placement decisions.

The evidence here is again quite clear. In every survey, the majority of Alum Rock parents agreed with the statement "for most parents, how close a school is to home is the most important reason for choosing a school for their children to attend." An open-end item asking parents to justify their school choices produced the same conclusion; 71 percent said that school location was the primary reason they chose a particular school for their child, and no other factor was cited as often. Over time voucher parents changed their attitudes, and were less likely to say that school location was the single most important factor in choosing a school. Of course, these are only attitudinal measures, but the enrollment patterns are congruent with these attitudes. The percentage of children who attended nonneighborhood schools increased every year during the voucher demonstration (Years 1 to 4). Parents' increasing willingness to choose nonneighborhood schools paralleled increases in their information levels, and this suggests that as parents learn more about their alternatives--as the choices became more differentiated in their minds--they became more willing to go outside their neighborhoods to get what they want for their children.

It is also quite clear that the older the child, the more willing parents were to choose nonneighborhood schools. Approximately 14 percent of the children aged 6 to 7 went to nonneighborhood schools, whereas over 25 percent of the children over 10 attended nonneighborhood schools.

7.9 On the whole, curriculum factors are less important to parents' choices than noninstructional factors (ethnic/social composition of the school, the desire to keep siblings together, school location, etc.).

In the Year 2 Alum Rock survey, parents explained their reasons for choosing particular minischools for their children. Only 32 percent of the parents mentioned anything to do with curriculum, and this was allowing a broad definition of "curriculum." In contrast, 71 percent mentioned school location as an important factor, 31 percent mentioned noninstructional factors (like choosing a school so that the child could stay with friends or siblings), and 18 percent mentioned the quality of the school staff as an important factor. In sum, instructional characteristics of the program, i.e., curriculum factors, are of relatively little importance when parents choose schools for their children.

7.10 In intact families, mothers are far more involved in their children's schooling than fathers are, and this appears to be true of all educational levels.

The evidence is straightforward; a behavioral measure of involvement, i.e., which parent in intact families signed the program selection card (voucher), showed that in families of all educational backgrounds, mothers were more likely than fathers to have signed the program selection cards (vouchers) for their children. The ratio of mothers to fathers signing the vouchers was 4:1.

7.11 Less educated fathers--those with a high school education or less--are probably more involved in their sons' education than their daughters'.

An examination of who signed the vouchers for boys and girls showed that working-class fathers were twice as likely to sign the classroom selection card for their sons as for their daughters. The evidence is only correlational, but it is provocative.

7.12 Less educated parents are more likely than others to emphasize children's obedience and respect for authority (politeness). In contrast, more educated families are more likely than others to encourage creativity (imagination) and reliance on internally set standards (independence).

The evidence for this proposition is very strong. *Value Survey* rankings collected in Alum Rock and Mamaroneck showed very similar results. In both districts, the more educated the parents, the less likely they were to emphasize children's obedience, cleanliness, and politeness, and the more likely they were to emphasize the children's independence, intellectualism, and imaginativeness. This is impressive because the districts are very different in terms of socioeconomic composition, and the findings are even more significant because they were predicted by Kohn's (1969) theory of social class and conformity.

7.13 As a consequence of the influence identified in Proposition 7.12, when both open and traditional classrooms are available children from more educated families will be overrepresented in less structured, "open" classrooms, and children from less educated families will be overrepresented in more structured, "traditional" classrooms.

At all three sites, children of socially advantaged families were overrepresented in open classrooms. Our predictions were based on the logical extrapolation of the relationship between obedience values and social class. Education serves here as a proxy for social class. Middle-class families put relatively less emphasis on children's obedience and conformity and more on their independence and imagination. In theory, open classrooms, relative to traditional classrooms, allow more student independence, at least in terms of movement and selection of learning objectives.

The evidence for Proposition 7.13 is particularly strong, because the same patterns were found in three different school districts using substantially different survey items and different survey procedures (e.g., mail questionnaires, personal interviews, and analysis of record data). This is probably one of the strongest findings of the study in terms of both internal and external validity. *Different kinds of classrooms attract different kinds of students when parents have free choices; and children from socially advantaged families tend to be overrepresented in less structured, open classrooms.*

Parents' Satisfaction

In principle, parents' satisfaction ratings are important because they indirectly affect children's school performance. Most family choice schemes assume that parents prefer choices to no choices, and for this reason satisfaction measures were included in the Alum Rock surveys (Rand, 1972). Despite their theoretical importance, little attention will be devoted to parents' satisfaction in this section, because the nature of the Alum Rock voucher demonstration makes it difficult to pin down the unique effects of giving parents choices. When satisfaction ratings changed, it was unclear whether the fluctuations were due to (a) the "true" effects of having choices, (b) the effects of being in a much touted "experiment," or (c) the effects of general, society-wide trends in attitudes toward schools. For these reasons, the external validity of the satisfaction findings is

problematic, and hence our confidence in these propositions is lower than it is for other propositions about parents' information levels and the determinants of school choices. On balance, the following propositions seem tenable and consistent with the Alum Rock experience:

7.14 Parents' global evaluations of the schools are generally lower than their evaluations of classroom teachers who came in contact with their children.

Voucher parents' satisfaction with the Alum Rock schools increased when they joined the choice system and then fell consistently over time, but their evaluations of classroom teachers remained stable over time. Cognitive consistency theories, of which there are several versions (see Abelson et al., 1968), provide one plausible explanation. Presumably, parents want the very best for their children, and hence they act--through modest amounts of "rationalization," "denial," etc.--to maintain beliefs which are cognitively consistent with their goals for their children. Believing that one's child will attain a good education and believing that the child's classroom teacher is incompetent are inconsistent; but this can be avoided simply by thinking better of the teacher. Of course, parents will not tolerate grossly incompetent teachers. There is a limit to how much cognitive distortion people will go through to maintain consistency; but through a wide range of "normal" teacher performance, parents are probably motivated to think well of their children's teachers.

7.15 In general, parents' satisfaction with the schools increases substantially at the outset of an innovation and then falls when the situation does not live up to their inflated expectations.

Parents' global satisfaction with the schools peaked in Year 2--the second year of the choice system for old voucher parents and the first year for new voucher parents--and then fell consistently. On

the other hand, the comparison groups' satisfaction declined steadily over time, although the decline was small. It should be noted, however, that even at the lowest point, the majority of parents in every group expressed satisfaction with the schools. No less than three-fourths of the parents said they were "satisfied" or "very satisfied" with the "education available in Alum Rock."

7.16 Parents' satisfaction with the schools falls when their schooling alternatives are constrained.

Parents' evaluations of the schools plummeted in Year 5 when the Alum Rock district shifted to a limited open enrollment system. Restricting parents' alternatives reduced their satisfaction. This reaction to a loss of freedom has been observed in many laboratory experiments but not in the context of family choice in schooling plans. So-called *reactance theory* (Brehm, 1972) provides a straightforward explanation for the Year 5 decline in parents' satisfaction with the Alum Rock schools. Once people have had choices, you cannot take them away without some negative reaction.

Alienation

7.17 Giving parents choices is supposed to reduce their feelings of powerlessness--alienation--but there is no evidence that this actually occurs when parents are empowered to choose classrooms for their children.

The evidence is mixed: Old voucher parents did in fact show a consistent reduction in feelings of powerlessness during the five years of voucher demonstration, but this reduction in alienation occurred only among more educated parents--those with more than a high school

education. The reduced powerlessness does *not* appear to be a direct result of having increased choices, because the new voucher parents, who were empowered to make choices beginning in Year 2, showed no changes in level of alienation from the time they joined the voucher demonstration.

It is not difficult to accept these findings, for it is probably naive to believe that simply empowering parents to choose among public schools, even diverse public schools, is going to change their world views very much. Other factors--economic, political, and social--probably influence these feelings of powerlessness at least as much as school factors. In short, family choice plans may have some impact on feelings of alienation, but the impact is probably too small to cause a change in general feelings of alienation or powerlessness.

7.18 Parents' feelings of powerlessness are consistently negatively correlated with their satisfaction with the school system and school personnel.

The results are consistent: The more alienated parents are, the less satisfied they tend to be with the educational system and the performance of school principals and classroom teachers. The relationships consistently run in the area of --.25.

Implications

To the extent that these propositions accurately describe the results of increasing family choice in schooling, we can see implications for school policymakers. The discussion that follows is aimed primarily at local school officials who are considering family choice plans. Some of the comments apply to choice systems in general, whereas others are aimed at specific kinds of school districts, because the nature of the choice system that is implemented in a district depends in large part upon the population(s) served and the educational objectives of the schools.

Social advantage,[1] which is correlated with social class, ethnicity, occupational status, and educational background, is used as the overarching concept that divides the population into meaningful groups of families. The use of this concept reflects our continuing interest in the social equity objectives of schooling. That is, we are concerned with how schools can improve the performance (and presumably life chances) of socially disadvantaged children, children who often have a low likelihood of achieving their full potential under present public school arrangements. Throughout this discussion we will be interested in how these children will benefit or be harmed as a result of increasing family choice in schooling.

1. *Parents, especially the parents of elementary school children, will be more likely to choose schools on the basis of educationally relevant differences between the alternatives, if the choices are offered within schools (minischools) and not simply between schools.*

According to most of the parents surveyed in Alum Rock, school location was the single most important criterion for picking a school, however, the older the child, the less important school location was in parents' decisionmaking. Offering choices within a single neighborhood school eliminates the importance of school location, and hence classroom choices ought to be based more on educationally relevant factors. But offering diverse alternatives *within* each building raises other stressful social problems for school administrators and teachers.

The school staff represents a social system, and mixing teachers with different, and often conflicting, educational philosophies may produce tensions that reduce the effectiveness of the instructional

[1]The concept of "social advantage" is discussed in detail in Chapter I.

program. On the other hand, the presence of "alien" or competing philosophies may lead to greater *intragroup* cohesiveness and hence better teacher performance. The social psychological literature on group cohesiveness is extensive, and it is clearly relevant to the decision to offer alternatives within schools rather than only between schools. Among the factors that district planners should consider are: (a) the relative sizes of the alternative programs, (b) the economies (or diseconomies) of scale that result from centralizing similar programs, and (c) the administrative arrangements that are used to supervise teachers. The latter factor is important, because the relationships between teachers, minischools, and principals offers a way of blunting destructive tensions between minischools.[1]

From the standpoint of the schools' ultimate educational objectives (e.g., maximizing student performance), it would be best to offer diverse alternatives within neighborhood schools, because parents, especially those with younger children, will be more likely to use educationally relevant criteria in choosing classrooms. But within-school diversity may raise personnel tensions, and hence from the standpoint of most school administrators, within-school diversity will be less desirable than offering diversity between schools. The administrative organization of the school holds some potential for alleviating tensions between minischools within each building; treating the various minischools as independent units may reduce potential conflicts, but the most likely by-product of this organization is that the principal's role is reduced to that of coordinator (and supervisor of common resources such as the lunchroom), and few principals who have worked their way up the school hierarchy are going to desire this role (see Pellegrin, 1975). Diversity between schools, not within schools, seems to be administratively easiest.

[1]Alum Rock teachers' responses to the organization of the voucher minischools are discussed in Rassmussen (1978), Thomas (1978), and Bass (1978), and in Chapter I of this report.

2. *Choice systems are largely irreversible, at least in the short run. Once parents have had choices, the district cannot eliminate the choice system without some decrease in parents' satisfaction with the schools.*

This implication follows from reactance theory (Brehm, 1972) and is confirmed by the Alum Rock experience, but other Alum Rock data suggest that allowing parents some continued role in school decision-making, even if it does not involve choosing schools, will offset some of the dissatisfaction that accrues from restricting schooling alternatives. Parents are most interested in curriculum decisions and least interested in hiring and firing teachers (see Table 15).

3. *In a heterogeneous school district, socially disadvantaged families will be at somewhat of a short-term handicap in learning about and choosing schools, especially if the alternatives are continually changing.*

The parents' role in any family choice system is crucial, and the evidence from Alum Rock suggests that some parents will be more willing and able than others to make informed choices for their children. In the short run, socially disadvantaged families will be the least informed about their options, and hence their children will be the most likely to end up in the least desirable classrooms, or in classrooms that may not be well suited to their needs. Over time, the vast majority of parents will come to understand the choice system and how to get what they want (or compete effectively for what they want); and the more consistent and stable the system is, the faster they will learn about it. This learning time can be reduced substantially if the district adopts certain information policies.

4. *The time required to learn about the choice system can be reduced significantly if the school district tailors its information dissemination policies to fit the habits and preferences of different parent populations.*

One lesson learned--or rather relearned--in Alum Rock is that different groups of people rely upon different information networks to learn about the schools. In general, less socially advantaged people rely more upon personal contacts for information, and they tend to ignore printed materials. In contrast, more advantaged people rely upon printed materials, although they also tend to have more sources of information so they can check one source against another. School districts with heterogeneous populations must acknowledge the diverse needs of families and treat them differently, when it is appropriate to do so. We already distribute some school services on the basis of need, as operationally defined by family income (e.g., free or subsidized lunches) so the precedent exists for treating different families differently, according to their needs.

To speed up the learning process, schools can tailor their communications to fit the habits of different subpopulations. This is analogous to what marketing specialists do when they "segment" a market and then use different messages (and media) to reach different segments. In practice, this might mean sending printed materials to everyone, and then following up with personal contacts (through telephone calls or counselor visits)[1] directed to less advantaged families.

Schools should not overlook the opportunity to communicate with less advantaged parents through paraprofessional and school aides, who represent important links between the schools and the community.

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[1] For practical examples of a personal contact campaign, see Bridge (1976).

(See Litwak and Meyer, 1974). Informing these employees of official school policies, even though they do not bear directly upon their work, should improve the quality of the information that is transmitted to parents, especially less advantaged parents.

5. *One reason socially disadvantaged parents have less information than others in the short run may be that they bear higher costs of collecting information; thus, one strategy for raising information levels might be to reduce the real and "psychic" costs of information collection.*

It has been argued (Klees, 1974; Levin, 1974) that socially disadvantaged families bear higher costs in collecting information than others do.[1] For instance, a large percentage of these parents will be employed in hourly jobs rather than salaried jobs, and hence attending school meetings or appointments during normal school hours will cost them lost wages. Keeping the schools open on the weekends or in the evening hours is one way of reducing the cost of collecting information.

6. *The less socially advantaged the population, the more that must be spent on information dissemination and parent education.*

It is harder to reach socially disadvantaged families. Messages must be communicated more frequently and by modes that are relatively more expensive (e.g., through school counselors rather than printed bulletins). Opening school offices in the evening or on weekends, so that parents can come to the school without missing work, drives

[1] Stigler (1971, 1962) has argued the opposite view, namely, that advantaged people bear higher costs, specifically opportunity costs. See Bridge (1974) for a review of these arguments.

up personnel and building maintenance costs. Districts considering increasing parent choice in schooling must reckon with these expenses, especially during the beginning stages of a new family choice plan. In short, the higher the proportion of socially disadvantaged families in the system, the greater the costs of information dissemination and administration.

7. *Alternative education systems may diffuse tensions between groups of approximately equal size that hold different and conflicting objectives for the public schools.*

Giving parents control over the kinds of classrooms their children attend may avoid intergroup tensions that result from conflicting value orientations among groups of approximately equal political strength. If one group is substantially more powerful than the others, it can exert its will through the normal political process, and there will be no need--in the majority's mind--for a family choice system. The within-school choice system in Mamaroneck appears to be an ideal example of the use of alternative education as an "institutional safety valve."

Note that the use of alternative education schemes for this purpose is most justified in socially advantaged communities, such as Mamaroneck. In this case, differences in parents' willingness and ability to participate are minimal. But imposing a choice system on a socially heterogeneous community would inherently put less socially advantaged children at a disadvantage, at least in the short run.

8. *Parents choose programs that reinforce their values, given the opportunity to do so. Lower-class children are most likely to end up in structured programs that teach the 3Rs, and more advantaged children are more likely to end up in less structured classrooms that stress social relationships, the development of independence, and creativity. This presents something of a philosophical dilemma.*

The dilemma is this: On the one hand, less socially advantaged parents have a propensity to choose structured programs that emphasize the basic 3Rs, and hence school performance, as measured by standardized achievement tests should increase, on the average.[1] Presumably, this is good, especially to the extent that school performance contributes directly (through knowledge attained) or indirectly (through social certification) to later life "success," as measured by, say, lifetime income.[2]

On the other hand, isolating these children with similar classmates in classes that stress the 3Rs may reduce their chances for acquiring the social beliefs, attitudes, competencies, and acquaintances that facilitate social mobility.[3] This is potentially a negative outcome of increasing family choice in schooling for socially disadvantaged children.

In his theoretical considerations of education vouchers, Levin (1974) has reached the same conclusion--that giving parents total control over their children's schooling will exacerbate class related

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[1]This is based on two tenable assumptions. First, children who are operating at a low conceptual level do better in highly structured classrooms, whereas children at a high conceptual level do equally well in structured or unstructured classrooms, or slightly better in the latter. Second, conceptual level is highly positively correlated with social class or social advantage, although the correlation is obviously not perfect. Both assumptions are plausible and supported by research reported by Hunt (1975, 1971).

[2]Some researchers would argue that school performance has little or no significant, independent effect on income in adulthood. Christopher Jencks (Jencks et al., 1972) is perhaps the best known contemporary advocate of this position.

[3]We are not arguing that these attitudes, beliefs, competencies, and social contacts are better in an absolute sense, simply that they make it easier to operate in the middle-class positions that most socially disadvantaged families hope their children will attain in adulthood. Is it reasonable for schools to foster mobility aspirations among socially disadvantaged children and their parents? We think so, for two reasons. First, the majority of what we have labeled socially disadvantaged parents (that is, those with less education and income) say that they want their children to acquire middle-class status. Second, middle-class status is statistically associated with longevity, and reported happiness (see for example, *Social Indicators 1974*), and these are "goods" that the vast majority of Americans, rich and poor, seem to desire.

differences; and presumably, his argument applies to a wide range of family choice systems. His view is that a conflict of private and social benefits is inherent in a voucher system that begins with a highly stratified social system and then permits individuals to make schooling decisions that contribute to their private goals. He writes,

> It is reasonable to believe then, that vouchers will lead to a higher degree of class segregation and socialization than the existing approach. If parents choose those school environments that they believe will maximize the probability of success as defined within the context of their experience, the working class child will be provided with schooling that will reinforce working class orientations while children from higher classes will attend schools that will orient them towards the upper echelon of the occupational hierarchy. That these systematic differences in school environments according to social class will "accentuate" the already existing differences in class orientation of students derived from family influences is suggested by the studies of Feldman and Newcomb in higher education [p. 16].

Undoubtedly some people will say that we have posed a false dilemma. They might argue that if parents have a wide range of programs and end up choosing one which is not good for their children (in terms of attaining their ultimate goals), it is the parents' fault, and we need not be concerned with the matter. Assuring equal opportunity, i.e., equal access to programs, is the school's only responsibility, according to this view. This argument, of course, assumes a particular view of the world that seems to deny the pervasiveness and reality of social class orientations in contemporary society.

Nothing in the available data permits us to resolve these debates empirically; they are partially matters of fact but largely matters of opinion. The most we can say is that increasing family choice in schooling does permit some nonrandom clustering of children according to social background, but there is no evidence that this clustering is either greater or smaller than one would expect to find in traditional, nonchoice schools that allow teachers to cluster children into ability tracks and where segregation in housing leads to wide variations in the racial and social class composition of schools.

Moreover, we can say with some confidence that in choice systems in socially heterogeneous districts, families will vary somewhat in terms of their involvement in school affairs, their criteria for choosing alternative programs, and their satisfaction with the schools. The long-term effects of these differences are unknown, but they are probably fairly small, since schools are not the only, or perhaps even the major, determinant of outcomes in adulthood. Family choice plans, at least the ones we have seen to date, are probably not as good for parents and students as some early theorists thought or as bad as some opponents argued.

Appendix A

A MODEL OF PARENTS' CHOICE BEHAVIOR: AN ILLUSTRATION

The following example illustrates how two parents can select different programs, even though they have similar information about the available alternatives.[1] Assume that two families must choose schools for their children, and they have only two *alternatives*: Classroom 1 (C_1) and Classroom 2 (C_2). These classrooms are quite different in terms of four *attributes*: (a_1) ease of transportation, (a_2) emphasis on basic subjects, (a_3) emphasis on the arts, and (a_4) class size. Each of the classrooms has been rated in terms of these four attributes, and Table A.1 shows the information that is available to both parents. A high number indicates that the classroom has much of the attribute in question.

Table A.1

Attribute	Classroom	
	C_1	C_2
a_1 Ease of transportation	10	1
a_2 Emphasis on 3Rs	10	1
a_3 Emphasis on arts	1	10
a_4 Small class size	1	10

[1] For a description of the basic decision model, see Chapter I.

The parents have quite different values, so they look for different things in the alternative schools. The importance that they attach to each of the classroom attributes is summarized in Table A.2 These are *weights* and a high number indicates greater importance.

Table A.2

	Attributes			
Parent	a_1	a_2	a_3	a_4
Parent 1 (P_1)	1	1	10	10
Parent 2 (P_2)	10	10	1	1

To find each parent's overall rating of each of the alternative classrooms, we simply multiply each classroom's individual attribute ratings by each parent's ratings of the attributes and then sum up these weighted attributes. This is most succinctly expressed in matrix algebra terms as:

$$\underline{R} = \underline{PA}$$

where $\underline{R}$ (the matrix of overall ratings) is the minor product of multiplying the matrix of parents' importance weightings ($\underline{P}$) through the matrix of classroom attributes ($\underline{A}$). This has been done in Table A.3, where it can be seen that the first parent (P_1) gave an overall rating of 40 to Classroom 1 and a rating of 202 to Classroom 2. In contrast, the second parent (P_2) gave Classroom 1 a rating of 202 and Classroom 2 a rating of 40. This would suggest that when they were forced to make a final decision, P_1 would choose Classroom 2, and P_2 would choose Classroom 1.

Table A.3

$$\begin{array}{c} \\ P_1 \\ P_2 \end{array}\begin{array}{c} \begin{array}{cccc} a_1 & a_2 & a_3 & a_4 \end{array} \\ \begin{bmatrix} 1 & 1 & 10 & 10 \\ 10 & 10 & 1 & 1 \end{bmatrix} \end{array} \quad \begin{array}{c} \\ a_1 \\ a_2 \\ a_3 \\ a_4 \end{array}\begin{array}{c} \begin{array}{cc} C_1 & C_2 \end{array} \\ \begin{bmatrix} 10 & 1 \\ 10 & 1 \\ 1 & 10 \\ 1 & 10 \end{bmatrix} \end{array} = \begin{array}{c} \\ P_1 \\ P_2 \end{array}\begin{array}{c} \begin{array}{cc} C_1 & C_2 \end{array} \\ \begin{bmatrix} 40 & 202 \\ 202 & 40 \end{bmatrix} \end{array}$$

Appendix B

WORDING OF QUESTIONS USED IN ALUM ROCK PARENT SURVEYS IN YEARS 1-5

NOTE: The exact wording of a small number of items changed from year to year. These were items that asked about the *voucher system* in Years 1 through 3, and the *open enrollment* system in Year 5.

Let's see, (CHILD) goes to (NAME OF SCHOOL). (SEE FRONT PAGE FOR SCHOOL)

8.	In general, do you think that the education (CHILD) is getting at (SCHOOL) is very good, good, fair, or poor?	Very good..... 1 Good..... 2 Fair..... 3 Poor..... 4 Don't know..... 0	21/
9.	Do you think the principal is doing a very good job, a good job, a fair job, or a poor job?	Very good..... 1 Good..... 2 Fair..... 3 Poor..... 4 Don't know..... 0	22/
10.	Do you think his/her teacher is doing a very good job, a good job, a fair job, or a very poor job?	Very good..... 1 Good..... 2 Fair..... 3 Poor..... 4 Don't know..... 0	23/

Skip 24-36

Card 14

18A. How many years of school would you personally like (CHILD) to complete? READ CATEGORIES AND CODE IN COL. A.

B. How many years of school do you think (CHILD) will actually complete? READ CATEGORIES AND CODE IN COL. B.

	A		B	
Some high school	1	37/	1	38/
Graduate from high school	2		2	
Some college, technical, business or trade school	3		3	
Graduate from college	4		4	
Post graduate or professional school	5		5	
Don't know	0		0	

902. This question will take a little bit of extra thought, but it is an extremely important question and one which you may find personally interesting. We are interested in what kinds of things you believe it is most important for your child to learn. Obviously different people have different ideas about the way they want their children to behave, so there are no right or wrong answers to this question. We are only interested in your opinions.

HAND RESPONDENT VALUES SCALE

Your job is to read this list of 18 value statements and then rank order them in order of importance. Put the most important value first at the top, the second most important value second, and so on, with the least important value last, at the bottom of the page.

WHEN RESPONDENT HAS COMPLETED IT AND ALL THE ITEMS ARE RANKED, TAKE IT BACK AND RECORD THE ID NUMBER ON IT. TUCK IT INTO THIS QUESTIONNAIRE.

-4-

Card 14
Skip 39-43

24. Before (CHILD) entered school about how often would you say that you or members of your family read to him--frequently, occasionally, or hardly ever?

Frequently 1 14/
Occasionally 2
Hardly ever 3

29. I will now read statements often made by people about government, schools, and current issues. Would you tell me how strongly you agree or disagree with each of these statements by selecting one of the answers on this card? Skip 45-48

HAND CARD A

	Strongly agree	Agree	Don't know	Disagree	Strongly Disagree	
A. Parents should have more to say about what their children learn in school	1	2	3	4	5	49/
F. Obedience and respect for authority are the most important things children can learn	1	2	3	4	5	Skip 50-53 54/
G. In general teachers and principals don't want the advice of parents. .	1	2	3	4	5	55/
H. Most parents like the idea that they should have a choice about the kinds of schools their children attend	1	2	3	4	5	56/
I. Children will get a better education if their parents can select the school that they go to	1	2	3	4	5	57/
J. It is the duty of the government in Washington to provide a job for everybody who wants to work	1	2	3	4	5	58/
K. Busing elementary school children to schools in other parts of the city only harms their education	1	2	3	4	5	59/

Begin Card 15

30. In general, how satisfied are you with the kind of education your child/children can get in Alum Rock--are you very satisfied, somewhat satisfied, somewhat dissatisfied or very dissatisfied?

Very satisfied (ASK A)	1	11/
Somewhat satisfied (ASK A)	2	
Somewhat dissatisfied (GO TO C) . . .	3	
Very dissatisfied (GO TO C)	4	

IF VERY OR SOMEWHAT SATISFIED:

A. Even though you are generally satisfied with the kind of education your child/children can get in Alum Rock, are there some changes that you think the schools should make which would give your child/children an even better education?

YES (ASK (1) AND (2))	1	12/
No (GO TO Q.33)	2	
Don't know (GO TO Q.33)	0	

IF YES TO A:

(1) What kinds of changes? (RECORD FIRST THREE RESPONSES)

Discipline-related.	01	13-14/
Curriculum-related	05	15-16/
Teacher and teaching quality related	12	17-18/
Parent-teacher/school-related . . .	19	
Administrative issues	22	

(2) Have you or anyone you know tried to do anything to get the schools to make those kinds of changes?

YES (ASK 3)	1	19/
NO	2	

(3) (IF YES TO 2): Were those changes made?

YES	1	20/
NO	2	
Don't know . . .	0	

-5a-

Card 15

IF VERY OR SOMEWHAT DISSATISFIED:

C. If you are dissatisfied, there are probably some things you would like to see changed or things you think would give your children a better education. Have you or anyone you know tried to do anything about the things that are causing your dissatisfaction?

Yes (ASK (1))....1 30/

No....2

Don't know....0

IF YES TO C:

(1) Were these changes made?

Yes....1 31/

No....2

Don't know....0

Begin Card 17

33. As you know, a certain amount of money goes to the public elementary schools here in Alum Rock. Do you think the schools are getting too much money, not enough money, or about the right amount to do their job?

Too much	1	38/
Not enough	2	
About right amount	3	
Don't know	0	

34. Are the schools making very good, good, fair, or poor use of the money they get, as far as you can tell?

Very good use	1	39/
Good use	2	
Fair use	3	
Poor use	4	
Don't know	0	

35. I will now read some more statements and you tell me how strongly you agree or disagree with each of these statements by selecting one of the answers on this card.

	HAND CARD A	Strongly agree	Agree	Don't know	Disagree	Strongly disagree	
A	Getting ahead depends on who you know more than how well you do something	1	2	3	4	5	40/
C.	In some cases it's best for children to attend elementary schools outside their own neighborhood	1	2	3	4	5	Skip 41 42/
D.	Giving parents a choice about the schools their children attend will make teachers more responsive to their complaints and suggestions	1	2	3	4	5	43/
F.	In the next few years, things are not really going to improve for the average person	1	2	3	4	5	Skip 44 45/
H.	People like me don't have anything to say about what the government does	1	2	3	4	5	Skip 46 47/
J.	Public officials don't really care what people like me think	1	2	3	4	5	Skip 48 49/

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Card 17

		Yes	No	No Opinion	
36A.	Do you think parents should be able to help decide which teachers get hired or fired in their children's schools?	1	2	0	50/
B.	Should parents be able to help decide whether a principal is hired or fired?	1	2	0	51/
C.	And should parents be able to help decide what should be taught in school?	1	2	0	52/
D.	Should they be able to help decide how the school spends its money?	1	2	0	53/

Skip 54-55

37C. Are you registered to vote in this area? Yes 1 56/

No 2

And now on a somewhat different subject.

38. Have you heard about the open enrollment plan that has started in the schools here in Alum Rock?

Yes 1 57/

No (GO TO Q.102) . . 2

39. How good a job do you feel the school system has done in explaining the open enrollment plan and how it works--do you think they have done a very good job, a good job, a fair job, or a poor job?

A very good job. . . 1 58/

A good job 2

A fair job 3

A poor job 4

No opinion 0

Begin Card 32

102. In total, how many different programs are being offered for children of his/her age at (SCHOOL CHILD ATTENDS) this year?

Number: _____

Don't know 0 12/

IF NUMBER EQUALS 1, ASK 103A. IF NUMBER IS GREATER THAN 1, ASK 103B.

103A. Do you think that there are too few programs available at (SCHOOL) this year, or just about the right number?

Too many 1

Too few 2

About right number 3

No opinion 0

103B. Do you think that there are too many different programs available at (SCHOOL) this year, too few or just about the right number?

Too many 1 13/

Too few 2

About right number 3

No opinion 0

Skip 14-21

106. Did you consider putting (CHILD) in a different program or school in Alum Rock from the one (CHILD) is in now?

Yes 1 22/

No 2

Skip 23-38

-9-

Card 32

108. Next, I will read some statements to you about the school system here in Alum Rock, which has been called an open enrollment system. As I read each one, I would like you to tell me if you think it is true or false. The first statements that I read have to do with the schools.

	True	False	Don't Know	
a. Under the open enrollment system, parents have the right to change the schools their children go to at any time of the school year if they want to. True or false?	1	2	0	39/
b. Under the open enrollment system, parents can choose the school that they want their children to go to. True or False?	1	2	0	40/
c. In some cases, this year, parents were not able to select the school they wanted because school officials assigned children to schools. True or false?	1	2	0	41/
108. d. The rules of the open enrollment plan state that children who previously attended a school may choose to remain. True or false?	1	2	0	Card 43 / 16/

And now a question about the different programs offered within schools. Card 32

i. The programs offered this year are all pretty much alike. True or false?	1	2	0	Skip 42-46 / 47/

Finally, one general question. Skip 48-49

l. The schools can make it difficult when parents wish to transfer their children. True or false?	1	2	0	50/

Skip 51-59

132. Did a teacher or principal ever tell you the achievement test scores of your children last year?

Yes. . . (ASK A AND B)	1	60/
No . . . (GO TO C)	2	
No children in school last year (GO TO C)	3	
Don't know, no answer (GO TO C)	0	

A. Do you think test scores tell you how good a child's program is?

Yes.	1	61/
No	2	
Don't know, no answer. . . .	0	

B. Would you consider changing a child's program because of his/her test scores?

Yes.	1	62/
No	2	
Don't know, no answer. . . .	0	

(ASK EVERYBODY)

C. In general, do you think teachers should report the achievement test scores of children to their parents each year?

Yes.	1	63/
No	2	
Don't know, no answer. . . .	0	

Card 32

133. Here is a list of ways (HAND CARD B) used by some parents to decide which school or program they wish to have their child enrolled in. For each item in the list, please tell me how important it is in choosing a program for (CHILD) -- that is, extremely important, very important, somewhat important, or not important at all.

HAND CARD B

	Extremely Important	Very Important	Somewhat Important	Not Important At all	
1. How well children like it.....	1	2	3	4	64/
2. What the program teaches children	1	2	3	4	65/
3. Your own child's test scores..	1	2	3	4	66/
4. Average test scores for the program.....	1	2	3	4	67/
5. What other parents say about the program.....	1	2	3	4	68/
6. What teachers say about the program.....	1	2	3	4	69/
7. What parent counselors say about the program.....	1	2	3	4	70/
8. Location of the school and program.....	1	2	3	4	71/
9. Teachers in the program.....	1	2	3	4	72/
10. Classroom discipline.....	1	2	3	4	73/
11. Kinds of children in the program.....	1	2	3	4	74/

Card 37 (begins on p.14)

135. Imagine that you were principal of a school like the one that your child attends and wanted to make it the best school you could.

		Preference A	Preference B	
a.	What kind of school would you want it to be: A. a strict school where students were always well-behaved, or B. a free-school where students could act naturally?	1	2	45/
b.	Would you want it to be: A. a school where the students took only three subjects, reading, writing, and arithmetic until they really learned them, or B. a school where the students took a lot of different subjects every day such as foreign languages, current events, history, science, and health?	1	2	46/
c.	Would you want it to be: a. a school where students concentrated on learning from books almost all the time, or b. a school where students spent a lot of time doing things like playing music, putting on school plays, taking art classes or playing sports?	1	2	47/
d.	Would you like it to be: a. a school where the students spent a lot of time listening to their teacher, or b. a school where the students spent a lot of time studying by themselves or in small groups?	1	2	48/
e.	Would you like it to be: A. a school where the teacher decided what the students should learn most of the time, or B. a school where the students could choose what they wanted to learn most of the time?	1	2	49/
f.	Would you like it to be: A. a school where students take a lot of time learning about problems such as pollution, race relations, energy, world peace, or B. a school where students didn't spend much time on controversial problems like these?	1	2	50/
g.	Would you like it to be: A. a school where students learn practical things they could use when they got out of school, or B. a school where students study academic subjects most of the time?	1	2	51/

Begin Card 37

-13-

1998. Is (KISH CHILD) now in a different school or program from the one he/she was in at the beginning of this school year?

Yes, different school. 1 *16/*

Yes, different program 2

No 3

C. Is (KISH CHILD) now in a different school or a different educational program from the one he/she was in at the end of the last year, that is, last June?

Yes, different school 1 *17/*

Yes, different program. 2

No 3

Skip 18-44

110. As far as you know in the school system here in Alum Rock, do parents have the right to request that their children be transferred from one school or program to another?

Begin Card 34

Yes. . .(GO ON TO Q.111) 1 *42/*

No (SKIP TO Q.40A) 2

ASK ONLY THOSE WHO ARE AWARE THAT CHANGES CAN BE MADE:

111. Overall, how good a job do you think the schools have done in explaining the way to transfer from a school or program to another--you think they have done a very good job, a good job, a fair job, or a poor job in explaining this?

Very good job 1 *43/*

Good job 2

Fair job 3

Poor job 4

No opinion 0

Begin Card 35

-14-

113. Have you at any time during this school year seriously considered making a request to have your child (any of your children) transferred to another school or program different from the one he/she/they now attend(s)?

Yes.....1 *11/*

No.....2

Skip 12-54

115. Overall, how good a job do you think the schools have done in handling parents' (your) requests for transfers--do you think they have done (did) a very good job, a good job, a fair job, or a poor job?

Very good job.....1 *55/*

Good job.....2

Fair job.....3

Poor job.....4

No opinion.....0

116A. How easy do you think it is for parents to get their children transferred to another school--do you think this is very easy, fairly easy, fairly difficult or very difficult?

Very easy.....1 *56/*

Fairly easy.....2

Fairly difficult....3

Very difficult.....4

No opinion.....0

Begin Card 18

-15-

40A. Now we would like to find out where you received information about the open enrollment plan in the schools here.

HAND CARD C

a.	From materials received from the schools	01	11-12/
b.	From talking to children	02	13-14/
c.	From attending parent meetings	03	15-16/
d.	From meeting personally with counselors and advisors from the schools	04	17-18/
e.	From attending School Board meetings	05	19-20/
f.	By reading about it in newspapers	06	21-22/
g.	From hearing about it on radio and TV	07	23-24/
h.	From attending school meetings where it was discussed	08	25-26/
i.	From bulletins or newsletters from the school	09	27-28/
j.	By talking to other parents, relatives, friends, or neighbors about it	10	29-30/
k.	By talking to teachers or principals about it	11	31-32/

Skip 33-37

-16-

Card 18

41. A. The school district gave parents enrollment forms to fill out for their children. Did you personally fill out these forms?

Yes . . (CODE "1" IN COL. A BELOW)

No . . ASK: Who did? (CODE IN COL. A)

B. Did (YOU/PERSON CODED IN COL. A) talk with anyone else about which program and which school to choose for your children?

Yes . . ASK: Who was that? (CODE IN COL. B BELOW ALL THAT APPLY)

No . . (CIRCLE CODE "9" IN COL. B)

	A	B	
Respondent	1 37/	1 38/	(ASK C)
Respondent's (husband/wife)	2	2 39/	
Other adult in family	3	3 40/	
Child/children themselves	4	4 41/	
Other children outside family	5	5 42/	
Teachers	6	6 43/	
Parent counselors or advisors at school	7	7 44/	
Other parents, friends, neighbors	8	8 45/	
No one helped me		9 46/	
Don't remember	0	0 47/	

IF RESPONDENT MADE CHOICE OR HELPED TO MAKE CHOICE, ASK C:

C. When it came time to make a choice, did you find you had enough information about the different programs being offered or would you have liked to have had more information?

Had enough information 1 48/

Wanted more information . . . 2

Can't say 0

Skip 49-68

Card 18

43. Taking everything together, do you think giving parents a choice between different types of programs is a very good idea, a good idea, a fair idea, or a poor idea?

Very good idea	1	69/
Good idea	2	
Fair idea	3	
Poor idea	4	
No opinion	0	

Card 43

904. Comparing this year with last year, would you say you had more programs to choose from this year, about the same number, or fewer this year?

More this year	1	17/
About the same	2	
Fewer this year	3	
No opinion	0	

47. Overall, do you think the chances of your child/children getting the kind of education you want for (him/her/them) are better, about the same or not as good as they were last year? Begin Card 19

Better	1	11/
Same	2	
Not as good	3	
No opinion	0	

48. As far as you know, under the open enrollment system, if a parent wants to send his child to a school that is not in his own neighborhood, does the parent have to provide transportation himself, does the child use city buses, or is transportation provided free of charge?

Parent must provide transportation	1	12/
Child uses city buses	2	
Transportation free of charge	3	
Don't know	0	

-18-

The next few questions are about the school (CHILD) goes to. Card 19

49. Why did you select that school for (CHILD)? RECORD FIRST THREE RESPONSES

Close to home	1	13-14/
Good principal	2	
Good teachers, cooperative	3	15-16/
Good school, like staff	4	
Friends go there	5	
Siblings go there	6	17-18/
Had no choice	7	
Offers basics	8	
Open classroom	9	

50. Is (CHILD) attending the "school" nearest your home, or is (he/she) going to a different school?

School nearest home	1	19/
Different school	2	

Card 43

905. Some schools have more than one program. Does your child's school have more than one program?

Yes	1	18/
No	2	

Card 19

51A. Do you happen to know which program (CHILD) is enrolled in? (What is name?

Yes	1	20/
No	2	

21/22/23

Skip 24-33

53. In your experience does (CHILD'S) (homeroom) teacher pay a lot, some or hardly any attention to suggestions or complaints from parents?

A lot	1	34/
Some	2	
Hardly any	3	
Don't know	0	

54. How about the principal--does the principal pay a lot of attention, some, or hardly any attention to suggestions or complaints from parents?

A lot	1	35/
Some	2	
Hardly any	3	
Don't know	0	

-19- Card 19

55. Now I have a few statements about the open enrollment system and I would like you to tell me how strongly you agree or disagree with each of them by selecting one of the answers on this card.

HAND CARD A

	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree	
A. The open enrollment system will result in better public schools in Alum Rock than the voucher system did	1	2	3	4	5	36/
E. Under the open enrollment system the more schools a parent has to choose from the more control parents will have over the school system	1	2	3	4	5	Skip 37-39 40/
F. The open enrollment system will do more for the education of blacks and Chicanos than it will for the education of whites	1	2	3	4	5	41/
H. For most parents how close a school is to home is the most important reason for choosing a school for their children to attend .	1	2	3	4	5	Skip 42 43/
I. Now, parents have more control over the schools of Alum Rock than they did last year . .	1	2	3	4	5	44/

-20-

Card 19

57. How many times did you or other members of your family do any of the following things during the past school year... (READ LIST BELOW) WRITE IN NUMBER OF TIMES OR CIRCLE "0" FOR NONE.

	Number Times	None	
A. Have talks with the teachers or other people at the school about your children	_____	0	46-47/
B. Attend any parent or neighborhood meetings at which the schools were discussed	_____	0	48-49/
C. Attend any special events at elementary schools, such as plays or ballgames or special assemblies, etc.	_____	0	50-51/

Card 43

905A. Would you say that this year you have had more contact with teachers, less contact, or about the same amount of contact with teachers as you did last year?

More contact. 1 19/

About the same amount . . 2

Less contact. 3

B. Have you had any contact with a parent counselor this year?

Yes 1 20/

No 2

58. Last year, did you or any other members of your family belong to any committees or groups at your elementary or middle school, such as the PTA, the Chicano Parents of Alum Rock, or other parent groups? Card 19

Yes 1 52/

No 2

Card 19

And now a few questions about your background.

64A. How long have you lived in Santa Clara County? CODE IN COLUMN A.

	A		B	
Less than 1 year	1	61/	1	62/
One to less than 2 years	2		2	
Two to less than 3 years	3		3	
Three to less than 5 years	4		4	
Five to less than 10 years	5		5	
Ten years or longer	6		6	

B. How long have you lived at this address? CODE IN COLUMN B ABOVE. Begin Card 36

124. How many people in this neighborhood do you know on a first-name basis-- most, many, some, or just a few?

Most 1 48/
Many 2
Some 3
Just a few 4

Skip 49

126. During the past school year did you move or change addresses?

Yes 1 50/
No 2

126A. Over the last five years, have any of your children ever attended voucher schools? Skip 51

Yes 1 52/
No 2

65. Which of these phrases (HAND CARD G) best describes how likely it is that you and your family might move away from Alum Rock within the next two years? Card 19

SHOW CARD D

Definitely will move 1 63/
Probably will move 2
Might move (50/50 chance) 3
Probably will not move 4
Very unlikely we will move 5

66. Altogether, including yourself, how many adults 18 and over live here in this household most of the year?

_____ 64-65/
(No. adults in household)

Card 19

67. A. Do you have any children who are not yet in school, that is, too young to be in school? IF NO, CIRCLE "0". IF YES: How many?

Number not yet in school: ____

None 0 66-67/

B. Do you have any children who are living here, under 18 and out of high school? IF NO, CIRCLE "0". IF YES: How many?

Number out of school: ____ 68-69/

None 0

68. Are you working full time now, working part time, (keeping house), (retired), or can't you find work, or what?

Working full time (35 hours or more) 1 70/

Working part time 2

Temporarily laid off 3

Can't find work 4

On strike 5

Retired 6

Keeping house . . .(SKIP TO Q.70) 7

Other 8

Specify:_____

69. A. What kind of work (do/did) you normally do?

OCCUPATION _____ | | | | | |

71/72/73/74/

B. In what industry is this?

INDUSTRY _____ | | | |

75/ 76/ 77/

Begin Card 20

70. What is your present age: WRITE IN: _____ 11-12/

IF RESPONDENT REFUSES, PLEASE WRITE IN ESTIMATE ABOVE AND CHECK BOX ☐

71. What was the highest grade or class you completed in school?

None to three grades	.1	13/
Four to seven grades	.2	
Eight grades	.3	
Nine to eleven grades	.4	
High school graduate	.5	
Junior college graduate	.6	
Technical, trade, business, and nursing school	.7	
Some college, but not a graduate	.8	
College graduate or more	.9	

72. Are you married, single, divorced, separated, or widowed?

Married. (ASK Q.73)	.1	14/
Single . (SKIP TO Q.78)	.2	
Divorced . (ASK Q.74)	.3	
Separated (ASK Q.74)	.4	
Widowed. . (ASK Q.74)	.5	

73. Is your (husband/wife) working full time now, working part time, retired, or can't (he/she) find work, or what?

Working full time (35 hours or more)	.1	15/
Working part time	.2	
Temporarily laid off	.3	
Can't find work	.4	
On strike	.5	
Retired	.6	
Keeping house . (SKIP TO Q.75)	.7	
Other	.8	

SPECIFY: _____

74. A. What kind of work (does/did) your (husband/wife) normally do?

OCCUPATION _____ ☐☐☐☐ 16/17/18/19

B. In what industry (is/was) this?

INDUSTRY _____ ☐☐☐ 20/21/22

-24-

Card 20

75. What is your (husband's/wife's) age? WRITE IN: _____ 23-24/

IF RESPONDENT REFUSES, PLEASE WRITE IN ESTIMATE ABOVE AND CHECK BOX. ☐

76. What was the highest grade or class your (husband/wife) completed in school?

None to three grades	.1
Four to seven grades	.2
Eight grades	.3
Nine to eleven grades	.4
High school graduate	.5
Junior college graduate	.6
Technical, trade, business, and nursing school	.7
Some college, but not a graduate	.8
College graduate or more	.9
Don't know	.0

25/

IF INTERVIEWING A WOMAN WHO IS CURRENTLY MARRIED, WIDOWED, DIVORCED OR SEPARATED ASK Q.77 ABOUT HER HUSBAND'S FATHER. IF INTERVIEWING A MAN, ASK ABOUT HIS FATHER.

77. What kind of work did your (husband's) father do most of his life?

OCCUPATION _____ ☐☐ 26/ 27/28/ 29/

INDUSTRY _____ ☐☐ 30/ 31/ 32

Card 20

ASK EVERYONE

78. Which of the words on the card best describes your race or ethnic background?

HAND CARD E

Mexican American/Chicano	1	33/
Other white/Anglo	2	
Black/Negro	3	
Oriental (Japanese/Chinese/ Filipino/Korean)	4	
American Indian	5	
Latin	6	
Other	7	

Specify: _____

80. Do you own your own home here, or do you rent? Skip 34

Own	1	35/
Rent	2	

81. Would you please look at this card and tell me which amount comes closest to your total family income from all sources last year, before taxes? Include wages, salaries, social security or retirement benefits, help from relatives, or public assistance of any kind. (Just your best guess)

HAND CARD F

A. Under $3,500	1	36/
B. $3,500-$4,999	2	
C. $5,000-$7,499	3	
D. $7,500-$9,999	4	
E. $10,000-$14,999	5	
F. $15,000 or more	6	
G. Refused	7	
H. Don't know	8	

82. Finally, how many people in total depend on this income?

Number _____ 37-38/

NEXT, FILL IN THE ITEMS ON PAGE 26.

Appendix C

PARTITIONING OF LINEAR AND NONLINEAR TRENDS IN PARENTS' SATISFACTION WITH THE ALUM ROCK SCHOOLS AND KEY PERSONNEL

Table C.1

PARTITIONED CHI-SQUARE VALUES TO TEST FOR LINEAR AND NONLINEAR TRENDS WITHIN GROUPS ACROSS SURVEY YEARS (Q30)

Parent Group	Components						Total		
	Linear Trend			Nonlinear Trend					
	χ^2 linear	df	p	χ^2 nonlinear	df	p	χ^2	df	p
Old voucher parents	3.747	1	.10	5.776	2	.10	9.523	3	.02
New voucher parents	1.380	1	ns	13.165	2	< .001	14.545	3	.003

Table C.2

PARTITIONED CHI-SQUARE VALUES TO TEST FOR LINEAR AND NONLINEAR TRENDS WITHIN GROUPS ACROSS SURVEY YEARS (Q8)

Parent Group	Components						Total		
	Linear Trend			Nonlinear Trend					
	χ^2 linear	df	p	χ^2 nonlinear	df	p	χ^2	df	p
Old voucher parents	.009	1	ns	7.758	2	< .025	7.767	3	.05
New voucher parents	5.325	1	< .025	34.205	2	< .001	39.530	3	< .001

Table C.3

PARTITIONED CHI-SQUARE VALUES TO TEST FOR LINEAR AND NONLINEAR TRENDS WITHIN GROUPS ACROSS SURVEY YEARS (Q9)

Parent Group	Components						Total		
	Linear Trend			Nonlinear Trend					
	χ^2	df	p	χ^2	df	p	χ^2	df	p
New voucher parents	0.184	1	ns	15.334	2	< .007	15.518	3	< .002
Nonvoucher parents (controls)	6.263	1	< .025	1.805	2	ns	8.068	3	< .05

Appendix D

DISTRIBUTION OF ALUM ROCK STUDENTS BY ETHNICITY, SOCIOECONOMIC STATUS, AND SEX (1970-1977)

by Roger L. Rasmussen

One argument against parental choice within the public schools is that it would result in increased segregation of students by ethnic group membership, socioeconomic status, or some other significant social characteristic. This appendix examines the distribution of students among schools and programs in the Alum Rock School District during its five year experiment with parent choice, to determine if there were any significant trends toward imbalance in the distribution of students by ethnic group, socioeconomic status, or sex. The results show small increases in ethnic and socioeconomic imbalance among schools and programs during the course of the experiment. Whether or not such increases constitute a strong argument against parent choice is a matter of interpretation.

The Legal and Political Context

In 1954, the United States Supreme Court climaxed a series of rulings on school segregation with the pronouncement that separate educational facilities are inherently unequal and that *de jure* segregation of the races is therefore in conflict with the equal protection clause of the Fourteenth Amendment.[1] This ruling was not actively enforced until the Kennedy and Johnson Administrations of the 1960s, but since then *de jure* segregation has been virtually eliminated in the United States.

As *de jure* segregation has withered in the public schools, it has become increasingly apparent that racial and ethnic segregation is not solely nor even primarily caused by legal constraints. Segregation in residential patterns, for example, has often caused

[1] *Brown v. Board of Education*, 347 U.S. 483.

or perpetuated school segregation even when no legal barriers to integration remained. Also, the enrollment of children in private schools has often contributed to segregation, even though parents may not have explicitly sought that effect.

The United States Supreme Court has never ruled on the constitutionality of *de facto* segregation *per se*, although recent cases in the lower courts have made the distinction between *de jure* and *de facto* segregation less and less clear.[1] Various policies of local school authorities have been ruled illegal either because segregation was an intended consequence of the policy or because separatist consequences of the policy were probable and foreseeable. Especially relevant to the voucher demonstration are recent court rulings on two types of school policies:[2]

> Parent-pupil school selection arrangements, such as open enrollment, free transfers, and optional attendance zones are illegal practices to the extent that they result in more segregation than would some other educationally sound and readily available pupil assignment mechanism.
>
> Segregated classroom assignments and other intra-school racial discrimination are illegal. In a number of southern cases the courts have held that systems . . . may not adopt pupil tracking devices that produce intra-school segregation.

These rulings are only part of a growing body of legal precedent which demands that school policies such as those proposed in the voucher demonstration be examined in terms of their segregating or desegregating effect on student enrollments.

Political as well as legal considerations also require that any comprehensive study of parent choice systems include an examination of the racial and ethnic distributions of students over time. One

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[1] See Flannery (1972).

[2] Ibid., p. 13.

of the major objections to the voucher idea as a system for increasing parent choice has been that parents could use it as a means to achieve school segregation, much as southern whites fled the public schools in the 1960s to form segregated private academies. This concern has been voiced by many groups in the course of public debate over the voucher idea.[1]

The segregation problem for voucher systems was explicitly recognized in the CSPP report, *Education Vouchers*. To counteract it, CSPP recommended a "regulated compensatory" voucher model containing several provisions that would prevent or at least discourage segregated schools. For example, each school would be allowed to fill as much as 50 percent of its enrollment by any criteria it wishes, so long as these criteria did not discriminate against any racial minority. Thereafter, the school would be required to fill its remaining enrollment strictly on the basis of demand, with a lottery system for cases where demand exceeded supply. Schools also would be given economic incentives to attract and enroll poorer students, in the form of "compensatory" voucher funding based on the number of students enrolled from low-income families.

The "transitional" voucher model proposed by Alum Rock was even more strongly regulated than the CSPP model to prevent discrimination in school enrollment policies. It provided that *all* applicants should be admitted to their first-choice programs, with a few exceptions when program resources were clearly limited or state laws would be violated. Programs would thus be required to expand to meet the demand for enrollment, and could not apply admissions criteria. As in the CSPP recommendation, a "compensatory" voucher incentive was also proposed so that minischools would benefit financially to the extent that they attracted and enrolled students from low-income families.

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[1] See, for example, Mecklenburger and Hostrop (1972). Testimony and statements of the American Jewish Congress, the Council of Chief State School Officers, the National Education Association, and the American Federation of Teachers all raised the segregation issue.

As another safeguard against segregation, the Office of Economic Opportunity stipulated as a condition of its initial grant to Alum Rock that "to the extent compatible with Federal legislation, the Governing Board of the Alum Rock School District will *insure that participating schools do not become racially segregated.* Should initial assignment of children indicate *imbalance as defined by the State of California,*[1] programs experiencing heavy under- or over-application by a particular group will be offered in additional buildings to assure that racial balance is maintained."[2] (Emphasis added.)

As the OEO-Alum Rock agreement illustrates, the terms "segregation" and "imbalance" are frequently treated as synonymous. However, there are both empirical and legal distinctions between the two concepts that should be recognized.

The concept of racial or ethnic imbalance is a *relative* concept that requires specification of a larger reference population in terms of which balance or imbalance is to be defined. Typically, the reference population is the school district, since the district is the traditional legal entity that has authority to set and modify school attendance area policies.[3] Defining imbalance in terms of a district's ethnic characteristics can lead to anomalous situations where completely segregated schools are labeled as ethnically "balanced" and well-integrated schools are labeled as "imbalanced." Such a situation can be illustrated by the example of Linda Vista School in Alum Rock In October 1974, the student body at Linda Vista School was 33 percent Spanish-surnamed, 4 percent black, 3 percent Asian-American, and 61 percent "other" (predominantly Caucasians who are not Spanish-surnamed). Such a mixture of minority and nonminority students does not suggest that the school should be considered "segregated." Yet Linda Vista

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[1]The reference is to the California Administrative Code Title 5, Section 14021. Excerpts from Section 14021 are provided later in the appendix.

[2]OEO Grant 90051, Special Condition 7.

[3]See *Milliken v. Bradley*, 418 U.S. 717 (1974) for conditions under which a cross-district remedy to segregation might be required.

School stands out as ethnically "imbalanced" when compared with other schools in the district, because it is the only school in Alum Rock that is *not* a predominantly minority school.

Ethnic group segregation and ethnic group imbalance are also frequently distinguished in terms of their legal significance. Perhaps the most forceful distinction was made by the United States Congress in 1964: "'Desegregation' means the assignment of students to public schools and within such schools without regard to their race, color, religion, or national origin, but 'desegregation' shall not mean the assignment of students to public schools in order to overcome racial imbalance."[1] The United States Supreme Court has made a more modest distinction between segregation and imbalance: "The constitutional command to desegregate schools does not mean that every school in every community must always reflect the racial composition of the school system as a whole . . . .[However,] awareness of the racial composition of the whole school system is likely to be *a useful starting point* in shaping a remedy to correct past constitutional violations."[2] (Emphasis added.)

The California State Supreme Court, on the other hand, has tended to treat the terms "segregation" and "racial imbalance" as synonymous. "The right to an equal opportunity for education and the harmful consequences of *segregation* require that school boards take steps, insofar as reasonably feasible, to alleviate *racial imbalance* in schools regardless of its cause . . . .School authorities, of course, are not required to attain an exact apportionment of Negroes among the schools, and consideration must be given to the various factors in each case, including the practical necessities of governmental operation. For example, consideration should be given, on the one hand, to the degree of *racial imbalance* in the particular school . . . and, on the other hand, to such matters as the difficulty and effectiveness of revising school boundaries so as to eliminate segregation . . . ."[3] (Emphasis added.)

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[1] Civil Rights Act of 1964, 42 U.S.C., Section 2000c.

[2] *Swann v. Board of Education*, 402 U.S. 1 (1970).

[3] *Jackson v. Pasadena City School District*, 59 Cal. 2d 876 (1963).

Whether or not a legal distinction is made between "segregation" and "imbalance" seems to depend primarily on the writer's perception that remedies are or are not needed for *de facto* segregation. Little notice has been given to the problem of relativity in defining imbalance.

Measuring Imbalance

One cannot determine whether racial or ethnic imbalance has increased or decreased without using some kind of quantitative measure. Numerous measures have been proposed,[1] but none is universally accepted. Two indicators of racial and ethnic group balance or imbalance are used in the analyses that follow.

1. $S = (\Sigma_{i=1}^{\ell} \Sigma_{j=1}^{k} |A_{ij} - E_{ij}|)2N$ is a statistical measure of imbalance that measures the percentage of students who would have to change location (i.e., school or program) to achieve identical ethnic proportions in each location in the district (A_{ij} = actual frequency of students in each ethnic group and location; E_{ij} = expected frequency of students in each ethnic group and location if ethnic group proportions were identical everywhere; k = number of ethnic groups; ℓ = number of locations; N = total number of students in schools or programs being considered.[2]

2. The "15 percent" criterion of imbalance contained in the administrative Code of California, Title 5, Section 14021:

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[1] For example, see Taeuber and Taeuber (1965). Appendix A discusses several proposed measures of racial segregation. Also see Zoloth (1974).

[2] For a single location and two or three ethnic groups, $S_i = (\Sigma_{j=1}^{k} |fo_{ij} - fe_{ij}|)/2N_i$ can be interpreted as the degree of imbalance for the most imbalanced ethnic group. S is simply a weighted average of the S_i. (This measure was suggested by Otis Dudley Duncan. See Taeuber and Taeuber p. 30.)

> . . . a racial or ethnic imbalance is indicated *in a school* if the percentage of pupils of one or more racial or ethnic groups differs by more than 15 percentage points that *in all the schools of the district.*[1] (Emphasis added).

In 1972, for example, Alum Rock was 51 percent Spanish-surnamed, 12 percent black, and 37 percent "other." That year, any school with less than 36 percent or more than 66 percent Spanish-surnamed students, less than 22 percent or more than 52 percent "other" students, or more than 27 percent black students would have been considered racially imbalanced.

Data Sources and Their Quality

Two primary sources of data have been used in this appendix: data from official Alum Rock district records and data from C. M. Leinwand Associates, the Data Management Contractor for the voucher demonstration. Table D.1 summarizes each of the specific dataset used.

Alum Rock District Data

The district has conducted a racial and ethnic survey of its student population each October since 1966, as required by the California State Board of Education and the United States Office of Civil Rights. The methods for conducting this survey and the racial/ethnic categories used have varied somewhat from year to year and from school to school.

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[1] This is the measure of ethnic imbalance that Alum Rock and OEO agreed to use in their initial voucher contract. Later in the same year, Section 14021 was repealed by a statewide public initiative (Proposition 21). In 1975, however, the initiative was repealed by the courts (*Santa Barbara School District v. Superior Court of Santa Barbara County*, 13 C. 3d 315-348), and Section 14021 was reinstated. Despite the turbulent legal history of this Code provision, it continues to be a useful method for identifying schools that differ significantly from the overall ethnic composition of their district.

Table D.1

DATA SOURCES

Type of Data	Grouped by	Source	Dates	Number of Schools[a]	Number of Students[b]
Ethnicity	School	District	Oct. 1970	24	16,077
			Oct. 1971	24	15,863
			Oct. 1972	24	15,403
			Oct. 1973	25	15,108
			Oct. 1974	25	14,952
			Oct. 1975	25	14,513
			Oct. 1976	24	13,851
Ethnicity	Minischool	Leinwand	June 1973	6	3,995
			June 1974	13	8,483
			June 1975	14	9,204
			June 1976	14	8,761
			June 1977	9	5,450
Eligibility for compensatory voucher	Minischool	Leinwand	June 1973	6	3,854
			June 1974	13	8,483
			Dec. 1974	14	9,322
Sex	Minischool	Leinwand	June 1973	6	3,854
			June 1974	13	8,483
			Oct. 1974	14	9,136

[a]Excluding Mt. Hamilton, an isolated one-classroom school for children of the staff at Lick Observatory.

[b]Including "special education" students not assigned to minischools and student records with blank or miscoded school, minischool, or ethnic data.

Before the beginning of the demonstration, each classroom teacher was responsible for classifying each of his or her students into one of the specified racial or ethnic groups and reporting the frequency distribution to the district. The district then aggregated these data and reported them for schools and for the district as a whole. This method of conducting the survey is still used at the nonvoucher schools in Alum Rock.

For the voucher schools (and any nonvoucher schools that wished to participate), a computerized student information system was begun in 1972-73. This system, known originally as RECAP (Regional Educational Center for Automated Processing) and later as ARAS (Alum Rock Attendance System), maintains a record for each student that includes his or her ethnicity, residential location, and school(s) and mini-school(s) attended. School secretaries have the major responsibility for keeping the student data up to date.

Both the hand-tally method and the computerized method have had their weaknesses. It is impossible to check from hand-tallied data whether teachers are classifying students accurately or consistently, since the ethnicities of individual students are not recorded. On the other hand, the computerized student record system has been weakened by missing data. In most cases, care and diligence by the district have brought missing ethnic data down to a percent or two of the total enrollment at each school, and the ethnic data for voucher schools can usually be considered at least as complete and accurate as for nonvoucher schools.

An exception occurred in the fall of 1973, when a few hundred missing ethnic codes were not tracked down and changed, but were treated in the district's ethnic report as "other," an ethnic category which includes non-Spanish-surnamed Caucasians and nonwhites who were not black, oriental, or American Indian. This caused the proportion of Spanish-surnamed and black students to be substantially understated in some schools and slightly understated for the district as a whole. For some schools it was possible to separate out the missing data and base our analysis only on students whose ethnicities were coded. For other schools this was not possible, and the "other" ethnic category remains overstated by an unknown but (we believe) small amount.

Data from the Data Management Contractor (Leinwand)

Since the beginning of the demonstration, C. M. Leinwand Associates of Newton, Massachusetts, has been under direct contract from the National Institute of Education to compile and maintain

demographic data on students, parents, and teachers. The primary source for Leinwand's student files is the district's own student record system. For this reason, Leinwand's student files necessarily suffer some of the same weaknesses as the district's. Namely, there are problems of missing data, and the constant turnover of students makes reconstruction difficult. However, the Leinwand student files are periodically updated and improved as weaknesses are identified. By the spring of each school year, most of the data problems have been worked out and the Leinwand files represent our most accurate source of information about students in the voucher schools.

For our analysis of the distribution of students among programs, the June (Period 10) student files have been used each year. We feel the end-of-year data are the most accurate because enrollments are stable and there has been adequate time to check out missing and inconsistent data. The percentage of records on the Leinwand student files that contain blank or miscoded school, minischool, or ethnic data was 1.3 percent in June 1973, 0.9 percent in June 1974, and 0.0 percent in June 1975.

Changes in student demographic characteristics from fall to spring of each year tend to be small (usually no more than a few percent), since the ethnic composition of the district is changing only slowly and student transfers among voucher minischools have been confined largely to the summers.

Ethnic Composition of Alum Rock's Total Student Population

The ethnic composition of a district's total student population is the norm against which imbalance is customarily measured. Table D.2 shows the proportion of Spanish-surnamed, black, and "other" students enrolled in Alum Rock each year from 1970-71 to 1976-77.[1] During this period, the total number of students in the district declined 14 percent; the proportion of Spanish-surnamed students

[1] The category "other" has consisted predominantly of Caucasians who are not Spanish-surnamed, but also includes a small proportion of Oriental, Pacific Island, and American Indian students.

Table D.2

ETHNIC COMPOSITION OF THE ALUM ROCK STUDENT POPULATION, OCTOBER 1970 TO OCTOBER 1976
(In percent)

Ethnic Group	Year						
	1970	1971	1972	1973	1974	1975	1976
Spanish-surnamed	47.2	49.5	51.3	52.2	53.3	55.1	57.2
Black	10.1	11.0	11.5	12.1	12.2	11.9	11.5
Other	42.7	39.5	37.2	35.7	34.5	33.0	31.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	16,077	15,863	15,403	14,860	14,952	14,513	13,851

SOURCE: Official District Records.
NOTE: Excludes students at Mt. Hamilton School, an isolated one-classroom school for children of the staff of Lick Observatory.

increased from 47 to 57 percent; and the proportion of black students varied between 10 and 12 percent. The trend toward fewer total students and an increased enrollment of Spanish-surnamed students has been a long-term, gradual trend which seems to have been unaffected by the voucher demonstration.

Ethnic Imbalance Among Schools

Data from the 1970-76 period do not show any trend toward increased ethnic imbalance among schools because of the voucher demonstration.

Using Duncan's measure of imbalance ($S = \Sigma\Sigma|A - E|/2N$), the amount of imbalance among schools in Alum Rock declined from 13.3 percent to 11.0 percent between October 1970 and October 1976. During the period of the voucher demonstration (1972-1976), the amount of imbalance among schools varied between 10.7 and 11.7 percent with no apparent trend (see Table D.3).

Table D.3

MAGNITUDE OF ETHNIC IMBALANCE AMONG SCHOOLS, OCTOBER 1970 TO OCTOBER 1976

Item	Year						
	1970	1971	1972	1973	1974	1975	1976
Percent of students[a]	13.3	12.3	11.1	10.7	11.0	11.7	11.0
Number of students	16,077	15,863	15,403	14.860	14,952	14,513	13,851

SOURCE: Official District Records.

[a]Percent of students who would have had to be exchanged among schools to achieve an identical ethnic distribution in each school in the district.

Using California's 15 percent criterion for ethnic imbalance, the total number of imbalanced schools in Alum Rock varied between 5 and 9 during the 1970-76 period. Of these, only two schools became imbalanced during their period of participation in the voucher demonstration, and only one remained imbalanced. Goss School went from 14.8 percent out of balance in 1971 to 15.6 percent in 1972, then dropped back to 13.2 percent in October 1973, climbed above 15 percent in the spring of 1974, then dropped to 12.5 percent the next fall and stayed there. McCollam School went from 9.6 to 15.3 percent out of balance in its third year of participation in the demonstration (1974), and continued out of balance through the spring of 1976.

Three other voucher schools (Conniff, Mathson, and Mayfair) were out of balance during the demonstration, but each of these schools had been out of balance before the demonstration began, and the extent of their imbalance did not change appreciably over the 1970-76 period. (Table D.4 shows the magnitude of imbalance by year for all schools in Alum Rock that were more than 15 percent out of balance during the 1970-76 period.)

Table D.4

DEGREE OF ETHNIC IMBALANCE BY YEAR FOR ALL SCHOOLS THAT WERE IMBALANCED AT ANY TIME DURING THE 1970-76 PERIOD

School	Year						
	1970	1971	1972	1973	1974	1975	1976
1972 Voucher Schools							
Goss	17.1	14.8	15.6	13.2	12.5	12.5	10.8
McCollam	8.4	9.6	7.7	9.6	15.3	15.6	14.4
1973 Voucher Schools							
Arbuckle	14.1	15.1	14.2	12.5	10.9	11.9	9.8
Conniff	21.3	22.1	19.3	22.8	23.6	21.6	--
Mayfair	22.9	21.0	17.8	16.7	19.5	21.2	19.2
1974 Voucher Schools							
Mathson	19.5	21.0	19.3	17.7	20.1	19.3	15.6
Nonvoucher Schools							
Cureton	7.5	9.4	9.4	8.7	13.0	16.0	8.0
George	10.5	17.2	18.4	12.8	15.0	15.2	14.0
Linda Vista	30.6	33.0	32.4	31.2	29.2	27.4	28.0
Rogers	16.9	11.6	16.0	9.1	17.6	10.5	10.7
Ryan	23.5	19.5	14.3	15.0	13.7	9.2	11.1
San Antonio	28.7	17.7	15.0	20.0	24.2	23.3	21.3
Slonaker	10.4	19.3	15.9	22.0	16.3	18.1	18.0
Number of Imbalanced Schools	8	9	8	6	8	9	5
Number of Schools	24	24	24	25	25	25	24

SOURCE: Official District Records, October 1970 to October 1976.

Ethnic Imbalance Among Programs

Over the first four years of the demonstration (1972-76), there was slightly more imbalance among programs[1] than there was among schools alone, and there was also a slight movement toward increased imbalance among minischool programs. In the fifth year of the demonstration (1976-77), the number of minischool programs was cut from 50 to 20, causing the degree of imbalance among schools and programs to decline to about the 1972-73 level. Throughout the demonstration, the most imbalanced programs tended to be those with a bilingual/bicultural or multicultural theme.

Using Duncan's measure of imbalance ($S = \Sigma\Sigma|A - E|2N$), the total amount of imbalance among schools and programs in Alum Rock climbed from 11.5 percent in 1972-73 to 12.9 percent in 1975-76, and then dropped back to 11.6 percent in 1976-77 when the number of minischool programs was cut from 50 to 20 (see Table D.5). These figures are slightly higher than those obtained when schools were the units of analysis (compare Tables D.3 and D.5), but the overall conclusion is similar: The total effect of parent choice on ethnic imbalance

Table D.5

MAGNITUDE OF ETHNIC IMBALANCE AMONG SCHOOLS AND PROGRAMS, JUNE 1973 TO JUNE 1977

Item	Year				
	1973	1974	1975	1976	1977
Percent of students[a]	11.5	11.9	12.6	12.9	11.6
Number of students	15,403	14,421	14,573	14,000	13,523
Number of programs	40	57	62	61	35

SOURCE: Official District Records and DMC student files.

[a]Percent of students who would have had to be exchanged among schools or programs to achieve an identical ethnic distribution in each school and program in the district.

[1]Each nonvoucher school was counted as one program.

in Alum Rock was relatively minor during the 1973-77 period, but the degree of imbalance did increase slightly as the number of programs increased.

Applying California's 15 percent criterion to programs rather than schools, the proportion of imbalanced minischools in Alum Rock was 23 percent in Year 1, 22 percent in Years 2 and 3, 28 percent in Year , and 15 percent in Year 5. (Table D.6 shows the magnitude of imbalance by year for all minischools that were imbalanced during the 1972-73 through 1976-77 period.)

Twenty-two different minischools were out of balance at one time or another during the demonstration, but some were much more consistently and substantially out of balance than others. Ranking programs by their average level of imbalance (see Table D.7) shows that six of the seven most imbalanced programs were bilingual/bicultural or multicultural programs. These six programs averaged 28 percent out of balance during their 16 program-years of existence, a very high figure relative to the district average of 12 percent.

In justification of bilingual/bicultural programs, HEW requires that students with low fluency in English be provided with special language instruction:

> Where inability to speak nd understand the English language excludes national origin - minority group children from effective participation in the educational program offered by a school district, the district must take affirmative steps to rectify the language deficiency in order to open its instructional program to these students.[1]

However, this does not mean that the federal objective of school desegregation is to be set aside in the case of non-English-speaking students. In fact, the HEW guidelines suggest a specific resolution to the conflict between special needs of non-English-speaking students and the goal of integrated public education:

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[1] 35 Fed Reg 11595. This guideline was cited in *Lau v. Nichols*, 414 U.S. 563, as one of the legal bases for the decision.

Table D.5

DEGREE OF ETHNIC IMBALANCE[a] BY YEAR FOR ALL PROGRAMS THAT WERE IMBALANCED AT ANY TIME DURING THE 1972-77 PERIOD

School and Program	1972-1973	1973-1974	1974-1975	1975-1975	1976-1977
Arbuckle Bilingual	--	--	--	16.1	14.6
Arbuckle Traditional/Action	--	18.7	14.5	20.6	--
Conniff Bilingual/Bicultural	--	28.9	29.1	29.3	--
Cureton Bilingual/Bicultural	--	--	--	--	27.4
Dorsa Communication Plus	--	8.1	8.6	7.7	17.5
Fischer Bilingual/Bicultural	--	--	38.0	39.6	--
Goss Activ-Centered/Learn Unlim	17.8	15.7	14.0	10.7	13.5
Goss Developmental/READ	16.9	18.5	13.2	15.0	10.9
Goss Seventh Grade/Tomorrow Today	14.0	15.8	2.7	14.6	14.5
Hubbard Adventures in Learning	--	10.8	10.2	16.4	--
Mathson Communications & Cultures	--	--	22.7	23.3	19.7
Mathson Learning Odyssey	--	--	18.5	16.1	11.5
Mayfair Bilingual/Bicultural	--	33.4	36.5	36.5	--
Mayfair Kindergarten Plus First	--	10.8	16.4	18.2	--
Mayfair Learning Tree/Schoolhouse	--	19.0	20.0	16.8	--
Mayfair Maximum Exposure	--	20.8	--	--	--
Mayfair People to People	--	13.5	15.1	21.6	--
McCollam Continuous/Nongraded	8.6	13.3	16.4	18.9	--
McCollam Enrichment	26.2	32.2	37.6	--	--
McCollam Traditional/BEST	4.8	4.8	8.8	18.3	5.6
Miller Multi-Cultural Arts	19.9	21.9	23.7	24.6	--
Pala Math/Science	21.5	2.7	1.2	5.3	--
Number of Imbalanced Programs	5	10	11	14	3
Number of Programs	22	45	51	50	20

SOURCES: DMC Student Files, 10th Period (June 1973 to June 1977); Official District Records (October 1972 to October 1976).

NOTE: Program level data from voucher schools were combined with school level data from nonvoucher schools to compute district norms for ethnic balance.

[a]Difference between school and district ethnic proportions for the ethnic group whose proportions were most different from the district average.

Table D.7

MOST ETHNICALLY IMBALANCED PROGRAMS, 1972-1977

Program	Average Imbalance[a]
Fischer Bilingual/Bicultural	38.8
Mayfair Bilingual/Bicultural	35.5
Conniff Bilingual/Bicultural	29.1
McCollam Enrichment	29.0
Cureton Bilingual/Bicultural	27.4
Miller Multi-Cultural Arts	22.5
Mathson Communications & Cultures	21.9
Mayfair Maximum Exposure	20.8
Mayfair Learning Tree/Schoolhouse	18.6
Arbuckle Traditional/Action	17.9
Mayfair People to People	16.7
Arbuckle Bilingual	15.4
Mathson Learning Odyssey	15.4
Mayfair Kindergarten Plus First	15.1

SOURCE: Table D.6.

[a]Difference between school and district ethnic proportions for the ethnic group whose proportions were most different from the district average.

> Any ability grouping or tracking system employed by the school system to deal with the special language skill needs of national origin - minority group children must be designed to meet such language skill needs as soon as possible and must not operate as an educational dead-end or permanent track.

The bilingual minischools in Alum Rock did not profess to be temporary programs that students were to leave when they had attained sufficient fluency in English. Rather, students were encouraged to remain in these programs as long as they wished.

Solutions other than making bilingual programs short-term programs can be imagined. Vigorous recruitment of non-Spanish-surnamed students who would like to learn Spanish might reduce minority imbalance in bilingual programs. Offering bilingual instruction in programs not specifically labeled "bilingual/bicultural" might also reduce the tendency of students and parents to perceive certain programs as being primarily or only for Spanish-surnamed students. Limiting enrollment of Spanish-surnamed students in any bilingual program to 60 percent (for example) might be another solution to the problem, although such a limit could conflict with the ideal of parent choice.

Distribution of Students by Socioeconomic Status

Many critics of parent choice have been concerned that it might increase racial and ethnic segregation within the schools, but some have also suggested that parent choice could increase socioeconomic segregation among students, and that such segregation could diminish opportunities for students from less privileged families. To test whether the system of parent choice in Alum Rock increased the level of socioeconomic segregation among students, trends in the distribution of students from low-income families were examined.

The measure of socioeconomic status used in this study was students' eligibility for compensatory voucher funding. In the first year of the voucher demonstration, 40.5 percent of the voucher students were eligible for compensatory vouchers. In Year 2, eligibility for compensatory vouchers jumped to 61.1 percent, because the schools that entered the demonstration that year tended to be from poorer neighborhoods. In Year 3, 63.0 percent of the voucher students were eligible for compensatory vouchers (see Table D.8).

Using eligibility for compensatory vouchers as an indicator of low socioeconomic status, the percentage of students who would have had to be exchanged among minischools to achieve an identical SES distribution in each program was 9.0 in Year 1, 9.3 in Year 2, and

Table D.8

STUDENT ELIGIBILITY FOR COMPENSATORY VOUCHERS BY YEAR, 1972-73 TO 1974-75

Category	Year		
	1972-73	1973-74	1974-75
Eligible students (%)	40.2	61.1	63.0
Ineligible students (%)	59.5	38.9	37.0
Total	100.0	100.0	100.0
Number of students	3797	8260	9030

11.7 in Year 3.[1] Thus the total amount of socioeconomic imbalance among programs was comparable to the total amount of ethnic imbalance in the district.

Using a 15 percent criterion to identify individual programs as SES imbalanced, the proportion of imbalanced programs was 23 percent in Year 1, 20 percent in Year 2, and 27 percent in Year 3. The SES-imbalanced programs tended to cluster by school, suggesting that the imbalance was due more to socioeconomic differences among neighborhoods than to the characteristics of the programs themselves. In general, SES-imbalanced programs were not necessarily ethnically imbalanced, nor were ethnically imbalanced programs necessarily SES imbalanced. (Table D.9 shows the degree of SES imbalance by year for all programs that were imbalanced during the 1972-75 period.)

Distribution of Students by Sex

Just as parent choice could affect the ethnic or socioeconomic distribution of students, it could also affect the distribution of boys and girls among programs, particularly if some programs were oriented toward subject matters traditionally associated with one of the sexes. The data, however, do not suggest that sex imbalance was

[1] Analyses of SES and sex distribution were done only for the first three years of the demonstration.

Table D.9

DEGREE OF SES IMBALANCE BY YEAR FOR ALL PROGRAMS THAT WERE IMBALANCED AT ANY TIME DURING THE 1972-75 PERIOD

High-SES Programs	1972-1973	1973-1974	1974-1975
McCollam Continuous/Nongraded	2.0	7.5	16.2
McCollam Enrichment	16.8	33.6	48.9
Pala Creative Arts	17.8	19.1	16.1
Pala Fine Arts	16.4	20.9	22.9
Path Math/Science	12.8	22.4	14.7
Pala Three Rs	24.5	34.8	28.9
Low-SES Programs			
Arbuckle Introduction to Life	--	14.1	17.7
Arbuckle Learn by Doing	--	13.2	19.0
Arbuckle Learning for Life	--	20.8	28.7
Arbuckle Traditional/Action	--	25.8	27.4
Dorsa Communication Plus	--	12.1	29.2
Dorsa World of Fine Arts	--	13.6	22.8
Hubbard Adventures in Learning	--	9.1	15.4
Mathson Communications & Cultures	--	--	19.8
Mayfair Bilingual/Bicultural	--	13.0	18.1
Mayfair Kindergarten Plus First	--	20.4	14.4
Mayfair Maximum Exposure	--	17.0	--
Miller Multi-Cultural Arts	19.1	1.5	2.5
Number of Imbalanced Programs	5	9	14
Number of Programs	22	45	51

SOURCE: DMC Student Files, June 1973, June 1974, December 1974.

NOTE: Data from voucher schools only were used in computing the norms for SES imbalance, and the SES composition of the voucher school group changed sharply from 1972-73 to 1973-74. Thus the imbalance figures for these two years are not directly comparable.

a serious problem among the minischool programs offered in Alum Rock. The percentage of students who would have had to be exchanged to equalized the distribution of sexes in each minischool was 4.1 in Year 1, 3.3 in Year 2, and 4.0 in Year 3. The proportion of "sex-imbalanced" programs (those more than 15 percent from the norm) was 5 percent in Year 1, 2 percent in Year 2, and 8 percent in Year 3.

In all the sex-imbalanced schools, the majority of students were boys. One minischool (Pala "Math-Science") had a disproportionate enrollment of boys in each of the first three years of the demonstration. Only 22 percent of the students in the Math-Science program were female during the first year of the demonstration, only 31 percent were female in the second year, and only 33 percent were female in the third year, compared to a 48 to 49 percent figure for all the voucher schools. Three other minischools (Mayfair "Kindergarten Plus First," McCollam "Enrichment," and Meyer "School 2000") showed unusually large enrollments of boys in October 1974, the third year of the demonstration. Each of these programs was only 32 or 33 percent female in October 1974.[1]

Summary

The primary purpose of this appendix has been to measure and describe changes in the racial or ethnic distribution of students in Alum Rock during the five years of the so-called voucher demonstration. The central concept is that of ethnic "balance" or "imbalance," defined empirically in terms of deviations from an identical ethnic distribution in each school or program in the district. Racial or ethnic imbalance is not necessarily the same thing as racial or ethnic segregation, either empirically or legally. However, there is widespread agreement that it would have been an argument against parent choice if substantial imbalance in the racial or ethnic

[1] In no minischool was the distribution of students by sex as uneven as for "special education" classes, which ranged between 72 and 80 percent male during the first three years of demonstration.

distribution of students among schools or programs had developed during the Alum Rock demonstration.

During the period from 1970-71 to 1976-77, Alum Rock's enrollment of Spanish-surnamed students increased from 47 to 57 percent and the district's enrollment of black students varied from 10 to 12 percent. Thus the district as a whole was becoming increasingly a "minority" district, a long-term trend over which the district had relatively little control.

While the proportion of minority students in the district was slowly but steadily climbing, the degree of *imbalance* in the ethnic distribution of students among schools remained relatively low during the period from 1970-71 to 1976-77. That is, the proportions of students from each ethnic group at each school tended to be near the district average. The degree of ethnic imbalance *among programs* tended to be only slightly higher than the degree of imbalance among schools. However, the degree of imbalance among programs did increase slightly as the number of programs increased.

A few schools and programs were exceptions to the general finding of little ethnic imbalance in Alum Rock. Of special interest were programs with a strong bilingual or multicultural emphasis, in which the ideal of special programs for students not fluent in English seemed to be in conflict with the district's goal of ethnic balance in each minischool.

Student distributions among minischool programs by sex and by eligibility for compensatory vouchers (a rough indicator of low socioeconomic status) were also examined. The magnitude of "SES imbalance" among programs was slightly less than the magnitude of ethnic imbalance during the first three years of the demonstration. Ethnically imbalanced programs were not necessarily SES imbalanced, and vice versa. The magnitude of sex imbalance among programs was quite small, with a few programs tending to attract an unusually large proportion of boys. Statistics on SES imbalance and sex imbalance should be interpreted in light of the fact that there has not yet been much debate nor has there developed any public consensus concerning the desirability or undesirability of a trend toward imbalance in any student characteristic other than ethnicity.

BIBLIOGRAPHY

Abelson, R. P., E. Aronson, W. McGuire, T. M. Newcomb, M. J. Rosenberg, and P. H. Tannenbaum (eds.), *Theories of Cognitive Consistency: A Sourcebook*, Rand McNally and Co., Chicago, 1968.

Anderson, J. E., *The Young Child in the Home: A Survey of Three Thousand American Families*, Appleton-Century, New York, 1936.

Areen, Judith, and Christopher Jencks, "Education Vouchers: A Proposal for Diversity and Choice," *Teachers College Record*, Vol. 72, 1971, pp. 327-335.

Barker, P., T. K. Bikson, and J. Kimbrough, *Alternatives in American Education*, Vol. V: *Classroom*, The Rand Corporation, R-2170/5-NIE, April 1978.

Barry, H. H., I. L. Child, and M. K. Bacon, "Relations of Child Training to Subsistence Economy," *American Anthropologist*, Vol. 61, 1959, pp. 51-63.

Barry, H. H., M. K. Bacon, and I. L. Child, "A Cross-Cultural Survey of Some Sex Differences in Socialization," *Journal of Abnormal and Social Psychology*, Vol. 55, 1957, pp. 327-332.

Barth, [redacted] S., *Open Education and the American School*, Agathon Press, New York, 1972.

Bass, G., *Alternatives in American Education*, Vol. I, *District Policies and the Implementation of Change*, The Rand Corporation, R-2170/1-NIE, April 1978.

Binderman, M. B., "The Failure of Freedom of Choice: Decision-making in a Southern Black Community," *Social Forces*, Vol. 50, 1972, pp. 487-498.

Blau, P. M., and O. D. Duncan, *The American Occupational Structure*, Wiley, New York, 1967.

Bracht, G. H., and G. V. Glass, "The External Validity of Experiments," *American Educational Research Journal*, Vol. 5, 1968, pp. 437-474.

Brehm, J. W., *Responses to Loss of Freedom: A Theory of Psychological Reactance*, General Learning Press, Morristown, N.J., 1972.

Bridge, R. Gary, *Nonresponse Bias in Mail Surveys: The Case of the Department of Defense Post-Service Survey*, The Rand Corporation, R-1501-ARPA, July 1974(a).

Bridge, R. G., "Parent Participation in School Innovations," *Teachers College Record*, Vol. 77, 1976, pp. 366-384.

Bridge, Gary, "Voucher Systems," *Alternatives for Delivering Public Services*, Westview Press, Denver, 1977.

Bridge, R. G., "Information Imperfections: The Achilles' Heel of Entitlement Plans," *School Review*, Vol. 86, 1978, pp. 504-529.

Bridge, Gary, Julie Blackman, and Martin Lopez-Morillas. *How Parents Choose Schools in Multiple Option Systems*, paper presented at the meetings of the American Educational Research Association, San Francisco, April 1976.

Bridge, Gary, Charles M. Judd, and Peter R. Moock, *The Determinants of Educational Outcomes: The Impact of Families, Peers, Teachers and Schools*, Ballinger, Cambridge, Massachusetts, 1979.

Bronfenbrenner, Urie, "Socialization and Social Class Through Time and Space," in E. E. Maccoby, T. M. Newcomb, and E. L. Hartley (eds.), *Readings in Social Psychology* (3d ed.), Holt, Rinehart, and Winston, New York, 1958, pp. 400-425.

Campbell, D. T., and J. Stanley, *Experimental and Quasi-Experimental Designs for Research*, Rand McNalley, Chicago, Illinois, 1966.

Cartwright, D., and A. F. Zander (eds.), *Group Dynamics: Research and Theory* (3d ed.), Harper and Row, New York, 1968.

Center for the Study of Public Policy, *Education Vouchers: A Report on Financing Elementary Education by Grants to Parents*, Cambridge, Massachusetts, December 1970.

Coleman, J. S., "Toward Open Schools," *Public Interest*, No. 9, Fall 1967, pp. 20-27.

Coleman, James, "Introduction: Choice in American Education," *Parents, Teachers, and Children: Prospects for Choice in American Education*, Institute for Contemporary Studies, San Francisco, 1977, pp. 1-12.

Collins, B. E., and B. H. Raven, "Group Structure: Attraction, Coalitions, Communication, and Power," in G. Lindzey and E. Aronson (eds.), *The Handbook of Social Psychology* (2d ed.). Vol. 4, Addison-Wesley Publishing Co., Reading, Massachusetts, 1969, pp. 102-204.

Coons, John E., and Stephen D. Sugarman, *Family Choice in Education: A Model State System for Vouchers*, Institute for Governmental Studies, University of California at Berkeley, 1971.

Coons, John E., and Stephen D. Sugarman, "A Case for Choice," in James S. Coleman et al., *Parents, Teachers, and Children: Prospects for Choice in American Education*, Institute for Contemporary Studies, San Francisco, 1977.

Crawford, J., "Family Characteristics and Choice of Alternative Public Schools," unpublished Ed.D. dissertation, Teachers College, Columbia University, 1977.

Cronbach, L. J., and R. E. Snow, *Aptitudes and Instructional Methods: A Handbook for Research on Interactions*, Irvington Publishers, New York, 1979.

Duncan, O. D., D. L. Featherman, and Beverly Duncan, *Socioeconomic Background and Achievement*, Seminar Press, New York, 1972.

Elder, G. H., Jr., "Achievement Motivation and Intelligence in Occupational Mobility: A Longitudinal Analysis," *Sociometry*, No. 31, 1968, pp. 327-354.

Fantini, M. F., "Participation, Decentralization, Community Control and Quality Education," *Teachers College Record*, No. 71, 1969.

Fantini, M. F., "Educational Agenda for the 1970's and Beyond: Public Schools of Choice," *Social Policy*, Vol. 1, 1970, pp. 25-31.

Fantini, M. F., *The Reform of Urban Schools*, National Education Association, Washington, D.C., 1971.

Festinger, L., "A Theory of Social Comparison Processes," *Human Relations*, Vol. 7, 1954, pp. 117-140.

Flannery, J., "School Desegregation Law: Recent Developments," *Integrated Education*, May-June 1972, pp. 11-19.

Friedman, M., *Capitalism and Freedom*, University of Chicago Press, Chicago, 1962.

Friedman, M., "The Voucher Idea," *New York Times Magazine*, September 23, 1973.

Gallup, G. H., *Sixth Annual Gallup Poll of Public Attitudes Toward Education*, Vol. 56, 1974, pp. 20-32.

Glass, G. V., "Open Discussion of Dr. Messick's Paper," in M. C. Wittrock and D. C. Wiley (eds.), *The Evaluation of Instruction: Issues and Problems*, Holt, Rinehart, and Winston, New York, 1970, p. 210.

Guthrie, J. W., *New Models for American Education*, Prentice-Hall, Englewood Cliffs, New Jersey, 1971.

Hare, Paul, *Handbook of Small Group Research*, Free Press, New York, 1976.

Harman, Harry H., *Modern Factor Analysis* (2d ed.), University of Chicago Press, Chicago, 1967.

Howard, J. A., *Consumer Behavior: Applications of Theory*, McGraw-Hill, New York, 1977.

Hunt, D. E., *Matching Models in Education*, The Ontario Institute for Education, Monograph Series 10, Toronto, 1971.

Hunt, D. E., and E. V. Sullivan, *Between Psychology and Education*, Dryden, Hinsdale, Illinois, 1974.

Hunt, D. E., "Person-Environment Interactions: A Challenge Found Wanting Before It was Tried," *Review of Educational Research*, Vol. 45, 1975, pp. 209-230.

Jencks, C., "Is the Public School Obsolete?" *Public Interest*, 1966, pp. 14-27.

Jencks, Christopher, "Private Schools for Black Children," *The New York Times Magazine*, November 3, 1968.

Jencks, C., "Giving Parents Money for Schooling: Education Vouchers," *Phi Delta Kappan*, September 1970, pp. 49-52.

Jencks, C., "Education Information: Part 22," testimony before the Senate Select Committee on Equal Educational Opportunity, 92d Congress, December 1-3, 1971.

Jencks, C. S., M. Smith, H. Aclana, M. J. Bane, D. K. Cohen, H. Gintis, B. Heyns, and S. Michelson, *Inequality: A Reassessment of the Effect of Family and Schooling in America*, Basic Books, New York, 1972.

Jerdee, Thomas, and Benson Rosen, *Parents' Evaluations of Schools: An Approach to Estimating Consumer Preference in Terms of Monetary Values*, paper presented at the meetings of the American Psychological Association, Consumer Psychology Division (No. 23), Montreal, August 1973.

Joe, V. C., "Review of the Internal-External Control Construct as a Personality Variable," *Psychological Reports*, Vol. 28, 1971, pp. 619-640.

Kiesler, C. A., and Sara Kiesler, *Conformity*, Addison-Wesley, Reading, Massachusetts, 1969.

Klees, Steven, *The Role of Information in the Market for Educational Services*, Occasional Papers on Economics and the Politics of Education, No. 74-1, School of Education, Stanford University, 1974.

Kohn, M. L., M. K. Bacon, and I. L. Child, "A Cross-Cultural Survey of Some Sex Differences in Socialization," *Journal of Abnormal and Social Psychology*, Vol. 55, 1957.

Kohn, M. L., *Class and Conformity: A Study in Values*, Irwin-Dorsey, Homewood, Illinois, 1969.

Kohn, Melvin L., "Social Class and Parental Values: Another Confirmation of the Relationship," *American Sociological Review*, Vol. 41, 1976, pp. 538-544.

Krech, David, R. S. Crutchfield, and Egerton Ballachey, *Individual in Society*, McGraw-Hill, New York, 1962.

Lefcourt, H. M., *Locus of Control: Current Trends in Theory and Research*, Lawrence Erlbaum Associates, Hillsdale, N.J., 1976.

Lekachman, Robert, "Vouchers and Public Education," *The New Leader*, July 12, 1971, pp. 9-14.

Levin, H. M., *Community Control of Schools*, The Brookings Institute, Washington, D.C., 1970.

Levin, H. M., *Educational Vouchers and Educational Equality*, Occasional Papers on Economics and the Politics of Education, No. 74-2, School of Education, Stanford University, 1974.

Levinson, Eliott, *The Alum Rock Education Voucher Demonstration: Three Years of Implementation*, paper presented at the meetings of the American Educational Research Association, San Francisco, April 1976.

Litwak, Eugene, and H. J. Meyer, *School, Family, and Neighborhood: The Theory and Practice of School-Community Relations*, Columbia University Press, New York, 1974.

Mann, Dale, "Public Understanding and Education Decision-Making," *Educational Administration*, No. 10, 1974, pp. 1-18.

Maxwell, A. E., *Analysing Qualitative Data*, Methuen and Co., London (1961).

McClendon, M. J., "The Occupational Status Attainment Processes of Males and Females," *American Sociological Review*, No. 41, 1976, pp. 52-64.

Mecklenburger, J., and R. Hostrop (eds.), *Education Vouchers: From Theory to Alum Rock*, ETC Publications, Homewood, Illinois, 1972.

National School Boards Association, *Alternative Schools*, Research Report 1976-3, Evanston, Illinois, 1976.

NIMH Bibliography, *Social Aspects of Alienation: An Annotated Bibliography*, by Lystad, M. H., National Institute of Mental Health, 5454 Wisconsin Ave., Chevy Chase, Maryland, 20015, 1968.

Overlan, S. F., "Do Vouchers Deserve at Least a Sporting Chance?" *American School Board Journal*, 1972, pp. 20-22.

Pellegrin, R. J., "Some Organizational Characteristics of Multi-Unit Schools," in J. V. Baldridge and J. E. Deal (eds.), *Managing Change In Educational Organizations*, McCutchan, Berkeley, 1975.

Pettigrew, Thomas F., "Social Evaluation Theory: Convergences and Applications," in David Levine (ed.), *Nebraska Symposium on Motivation*, University of Nebraska, Lincoln, 1967, pp. 241-311.

Porter, J. N., "Race, Socialization and Mobility in Educational and Early Occupational Attainment," *American Sociological Review*, No. 39, 1974, pp. 303-316.

The Rand Corporation, "Technical Analysis Plar for Evaluation of the OEO Elementary Education Voucher Demonstration: Technical Dissertation," submitted to the Office of Economic Opportunity, Contract B2C-5326, February 1972.

Rasmussen, R., *A Study of Alternatives in American Education*, Vol. III, *Teachers' Responses to Alternatives*, The Rand Corporation, R-2170/3-NIE, April 1978.

Raven, B. H., and J. Rietsma, "The Effect of Varied Clarity of Group Goal and Group Path upon the Individual and His Relation to His Group," *Human Relations*, Vol. 10, 1957, pp. 29-44.

Reimer, E., *School is Dead: Alternatives in Education*, Doubleday-Anchor, New York, 1971.

Rokeach, M., *Value Survey*, Halgren Tests, Sunnyvale, California, 1967.

Rokeach, M., *The Nature of Human Values*, Free Press, New York, 1973.

Rotter, Julian B., "Generalized Expectations for Internal vs. External Control of Reinforcements," *Psychological Monographs*, Vol. 80, Whole No. 609, 1966.

Rotter, Julian B., "Some Problems and Misconceptions Related to the Construct of Internal versus External Control of Reinforcement, *Journal of Clinical and Consulting Psychology*, Vol. 43, 1975, pp. 56-67.

Seeman, Melvin, "On the Meaning of Alienation," *American Sociological Review*, Vol. 24, 1959, pp. 783-791.

Seeman, Melvin, "Alienation and Knowledge-Seeking: A Note on Attitude and Action," *Social Problems*, Vol. 20, No. 1, 1972, pp. 3-17.

Sewell, W. H., A. O. Haller and Alejandro Portes, "The Educational and Early Occupational Attainment Process," *American Sociological Review*, Vol. 34, 1969, pp. 82-92.

Sewell, W. H., A. O. Haller, and G. W. Ohlendorf, "The Educational and Early Occupational Status Attainment Process: Replication and Revision," *American Sociological Review*, Vol. 35, 1970, pp. 1014-1027.

Siegel, S., *Nonparametric Statistics*, McGraw-Hill, New York, 1956.

Simon, H. A., "A Behavioral Model of Rational Choice," *Quarterly Journal of Economics*, Vol. 69, 1955, pp. 99-118.

Simon, H. A., *Models of Man*, John Wiley and Sons, New York, 1957.

Simon, H. A., and A. C. Stedry, "Psychology and Economics," in G. Lindzey and E. Aronson (eds.), *Handbook of Social Psychology* (2d ed.), Vol. 5, Addison-Wesley, Reading, Massachusetts, 1969, pp. 269-314.

Social Indicators 1974, U.S. Government Printing Office, Washington, D.C., 1974.

Stigler, G., "Information in the Labor Market," *Journal of Political Economy*, Vol. 70, No. 5, 1962.

Stigler, G., "The Economics of Information," *Journal of Political Economy*, Vol. 69, 1971, pp. 213-225.

Taeuber, K., and A. Taeuber, *Negroes in Cities*, Aldine Press, Chicago, 1965.

Terrell, H. W., *A Comparison of the Characteristics of Elementary School Students who Chose to Participate in a Selected Alternative Schools Program*, unpublished doctoral dissertation, University of Minnesota, 1974.

Thomas, M., *Alternatives in American Education*, Vol. II, *The Role of the Principal*, The Rand Corporation, R-2170/2-NIE, April 1978.

Throop, W. F., and A. P. MacDonald, "Internal-External Control: A Bibliography," *Psychological Reports*, Vol. 28, 1971, pp. 175-190.

Weiler, D. M., et al., *A Public School Voucher Demonstration: The First Year at Alum Rock*, The Rand Corporation, R-1495-NIE, June 1974.

Weinstein, E. A., and P. N. Geisel, "Family Decisionmaking Over Desegregation," *Sociometry*, Vol. 25, 1962, pp. 21-29.

Wilson, J. Q., "Planning and Politics: Citizen Participation in Urban Renewal," in H.B.C. Spiegel (ed.), *Citizen Participation in Urban Development*, NTL Institute for Applied Behavioral Science, Washington, D.C., 1968, pp. 43-60.

Witkin, W. A., G. A. Moore, D. R. Goodenough, and P. W. Cox, "Field-Dependent and Field-Independent Cognitive Styles and Their Educational Implications, *Review of Educational Research*, Vol. 47, 1977, pp. 1-64.

Wortman, P. M., and R. G. St. Pierre, "The Educational Voucher Demonstration: A Secondary Analysis," *Education and Society*, 1977.

Wright, James D., and Sonia R. Wright, "Social Class and Parental Values for Children: A Partial Replication and Extension of the Kohn Thesis," *American Sociological Review*, Vol. 41, 1976, pp. 527-537.

Zoloth, B., *An Investigation of Alternative Measures of School Segregation*, Institute for Research on Poverty, University of Wisconsin, Madison, 1974.

WORKS CONSULTED BUT NOT CITED IN TEXT

Averch, H., S. J. Carroll, T. S. Donaldson, H. J. Kiesling, and J. A. Pincus, *How Effective is Schooling? A Critical Review of Synthesis of Research Findings*, The Rand Corporation, R-956-PCSF/RC, March 1972.

Barr, Robert D., "The Growth of Alternative Public Schools," in *International Consortium for Options in Public Education, 1975 Report*, Center for Options in Public Education, Indiana University, Bloomington, Indiana, March 4, 1975.

Bowles, Samuel, and Herbert Gintis, "I.Q. and the U.S. Class Structure," *Social Policy*, 1972, pp. 65-96.

Bridge, Gary, *Parental Decisionmaking in an Educational Voucher System*, paper presented at the meetings of the American Educational Research Association, Chicago, April 1974(b).

Cohen, J., "Multiple Regression as a General Data Analytic System," *Psychological Bulletin*, Vol. 70, 1968, pp. 426-443.

Epstein, J. L., and J. M. McPartlan, *The Effects of Open School Organization on Student Outcomes*, No. 194, Center for Social Organization of Schools, The Johns Hopkins University, 1975.

Goldberg, M. L., A. H. Passow, and J. Justman, *The Effects of Ability Grouping*, Teachers College Press, New York, 1966.

Guthrie, J. W., "Public Control of Schools" Can We Get It Back?" *Public Affairs Report*, Vol. 15, 1974, pp. 1-5.

Kerlinger, F. N., and E. J. Pedhazur, *Multiple Regression in Behavioral Research*, Holt, Rinehart, and Winston, New York, 1973.

National Educational Association, *Ability Grouping*, NEA Research Division, Washington, D.C., 1968.