DOCUMENT RESUME

ED 093 092 EA 006 291

AUTHOR Weiler, Daniel; And Others
TITLE A Public School Voucher Demonstration: The First Year at Alum Rock. Summary and Conclusions.
INSTITUTION Rand Corp., Santa Monica, Calif.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
REPORT NO R-1495/1-NIE
PUB DATE Jun 74
NOTE 38p.; A related document is EA 006 290

EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS Decentralization; *Educational Experiments; *Education Vouchers; Federal Aid; *Federal Programs; Middle Schools; Models; Parent Attitudes; *Parent Role; Parent School Relationship; *Program Evaluation
IDENTIFIERS *Alum Rock; Mini Schools

ABSTRACT

Because it included only public schools and guaranteed both school survival and staff employment rights, the first year of the Alum Rock demonstration (1972-73), as sponsored by the Office of Economic Opportunity, was not a test of vouchers as defined in theory. The demonstration was known, therefore, as a "transition" voucher model, which would look to the inclusion of private schools in the future. The participating schools created a limited amount of educational diversity by setting up special instructional programs known as mini-schools; but, as of the second year, there are still no private schools in the demonstration. The demonstration has shown that Federal agencies can offer incentives for schools to follow innovative policies, but these agencies cannot control the shape of future innovations in American public schools. That shape is traditionally determined by local priorities and interests. With Federal support, Alum Rock has shown that it is possible to combine decentralization of authority down to the school level with parental freedom to choose children's school programs. The major discernible effect of the first year of the demonstration has been on the roles of central district staff, principals, and teachers. Each voucher school has gained new autonomy, and teachers are now working in new cooperative arrangements and with new discretionary power over resources. (Author/JF)

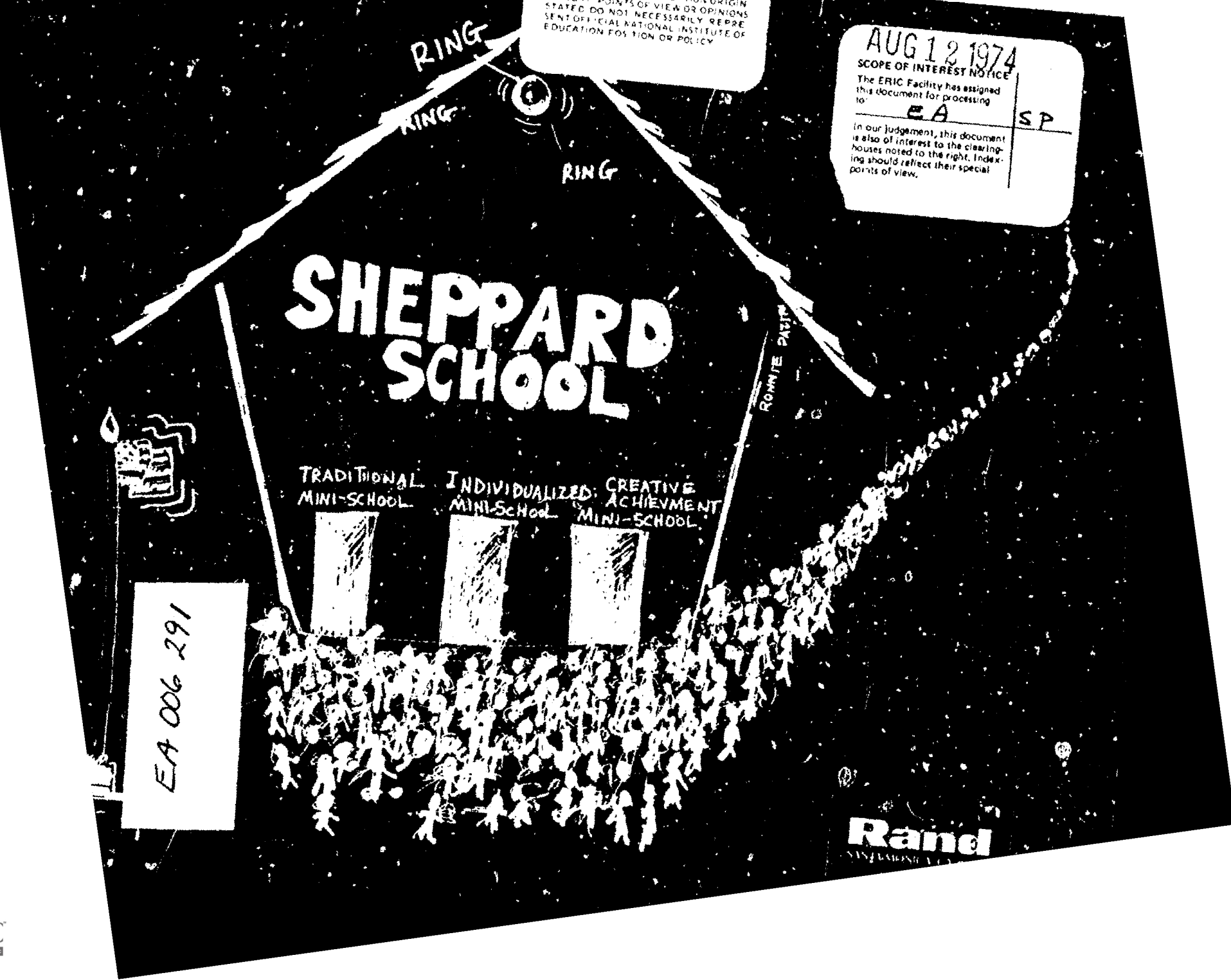
A PUBLIC SCHOOL VOUCHER DEMONSTRATION: THE FIRST YEAR AT ALUM ROCK

SUMMARY AND CONCLUSIONS

PREPARED FOR THE NATIONAL INSTITUTE OF EDUCATION

DANIEL WEILER
STUDY DIRECTOR

R-1495/1-NIE
JUNE 1974



Rand

A PUBLIC SCHOOL VOUCHER DEMONSTRATION: THE FIRST YEAR AT ALUM ROCK SUMMARY AND CONCLUSIONS

PREPARED FOR THE NATIONAL INSTITUTE OF EDUCATION

DANIEL WEILER, STUDY DIRECTOR

WITH THE COLLABORATION OF

PIERCE BARKER
GAIL V. BASS
THEODORE S. DONALDSON
SUE A. HAGGART
DOROTHY JOSEPH
KONRAD KELLEN
ROBERT E. KLITGAARD
ELIOT LEVINSON
MARJORIE L. RAPP
ROGER L. RASMUSSEN
ROBERT T. RILEY
MARTA SAMULON
STEPHEN S. WEINER
JOANNE M. WUCHITECH

R-1495/1-NIE
JUNE 1974

Rand
SANTA MONICA, CA. 90406

PREFACE

This is one of four Rand reports that describe and analyze the workings of an education voucher demonstration during its first year (academic year 1972-73). The present report briefly summarizes and presents the conclusions of Rand researchers' findings. The other reports provide further details on the demonstration and its results; they are:

R-1495-NIE, *A Public School Voucher Demonstration: The First Year at Alum Rock*, June 1974.

R-1495/2-NIE, *A Public School Voucher Demonstration: The First Year at Alum Rock, Technical Appendix*, June 1974.

R-1495/3-NIE, *A Public School Voucher Demonstration: The First Year at Alum Rock, Documentary Appendix*, June 1974.

All four volumes of the study were prepared pursuant to NIE Contract B2C-5326.

The Education Voucher Demonstration is a large-scale educational and social intervention that began in the Alum Rock Union Elementary School District, San Jose, California, in September 1972. First funded by the Office of Economic Opportunity, it is now sponsored by the National Institute of Education.

Since April 1972, Rand has been collecting and analyzing data related to the demonstration. Our work documents events and outcomes in the demonstration; analyzes social, political, economic, and educational impacts of the demonstration; and identifies implications of the voucher concept for federal, state, and local education policies.

The report should be read with three caveats in mind:

- First, a number of voucher models have been proposed and debated. The one OEO originally considered included both public and private schools. The model currently being tested in Alum Rock differs from that plan in two major respects: only public schools participate, and the demonstration guarantees continued operation of schools and employment of teachers, regardless of "market" demand. These modifications raise serious questions as to whether the Alum Rock demonstration is a voucher system at all. It could be described as a system of open enrollment combined with decentralization of administration and instructional policy. However, the federal government, the media, and the Alum Rock district all describe the project as a "voucher" demonstration, and we have followed this usage.

  Whether the Alum Rock demonstration is a voucher system or not, it may be an important exemplar for the future of public schools. Within the framework of a public school system, it is designed to provide greater autonomy and management responsibility in the operation of individual schools; greater initiative and discretion to teachers; and diverse choices for parents and students in the form and content of schooling.

- Second, this report deals only with the first year of a multiyear demonstration. Trends noted initially may speed up, slow down, or even be reversed as the demonstration continues, and significant developments may yet be in the making. Rand is still collecting data on the demonstration and conducting analyses of first- and second-year data. This report itself will be the subject of debate and

reanalysis. Therefore, judgments concerning the ultimate significance of the demonstration are as yet neither justified nor intended.

- Third, this report should not be interpreted as concluding that the Alum Rock model "works" or "does not work." The consequences of such a complex intervention are likely to defy such simple judgments. Also, conclusions as to whether the Alum Rock model is a useful exemplar for other districts depend upon the values which various constituencies in American education place upon the demonstration's diverse objectives and outcomes.

The Alum Rock demonstration may have important implications for the effectiveness, creativity, and cost of public schools. It would be a mistake, however, to attempt to use this report as evidence for or against voucher systems in general, or other specific voucher models. Not only is the Alum Rock model unique, but the district itself is in many ways different from other districts. Therefore, judgments about the relevance of our findings to other districts must be made with both the characteristics of the model and of the Alum Rock district in mind. It is also possible that so-called "Hawthorne" effects influenced people's performance and hence the course of the Alum Rock demonstration. Participants were well aware that many eyes were on Alum Rock as the only "voucher" system in the nation, and the resulting national attention and publicity may have influenced their behavior.

ABSTRACT

WHAT KIND OF DEMONSTRATION TOOK PLACE?

In an education voucher system, parents are given cash vouchers that they are free to spend to enroll their children in public or private schools of their choice. The vouchers are redeemable in public funds. Because vouchers follow the students, and because they constitute the schools' most important source of funds, schools must compete for students in the academic marketplace. The ones that attract many children can expand; others may be forced to reduce their operations or even go out of business. Voucher proponents claim that this process of selection and competition will enable parents to choose the schooling best suited for their children, will motivate the schools to respond to the demand for diversity, and will otherwise improve the quality of education.

The first year of the Alum Rock demonstration (1972-73), as sponsored by the Office of Economic Opportunity, was not a test of vouchers as defined in theory, because it included only public schools, and both school survival and staff employment rights were guaranteed. It was therefore known as a "transition" voucher model which was to look toward the inclusion of private schools in the future. The participating schools created a limited amount of educational diversity by setting up special instructional programs known as "mini-schools"; but as of the second year there are still no private schools in the demonstration, and no demonstration schools will be closed down nor staff terminated because of lack of demand for a particular program (although some teachers have transferred out of programs where enrollment declined).

If the demonstration did not test the effectiveness of vouchers, what did it achieve and why should it interest educators and the general public? One prominent educator has commented wryly that it demonstrated the Alum Rock Superintendent's deftness in garnering federal funds (more than $4.5 million in the first two years) to carry out a program of school decentralization he was committed to anyway. But there is another way of looking at it that seems both more useful and more comprehensive.

It is clear that federal agencies can offer incentives for schools to follow innovative policies, but they cannot closely control the shape the innovations will take in American public schools, with their long tradition of local autonomy. That shape is largely determined by local priorities and interests. The first year of the demonstration in Alum Rock produced results that are consistent with this viewpoint. With federal support, Alum Rock showed that it was possible to combine decentralization of authority down to the school level with parental freedom to choose their children's school programs. These are important elements in a voucher system, and they were achieved without crippling strife among the parties involved. (Teachers did not rebel against administrators, for example, nor parents against the school system.) This accomplishment was perhaps easier in Alum Rock than it might be elsewhere because the district had already taken some steps to decentralize decisionmaking to the school level. Those elements of the voucher model that the district was less interested in—private schooling, economic competition, a detailed flow of evaluative information to parents—were either not implemented or received lower priority than OEO had sought.

ESTABLISHING THE VOUCHER DEMONSTRATION IN ALUM ROCK

The demonstration developed, then, as a sort of halfway house between "business as usual" and a voucher model. It seems to have done so because the two major parties involved, OEO and the school district, had disparate aims that called for compromise. The school district, in a low-income area of San Jose, California, was hard-pressed for funds and wanted further support in decentralizing authority from the central district administration to the local school level. OEO was bent on finding a school district that would agree to test vouchers. From the school district's viewpoint, various elements of the voucher model ranged from mildly desirable at best to completely unacceptable at worst. From the OEO viewpoint, vouchers looked like a way to make schools more responsive to the needs of poor children and their parents, but there was no way to test that view unless some school system would try it out.

In 1972, it appeared that, of the handful of districts that had shown some interest in vouchers, only Alum Rock combined innovative leadership, staff and community acceptance, and financial need to the point where some form of voucher test could be initiated. Many, if not most, of America's educators are opposed to vouchers because they introduce economic competition into local school systems, where such competition is virtually unknown and income has little connection with client satisfaction. Vouchers are also suspect because they could conceivably foreshadow de facto erosion of teacher tenure, the emergence of schools more segregated by race and social class than they are now, a breakdown of the Constitutional separation of church and state, and, in some educators' eyes, the potential destruction of the shared democratic values fostered by American public education.

OEO funded several "feasibility" studies in different school districts during 1970 and 1971, with the hope that they would eventually lead to local voucher demonstrations. Each study, except the one in Alum Rock, ended with a local decision against vouchers. After two years of effort, it became clear that for OEO it was Alum Rock or nothing. The school district's problem was how to accommodate OEO's desire for a voucher system without alienating its own constituencies—parents, principals, teachers, and central district staff. Parents wanted neighborhood schools. Teachers wanted the preservation of tenure and no "unprofessional" competition. Principals and central staff did not want to get involved in a popularity contest among public schools, let alone compete with private schools. Nobody in the school system wanted economic competition to dominate educators' behavior. And many Alum Rock parents, teachers, and principals were not yet ready to accept the voucher idea.

A decision to exclude private and parochial schools, and to guarantee continued employment for the professional staff, defused much of the local opposition to the demonstration. So did the guarantee of "squatters' rights" to all parents who might want to continue sending their children to the neighborhood school.

Even with these compromises and modifications, only 6 of the district's 24 schools decided to take a chance on the demonstration. With so few schools in the demonstration, all similar in curriculum and method, OEO and the district hit upon a way to provide more educational diversity, by having each voucher school offer several programs to choose from. Small groups of teachers at each school joined together to devise these new programs—or mini-schools—22 of which emerged in the first year. The array of mini-schools was at least roughly the same at each school; diversity and competition were thus largely confined within the walls of the neighborhood school.

WHAT HAS THE FIRST YEAR OF THE DEMONSTRATION DEMONSTRATED?

The following are the major findings thus far:

1. Given the incentive of federal funding (10 percent of the district budget in the first year and 17 percent in the second), Alum Rock was able to decentralize decisionmaking to the school level and offer parents a choice among instructional programs, without stirring up disruptive conflicts within the school system or the community. Alum Rock is not highly organized politically, however, and as of 1972-73 there were no strongly supported interest groups that could effectively express dissent or exert pressure on the school system and OEO.

2. The real changes in Alum Rock may flow from the creation of mini-schools in each school. The mini-schools offer what parents perceive to be a genuine choice at the neighborhood school level. They also have changed the distribution of power within the school system. The small groups of teachers (from two to twelve per mini-school) who operate them now have considerable decisionmaking power over curriculum, admission rules, use of compensatory voucher funds, and school-parent relations. Consequently, they have also acquired considerable leverage in their dealings with principals and with district central staff. As a side effect, the demonstration has reduced competition between schools by introducing the mini-school as a competitive unit.

3. Because mini-schools are small (typically, fewer than two hundred students), and have small and cohesive faculties, certain time-honored values of the American school system are being reintroduced: children and teachers work together over a period of years, and older and younger children are grouped together. The mini-schools may be engendering something more closely approaching a community spirit and a sense of continuity than is possible in most urban school settings.

   It is by no means sure that the district has developed any important institutional reforms that will outlast the federal grant. It remains to be seen whether the voucher system grows any roots as a result of increasing parental awareness and the growth of teacher preference for their new autonomy.

4. On the whole, parents and teachers, when surveyed, are reasonably well satisfied with the demonstration, and parents seemed more satisfied during the second year than during the first. Voucher teachers were more satisfied at the end of the first year than at the beginning. Not too much should be read into parent reaction, however, because most parents said they were well satisfied with the schools before the demonstration in any case. Teacher reactions may be more important, and the increase in their support for the demonstration over time could lead to long-run changes in the district's approach to schooling. During the first year, teachers said they preferred the increased autonomy they enjoyed under the voucher system, and voucher school principals felt the same way. The fact that seven more schools joined the demonstration in 1973-74 is additional evidence of acceptance by school staff and the community. On the other hand, many teachers objected to the additional workload and the competitive atmosphere that they believed the demonstration engendered.

5. During the first year of the demonstration, Rand's data on student outcomes, as measured by achievement test scores, attendance rates, and student attitudes, were inconclusive or absent. Very few educational interventions produce signifi-

cant short-run changes in achievement test scores, and the first year at Alum Rock was probably no exception. However, our evidence on this is limited and somewhat contradictory. Results from one set of tests (MAT) seem to show that in 1972-73 voucher students gained about as much as Title 1 students did that year. However, results from the California State Testing program indicate that voucher students did somewhat worse compared with their own past performance and that of nonvoucher students, including those in Title I schools, in 1972-73. Our opinion is that voucher students have not been exposed to a relatively normal learning routine for long enough to warrant even tentative conclusions about the effects of a limited voucher model on achievement. Unexcused absence rates were slightly lower in voucher schools than in nonvoucher schools before the demonstration, and stayed lower during the first year. No student interviews were conducted until the spring of 1974, so there is no direct evidence on changes in student attitudes during the first year.

6. The fears of voucher critics that parent choice would result in increasing segregation by race or social class were not borne out. Most children went to the same school they had attended the year before, and there was very little difference in race or class composition among the constituent mini-schools of each school, except that multicultural programs enrolled slightly larger percentages of Mexican-American students than might be expected by chance.

7. The demonstration created some diversity in instructional programs, and parents liked having these choices. There were 22 mini-schools in 6 schools the first year, and 45 mini-schools in 13 schools the second year; but these figures overstate the amount of diversity, because many programs were similar from school to school.

8. Any major organizational change brings discord, and the voucher demonstration was no exception. But none of the conflicts in the first year seriously jeopardized the demonstration. Several potential sources of conflict were visible during the first year: between teachers and principals over mini-school policies and control of funds; between school personnel (central staff, principals, teachers) and parent counselors over the flow of information to parents (the more parents know about mini-schools and their performance, the greater their potential influence over school policy); between OEO and school personnel over demonstration ground rules. These conflicts either remained low-key or were resolved quickly when they did flare up.

9. It remains to be seen, during the five-to-seven-year course of the demonstration, whether any long-run changes occur in student outcomes, school organization, participant satisfaction, or relations between citizens and their schools. Swift changes are unlikely. American education is a stable system of institutions, and major reforms are likely to come slowly, if at all. This first-year report must be taken for what it is—a description of a newborn educational program in its first year of life. The course of this program's development and the possibilities for healthy and independent growth are still uncertain.

ACKNOWLEDGMENTS

We wish to extend our appreciation to the parents, students, teachers, and administrative staff of the Alum Rock Union Elementary School District, without whose cooperation this study would have been impossible. They have been very generous with their time and patient with the many demands the study has made on them. Dr. William Jefferds, the Superintendent of Schools, was particularly generous in providing assistance and facilities for our data collection and research. Of course, Alum Rock staff cooperation with Rand's research does not necessarily imply any agreement with the findings of this report.

We also wish to thank those people in the federal government (originally in the Office of Economic Opportunity and later in the National Institute of Education) who have been responsible for the voucher demonstration and its analysis, and who have provided invaluable advice and assistance, especially Denis Doyle, Richard Holt, and David Mandel.

C. M. Leinwand Associates, the independent Data Management Contractor, and Field Research Corporation, Rand's survey subcontractor, played key roles in the collection of research data; this study would not have been possible in its present form without their contributions.

John Pincus, the manager of Rand's Education and Human Resources program, oversaw and helped guide the progress of the research. Several members of the Rand voucher study staff who did not participate in writing this report nonetheless made important contributions to the work. Ted Fairbrother, Patricia Gowen, and Carol Frost were responsible for data management and programming on the project; Margaret Thomas performed a variety of data collection and analysis tasks; Kay Hogue, Linda Prusoff, and Eve Savage have served the study as research assistants, and Mary Rudolph as librarian. Consultants Henry Acland, Gary Bridge, James Vanecko, and Gail Zellman conducted analyses of parent and teacher survey data. Bill Furry helped analyze the district's new budgeting and financial information systems. In addition, Phyllis Kantar, Peter Morrison, and Eric Roberts, of the Rand staff, have assisted the project in various ways.

Rand's internal technical review of an earlier draft of this report was performed by Garry Brewer and Paul Hammond. A number of other reviewers also read and commented upon earlier drafts: James Coleman of the University of Chicago, Robert Crain of The Johns Hopkins University, Alice Rivlin of the Brookings Institution, Richard Snow of Stanford University, and Harold Watts of the University of Wisconsin. These people provided many helpful suggestions, but are of course in no way responsible for the final product.

Numerous people within Rand lent their efforts to the actual production of this report. We are especially grateful to Francine Russell, who coordinated the typing and production efforts, and to the secretarial staff that assisted her. Will Harriss was chief editor on the report; Pat Bedrosian, Becky Goodman, Brownlee Haydon, and Roberta Schneider helped with the editing. Robert Duis, Ann Valsasina, Beverly Westlund, and many others in the Rand Publications Department also rendered valuable service.

We also thank Ronnie Patin, a student at Alum Rock's Sheppard Middle School, for the drawing that appears on the cover.

CONTENTS

I. INTRODUCTION

This volume briefly reviews the development of ideas about education vouchers in recent years; their translation into an operational model, initially under the aegis of the Office of Economic Opportunity; the negotiation of an agreement with Alum Rock for a federally subsidized voucher demonstration; the first year of the demonstration; and Rand's tasks in analyzing the demonstration. It also assesses the effects of the demonstration during the first year, subject to the caveats described in the Preface.

II. EDUCATION VOUCHERS AND THE ALUM ROCK MODEL

DEFINITION OF VOUCHERS

Voucher plans are designed to introduce the market mechanism into the educational system. Various voucher plans have been proposed by economists, starting with Adam Smith. Most contemporary plans, including such varied approaches as those advocated by Professor Milton Friedman and Professor Christopher Jencks, include four common features:

- Parents choose the schools their children will attend.
- In order to pay the schools of their choice, parents receive certificates—vouchers—from a governing agency, which redeems the vouchers against public funds upon receiving them from schools.
- Both public and private schools are eligible to enter and compete in the voucher marketplace.
- Schools survive only if they receive enough income to pay their expenses.

Voucher proponents argue that vouchers will overcome rigidities in the educational system brought about by the public schools' virtual monopoly of elementary and secondary education. They contend that the quality of schooling will improve because vouchers will promote educational innovation and diversity, parental interest in education, and school responsiveness to parent and student needs.

Opponents claim that vouchers could foster segregation by race and class, undermine the Constitutional separation of church and state, encourage hucksterism in the schools, increase the tax burden for public support of schooling, undermine existing systems of professional tenure for teachers and administrators, and destroy the shared democratic values fostered by the traditional system of public schools.

GENESIS OF THE ALUM ROCK DEMONSTRATION

In the late 1960s the federal Office of Economic Opportunity (OEO) began investigating vouchers as a way to improve the educational opportunities of poor families, and retained The Center for the Study of Public Policy (CSPP) of Cambridge, Massachusetts, to study the voucher concept. In March 1970, CSPP proposed and OEO agreed that a voucher demonstration should be tried and that a "regulated compensatory" voucher model would be most appropriate for testing. This model was to include:

- Public and private schools.
- A "basic voucher" equal in value to current per pupil spending in the public schools of the districts where vouchers were tested.
- An extra "compensatory" voucher for poor children that would give them more "purchasing power" in the educational marketplace.
- Limitation of school "tuition" to the local value of the basic voucher.
- A lottery system of admission for schools whose applications exceeded openings.
- Free transportation for children enrolled at schools distant from their homes.
- Rights of student transfer from one school to another at any time, with transfers

to be accompanied by prorated portions of voucher dollars, and with school revenue entirely dependent on enrollment.
- Establishment of an autonomous public agency, the Education Voucher Agency (EVA) to manage the demonstration, including fiscal arrangements and start-up activities, and allocating funds for providing information to parents. (The local board of education might or might not serve as the EVA.)
- No guarantee of survival for public or private schools, whether new or preexisting, unless voucher income covered expenses.

In 1971, on the basis of the CSPP report, OEO authorized voucher feasibility studies in four school districts. Three of them rejected the voucher model, for a variety of reasons: fears that parental choice could lead to racial segregation; reluctance to serve as guinea pigs for an untested model; general decline of support for OEO initiatives by organized leaders of poor people; opposition by teacher organizations; and absence of state legislation that would permit private school participation.

In Alum Rock these factors were finally not persuasive. The district, serving some 15,000 pupils in a predominantly Mexican-American area of San Jose, California, perceived a number of possible fiscal and organizational advantages. In particular, the Alum Rock Superintendent of schools saw a voucher demonstration as a means of advancing preexisting district policies of administrative decentralization and parent participation, while infusing substantial federal funds into the district.

The Alum Rock feasibility study did lead to considerable controversy within the district, but by January 1972, the school district and OEO agreed on a compromise "transition model" demonstration, which would receive federal support for five to seven years. The model had the following features:

- The demonstration would initially involve public schools only, with 6 of the district's 24 schools participating (participating schools are called voucher schools; other schools in the district are called nonvoucher schools). Some planning funds were provided, looking toward eventual development of new "community schools," which would be something like private schools.[1]
- Each participating school would offer two or more distinct program options ("mini-schools") to parents; children already attending a given school and their younger siblings were guaranteed the right to continue attending that school (so-called "squatters' rights").
- The district would provide the basic voucher from its current income and OEO would provide a compensatory voucher for each child who qualified for the federal free lunch program.
- Teachers' job tenure and seniority rights were guaranteed.
- The Alum Rock Board of Trustees (school board) and Superintendent were put in charge of the demonstration. An Education Voucher Advisory Committee (EVAC), composed of voucher school staff and parents, was established.
- The district contracted with a newly formed private organization, the Sequoia Institute, to establish a central voucher staff responsible for assisting in start-up, internal evaluation, and parent counseling.

The transition model as approved for Alum Rock was quite different from the regulated voucher model recommended to OEO by CSPP; and, as this report will explain, the model actually implemented during the first year was even more remote

[1] California state law as of 1972 did not authorize private school participation; the law was later amended, but the OEO-Alum Rock agreement was based on the assumption that "community schools" would be the greatest departure that existing legislation would permit.

from the CSPP version. In other words, what the Rand study examined during the first year was not a test of the CSPP model, or even of the transition model itself.

OEO granted the district $1,585,756 for the school year 1972-73. Table 1 and Fig. 1 show how these funds were spent.

Table 1

DISTRIBUTION OF ACTIVITIES SUPPORTED BY FEDERAL VOUCHER GRANTS, 1972-73

Category	Amount ($000)		Percent of Total Grant	
Central administration		433.4		27.3
Organization development training[a]		69.0		4.4
Indirect school-site support				
Administration	128.5		8.0	
Inservice teacher training	280.0		17.7	
Substitute teachers	58.8		3.7	
Transportation	11.0		0.7	
Total, indirect support		478.3		30.1
Direct school-site support				
Compensatory voucher	509.1		32.1	
Classroom space	15.0		0.9	
Total, direct support		524.1		33.0
Teacher salary guarantee		36.0		2.6
Central staff salary guarantee		30.0		1.8
Grants to new schools, community		15.0		0.9
Total, all categories		1,585.8		100.0

[a]Alum Rock employed the services of an organization development consultant, the Center for Human Resources and Organizational Development (HRC), to work with principals, teachers, and central staff involved in implementing the voucher demonstration. Organization development training is designed to facilitate organizational change, by improving interpersonal communication and group problem-solving skills, and encouraging participative decisionmaking.

ALUM ROCK DISTRICT AND COMMUNITY

The Alum Rock Union Elementary School District lies in the eastern section of San Jose, California. San Jose was a center for the Santa Clara Valley farming area before World War II. Its population grew very rapidly from 1945 until 1970, but has begun to level off since then.

Approximately half the school children in Alum Rock are Mexican-American, 40 percent are Anglo, and 10 percent are black. Most are from lower middle class or lower class families. The population is highly transient, with a 30 percent annual residential turnover. Most families live in single-family residences, and there is no pattern of ethnic or racial housing segregation (San Jose has the most desegregated housing pattern of any metropolitan area in the United States).

There is little effective political mobilization or focus for organized social change in the district. There are ethnic activist organizations, but they have been unable

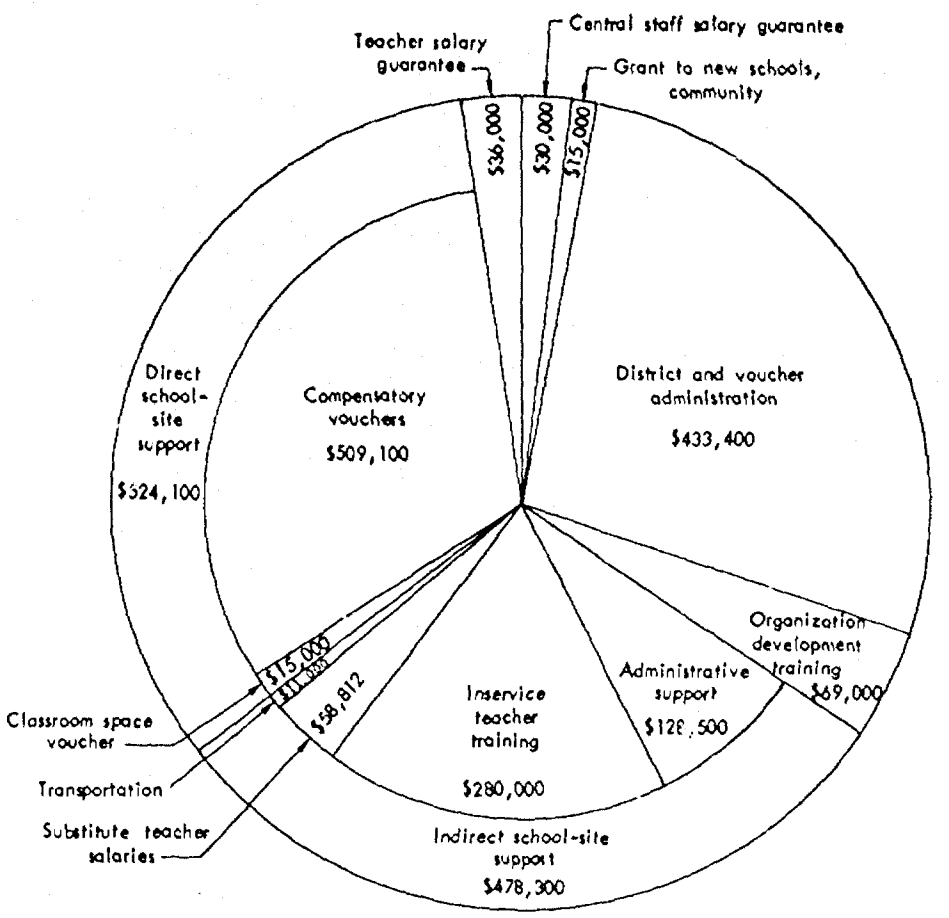


Fig. 1—Breakdown of voucher demonstration grant budget by area of support, 1972-73 school year

to elect candidates to the school board. Voter turnout at school elections is light, ranging from 10 to 20 percent of the electorate. Voters have consistently passed bond issues in Alum Rock despite a recent national trend against passage of school finance measures.

The district, which serves kindergarten through eighth grade, grew from 5000 students in the late 1950s to 15,000 in the late 1960s and has remained relatively stable since then. The district's budget has quadrupled in the past decade to a current level of more than $17 million. However, the district has one of the lowest assessed property valuations per student in California. Despite high tax rates, income from local revenue sources continues to be low, a fact that undoubtedly accounted for some of the local interest in the OEO initiative.

Teacher organizations in the district have nonetheless succeeded in obtaining teacher salaries comparable with those in other more affluent districts. Teacher relations with the District Superintendent are cordial and cooperative.

The Superintendent, Dr. William Jefferds, has been employed by the district since 1952 and has served as Superintendent since 1968. He has promoted policies

to decentralize decisionmaking to the school level, increase parent participation in the schools, and actively recruit minority staff.

The six 1972-73 voucher schools share the general socioeconomic characteristics of the district. The participation of these six schools was initiated by their principals, subject to approval by a majority of teachers at each school. The schools—five elementary and one middle school—are within five miles of one another (four are within two miles of one another). In 1972, both school staff and parents perceived the five elementary schools as of approximately equal quality; consequently, voucher parents were not prompted to transfer their children to particular favored schools at the first opportunity.

III. THE RAND STUDY

In April 1972, OEO awarded Rand a contract, subsequently renewed by NIE, for the study and analysis of the Alum Rock demonstration. OEO and NIE contracted with a separate data management contractor, C. M. Leinwand, Associates, for collecting school and student data from the district and preparing computerized data files for use by Rand, the district, NIE, and other researchers. Rand has also subcontracted with a survey research firm, Field Research Corporation, to carry out parent/community surveys in Alum Rock. Rand is an independent, external evaluator, working cooperatively with the district but solely responsible for study conclusions.

ANALYSIS OF SOCIAL DEMONSTRATIONS: THE VOUCHER CASE

Large-scale demonstrations are very different from rigorous experiments. In practice, demonstrations rarely follow closely their original blueprints. Success is hard to define, objectives change, and it is usually impossible to apply scientific controls for the measurement of program effects, such as random assignment to different treatments, or the selection of matching groups. The Alum Rock voucher project is a large-scale social demonstration of this kind—a subsidized prototype rather than an experiment in the scientific sense. It was clear from the outset that no study would be able to discover and assess the meaning of every facet of the participants' behavior, and it was also clear that standard statistical methods for determining the effects of an experimental intervention were not strictly applicable in this case. We therefore decided to select only a limited number of variables for analysis, and to try to be sensitive to unanticipated developments during the course of the demonstration. This approach suggested an emphasis on careful description of demonstration processes and events, and the collection and analysis of data on the basis of what actually happens in the demonstration as well as on preselected criteria. It has also led us to stress the distinctions between short- and long-term findings, because definitive policy conclusions are still remote. Finally, it has led us to use many different indicators of outcomes, and multiple sources of information, because the intervention is so complex as to preclude high-confidence reliance on a single source.

POLICY ISSUES

In Rand's Technical Analysis Plan of February 1972, we suggested that experience from voucher demonstrations might contribute to the debate over the following public policy issues:

- Should parents somehow be given a more direct voice in choosing their children's schools?
- Should public policy encourage more diversity in the schools, and if so, how?
- Should the public support private and parochial schools, and if so, how?
- Should there be market incentives in elementary and secondary schooling, and if so, what kinds?

- If the answer to any of the above questions is "yes," to what extent are vouchers a necessary and sufficient device to shape such new policies?

In turn, evidence relevant to these issues could specifically contribute to public policy decisions about whether to introduce the voucher mechanism to other communities. To assemble this evidence, we proposed to collect and analyze data in three broad categories of the effects of the demonstration:

- The education of students;
- The cost and efficiency of the schooling process; and
- The relationship between citizens and their schools.

Subsequently, during the first year of the Alum Rock demonstration, a fourth important category of effects emerged: effects on the roles of school professionals and on patterns of internal school district decisionmaking.

During the first year we therefore collected data on diversity of educational options, the exercise of parental choice, parental satisfaction, school governance, the organization of classroom instruction, the role of teachers and administrators, educational costs and resource use, the distribution of students by ethnicity and socioeconomic status (SES), and student achievement.

To gather this information we used a number of methods, including parent/community surveys, teacher surveys, community observation, personal interviews, collection of record data, classroom visits, meetings with mini-school faculties, collection of budget and accounting data, achievement testing, and affective testing. These data are much more complete for voucher schools and for the period since September 1972 than for nonvoucher schools and the prevoucher period.

IV. POLITICAL AND TECHNICAL ISSUES OF IMPLEMENTATION

The CSPP voucher model proposed a new way to organize and deliver educational services, which would lead to a new set of relationships among people in the system, calculated to provide new incentives and to engender change in behavior and attitudes. The CSPP report said little about how to transform an existing school system into an example of this model. The provisions of the Alum Rock model, derived in part from the CSPP model, reflect the first attempts to deal with that problem. The rules on "squatters' rights" and teacher job safeguards, for example, represent concessions by OEO to the wishes of parents, teachers, and administrators who objected to changes in teacher tenure arrangements and the right of children to attend their neighborhood schools.

The Alum Rock model itself, however, was only a set of general rules, waiting to be elaborated and in some cases modified as the project was carried out. Implementation—the translation of written guidelines into working procedures—in turn required the solution of both technical problems and political issues surrounding the new relationships implicit in the model.

POLITICAL ISSUES

The most important political issue of the first year of the demonstration was a conflict between the six voucher school principals and the central voucher staff (Sequoia Institute) over the distribution and exercise of decisionmaking authority in a number of key areas. This issue largely took the form of a struggle between the contending parties over the relative independence of the "internal" evaluation staff, which was to gather information about the conduct of the demonstration, and of the parent counseling staff, whose job it was to inform parents about their rights and options. The Superintendent and his regular staff, caught in the middle of this dispute, sought mediation and compromise. The formal rules of the demonstration stipulated that policies on these issues were to be decided by the Board of Trustees, with advice from the Superintendent and the Education Voucher Advisory Committee (EVAC). The Superintendent was to be advised by the Sequoia Institute, and EVAC was to provide the views of teachers, administrators, and parents at the schools.

In practice, things worked out differently. Decisions about the conduct of the demonstration and the flow of information to parents largely reflected the influence of the six voucher school principals; the only effective counterbalance to their authority was the Superintendent, who did not always intervene. The adversaries to the principals' group in both areas were members of the Sequoia Institute's central voucher staff, including the evaluation and parent counseling staffs, who believed they represented the interests of parents as envisioned in the original model.

The principals were able to dominate the decisionmaking process for a number of reasons. They formed a small, cohesive group with similar professional backgrounds, similar problems, and a shared belief in the desirability of decentralizing administrative authority to the school site. They had time to participate in decisionmaking, understood the administrative intricacies of the disputed issues, and had

access to considerable discretionary funds. They derived legitimacy from their early support of the demonstration and from the fact that they often spoke as representatives of a larger constituency—their school faculties. Their participation in an organization development program sponsored by the district also bolstered their unity and effectiveness. (See footnote to Table S.1.)

Some other interested participants, such as the Sequoia staff and EVAC, lacked one or more of these attributes. Parent groups, organized teacher groups and the Board of Trustees either exhibited little active interest in policy issues or, when their interest was keen, they also lacked one or more of the principals' advantages of cohesiveness, available time, legitimacy, grasp of the issues, and access to resources.

The principals took well-defined positions on each of the policies in question:

- Arguing that release of test data and uniform internal evaluation would inhibit diversity among mini-schools, the principals insisted that (1) student scores on standarized achievement tests not be released to the public until the spring of 1974, and that (2) the voucher staff's internal evaluator be barred from imposing any requirements for evaluation on the individual mini-schools.
- The principals insisted upon exercising veto power over the activities of the parent counseling staff in their respective school communities, on the grounds that the veto power would promote decentralized authority.

The principals were successful on both counts, which gave them substantial de facto control over the internal evaluation and parent counseling staff during the first year. The voucher staff, however, was dismayed by the way the principals had circumscribed its activities, and appealed the evaluation controversy to the Superintendent toward the end of the first year. The Superintendent fashioned a compromise that returned a small degree of autonomy to the internal evaluation staff.

TECHNICAL PROBLEMS

Implementation of the voucher model required development of new administrative support services for budgeting and student attendance accounting.

The essential task was to create rules for allocating income to individual schools and mini-schools based on enrollment—an "income-outgo" budget. This process, in turn, raised difficult questions about the extent to which schools should be eligible for additional discretionary income:

- If their teaching staff earned less than the district's average teacher salary,
- If their administrative costs were spread over a larger than average student enrollment, and
- If they chose to maintain relatively high class sizes, thus reducing the size of the teaching staff.

Finally, decisions had to be made about the relative allocation of funds to mini-school accounts, largely controlled by teachers, and to whole school accounts, largely controlled by principals.

New attendance accounting and budgeting systems were also needed to allocate voucher dollars among the participating schools and mini-schools.

None of the new systems was implemented adequately during the first year. The voucher money for each student remained with the school he attended at the beginning of the year, regardless of transfers. With the aid of supplemental federal grants, the district appeared to be solving these problems toward the end of the first year.

But it is important to recognize that during 1972-73, a voucher school could gain little or no financial advantage by attracting more students, because discretionary funds were in effect locked in for the year after fall 1972 enrollment was completed. However, this situation did not become known to the voucher schools until the end of the first year.

V. CREATION, RESPONSIVENESS, AND EFFECTS OF THE MINI-SCHOOL

The Alum Rock "transition model" was predicated on a belief that competition for voucher income would improve instruction in the six participating schools and their mini-schools. A popular mini-school would expand to accommodate parental demand, while an unpopular one would have to change or dissolve. Teachers from defunct or shrinking mini-schools would transfer to the growing ones.

The success of this mechanism requires that: a truly diverse set of options be created; parents have enough interest and information to choose the best option for their child; parents have the right to transfer to preferred options; the size of mini-schools be responsive to parent demand; and funds actually follow the student.

CREATION AND DIVERSITY OF MINI-SCHOOLS

In the spring of 1972, in response to the requirements of the OEO-Alum Rock agreement, teachers at each of the six voucher schools began to consider educational objectives and strategies for the mini-schools in their buildings. They also had to decide which teachers would be associated with each mini-school. Because of the close deadline for distributing mini-school descriptions to parents, the teachers had only a few weeks for these tasks; there was little participation by administrators and even less by parents.

At the six voucher schools, 22 mini-schools emerged. Of the voucher teachers responding to our November 1972 questionnaire, 79 percent stated that the teacher assignment process, largely governed by the teachers themselves, was fair, and 76 percent reported that they were teaching in the program they had wanted most.

Our analysis of mini-school programs indicates that 11 mini-schools emphasized general basic academic skills; 3 emphasized specific basic skills (2 reading, 1 math/science); and the other 8, while not neglecting academic subjects, had different interests. (Two of them emphasized the fine arts, 2 emphasized learning about different cultures, and 4 were "activity-centered," teaching basic academic skills through practical, everyday activities.)

In November of the first year, 57 percent of the teachers reported that their mini-schools represented "significant departures" from their schools' previous educational methods. And 79 percent reported they were conducting their classrooms "very differently" from the way they had in the past.

The Rand staff observed 103 of the 126 classrooms in the demonstration for periods of time ranging from a class period to half a day, and held structured discussions about time allocation and mini-school resource-use with all mini-school faculties. These efforts yielded two major findings about program diversity:

- No gross discrepancies were detected between the program emphases described in the parent information booklet in the spring of 1972 and the programs as implemented in the 1972-73 school year. These descriptions were brief, however --a page long--and somewhat general. While many teachers reported making changes in their programs between September 1972 and June 1973, none of them altered basic program orientation.

- Diversity among the mini-schools was real but limited. In their use of instructional time, for example, 19 of the 22 mini-schools devoted about 40 percent of their instructional time to reading and language arts and about 25 percent to arithmetic. On the other hand, there were important differences in how the mini-schools used the other third of their instructional time—largely in social studies, science, art, music, and program activities. (There were also differences among the mini-schools in educational philosophy, classroom organization and resource use.)

RESOURCE USE

Mini-school budgets for discretionary funds are determined by the number of students eligible for compensatory vouchers (basic voucher funds are largely committed for teacher salaries and the district's other basic instructional costs). During 1972-73 the mini-school discretionary budgets ranged from a low of $3534 to a high of $42,775, with an average of about $18,000. These funds were allocated as follows:

Item	Percent of Total
Instructional materials	60
Teacher aides	15
Equipment	9
Teacher salaries	7
Field trips	6
Portable classrooms	3

Those figures are averages, however; there was considerable variation among schools. For example, some mini-schools allocated as little as 15 percent or as much as 97 percent of their total budget to instructional materials, and from zero to nearly 30 percent for teacher aides.

The increased level of instructional expenditure made possible by compensatory vouchers was perceived by teachers as one of the main advantages of the demonstration. In fact, 82 percent of the voucher teachers agreed in November 1972 that "all things considered, *the* major benefit of the voucher system is the additional money received by schools in the district." (Emphasis added.) In a later telephone survey of teachers (March 1974), 54 percent cited money or its effects as *one* of the main positive features of the demonstration. It is clear that the financial "carrot" of compensatory vouchers was, at first, instrumental in generating teachers' support for the demonstration. More years are needed to assess whether supplementary federal funding will remain a significant factor in explaining teacher support for the demonstration.

About 35 percent of the compensatory voucher funds remained unspent at the end of the first year. This implies that there was more money than there were ways for the teachers to spend it, but the time constraints created by the rapid start-up of the demonstration may also have been a factor. In some cases, lack of information about availability of funds or delays in central processing of requisitions may have contributed to this outcome. A broader implication is that a learning process may be required before teachers can find ways to use discretionary funds effectively.

UNRESPONSIVENESS OF MINI-SCHOOLS TO ENROLLMENT DEMANDS

At the beginning of the 1972-73 school year, mini-school sizes were adjusted (through reassignments of teachers) to accommodate virtually all students in the programs their parents had listed as first choice. During the school year, however, popular mini-schools were generally unwilling to expand in response to parental demand. In several instances where parental demand was sufficient to support program expansion, mini-schools declared themselves "temporarily closed" to further enrollment. In these cases, several factors—weak financial incentives, professional norms against competition, faculty cohesiveness, concern to maintain quality of instruction, and space considerations—worked to influence their decisions not to expand.

Weak Financial Incentives

As a general rule, the more students a mini-school enrolled, the more income it could earn. However, once its existing classrooms were filled, the financial incentive for a mini-school to open new classrooms was weak. A mini-school that opened an additional classroom could not be sure how many more students it would attract. Moreover, the amount of additional income earned depended on how many new students would bring compensatory voucher funds with them. Consequently, after considering salaries and other instructional costs, it was often unclear whether a given mini-school could make a "profit" by opening more classrooms and hiring more teachers. Perhaps even more important, though, was the fact that many mini-schools already had more discretionary money than they could effectively plan to spend. For those programs, the prospect of extra earnings was no incentive. The earnings would not show up on staff paychecks, nor were they needed to buy materials, hire aides, or schedule field trips, since the schools already could afford to buy what they needed.

Professional Norms Against Competition

Many teachers in the demonstration viewed overt competition between mini-schools as undersirable and unprofessional, and forthright criticism of competing mini-schools as flatly unethical. Positive promotion of one's own mini-school was viewed as somewhat more acceptable. A few mini-schools took the cautious step of printing simple circulars to send home to parents of children in their own schools. None solicited parents through radio, TV, the newspapers, or direct mail. When one mini-school received some modest attention in a local newspaper, some other teachers regarded the event as unfair advertising.

Faculty Cohesiveness

Mini-school faculties were social as well as professional groups. If a new teacher was to be hired, applicants had to be screened by the mini-school for professional competence and personal compatibility. Some mini-schools declined to expand, fearing that a new member might disrupt their existing patterns of interaction and organization.

Concern for Quality of Instruction

Many mini-school faculties believed that to expand enrollments continually in response to demand would reduce the quality of instruction. Continuous fluctuations in enrollment would create extra burdens on the instructional planning process. Growth meant hiring new teachers unfamiliar with the philosophy and methods of the mini-schools; and it could require the use of trailers as temporary classrooms—a recourse unpopular with the faculties.

Instructional Space

Unpopular though they were, trailers were sometimes a necessary evil—all the more annoying because, besides requiring additional expense and administrative effort, it sometimes took several weeks to get them. Worst of all, trailers added to crowding in certain common facilities such as cafeterias, libraries, playgrounds, and bathrooms.

The foregoing factors, together with other problems of implementation, tended to constrain the willingness of popular mini-schools to expand. The effect on the demonstration may well have been to reduce interprogram and interschool transfers during the year below what they otherwise would have been, although this cannot be established with complete certainty.

EFFECTS OF MINI-SCHOOL ORGANIZATION ON INSTRUCTION AND PLANNING

The creation of the mini-school and the access of mini-school faculties to discretionary money increases teachers' control over the curriculum. In the spring of the first year, voucher teachers were nearly unanimous in agreeing that there had been a shift in decisionmaking authority from the school district level down to the individual school, and two-thirds felt that the shift had been a "considerable" one. Two-thirds of the voucher teachers also indicated that "more teacher authority" was one of the main advantages of the demonstration. Teachers felt more responsible for educational outcomes since it was "their" program they were implementing. Many said they felt like managers of instruction and of their mini-schools. As time passed, teachers looked to principals less for formal direction and more for informal guidance. Teachers often appeared to develop a sense of accountability to their teaching peers. No longer isolated in their classrooms, they found themselves planning jointly, spending money jointly, and turning to each other for suggestions and help. Given the responsibility to spend money, many teachers found they did not know enough about what kinds of instructional materials are available, and some were stimulated to find out more.

Increased teacher involvement in planning and influence over decisionmaking was not, of course, without its costs in time and energy. Almost all of the voucher teachers reported working extra hours. Fifty percent, in fact, reported working six or more extra hours per week compared to the previous year. Some of the extra demands on teachers' time seemed especially burdensome: 88 percent cited "too many meetings" as a main disadvantage of the demonstration, and 69 percent cited "too much paperwork." The increased teacher workload may have been transitional in nature, caused by the need to learn how to operate effectively in a changed role under new rules. On the other hand, teachers' commitment to their work may be

enhanced in a lasting way by the structural features of mini-schools and the transition model.

The mini-school form of organization facilitates instructional planning across grade levels by taking advantage of shared teacher familiarity with a particular group of students. The individual teacher in this setting does not have to rely solely on the cumulative record folder with its brief comments about an individual student. The mini-school also allows more cohesive planning; teachers can work together to shape a curriculum to meet the objectives of the mini-school and the needs of the students. This kind of planning is of course much easier in small groups than it would be in faculty groups of 20 or more teachers. In the voucher schools, where 19 of the 22 mini-schools had 7 teachers or less, such consultation and planning became a reality. In fact, three-fourths of the voucher teachers indicated that "improved teacher teamwork" was a major advantage of the demonstration.

Increased cohesiveness within mini-schools also brought with it a problem: tensions between mini-schools in the same building. Differences in educational philosophy became more evident as different mini-schools developed their own distinct curricula and forms of classroom organization. Increased interaction within mini-schools was naturally accompanied by decreased interaction between mini-schools. Also, the existence of competition between mini-schools was a factor which contributed to interpersonal tensions between programs. The importance of these tensions is indicated by the agreement of 65 percent of the voucher teachers that "friction between mini-schools" was a main disadvantage of the demonstration.

In most of the mini-schools there were too few students in at least some grade levels to form classes for those grades alone. The result was formation of multiple-grade classrooms, which led to changes in patterns of instruction. In some cases, however, it was the desire to change instructional patterns that led to the regrouping of students. Multi-age groupings are rarely found in U.S. schools, and, like the mini-schools, they represent a significant unanticipated innovation of the demonstration's first year.

Of the 126 classrooms in the demonstration, 85 had some combination of grade levels, and in nine mini-schools all classes were multiple-grade classrooms. Partly in response to the need to deal with different grade level students, many mini-schools sought to individualize instruction. In fifteen of them individual or small-group instruction was more common than instruction directed to the whole class.

Thus, cooperative teacher planning, peer group responsibility among teachers, and individualization of instruction began to appear as a result of the organizational and financial structure of the demonstration.

BENEFITS AND COSTS TO TEACHERS

As the foregoing discussion has indicated, the first year of the transition model demonstration and its mini-school form of organization resulted in both benefits and costs to voucher teachers. Among the primary benefits to teachers were the following:

- Increased discretionary funds for instructional use;
- Increased influence over educational decisions;
- Faculty cohesiveness within mini-schools; and
- Increased stimulation to innovate.

Among the primary costs to teachers were the following:

- Increased workload;
- Tensions between mini-schools;
- Inconveniences arising from student enrollment and transfer privileges; and
- Job or status insecurity.

The last of these costs, job or status insecurity, deserves special consideration here since it is presumably one of the major sources of nationwide teacher resistance to the voucher concept. As indicated previously, the Alum Rock transition model included several features designed to reduce the effects of consumer demand on teachers' job security: the public-schools-only feature effectively forestalled any exodus of students from the district, and the guarantee of continued teacher employment in the case of underenrollment further protected teachers from the vagaries of the marketplace. Thus, it is not surprising that only 31 percent of the voucher teachers felt in the spring of 1973 that "job insecurity" was a main disadvantage of the demonstration. However, feelings often ran high among those teachers who did worry about job security, and the additional factor of *status* insecurity was still present. Even if continued employment were guaranteed, it would be a blow to any teacher's ego to have to leave a program because of declining parental or student interest in that program. In the one voucher school which experienced such a decline in enrollment the first year, the faculty chose to allocate compensatory voucher money to retain the two teachers who would otherwise have had to look for another position in the district.

At the conclusion of the first year, most voucher teachers were ready to assert that the advantages of the demonstration outweighed the disadvantages. In fact, attitudes of voucher teachers generally changed from favorable to more favorable as the first year progressed. For example, the percentage of voucher teachers who believed that the demonstration would increase the quality of education in Alum Rock grew from 56 percent in November 1972 to 74 percent in May 1973; the percentage who felt that "giving parents a choice between different types of programs for their children" was a good idea rose from 69 percent in November to 87 percent in May; and the percentage who reported being pleased about participating in the demonstration increased from 79 percent in the fall to 84 percent in the spring.

VI. PARENTS' ATTITUDES AND RESPONSES

The chief way in which a voucher system changes the role of parents in the school system is by allowing them to choose their child's school, thereby giving them potential economic leverage over the schools. The Alum Rock proposal to OEO also stipulated that, "The community will participate actively in the operation and governance of the transitional voucher demonstration. Individual schools and programs will encourage parental participation at a meaningful level in their respective decisionmaking processes."

PARENT SATISFACTION AND ATTITUDES TOWARD SCHOOL GOVERNANCE

Both parental exercise of voucher options and collective participation in school decisionmaking depend partly on the initial attitudes of parents, particularly on their satisfaction and their attitudes toward their proper role in school governance. For example, parents may be dissatisfied with the schools but deem it improper to intervene.

At the beginning of the demonstration, participating parents were already satisfied with their schools. When surveyed in November 1972, more than 70 percent of voucher parents (those participating in the demonstration) thought their children were already getting a "good" or "very good" education in Alum Rock. Nonvoucher parents (those not participating in the demonstration) were almost as well satisfied.

Parents' attitudes toward whether they should influence school decisions depended on the kind of decision that was involved. At the beginning of the demonstration, for example, many more thought that parents should have a voice in curriculum planning than thought parents should share in the decision to hire and fire teachers.

COLLECTIVE PARENTAL PARTICIPATION IN THE *DEMONSTRATION*

There were a number of mechanisms through which, theoretically, parents could have influenced decisions within the demonstration. As mentioned earlier, the Education Voucher Advisory Committee (EVAC), composed of one teacher and one parent from each voucher school, was set up to advise the Superintendent and Board of Trustees on demonstration-related issues, but its precise functions and powers were left ambiguous in the OEO-District agreement. A number of mini-schools did set up parent advisory committees, but, unlike parent advisory committees in schools receiving funds under Title I of the federal Elementary and Secondary Education Act, these committees had no formal authority.

The first year saw no dramatic change in the preexisting pattern of limited parent participation in the school system. Small groups of parents did influence the decisions of several school faculties on whether to join the demonstration in the second year. Where mini-school parent advisory committees were established, they hardly ever had much influence on mini-school decisions. EVAC proved to be a

peripheral group in the first year. It met infrequently and had little knowledge of current issues; the participating parents did not press for more decisionmaking power.

In general, parents showed little interest in decisionmaking in the demonstration. Two factors must be considered, however. First, parent participation depends not only on initial parent interest but also on how much the schools encourage and organize such participation. In Alum Rock, school professionals were ready to accept parents as "consumer participants," but they had ambivalent feelings about parent organizations helping to decide rules or policies for either mini-schools or the demonstration as a whole.

Second, participation in school affairs partly depends on parents' political and organizational skills, which may take time to develop. It took several years for Title I school parent advisory committees to become active in Alum Rock, but once they did they constituted an effective force. For example, in those cases where parents influenced new schools to join the demonstration, "Title I parents" seem to have been among the most influential. It is possible, then, that the present low level of collective parent participation in the demonstration may change in the future. There are some signs during the 1973-74 school year that such a change may be taking place.

PARENTAL AWARENESS, INFORMATION, AND CHOICE

In November 1972, 17 percent of the voucher parents said they had not heard of the voucher demonstration even though their children had already been attending voucher schools for two months. Of those who had heard, one-fourth could not remember what mini-school program they had chosen for their child. Anglos and blacks were somewhat better informed about the voucher demonstration than were Mexican-Americans, particularly those Mexican-Americans interviewed in Spanish. Better educated and wealthier parents were a little more likely to know about vouchers.

In the fall of 1973, after a year's experience with the demonstration, 94 percent of the original demonstration parents were aware of the demonstration, and differences in knowledge among ethnic groups had decreased.

In November 1972, most parents who had heard of the demonstration said they had received adequate information about it. In choosing a mini-school almost all parents relied on the written information and program descriptions provided by the schools or on conferences with teachers or principals.

Many parents were not well informed about the basic rules of the demonstration in November 1972. Three voucher parents in five did not understand the rule governing student transfers, and over half did not know that the demonstration would provide free transportation if they wished their child to attend a school other than their neighborhood school. A year later, in the fall of 1973, voucher parents were much more familiar with the rules of the demonstration.

About 70 percent of the parents who were aware of the demonstration in the fall of 1972 felt that the demonstration offered them about the right number of options. In general, parents perceived real educational diversity in the range of mini-schools offered, liked the idea of having a choice, and felt satisfied with the mini-school offerings available.

In selecting a school—as distinguished from selecting a particular mini-school within a school—parents strongly tended to select the school nearest their home or the one their child previously attended. In November 1972, less than 15 percent of

the aware parents chose a school primarily because it contained a particular mini-school they wanted, and only an additional 15 percent cited the nature of mini-schools as even one of the factors they considered in selecting a school. This should not be surprising, given that mini-schools had not operated before and therefore had no reputations, and that all schools offered roughly similar arrays of mini-school choices (a traditional or basic skills mini-school plus several "innovative options").

Throughout the first year parents displayed a very low propensity to transfer their children between either mini-schools or schools and, as we have noted, they were not on the whole encouraged to do so by principals or teachers. However, transfers to nonneighborhood schools increased noticeably at the beginning of the second year. Parents from the different ethnic groups exhibited roughly equal propensities to transfer their children between schools and mini-schools.

CHANGES IN PARENTAL ATTITUDES IN THE FIRST YEAR

After the first year of the demonstration, original voucher parents were as well satisfied with the schools as they had been at the beginning. The percentage of these parents asserting that their children were getting a "very good" or "good" education increased from 74 percent in November 1972 to 80 percent in November 1973. Enthusiasm remained high for the job being done by principals and teachers. The proportion of parents who believed the voucher demonstration would improve the Alum Rock public schools rose from 76 to 84 percent. Finally, between November 1972 and November 1973, there was a noticeable increase in the proportion of original voucher parents who stated that parents should be able to help shape a variety of school decisions. In November 1973, 52 percent of these parents said that parents should have a voice in hiring and firing teachers, as compared to 36 percent in November 1972; and 62 percent favored parental involvement in hiring and firing the school principal, as compared to 54 percent the previous year. The proportion of original voucher parents favoring parental influence on curriculum decisions increased from 63 percent to 70 percent while the proportion supporting a role for parents in school expenditure decisions rose from 55 to 60 percent.

STUDENT ETHNIC AND SOCIAL CLASS DISTRIBUTION

Critics of voucher proposals have argued that, in the absence of controls, parental choice of schools could lead to increased ethnic and social class segregation, particularly if parents were allowed to supplement their vouchers with private funds.

The Alum Rock demonstration involved neither private schools nor parental supplements to vouchers, and also included the safeguard of lottery assignment provisions. Therefore, increases in segregation would be less likely in Alum Rock than in some voucher models. Furthermore, Alum Rock is much less segregated than are most school districts with large minority populations. Nonetheless, we conducted analyses to see whether ethnic or social segregation increased during the first year. Our conclusion is that it did not.

VII. COSTS AND BUDGETING

The federal grant for the first year of the demonstration was $1,585,756. A question of considerable interest is the extent to which the initial grant paid for "start-up" costs, which will decrease in the future, and the extent to which there will be continuing extra costs as a result of the demonstration.

The major budgeted activities that were supported by the federal grant, accounting for 85 percent of federal funds, were administrative costs ($191,683); parent counseling staff ($91,857); inservice training and organization development training ($399,400); compensatory vouchers ($509,100); and student and financial accounting ($128,500). In the second year of the demonstration, with an increase to 13 voucher schools, the federal grant doubled, with 85 percent of the total still devoted to these five activities.

Of these items, inservice training and organization development training most clearly qualify as start-up costs because their phased reduction has been agreed upon by the district and the National Institute of Education. Some of the central administrative costs have gone into the development of new budgeting and student attendance accounting systems, and the major burden of those tasks has also been completed. In addition, some future reduction of student and financial accounting costs at each school may be possible. A major portion of the activities supported by other categories, such as the costs of the compensatory voucher and the parent counseling staff, could conceivably continue indefinitely.

The demonstration has caused the district to move toward a type of budgeting distinctly new in American school districts. Traditionally, school districts have budgeted expenditures into a series of "line items" (such as personnel, maintenance, etc.) and then allocated a portion of each line item to a school on the basis of a formula. The conventional budget practice does not allow the school to "trade off" expenditures between one category and another. The new budget process, by contrast, gives considerable discretionary authority to teachers and principals. In Alum Rock this authority extends primarily to compensatory voucher funds. The district also sought to establish budgets that would rise or fall during the year as enrollment increased or declined; but for technical reasons, this innovation had to be delayed until the second year.

Recall that, under the voucher demonstration, the school district provided a "basic" voucher for each child out of its current income, and the federal government supplied the compensatory voucher funds for disadvantaged students. Under a voucher concept of budgeting, the basic voucher—the per student share of the total district budget—would have been allocated to the school the child attended, and the schools, in turn, would have contracted with the central office for any centralized services they wanted (purchasing, business, personnel, special services, community relations, etc.). Such a "pure" approach, however, undoubtedly would have caused dislocations in the central office and the possible reduction of central staff. In Alum Rock, therefore, before the basic voucher was allocated to school budgets, a sum of money was deducted to support central administrative costs including all central office personnel. As a consequence, the basic voucher awarded to the schools provided just enough funds to cover the salary costs of school personnel, with only a few dollars per pupil more in discretionary money. State regulations governing class size, and district agreements with teacher organizations, limit the extent to which

schools can generate additional discretionary money by reducing their use of teachers and administrators.

Thus, the federal compensatory voucher money has been virtually the only source of discretionary money for schools and mini-schools. If this continues to be true, it is unclear what aspects of decentralized authority can survive the ultimate termination of the federal grant. Moreover, to the extent that teachers' support for the demonstration depends on the extra funds, the durability of that support is uncertain.

VIII. EXPANSION OF THE DEMONSTRATION IN THE SECOND YEAR

After a year's experience with vouchers, the demonstration expanded from 6 schools with some 4000 students in 1972-73 to 13 schools with some 9000 students in 1973-74. At the same time, either through inaction or overt rejection, 12 schools remained outside of the demonstration. (A new middle school opened in September 1973, increasing the number of district schools from 24 to 25.)

As they had in 1972, principals supplied the major impetus for schools to join the demonstration for the second year. In four of the "expansion" schools, parent groups exerted a noticeable effort on behalf of joining the demonstration—and at one other school, parents successfully blocked participation. In all cases the teachers themselves, although at times under pressure, made the final decision. The extra money available to voucher schools, the opportunity for innovation, and the prospect of added authority and autonomy appeared to be important motivations for teaching staffs to join. Also, while the major teachers' organization, the Alum Rock Educators Association, maintained an official neutrality, the organization's top officials, on the whole, favored the demonstration. On the other side, the expectation of extra work, hesitancy about organization development training, and reports of conflict and competition at demonstration schools were major reasons cited for teacher resistance to the demonstration.

In March 1973, a group of young teachers from outside the district proposed to add a new alternative to the demonstration for 1973-74, a school called Greater Resources Organized with Kids (GRO-Kids). As this is written, one year later, the GRO-Kids program is still in the preparatory stages, largely because of a complex series of legal questions and the resistance of a portion of the district's Board of Trustees and professional staff. During the year of controversy it has become clear that no operational procedures exist for adding "community initiated" schools to the demonstration. Such procedures may well result from the debate over the entrance of GRO-Kids into the system. New state legislation passed during the first year of the demonstration has been interpreted by the Alum Rock Superintendent in such a way as to give the Certificated Employees Council (a district bargaining group composed almost totally of teacher representatives) an important role in determining the rules for private school participation in voucher demonstrations. Thus, it appears likely that "community initiated" alternatives will be permitted only if they conform to district-teacher agreements on salary and working conditions. The Board of Trustees has approved GRO-Kids participation on these terms, and the GRO-Kids organizers may open their school in the fall of 1974.

IX. STUDENT OUTCOMES

For the first year of the demonstration, the data on student achievement in voucher schools, as measured by standardized achievement tests, are somewhat contradictory. Results from the California state testing program seem to show that reading scores for voucher schools fell off compared to their past scores and compared to scores in nonvoucher schools. However, results from the Metropolitan Achievement Test (MAT), which was administered at Rand's request in voucher schools, seem to show that voucher school students' scores increased during the year about as much as those of students in Alum Rock Title I schools, who received the same test. Furthermore, for 1972-73, on California state tests, Title I children did better than voucher children on average; while for MAT tests in the same year, the opposite was true: voucher school children did better than Title I children. More detailed analysis of these data is now underway to try to understand the apparent discrepancies, but it would, in any case, be a mistake to give much weight to achievement scores after only one year of the demonstration, when the new programs were just getting organized.

Rand's data on other measures of student outcomes in the first year of the demonstration are limited. Unexcused absence rates were slightly lower in voucher schools than in nonvoucher schools in 1972-73, but they had also been lower before the demonstration. Rand administered affective tests in voucher schools in the spring of 1973, but the purpose was to select the best test for future use and so there are no affective test results at this time which would shed light on student outcomes. Also, Rand's first interviews with students were conducted in the second year of the demonstration. The available measures of vandalism cast virtually no light on the effects of vouchers on student attitudes.

X. CONCLUSIONS

These conclusions are based on findings from the first year. They are therefore tentative and subject to revision or amendment as the demonstration evolves.

1. Even where it provides the financing, the federal government will probably find it difficult to control in detail how voucher models operate in the face of strong local interests. The demonstration in Alum Rock was largely shaped to fit the district's needs and as those needs have changed, so has the demonstration.

2. It is possible to bring about organizational and procedural changes in moderate size school districts—including variants of the voucher model—without jeopardizing the basic functions of the district. However, there are some conditions which make success more likely, and other conditions which are necessary for successful implementation. Success is more likely:

- If the innovation complements existing trends in the district. In Alum Rock, the voucher demonstration reinforced an existing policy of administrative decentralization.
- If enough time and technical assistance are provided for planning, which was not the case in Alum Rock before the demonstration. With more time and more help, the demonstration would probably have been implemented more efficiently, and would have been able to adhere more closely to its stated objectives.
- If the district is not highly mobilized politically. Where any controversial educational change is proposed, well organized local interest groups are likely to feel compelled to take sides. The proposed change therefore becomes less acceptable as it appears to become more controversial. The absence of a well organized community in Alum Rock, whatever its other consequences, helped to launch the voucher demonstration relatively smoothly.

The following conditions are probably necessary for successful voucher demonstrations:

- Support of an effective superintendent of schools. This was a decisive factor in Alum Rock. More generally, such support is necessary for success, but it is by no means sufficient. In addition, the more successful the superintendent is in institutionalizing change, and embedding it in the habits of district staff, the less essential he becomes for the long-run success of the demonstration.
- External financial support. At first, extra financial support will be necessary, both to help the district to plan and implement new procedures and to help overcome the natural inertia of the bureaucracy.
- Bringing all the groups affected by the change into the process of planning for change, unless those groups are voiceless or powerless. In Alum Rock, teachers and principals in the six original voucher schools volunteered to enter the demonstration and planned their own mini-school structures. A few teachers who felt that they had not been fully consulted expressed considerable anger with this process. If this feeling had been widespread the fate of the demonstration would have been in serious doubt.
- Tangible rewards for those who have to change their behavior as a consequence of the demonstration. In Alum Rock, teachers and principals were asked to work harder, risk their professional reputations with untried organizational arrangements and procedures, and adjust to new ways of doing things. In return, they

were offered more autonomy, and more direct control over their professional lives. Without these benefits during the first year, it is doubtful that the demonstration could have continued in its present form.

- Careful attention to technical details. Once the issues of "grand design" have been thrashed out, the technical problems of implementation are the demonstration's most vulnerable point, since they are often left until last, and their difficulties are often underestimated. In Alum Rock, the district did not work out the new student attendance and financial accounting systems very well in the first year, which prevented the staff from carrying out the demonstration design as originally specified, and made it difficult for mini-schools to plan. However, the technical gaps were not severe enough to undermine the confidence of teachers, principals and parents in the voucher administration, or erode their commitment to the demonstration.

3. Mini-schools might well flourish without vouchers, but competition for students and discretionary funds may make them work better. Because they may have more opportunities for effective planning, teachers in mini-schools are also likely to benefit more than their colleagues in the typical school from improvements in existing educational information resources and technical assistance.

4. A public school system is unlikely to develop schools or mini-schools that are competitive and independent for at least the first few years of a voucher demonstration without strong outside pressures. Teachers and administrators are likely to succeed in preventing such competition, because

- They regard competition as unethical and unprofessional.
- They see it as a threat to job security, despite any protective guarantees, because it establishes a potentially dangerous new precedent with unpredictable long-run consequences.
- The movement of students between schools or mini-schools makes it hard to plan, since educational planning as now practiced depends on predictable student enrollment and budgets.

On the other hand, strong outside pressures to expand competition in a public school system may well produce an organized reaction, encouraging demonstration participants to cooperate against those pressures, which would threaten the existing stability. In Alum Rock, the six voucher principals, rather than competing with one another for students, cooperated against the central voucher staff, which was trying to implement some elements of a market system. And Alum Rock teachers have been instrumental in preventing a competitive threat from a proposed new community school. An attempt to force the issue of competition could threaten the stability of the demonstration. In the long run, as teachers and principals grow more confident, or as parent groups become stronger and more active, more competition may become possible. Until then, it is likely that only a demonstration which builds strong competitive features into its design from the outset will be able to test this feature of voucher theory.

5. At the same time, in a system which is not highly competitive (e.g., a system with few financial incentives, with strong job security guarantees, and with limitations on program enrollment) parents will not have the economic power to ensure school responsiveness. This is the case in Alum Rock, despite parents' nominal right to transfer students to any mini-school of their choice, together with some portion of their voucher dollars. In such a system, however, schools may be responsive to parent and student needs for other reasons:

- From a sense of professional commitment and the desire to succeed in a new venture once the decision has been made to try it. "Competition" in such a milieu is for prestige, reputation, recognition, and community support—or at least to prevent the disgrace of failing to attract students—rather than for dollars or job security. This is currently the situation in Alum Rock.
- As a response to direct non-economic parent pressure like that exerted successfully by some Alum Rock Title I school parents in the past. Voucher school parents did not exert this kind of pressure during the first year.

6. As things now stand, the demonstration is not much of a test of the original voucher model. But it could tell us a lot about the effects of a radically decentralized system with elements of voucher model financing and direct parent participation in educational decisions.

7. The decentralization of authority in general is closely tied to the decentralization of authority over expenditures. If the federal grant remains virtually the sole source of discretionary money for the schools, then little decentralized authority may survive after the federal grant ends. And we do not know yet whether the district can develop other institutional reforms that will outlast the federal grant. It remains to be seen whether parental participation or teachers' fondness for their new autonomy will help the present arrangements to take root.

8. Quite apart from special rules built into the demonstration to prevent segregation by race or class, the first year in Alum Rock does not tell us much about the propensity of voucher systems to promote or discourage segregation. Private schools, the feature of proposed voucher models most widely criticized as likely to promote segregation, are not part of the Alum Rock demonstration. The district was also unusually well integrated before the demonstration began, so that a significant movement toward segregation with only one-fourth of the district's schools participating in the demonstration would have been unlikely. These factors make the first year of the Alum Rock demonstration a poor basis for making educated guesses on this issue.

9. Similarly, the first year of the demonstration did not provide enough information to allow us to predict probable levels of parent satisfaction with vouchers or the effects of vouchers on student achievement. The high level of parent satisfaction we observed could have been the result of genuine interest, of relative ignorance, or of reaction to the appearance and excitement of something new. Our achievement test results are limited and somewhat contradictory. Our opinion is that students have not been exposed to a relatively normal learning routine long enough to warrant even tentative conclusions about the effects of a limited voucher model on achievement.

The major discernible effect of the first year of the demonstration has not been upon parents' behavior or students' academic achievement, but on the roles of central district staff, principals, and teachers. Each voucher school has gained new autonomy, and teachers are now working in new cooperative arrangements and with new discretionary power over resources. It remains to be seen whether the various changes will improve the quality of education and the relationships between citizens and their schools.