DOCUMENT RESUME

ED 354 612 EA U24 674

AUTHOR

Corwin, Ronald G.

TITLE

Private Schools and Parental Choice: Dubious

Assumptions, Frail Claims, and Excessive Hyperbole.

Occasional Paper.

INSTITUTION

Southwest Regional Lab., Los Alamitos, CA.

SPONS AGENCY PUB DATE

Department of Education, Washington, DC.

CONTRACT

91002006

NOTE

52p.

AVAILABLE FROM

Southwest Regional Laboratory, 4665 Lampson Avenue,

Los Alamitos, CA 90720.

PUB TYPE

Information Analyses (070) -- Viewpoints

(Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE

MF01/PC03 Plus Postage.

DESCRIPTORS

Bureaucracy; Competition; *Educational Improvement;

*Educational Vouchers; Elementary Secondary

Education; *Private Schools; *Public Schools; *School

Choice

ABSTRACT

The preoccupation with choice between public and private schools offered under voucher programs obscures the greater problem of a lack of variety in the present educational system. If providing a greater variety of school structures and improving the educational system is the objective, competition between the public and private sectors will not achieve that goal. A comprehensive system of specialized schools is needed that includes cooperative relationships among many types of schools in the public and private sectors. The assertion that competition, or marketplace forces, will lead to a better educational system is invalid. Private schools represent only about 12 percent of all school enrollment and, unlike public schools, can be selective in the students they accept. Successful small, experimental programs tried in private schools may not be effective when attempted on a larger scale. And many private schools are unwilling or unable to participate in a voucher program. Eliminating bureaucracy is also a faulty reason for establishing a voucher system. Bureaucracy provides structure and fairness to the educational system. A system of specialized schools with special focuses that encourages cooperation and collaboration between private and public schools can provide the educational improvements voucher advocates seek. (Contains 63 references.) (JPT)

age of the sign of

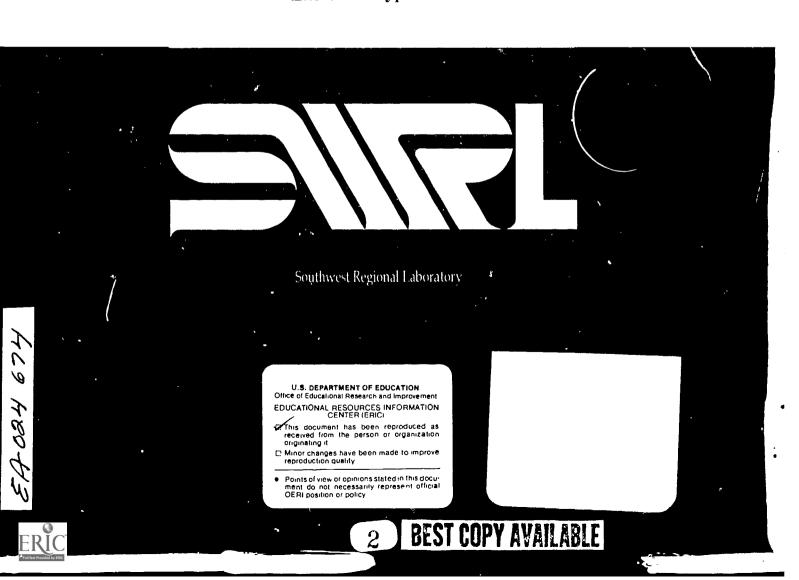
from the original document.



Reproductions supplied by EDRS are the best that can be made

Private Schools And Parental Choice

Dubious Assumptions, Frail Claims, and Excessive Hyperbole



Southwest Regional Laboratory

The Southwest Regional Laboratory (SWRL) is a public educational agency that exists to address challenges resulting from changing demographics and increasing numbers of at-risk children in the metropolitan Pacific Southwest. The Laboratory is governed by a board of directors selected in part by the state boards of education and the university systems in Arizona, California, and Nevada. The Laboratory addresses its mission by engaging in research, development, evaluation, training, technical assistance, and policy analysis. The bulk of the Laboratory's work is supported by competitively won federal and state contracts and grants.

Edwin C. Myers is SWRL's executive director.

Occasional Paper Series.

The Laboratory publishes from time to time "occasional papers" that address issues relating to children who, for a variety of reasons, do not benefit from conventional schooling practices in the metropolitan Pacific Southwest. Inquiries are welcome; address them to E. Joseph Schneider, deputy executive director, who edits the series.



Private Schools And Parental Choice

Dubious Assumptions, Frail Claims, and Excessive Hyperbole

Ronald G. Corwin
Southwest Regional Laboratory

February 1993



Prepared under a subcontract with Far West Regional Laboratory for Educational Research and Development (contract no. 91002006, U.S. Department of Education). The content does not necessarily reflect the views or policies of Far West Laboratory or the U.S. Department of Education nor does the mention of trade names, commercial products, or organizations imply endersement by these agencies.



ABSTRACT

In his paper, Ronald G. Corwin examines a rationale in favor of using public funds to pay private school tuition. He makes two key points: The preoccupation with choice between public and private schools obscures the limited number of alternatives from which to choose; if reforming public schools is the objective, one must not rely exclusively on competition from the private sector to do it. Corwin proposes a comprehensive system of specialized schools that includes cooperative relationships among many types of schools in the public and private sector.



CONTENTS | Introduction 1

The Competition Mystique 3 Part I

The Market Solution 4 The Ordeal of Survival 6

The Specter of Bureaucracy 8 Part II

The Allegations 8 Reservations 10 Implications 14

Part III A Quest for the One Best School 14

What Do the Data Actually Say? 15

Interpretations 19 Part IV

Scale Effects 20 School Choice as a Division of Labor Problem 25

Conclusions and Suggestions 34 Part V

Synopsis 34 Recommendations 35

References 39



INTRODUCTION*

This paper examines a rationale in favor of using public funds to pay private school tuition. I will not tackle the economic and moral aspects of this complex issue. What interests me is the proposition being circulated that competition from the private sector will compel public schools to reform. I started with an open mind, but have come to see that much of the argument for private schools is hyperbole. The mystique that competition will force public schools to improve through an idyllic survival-ofthe-fittest scenario is myopic. Education does not fit many tenets of the market model. The private sector can skim problem-free students, leaving the public sector with students it cannot handle. Private schools represent a small share of the market, and many are almost full. Public bureaucracies have their problems, but their rules help guard against favoritism and corruption. Unlike private schools, public schools can mix students and nurture common values. While some private schools may be superior, because of the enormous variability it is safe to say there are good and bad schools in both sectors.

There is nothing wrong with the idea of making private schools available to everyone. My point is that competition is not the answer. Collaborative arrangements are needed between selected private and public schools to take advantage of the unique strengths and needs of each sector. Fantasizing about only one kind of choice only diverts attention from the central challenge of providing more alternatives from which to choose. For all children to benefit, there must be a planned division of labor. It would consist of a comprehensive system of specialized schools, each targeted to specific kinds of problems besides helping good students improve their test scores.

A few communities, such as Milwaukee, have voucher programs that allow parents to choose private schools. Statewide voucher drives were active in California in 1980 and 1992. The 1992 proposal, which would permit students to use a maximum of \$2,600 in tax money to pay for private school tuition, has qualified for the 1994 ballot. There is broad support for these plans. According to a Gallup Poll (*Phi Delta Kappan*, 1991), half the adult population in this country favor government vouchers



^{*}Ronald G. Corwin is a visiting sociologist at Southwest Regional Laboratory (SWRL). He also is a sociology professor at Ohio State University.

The author wishes to thank SWRL's Robert Dentler, Marcella Dianda, and Diane Yoder for commenting on an early version of this paper. Dentler called Corwin's attention to the importance of scale.

parents can use to send their children to any public or private school.

However, the same poll shows that nearly as many (39%) oppose vouchers good for ray school. Moreover, a 1992 survey conducted by the Carnegie Foundation for the Advancement of Teaching found that the school choice option has been used by less than 2% of parents in 13 states where it is available. The survey reports that 70% of parents with children in school would not send their child to a different school if they had a choice.

The issue of using tax dolla's for private schools is entangled in a larger question of whether parents should have more choice over the school their child attends. Many proposals limit choices to the public sector. President Bill Clinton is unequivocally opposed to using vouchers for private schools, but he favors more choice within the public school sector. Also, most states that allow school choice limit options to the public sector. An example is California's Charter School legislation passed in the fall of 1992. Under the act, anyone can start a school with a petition signed by 10% of the teachers in a district or half the teachers in a single school, subject to review by the school board. Charter schools are exempt from most state regulations and can set admissions standards. Any parent may apply, and per-pupil funding follows the students who are accepted.

Some arguments developed in this paper may apply equally to choice in either sector. However, I am interested in the debate about competition from the private sector. Concerned citizens trying to follow the issue will find a bewildering morass of buried premises, conventional wisdom, murky data, myths, and stereotypes. Advocates of privatization base their case on the following three-pronged attack on the infrastructure of public education: (a) a beguiling promise that competition from the private sector will create segmented markets filled with many different types of schools providing for every need and force public schools to reform; (b) an assault on public bureaucracies; and (c) an alternate system of private schools propagated by free enterprise and nurtured by concerned parents. The argument, in profile, is that rules and red tape and an army of expendable autocrats are choking public schools. The public school monopoly has become unaccountable to concerned parents. It also is inaccessible to creative teachers. Sluggish from years of domestication, the public schools can be jolted back to life by competition from the private sector. Either they must change or they will go under. The blessings of privatization are frothing from a river of evidence demonstrating two things: Private

schools are more effectively organized, and they produce smarter children than the public sector (Chubb & Moe, 1990).

In the following pages, I critically review some claims and propose another way to look at the controversy. Two points I want to make are:

- 1. The preoccupation with choice between public and private schools obscures the limited number of alternatives available from which to choose. The significant question is not whether parents have a right to choose schools, but how to expand the options available to them.
- 2. If reforming public schools is the objective, don't rely exclusively on competition from the private sector to do it; reform hinges on collaborative relationships.

I propose a planned system of specialized schools that includes cooperative relationships among many types of schools in the private and public sectors.

The paper is divided into five parts. Parts I - III address the three attacks on public education. Part IV contains discussions of two major implications connected with those criticisms. Part V presents my conclusions and recommendations.

PART I THE COMPETITION MYSTIQUE

A large literature has accumulated on the topic of privatizing education. While only a small cross-section of that literature will be considered here, a dominant theme is that competition will propel public schools into reform. By knowing the consumer has another option, we are told, suppliers will be more responsive to the consumer's wishes. In Levin's words, "...it will be the threat of tuition tax credits and vouchers that will create the greatest stimulus for developing a system that increases meaningful public choices..." (1983, p. 38). A U.S. Department of Education document (December 1990, p. 1) is jubilant about the prospect. School choice will "inject vitality in the education system" (p. 3). Choice "unleashes the pent-up creativity of educators in response to consumer demands" (p. 2), and ultimately, it is "the catalyst that drives other social reforms—it sparks innovation in teaching, management and learning" (p. 2).

The perfect solution, or so it seems. How does it work? For answers, one must look to models from classical economics erected from legion assumptions about how select organizations can survive in a market economy.



The Market Solution

The promise of private school choice is riding a renaissance of laissez faire economics that propelled the 1980s and is being fanned by the collapse of communism in Eastern Europe. However, the debate has been going on for a long time. While advocates do not exactly offer voucher programs as free market prototypes, some of their arguments draw unmistakably from the canons of classical economics. The Nobel laureate economist Milton Friedman (1955; 1962) proposed many years ago that if all parents were given money to purchase education for their own children, markets would develop where none exist. Soon after that, Jencks (1966) wanted to give vouchers to children in the inner cities to help them find alternatives to the public schools. Friedman calculated that parents would control a billion dollars (much more in today's economy). A smaller sum has provided ample restaurants of all kinds. Disciples believe competition for so much money would achieve the following (U.S. Department of Education, December 1990):

- (a) create segmented markets in which many different types of schools would form to provide for every need;
- (b) force managers to minimize expenses and increase efficiency (to make a profit);
- (c) improve the quality of schools;
- (d) improve parent participation;
- (e) provide incentives for parents to monitor their schools, and if not satisfied, demand changes or switch to another provider;
- (f) expand educational opportunities for low- and moderate-income families; and
- (g) identify districts in need of special services.

Markets are poised on one side of a fictitious dichotomy between public and private sectors, which we are told operate differently. We often hear the private sector is more responsive to market demand and more cost effective. This simple dichotomy probably makes sense to the average citizen. For that person, there are only two ways to pay for schooling: out of pocket or with tax dollars.



Reservations

However, for the economy, the line separating the great dichotomy has been blurred in many ways. They include government protection, scores of regulations, and the collective properties of some goods and services. Consequently, the market model has serious flaws, and anyhow is only marginally applicable to public education.

The Market for Education. Most markets operate imperfectly. Demand has not produced adequate low-income housing or affordable medical care for the aged, both of which must be financed with public dollars. Education is especially unresponsive to market mechanisms for several reasons.

First, compulsory education laws guarantee a market for providers. There is no similar guarantee for restaurant owners, for example (However, most markets are shaped by laws; e.g., the garment industry benefits from laws prohibiting nudity.) Political agreements, not individual choices, create the market for education. There is no danger the market will collapse, even if providers do not give consumers what they want. While some consumers can decide to send their child to private schools, they cannot spend their money on another commodity.

Second, under voucher plans, consumers might not pay the full cost of education out of pocket. Because the government sets the subsidies, politicians pick the survivors. Take for example the voucher proposal that will be on the 1994 ballot in California. It sets the value of scholarships at one half the average amount of government spending on public education in the state. This amount covers the cost of all except the most elite elementary schools in the state, but only one fifth of the high schools (Dianda & Corwin, 1992). The schools that will and will not benefit already have been identified.

Finally, the private education sector is underwritten by a vast public system obligated to finish whatever the private sector prefers not to do. This includes taking care of the most difficult students needing the most costly services.

The Government Control Complication. Government influence takes many forms:

1. Private businesses are protected by subsidies, trade embargoes and tariffs, patents, tax breaks, and low-cost loans.



2. Business decisions are constrained by licensing requirements, regulations of the Security and Exchange Commission, and a profusion of laws. The latter extends to consumer rights, the environment, labor relations, occupational safety, discrimination, pensions, and unemployment.

In the case of private school vouchers, the government must establish and monitor guidelines regulating desegregation, the disabled, and health and safety. In addition, it will lay out the curriculum, set testing standards, and resolve disputes.

The Public Good Complication. Privatization undermines a basic public service that schools in this country historically have performed, namely helping accommodate large immigrant populations. Durkheim (reprinted 1961) wanted the public to control schools because they are the principal means of conveying common societal values. He considered public schools essential for maintaining social integration as society rushed toward specialization. Special interests in the free market, he said, cannot be entrusted with responsibility for providing this common base of cultural experience. In retrospect, schools in the United States historically have provided a setting where generations of immigrant populations mixed within classrooms with children from diverse backgrounds (Levin, 1983).

Because of their responsibility for promulgating common values, schools dispense a public good (Levin 1979; 1983), not merely a consumer item such as appliances. Private decisions are not always in the public interest. For example, local control produced a pattern of racial segregation throughout the United States and countless incidents of attempts to censor course materials. Also, the fact that children frequently change schools requires a national curriculum. Private schools are not prepared to undertake this responsibility.

The Ordeal Of Survival

The rough and tumble laissez faire arena is governed by the perils of competition and the threat it poses to survival. According to the survival catechism, reform occurs in three steps:

- 1. To remain competitive, some public schools improve.
- 2. Others lose customers and close.



3. Existing schools expand, or new schools are founded to replace others as they expire.

It seems logical that public schools must do something if private schools take away masses of students. Also, there is some evidence that organizations are more likely to change when there is an outside stimulus or threat (Corwin, 1972; 1973). However, this argument has some gaping holes.

Reservations

First, the private sector currently poses no threat. 1: accounts for only 12% of school enrollments. Whether vouchers will increase the market share sufficiently to make private schools an immanent danger is pure conjecture. More likely, huge numbers of parents—"inactive choosers" Elmore (1990) calls them—will not participate. Furthermore, many schools are not ready to jump at voucher programs. About one fourth of the private schools in California have little interest in participating in a voucher program. Most of the others are nearly filled to capacity (Dianda & Corwin, 1992). The prospect is that the most desirable schools will fill early, leaving many parents with their second choices. Or, their prices could increase to the point of excluding large numbers of children. In sum, choice may be a mirage (Bibbiani, 1991).

Second, while the threat from competition can act as a powerful incentive for change, it doesn't provide the mechanisms needed to carry it out. It takes more than good intentions to transform complex, public organizations. Innovation is a complicated undertaking requiring special leadership, skills, and resources. Many innovations fail even under the most favorable circumstances, and most end in compromise.

Third, schools do not simply succeed or fail. They carry out a spectrum of objectives with varying degrees of success. They can live on by doing one thing well, or several things in a mediocre way, while failing in other respects. Anyway, choices are not always made rationally. They might be predicated on custom, loyalty, and fear of the unknown. Parents often choose a school that is close to home. Also, schools can survive by appealing to a powerful constituency. For all of these reasons, some schools will hang on indefinitely—floundering, languishing, deteriorating.

The above possibilities suggest a different market scenario. It goes like this: A noncompetitive school loses high-achieving



students, but retains a minimum student base and manages to survive for years under marginal conditions.

Finally, the whole process seems to take place in a timeless vacuum. This is no schedule. How many years will pass before there are enough new, inexpensive, desirable schools? How long will it take for the bad schools to wither and die? And, what happens to the children in the meantime?

PART II THE SPECTER OF BUREAUCRACY

Most of us have experienced some type of problem with a bureaucracy, such as red tape, a public servant's indifference to our problems, and the like. Social scientists have identified many organizational pathologies, ranging from oligarchy (Michels, 1958; 1915) to red tape, inflexibility, and misuse of power (Merton et al., 1952). Public school districts are among the worst offenders. Roger's (1968) scathing criticism of a fossilized New York City school district in the 1960s contributes to a haunting account of organizational maladies.

Private school choice advocates have mined this vein of deep-seated public resentment. They proffer a nostalgic, autonomous life, unencumbered by the inconvenience of government regulation, which has reached a responsive audience. In a landmark essay, Williamson (1975) once observed that organizations form when markets fail. Voucher advocates have turned Williamson's observation inside out, offering markets as the solution to failing organizations.

The Allegations

Some voucher proponents denounce public school districts as top-down, rule-driven oligarchies (Chubb & Moe, 1990). There is no denying that many public school districts do make easy targets. They often seem to be more sensitive to legislatures holding the purse strings than to parents with children in school. Schools and teachers are hemmed in on all sides by policies other people control—teacher-training programs, state and federal agencies, school boards, professional bargaining units, parent-teacher associations, and other stakeholders. Further, school principals and teachers are employees. They must obey district regulations governing the curriculum, textbooks, schedules, and the like.

The recurring theme in this literature is that the public school system is repressive. It keeps teachers (and parents) from doing what they know should be done for children. If only schools could operate in the free market, unshackled

from political and administrative restrictions, children would get a better education. Further, following the tenets of classical economic theory, private school choice promises to produce an administratively simple, cost-effective system. Because decisions are made by the marketplace, there is no need for an elaborate managerial apparatus. Administrators drain off valuable resources. So, maybe schools would be better off without so many administrators. And again, there is some truth in these criticisms. Several research articles find an inverse relationship between the number of administrators and student test scores (Bidwell & Kasarda, 1975). But naturally, a correlation doesn't necessarily mean that administrators cause low scores. Conceivably, places that already have academic problems hire more administrators.

Insensitivity

Critics complain that big-city school districts have become so cumbersome parents cannot penetrate them. And again, there is some supporting evidence. For example, parents interact with teachers less frequently in schools that have more rules, more centralization, and stronger teacher unions (Corwin & Wagenaar, 1976). Suppose, says Leiberman (1989), parents believe their child is being taught by an incompetent teacher. "To whom would the parent voice his objection?" Few principals have authority or incentive to pursue the complaint. The principal would have to consult the personnel office, which in turn, is bound by contract provisions and procedures worked out with the teacher organization. Existing contracts and prospects of future negotiations can paralyze a school board.

As school districts have grown in size and complexity, administrators have assumed authority for decisions once considered the school board's prerogatives. However, administrators are not in tune with the public on many issues. They are at odds on busing, sex education, vouchers, and other controversial issues. Feistritzer (1988) compared public opinion surveys to her 1987 national survey of 1,700 superintendents and nearly 1,900 principals. The public was twice as likely to favor busing and less likely to favor sex education. Only 8% of superintendents and 13% of public school principals favored education vouchers, compared to 44% of the public (at the time). Also, administrators were substantially more laudatory about recent improvements in education.



1G

Inflexibility

Schools are hard to reform. They are wrapped in overlays of ambiguous authority and pulled by intricate connections among units with diverse interests. District regulations and state curriculum standards do not leave much room for schools to develop and operate their own programs. They also don't control their own budgets. Anyway, each unit can have a different vision, probably opposed to the interests of other units. A curriculum department wants to hire more specialists for a new initiative. However, another department also wants resources, and makes a competitive proposal. Can anyone reform such a monstrosity?

Waste

Critics say public school bureaucracies are wasteful because a huge force of bureaucratic functionaries has swelled the organization charts. Chubb and Moe (1990) clock the growth of administration during the 1980s at 2.5 times faster than the growth of instructional staff. Private schools, by comparison, have much leaner administrative staffs. For example, one quarter of the Catholic schools do not have an administrative apparatus beyond the school board (Chubb & Moe, 1990). Presumably, low-level bureaucratization makes private schools more cost effective than the public sector. Additional savings come from teacher salaries. By some estimates, Catholic teachers earn 40% less than public teachers.

Limits on School Autonomy

Insensitivity, inflexibility, and waste add up to a still more fundamental defect in public schools: Bureaucracy constricts the freedom of schools. Chubb (1990/1991 p. 60) insists the most important determinant of whether a school is effectively organized is freedom to develop its own program and hire i own staff. Then, why not give schools more autonomy? He believes that would be nearly impossible in the public sector because school boards cannot afford to take the associated risks. He does not see that as a problem in the private sector.

Reservations

While many of these criticisms may have some foundation, they are saturated with hyperbole. It will be instructive to reconsider each complaint.



Insensitivity

A fluid coalition governs education. It consists of state legislatures and departments of education, the courts, labor unions, teacher-training institutions, professional organizations, businesses, and many other stakeholders. One cannot dismiss this complex system as a "bureaucracy." Dismantling the bureaucratic components would not touch many problematic aspects of the system, such as lethargy, unresponsiveness, conflict, favoritism, and political corruption. Anyhow, bureaucratic rules are not expendable. Bureaucracy is a defense against favoritism and personalized forms of power, special interests, and small groups of individuals seeking to exert personal influence.

As Weber (1947) observed, decisions based on rules and expertise, the distinguishing features of bureaucracy, are the essence of rational choice. They are precisely what separates legal-rational authority from more personalized traditional and charismatic forms of authority. There is a fine line between a principal being "responsive" to a parent's request and showing favoritism. Rules also provide one defense against corruption. If public school districts have become too remote and insensitive, scrapping bureaucratic standards is not the solution. The public needs more effective control structures and appeal procedures; that means more bureaucracy, not less.

Inflexibility

School districts no doubt have been slow to adapt to new conditions. Numerous districts that have been subject to court-ordered busing are ample demonstration. But it doesn't follow that they are monolithic bureaucracies hypnotized by rules.

First, the private sector has no monopoly on diversity. Beneath their bureaucratic skeletons, school districts are complex organizations operating as natural, loosely coupled systems (Corwin, 1981; Katz, 1964, 1968; Weick, 1976). Within the formal structure alone, some decisions are made at centralized levels of the hierarchy; others are decentralized. Public education is segmented into large and small cities, ghettos and suburbs, and low- and high-income districts. Witte (Clune & Witte, 1990, pp. 14-16) points out that there are over 15,000 school districts, comprising 70,000 schools that vary widely in size, grade-level structure, student composition, course requirements, and funding levels. They cannot possibly fit one



mold. Given the variability, public education can be anything someone wants it to be. It is monolithic. It is fragmented. It is both. It depends on the specific localities and policies being considered. It probably also depends on what one would like to believe.

Second, there can be big differences among schools within a given district. Schools within a district are subject to the same constraints, yet they differ considerably in levels of performance. Therefore, one writer asks, if bureaucracy is the problem, how do you account for larger differences between schools within the same district than between districts? The quality of a student's education depends more on the particular school than whether the school is in the public or private sector (Murnane, 1984).

Conventional wisdom holds that big, complex districts are less flexible than smaller ones. However, some evidence disputes this. Centralized, complex organizations often are more innovative. Authoritative centers of power in big places can coordinate systemwide changes and push programs against pockets of resistance. Another reason is that complexity generates coordination problems that demand correction. Wilson (1966) observed that proposals for change increase exponentially with organizational complexity because every unit has its own ideas about how to improve the organization. The pool of proposals is typically large. It is therefore likely that many proposals will make it through the resistance.

Third, the restructuring and downsizing going on in school districts across the nation contradict the myth that change in the public sector is impossible. Many districts are adopting innovative structures like school-based management, magnet schools, decentralization, quality circles, school-business partnerships, and community councils. Whether these activities prove to be a trend or fads, they prove that change is possible.

Waste

An important element in the cost equation is that most private schools do not provide special education and other costly programs. Only 12% of schools in the private sector are dedicated to special education students (National Center for Educational Statistics, 1991, p. 3). Nationally, 85% of all students in private schools attend a school with a religious orientation. Programs focusing on alternative programs, or vocational and special education, are available in only 1% of the Catholic schools and in 7% of the other religious schools



(National Center for Educational Statistics, 1991). In California, under 4% of the private schools provide language support programs or special education programs (Dianda & Corwin, 1992). Someone who speaks for schools in Ventura, CA, estimates 18% of the county's public school students have inadequate English speaking skills and another 10% have learning disabilities (*Los Angeles Times*, April 19, 1992, p. B-13); yet, private schools in the area do not offer bilingual or special education classes. The same is true of 57% of elite private schools and 40% of other private schools.

Chubb and Moe (1992, p. 6) proclaim that "...leaders of the educational establishment, who are politically powerful and speak with 'authority' on such matters, are quick to say that spending is the key to success." I wonder how many people really believe that. Their point, that adding more money does not guarantee better results, is of course valid. However, it does not mean funding has nothing to do with outcomes. It means only that what really matters is how the money is spent. Bidwell and Kasarda (1975) did not find a direct relationship between cost and test scores. They did, however, find that cost was related indirectly to outcomes, in two ways: (a) If money were spent on hiring administrators, scores went down; and (b) if it were spent on hiring more teachers, scores increased. My coauthors and I found the same pattern in The High School and Beyond data set used by Chubb and Moe (Namboodiri, Corwin, & Dorsten, unpublished).

School Autonomy

If autonomy is so important in the free market, how shall we explain the predominance of big, centrally run private corporations? Are the General Motors, IBMs, AT&Ts, and GEs less bureaucratized than the typical school district? While perhaps Catholic schools are not bureaucratized at the local level, they are part of one of the largest bureaucratic systems in history.

The proposition that lack of freedom is what is holding the schools back rests on these shaky assumptions:

- 1. Among parents and teachers there is pent-up desire to make specific changes.
- 2. Parents and teachers have definite ideas about what needs to be done.



- 3. They agree with each other.
- 4. They are right.
- 5. Bureaucracy is the main obstacle.

Still, there is more to innovation than simply unleashing some constraints. Besides a broad-based commitment to improve, planned change requires many other things. For example, it is essential to have planning, special procedures, detailed knowledge of the options and the circumstances, implementation skills, and the resources needed to do the job. Furthermore, if the main actors disagree on what needs to be done, an administrative apparatus has to be set up to mediate the disagreements and to coordinate and monitor progress.

Finally, even if autonomy were essential, the private sector cannot avoid regulation. The chief advocates of vouchers themselves see a need for more bureaucracy. They recommend a host of rules to ensure that necessary information gets to parents, that admission processes are open and fair, that special funding is available for children with physical and learning disadvantages, and that transportation is provided for those who need it (Chubb & Moe, 1992, pp. 10-11). In addition, legislatures can impose other requirements. For example, the 1992 California voucher initiative would have given the state authority to request participating schools to administer standardized tests.

Implications

Common knowledge tells us there are many excesses in public school districts. However, the free market is not the only alternative. Many organizations are voluntarily modifying traditional bureaucratic structures with supplementary structures, such as decentralization, interdepartmental task forces, coalitions of member units, and the like. School districts are no exception to this trend. Fifteen years ago Levin (1979) identified many options to privatization within the public sector. They included open enrollment, alternative schools, and minischools.

PART III A QUEST FOR THE ONE BEST SCHOOL

Having dismissed as incredulous the myth that there can be only "one best system" to govern public education, Chubb and Moe (1990) take us on a journey to unearth the one best school (see also Erickson, 1982; Tyack, 1974). They cite some data that show private schools have the following characteristics (in comparison to public schools):

- 1. Parents are uniformly more cooperative and supportive of their schools; they have higher expectations and are more active in monitoring their children's behavior.
- 2. Principals have more influence over curriculum and instruction, discipline, and hiring and firing; they have more teaching experience and are not preoccupied with advancing their own careers, and teachers rate them higher.
- 3. Teachers give more priority to academic excellence and personal growth; they place less stress on basic literacy, citizenship, and good work habits.
- 4. Teachers are less active in unions, but believe they are more influential in setting schoolwide policies governing curriculum, textbooks, discipline, homework, and hiring and firing; they spend more time meeting and are more satisfied with their jobs, although they work for less money and seldom have tenure.
- 5. Graduation requirements are more stringent, and students do more homework and take more academic coursework in English, history, science, math, and foreign languages.

Some of these features, such as homework and academic coursework, correlate positively with school-level standardized test scores (Coleman & Hoffer, 1987; Lee & Bryk, 1989; Namboodiri, Corwin, & Dorsten, forthcoming).

What Do the Data Actually Say?

A small corps of high-profile social scientists has fueled the momentum for privatization. Their positions are based on their readings of available research findings and their own proclivities. This involvement on the part of eminent social scientists has cloaked the debate over privatization in the authority of social science. But it also is mired in uncertainties inherent in data analysis and in sometimes slippery projections from data to ideology.

Some Findings

Over the last decade, several studies have shown that students in Catholic schools, on average, have higher standardized test scores than their counterparts in public schools:



- 1. A study published in 1982 compared 893 public schools with 84 Catholic schools and found that reading and math test scores averaged about one grade higher in Catholic schools (Coleman, Hoffer, & Kilgore, 1982).
- 2. In 1987, Coleman and Hoffer published another report using 1980 and 1982 longitudinal data to examine changes in achievement between the sophomore and senior years. Catholic school students outgained their counterparts in the public sector in reading, vocabulary, mathematics, and writing. This analysis controlled for the students' race, socioeconomic status, region, handicap status, college aspirations, and parents' educational aspirations for their child.
- 3. Other analyses of the same data confirm higher achievement for Catholic school students (Bryk & Raudenbush, 1989; Lee & Bryk, 1989).
- 4. An analysis of National Assessment of Educational Progress Data showed that 4th, 8th, and 11th graders in Catholic schools do better in reading than their public school peers.

Some Questions

However, are the findings worth all the fuss? Many writers have criticized the technical foundation of the data and the way they are being interpreted.

Technical Issues. The findings themselves can be challenged on three grounds.

How big are the differences? First, critics have raised questions about the size of the difference between the public and private sectors. Several critics have challenged the importance of the differences reported, for example:

1. Alexander and Pallas (1987) used sophomore test scores as a measure of the students' prior ability. They found almost no difference between the two sectors. There was little support for the widely accepted proposition that Catholic students improve more rapidly than students in the public sector.¹



Alexander and Pallas concluded that Catholic schools have, on average, about two thirds of one-year growth advantage over public schools. Many do more poorly; 40% of the Catholic sophomores still scored

- Goldberger and Cain (1982) faulted Coleman and his
 coauthors for failing to control for differences among
 students in different tracks. Students in nonacademic
 programs in public schools were compared to private school
 students enrolled in academic programs.
- 3. Levin (1990) concluded that at best the average private school student ranks above his/her public school counterpart by only a few percentage points.
- 4. According to Rosenberg's (1990/1991) estimates, all of the school organization variables considered by Chubb and Moe, taken together, don't explain more than 5% of the variation in student achievement. She concludes organization variables could increase the correct answers by one or two and close the achievement gap by not much more than half a year.

Has research solved the selectivity riddle? The second technical question is whether the special characteristics of students selected into private schools have been adequately controlled. Two types of selectivity are in question: ability and behavior.

Concerning the ability dimension, some writers dispute that the sophomore test score is an adequate measure of the selection bias. As Witte (1990) observes, the family making the financial sacrifice necessary to send its children to private schools has an exceptional "taste for education." In other words, it attaches more importance to education and instills higher motivation in their children.

The question of selection for ability aside, private schools are proficient at picking well-behaved children. Their screening criteria include personal interviews, grades, and behavioral considerations. The rates of drug use, vandalism, and verbal abuse of teachers are one half those found in the public sector. Also, student absenteeism and cutting classes are far lower (Coleman, Hoffer, & Kilgore, 1982).

How much variance is there? The third technical consideration I will mention is fundamental. However, it is

below the sophomore average after two years of schooling. The point they stress is that students in either sector do not exhibit much improvement during their high school careers. The total change for each sector is so low (a few more questions answered correctly) that even a one-year difference would not be a meaningful advantage.



puzzling that even the severest critics have seldom mentioned it. The debate over the private sector's presumed test score advantage has been riveted to comparisons of means, medians, and percentages. My concern is that no one seems to worry about the distribution of outcomes. The important question is whether the average difference carries throughout the entire population. Or does it reflect better performances in only one part, such as the upper end, which pulls up the mean? To paraphrase Brown and Saks (1975), the main question is not whether an input such as homework is usually productive, but for whom it is productive. People want to know, how many students in the private sector are doing better, and which ones? Means and medians simply cannot tell us that. A school can increase its average score if students in the upper part of the distribution improve; the net effect could be to increase the gap between the top and bottom. Or, students in the bottom part of the distribution could improve, but at the expense of the upper part. Here, the mean score might not change, but the intervention has nonetheless had an effect. Rosenberg (1990/1991) observes that sophomores in the High School and Beyond survey answered 6.6 more questions correctly by their senior year, which is a small gain. However, the lowest quartile of students answered, on average, 4.66 fewer questions correctly. This translates to 18.13 more questions that the top quartile answered correctly. Thus, the achievement gap between the bottom and top groups widened by 22.79 questions, or 6.33 years. Does that pattern hold for the private schools as well?

To judge the validity of claims being made for the private sector, we need to know more about how test scores are distributed in the public and private sectors.

Implications. Let's suppose that private schools are doing some things that work. We have at least two options. One is to turn over education to private schools. The other is for the public sector to adopt the private schools' strategies. Chubb and Moe (1990) show that private schools have distinctive organizational characteristics, and that their academic prowess results from effective principles of organization.²

Those findings should tell us that the advantages of private schools, whatever they may be, probably have little to do with virtues inherent to private schools *per se*. Their advantages stem



Chubb and Moe (1990) estimate that properties of schools account for one half to two thirds of a year of additional achievement. About a fourth of that amount is specifically due to academic tracking; the remainder can

PART IV INTERPRETATIONS

from the way some private schools are organized and operate. If the organizational differences were factored out, the private school advantage would disappear. If so, privatization is not necessarily the answer.

Returning now to our original question concerning whether privatization can reform education, I find the proposition hard to swallow. Consider again the holes we have found in the reasoning.

First, the crux of privatization, the market model, is itself flawed by pervasive subsidies and regulation. Anyhow, the voucher programs that are being proposed don't conform to the market model. The picture is clouded by compulsory attendance laws, public subsidies, selective admissions, and the public sector's historic responsibility for promulgating common values.

Second, it requires a leap of faith if we expect that a little competition from some private schools will reform the vast enterprise of public education. Reform takes time and involves far more than competition. Moreover, competition can have a debilitating effect that saps the strength of public schools without killing them off.

Third, to hold bureaucracy responsible for the ailments of public school districts is like attributing inebriation to the bubbles in scotch and soda. Public education is a diverse and sprawling enterprise. It cannot be encapsulated in a simple stereotype, notwithstanding that bureaucracy is an admittedly important component of public education. It also is integral to the Catholic church, major corporations, and government agencies.

Public bureaucracies do have their problems, but countless rules they support provide the first line of defense against

be attributed to the combined effects of homework, graduation requirements, administrative routines in classrooms, and disciplinary policy. An analysis of the same data by my coauthors and me show that the amount of homework, time spent in school, teachers' education, and the presence of specialized facilities each correlated with learning outcomes (Namboodiri, Corwin, & Dorsten, forthcoming). Some of these variables had more effect on verbal scores, while others impacted math. We also discovered that the effect of specific variables depends on where students are located within the overall distribution of scores. For example, the lowest quartile of verbal scores, with students already at most risk, actually expanded as time in class increased. However, this part of the distribution benefited from homework, specialized facilities, and teacher training.

20

favoritism and corruption. If there is more waste in the public sector (and maybe there is), it cannot be used to account for the lower overhead in the private sector. Private schools are cheaper because they pay teachers less and can handpick the students they want. Therefore, they can avoid the costly and perplexing job of dealing with the array of overwhelming problems that plague public schools—problems involved in coping with limited English proficiency, vocational education, the physically handicapped, disciplinary cases, chemical dependency, and pregnancies, to mention only a few.

We shouldn't exaggerate the amount of autonomy available to private schools. They are subject to many of the laws, regulations, professional norms, and customs that apply to the public sector. Autonomy can sometimes promote good ideas, but is not a cure-all. Teachers and parents must know what will work and agree how to do it. Even then, it will be necessary to resurrect bureaucratic methods to coordinate effort and resolve disputes.

A seductive myth that private schools are superior has swept the nation astride a survey based on a handful of Catholic schools. The evidence is thin and opaque, based solely on small differences in means and without regard to the distributions of test scores in the two sectors. If there is a difference, it is probably due to selective admission policies used by private schools. Even if we were to grant that private schools get better results, it does not necessarily argue for more privatization. It makes equally good sense for public schools to copy what works in the private sector.

In sum, the arguments we have reviewed so far, promoting privatization as a vehicle of reform, simply do not hold up. Now I want to take another step and examine two dimensions I have not yet considered. I see two possibilities that have been largely overlooked in the weighty literature on the subject:

- 1. The private sector advantage would probably disappear if it were to successfully compete and expand as proponents recommend.
- 2. The simple choice between public and private schools is too limiting and does not begin to address the fundamental problem of providing parents with more alternatives.

Scale Effects

From the issues being most hotly debated, one gets the impression the debate over school choice concerns only what



exits. On the contrary, apart from the relative merits of the public and private sectors as now structured, the crucial question is, what would happen if privatization were to become widespread? The private sector now holds only 12% of the market, consisting of select students, and it is concentrated in a few places. For example, two thirds of the Catholic enrollments are clustered in 15 states, five of which account for almost half the enrollments. Half of all Catholic school students attend schools in 20 Catholic dioceses; only one, Los Angeles, is in the western states. One quarter of Catholic school students are concentrated in only five cities (Brigham, 1992; National Center for Education Statistics, 1991, p. 25).

What would happen if this market share increased across the breadth of the United States, say from 12% to 25%? Or suppose they capture half of all enrollments. Evaluations of innovative education programs over the years ought to trigger some skepticism. Even some very promising programs falter when they grow from small, experimental, hothouse settings into large-scale operational programs. Expansion necessarily introduces new conditions, unexpected events, and additional administrative problems and financial exigencies. Small, experimental programs are usually inexpensive, not highly visible, and nonthreatening. Big programs intrude on established ones, requiring changes in roles and status systems, thus unleashing latent political forces (see Corwin, 1973, for a review of some of this literature).

Private sector expansion can occur in two ways—through enlargement of existing schools and through new findings.

Enlargement

There is no evidence to suggest that existing schools are preparing to dramatically increase their plants and staffing to take advantage of voucher programs. At a point in time in California when a specific voucher program had a good chance of being approved, we asked private schools whether they planned to accept students with vouchers. If so, we then asked whether they would increase their facilities (Dianda & Corwin, 1992). A quarter of the 1,000 private schools that responded were not planning to participate in the voucher program at all. Of the schools most likely to participate, 40% were operating at peak capacity. Over 70% could expand by no more than 15%. While half of these planned some expansion, very few said they would expand by a large amount.



However, for the sake of argument, suppose that most private schools do eventually decide to go for substantial growth. Several things will happen.

Loss of Distinctive Character. First, expansion means displacing a very distinctive clientele to reach a broader market. That in turn will drastically alter the shape of private education as it exists today. The evidence that private schools take steps to select the right students comes from a national study of private schools based on information from 1987 (National Center for Educational Statistics, 1991).

- 1. Most Catholic high schools require for admission a standardized achievement or aptitude test (77%) or a test developed by the school (22%), a strong academic record (61%), recommendations of elementary school principals (73%), and successful completion of the previous school year (98%); also, about half require interviews with parents and students.
- 2. Catholic high schools seldom serve special education students. Only a few private schools provide bilingual services (9%), English as a second language services (12%), programs for the handicapped (18%), and vocational/technical programs (14%). They are more inclined to provide academic services such as remedial reading (69%), remedial mathematics (53%), foreign languages (46%), and programs for the gifted and talented (33%).
- 3. Inner-city Catholic schools enroll a high percentage of minority students, but the above pattern suggests they also are a select group. For example, in California, where the typical private school is 40% minority, most schools expect students to be performing at grade level as a condition for admission. In less than 10% of California's private schools, one fifth or less of the students come from families receiving some form of public assistance. Eighty percent of these schools have no children eligible to participate in a federally subsidized breakfast or lunch program.

If private schools become less selective, as they must to expand substantially, they will lose their special market niche and radically alter their distinctive advantage.

Additional Costs. Second, the cost advantage of Catholic schools partly hinges on the special market niche they now



occupy. Could they maintain a cost advantage if they had to build a school plant large enough to educate one quarter to one half of the school-age population? As it is, they can pay teachers substandard salaries. Still, how large is the pool of competent, dedicated teachers willing to work for 40% less than they can get in the public sector? Another element in the cost equation, already mentioned, is that private schools seldom provide special education and other costly programs.

Reemergence of Bureaucracy. Third, the privates have been able to remain relatively small and administratively simple because they handle only 12% of the school population. Some public school administrators contend private schools do not have an equivalent burden of compliance requirements to monitor. Large city public school districts must rely on economies of scale and a large administrative apparatus. Could Catholic schools maintain a simple administrative structure if they were to double or triple their current enrollment? Could they provide an equitable education for millions of children without resorting to rules, specialized offices, and hierarchies of authority?

Some cooperatives and commune schools tried to get along without specialized offices, centralized control, rules, and schedules. They often reintroduced the same features, in response to:

- (a) employees wanting careers and needing reliable procedures to meet deadlines and ways to coordinate effort;
- (b) banks and other sponsors looking for evidence of financial stability and legitimacy; and
- (c) taxpayers and benefactors demanding accountability and looking for assurances that people are doing what they are supposed to (Swindler, 1979; Newman, 1980).

New Findings

The logic of privatization is that entrepreneurs will rush in to build new schools in response to increased demand. What would happen then?

Freedom From Custom. First, as proponents claim new schools do have the advantage of being unimpeded by tradition. They are not locked into obligations, established procedures and structures, and an existing plant (Stinchcombe, 1965). They



therefore are free to develop and tailor special programs for specific types of customers, just as free market advocates say.

Liabilities of Newness. Second, however, they suffer liabilities of newness. One liability is financial instability. New organizations have short life spans. Many schools will go out of business quickly, creating disruptions in students' programs. Some students can expect to shift from school to school as they open and close.

A major liability for new organizations is that financially insecurity makes them vulnerable to takeovers by powerful interests with the resources needed to keep them going.

Another liability is that a new school is an unknown. It has no record or reputation to underwrite its competence and reliability. Therefore, newly founded schools may have difficulty attracting customers.

For the new school, legitimacy depends largely on who sponsors it. Teachers or other members of the education establishment probably can count on some good will, whereas sources outside this mainstream may have more difficulty. Therefore, outsider status perhaps brings new perspectives and other forms of flexibility, but it also poses additional risks. Perhaps it is safe to assume that old-line schools in the private sector usually subscribe to high ethical and educational standards, since they have been scrutinized. The new ones will be an unknown quantity at first.

White-collar Crime. Presumably, the private world is relatively free from conventional regulations. New private schools may therefore be vulnerable to various kinds of white-collar crime. The "laws" of supply and demand sometimes operate outside the law. On one recent day, several major banks, a chain department store, an automaker, an airline company, and a chemical laboratory were charged with federal violations ranging from fraud, price fixing, and credit swindles. A high rate of fraud associated with private trade and vocational schools may be a cause for some concern.

However, opponents of privatization probably tend to exaggerate the risks. Enemies of the school choice initiative in California (especially teacher organizations) claimed there would be no requirements for school accreditation, no teacher certification, no state-required financial accountability, and no curricular standards. They warned that teachers with criminal backgrounds can slip through, that school buildings are exempt from safety codes, and that pupils are not required to be immunized against diseases.



3;

Several of these criticisms are inapplicable to existing private schools. For example, school employees who have contact with minor children are required by state statute to undergo clearance by state and federal agencies. Private schools are required by state education codes to meet state graduation requirements. And, schools are subject to the same state and local building codes and earthquake codes that apply to any public building.

Implications. In sum, scale is itself a force that has yet to be factored into the privatization story. The changes are likely to be exponential, not linear. There is no reason to suppose the two sectors will continue to function as they do now while the relationship between them undergoes the fundamental transformations that youcher advocates look for.

School Choice as a Division of Labor Problem

Choices require alternatives. Over the cacophony of voices disputing vouchers, I hear a shrill protest about the finite number of options available in the public sector. Privatization offers an alternative, but for a narrow segment of the market. The overwhelming majority of schools in the private sector emphasizes academics; a very small percentage focuses on special education and learning alternatives. That is not good enough. The diversity of challenges cannot be met unless someone creates more alternatives in both sectors. Instead of arguing about whether private schools are superior and jousting over who has the right to make choices, let's contemplate how to provide more meaningful alternatives from which to choose.

The Common School

For most parents, the only realistic prospect is the traditional common school. It doesn't work any more. What I will propose in the following pages is a system of specialized schools designed to provide comprehensive services to meet the needs of most students. The advantages of a better division of labor will become clearer if we compare the assumptions underlying the privatization movement with the realities of education.

Assumptions and Reality. In the course of the debates over private school choice, advocates on both sides have winnowed down an immensely complex public education system to four simplifying assumptions:

1. All schools have one objective—to improve cognitive test scores, especially the scores of the most capable students.



- 2. Either private schools are better and more cost effective than public schools, or they are not; variability within sectors does not count.
- 3. When given discretion, parents will make wise choices; and when given autonomy, schools will find the best solutions.
- 4. Within any given school, students can be mixed together and treated alike.

The reality is quite different:

- 1. Schools are saddled with many objectives other than academic learning; among them are vocational training, public health, character formation, and acculturation.
- 2. Schools are not simply good or bad, better or worse. They have potentially unique capacities to achieve diverse objectives. There are good and bad private schools, just as there are good and bad public schools.
- 3. There is no conclusive evidence that test scores are caused either by autonomy or the level of satisfaction parents express with their child's school. There is no reason to believe that simply giving schools more autonomy will make them improve. Autonomy alone doesn't furnish the wisdom necessary to avoid mistakes.
- 4. Finally, students are not equally prepared. Many are unmotivated; some have physical, learning, or language disabilities. And, at least in the public sector, they may come from diverse family backgrounds.

If the simplifying assumptions so obviously contradict the basic realities, why are they being greeted with such enthusiasm? It is because privatization opens one, if narrow, set of options—options promising an idyllic island of tranquillity in a volatile sea of diversity, change, and disruption. Unfortunately, these options happen to be available only to a few parents. A mirage or not, privatization signifies there are some schools, somewhere, specially qualified to do a particular task. They are set up to meet the academic needs of average and exceptional children.

However, privatization provides no real solution to the division of labor problem. It has no counterpart clamoring for



schools distinctly qualified to help the economically, culturally, and educationally handicapped of ildren. It is in this sense, and primarily in this sense, that privation is an elitist solution. That criticism would be less apropos if comparable resources and support were available for all types of customers.

Multiple Goals, Multiple Responsibilities. Schools have accumulated many burdens, which common sense and models from all around suggest demand special resources. Few hospitals are staffed exclusively by general practitioners. However, most schools are staffed almost entirely by teachers with identical job descriptions. A given classroom teacher, unassisted and with no special training, can expect to cope with:

- (a) youngsters from ethnically and socially diverse backgrounds;
- (b) youngsters who may have physical, learning, and language disabilities; and
- (c) youngsters whose parents exhibit varying degrees of support for school policies.

Moreover, any given teacher will probably find high rates of truancy, vandalism, insubordination, and drug abuse. No matter; one type of teacher fits all. This situation is not an accident of history; it is a deliberate policy. Could anyone have designed a system that is less likely to succeed?

The lesson from the private school choice movement is that the common school is not working. It uses an embryonic division of labor out of step with the requirements of a technocratic society. Once regarded as the first line of defense against elitism, the common school has become as obsolete as the general store. Yet, firmly etched in tradition and intercommingled with democratic ideals, the ideology (if not always the reality) has proven resilient beyond its usefulness.

The Common School as Adversary of Specialization. The common school, as set forth by Horace Mann (Morgan, 1936) 150 years ago, consists of a socially integrated student body and a core curriculum. Curricular-academic criteria and students' social characteristics provide the basis for programs. The latter include both background attributes and personal characteristics, which sometimes aid and sometimes hinder learning.

Traditionally, the design of the common school supported the myth that it is unnecessary to pay much attention to the background question. Common schools acted as laboratories for



welcoming and assimilating newcomers who did not know the language and customs. Therefore, educators concerned themselves largely with the curriculum. In recent years, desegregation programs have focused on students' social backgrounds. However, here I want to concentrate on the personal dimension, the source of legion problems and pathologies that afflict schools today. In many respects, it is the downside of the common school ideology. While many teachers and programs may be concerned about this part of schooling, the reality is that schools are not structurally organized to deal effectively with the disparate personal problems of students.

James Conant (1948) wrote treatises nearly a half century ago propounding the common school as a major vehicle for assimilating waves of immigrants and fostering understanding among the social classes. He argued vociferously that the comprehensive design of public schools in the United States combated elitism by assimilating a broad spectrum of social classes and racial and ethnic minorities. However, in principle, the common school is opposed to specialization, which often is portrayed as destructive of community values and a source of alienation (Bowers, 1985; Newmann, 1981).

The common school is no longer a reality everywhere, if it ever was. It is bent out of shape by residential housing patterns and tracking practices. However, otherwise, schools continue to be set up as they always were. Within the parameters controlled by districts, students are still assigned randomly to schools and teachers. Using principles of equitable treatment rather than policies of distinctive need, school administrators mix students indiscriminately within classrooms. Consequently, any teacher can expect to confront a mixture of students carrying the full spectrum of problems.

Whenever it has the chance to change things, the American public faithfully refuses to sort children into groups based on their distinctive needs and problems. Sometimes a group, such as the physically handicapped, manages to find a supportive environment for a while. Then, someone discovers it and reins it back into the mainstream of comprehensive classrooms to preserve the semblance of the common school myth. Accordingly, specialization remains at a primitive level in education, while perhaps the surrounding society has moved too far in the other direction.

Schools will never be effective until they have specialists trained to work with children who are afflicted with a wide range of social and physical handicaps and learning disabilities.



Specialists, in turn, need: (a) clearly delineated responsibilities, (b) a supportive knowledge base, (c) specialized training, (d) incentives to work hard at whatever they are expected to achieve, and (e) a supportive environment. A supportive environment includes (a) special schools, (b) classrooms, (c) programs, and (d) other critical resources. Taken together, these kinds of support make up the division of labor within a given school and between schools.

The Meaning of Specialization

Before defining specialization, consider first what it is not.

Diversity. Proponents of vouchers call it "diversity," suggesting that options are abundant. "The private sector," declares Coleman (Clune & Witte, 1990, p. vxiii), "is not a single sector...Greater diversity is achievable in the private sector of education." Proclaiming that parental choice and control at the school level will lead to "increasing diversity and innovation" (Clune & Witte, p. ix), Coleman succeeds in capturing a creed shared by many voucher supporters. Perhaps the private sector is as diverse as the public sector. It does not solve the division of labor problem, however.

Homogeneous Communities. Some writers equate specialization with "homogeneous communities," meaning a school whose students and parents share the same religious, political, and social backgrounds. However, don't confuse a group of students and parents from similar backgrounds with specialized structures. The latter include curricula, teacher training, incentives, resources, and the like. Moreover, there is substantial redundancy among homogeneous communities. For example, Catholic schools make up most of the private sector. They represent one type of alternative, not many different ones. Most important though, homogeneous schools evolve in a haphazard pattern. Each school is a product of the exigencies of community size, wealth, church organization, and the like.

Idiosyncratic Specialization. Another kind of specialization is "idiosyncratic." It is the product of adaptation. Many schools and districts have evolved distinctive reputations. Reputations form in response to diversity among communities. They also reflect the initiative of principals and the concerned efforts of many talented individual teachers. The latter may be adept at working with discipline cases, or with the deaf, or with remedial learners. Others have a special talent or a personal interest in working with students who have particular problems.



Controlled Adaptation. Finally, one author (Glenn, 1987) recommends something that I would call "controlled adaptation." His objective is to produce schools that are "...distinctively excellent in ways that take into account the concerns of parents and the professional judgment of teachers and principals..." Distinctive schools of this kind come close to specialization as defined above, except the concept is not systemic. It lacks the comprehensive planning that is so fundamental to a system of specialized schools.

Characteristics of Specialization

In contrast to vague and random usages like these, specialization has a specific definition in the expansive literature on the division of labor and professionalization.

Specialization Defined. A specialized organizational unit, such as a school, is a planned alternative within a systematic division of labor. It provides a special focus, and skilled workers, trained to perform interdependent roles, staff it. An example is a school for accelerated learners equipped with laboratories, libraries, and paraprofessional support. Teachers are rewarded or fired depending on students' performances on college admissions exams. However, any organizational unit can be specialized, including: teams of teachers, single classrooms, programs within schools, collaborative programs within and across schools, centers and consortia within or between school districts, and special schools or school districts.

Specialization establishes a mission. It clearly specifies what a school is supposed to achieve. This has two important consequences. First, unless the product is identified, no one—not school boards, administrators, teachers, nor students—can be held accountable for anything beyond attendance and literacy. But, when the specialized competency is explicit, then it is possible to the performance standards and sanctions to each official, teacher, and student. Second, differentiated, competitive relationships between winners and losers become transformed into symbiotic relationships among providers. When providers are undifferentiated, they all compete for the same thing teachers usually compete for—the good academic students. A division of labor sorts the population into different domains, thus widening the base so everyone can be a winner.



Ingredients of Specialization. Specialization is not equivalent to the mere presence of trained personnel. The staff must be supported by a structure made up of (a) interdependent professionals and paraprofessionals with clearly defined roles, (b) an evaluation and incentive system, (c) governance and appeal mechanisms, and (d) linkages to parents and other schools and service agencies in and outside the district. All of the pieces must be present. For example, under the tenets of specialization, teachers cannot be held accountable for outcomes unless they have the necessary support.

Specialization and the Division of Labor. Specialization, in the sense used here, is systemic. In a systemic organization, alternatives have meaning only in relation to one another. One must understand the total system of relationships to assess the value of a given alternative. Systemic specialization is planned, comprehensive, balanced, and equitable. To form a systemic division of labor, one must first match the objective for each type of student with their condition, and then establish approrriate organizational structures. Objectives may be academic, ocial, vocational, or religious. The condition of students depends on whether they are motivated or alienated, idealistic or pragmatic, well-prepared or not. Some have personal problems (e.g., drugs, despondency), handicaps (e.g., language deficiency, dyslexia), or conflicting responsibilities (e.g., a job, a baby).

The division of labor question is whether alternatives are available to meet such needs. In practice, every school informally specializes to accomplish different things. When the system is viewed as a whole, the gaps and the redundancies will become apparent.

Comprehensive vs. specialized classrooms. The social classes mixed with one another within the common school and they were stirred again within comprehensive classrooms. Americans want to keep the organizational structure of the common school, even against heavy odds. However, comprehensive classrooms were folded into homogeneous learning groups and multitrack systems. Grouping and tracking pass as specialization because they bring together students with similar social backgrounds. However, neither practice is supported by the structures and trained personnel needed to target expertise most effectively. They are afterthoughts tacked onto an organizational form designed for other purposes. Tracking, in particular, is a de facto form of skimming, a vehicle for diverting talented students into accelerated tracks without necessarily helping students in the low track.



Therefore, grouping and tracking experiences are not tests of the feasibility of within school specialization.

For the following discussion, it will help to distinguish between: (a) systemic specialization vs. idiosyncratic specialization; and (b) specialized schools vs. specialized classrooms.

Systemic and idiosyncratic specialization. Systemic specialization is planned, comprehensive, balanced, and fair. It requires (a) a formal structure (procedures, rules, and resources); (b) trained personnel; and (c) sanctions tied to performance. An example is a school for accelerated learners that rewards teachers based on students' performances on college admissions exams.

Idiosyncratic specialization was defined above. It is an adaptive structure, shaped from informal responses to political and economic forces and student composition. While the common school model still guides mar y policies, idiosyncratic specialization has changed the model. For example, test scores reflect differences in student composition due to geographical segregation of the social classes. Some schools function as "dumping grounds" for those students the system cannot handle in any other way.

Forms of Specialization. Within any organizational unit, specialization can take one or more of the following forms.

Role specialization. Teachers and paraprofessionals are formally trained and experienced in the skills and functions necessary to perform a task. Possibilities for specializing extend far beyond course assignments. They include professional and supportive roles, such as working with children who have language deficiencies or those in need of remedial assistance. Other examples are social workers and health care personnel who work with families.

Thousands of nonteaching professional personnel already work as specialists in: school psychology, reading and language, nursing, bilingual and special education, alcohol and other drug abuse, teenage pregnancy, suicide prevention, college counseling, job placement, and the like. The rate that noninstructional staff has been growing is twice the rate of instructional expenditures (Robinson & Protheroe, 1987). Even so, in comparison to the enormity of the demand in problem-plagued schools, they remain little more than symbols of what might be done.

Specialized programs and schools. There are vocational schools and schools devoted to special education, the arts, and to modern technologies, but they are not necessarily prevalent. For example, most large school districts sponsor alternative or



magnet schools. However, few students thus far attend such schools. Only 200 of the 15,000 school districts in the United States have magnet school programs. Only 1,500 of the 70,000 operating schools are magnet schools (Dentler, 1991).

Specialized content. Although many forms of specialization exist, as an organizing principle, specialization has not reached its potential within public education. The capacity of schools to specialize extends far beyond the curriculum and a few schools devoted to math, science, the arts, and special education. Other possibilities include:

- (a) school-based health care facilities for alcohol and other drug problems, pregnancy and day care, and sexually transmitted diseases;
- (b) counseling and diagnostic centers for students who engage in violence, vandalism, and verbal or sexual harassment; for recent immigrants; and for students returning to classes after jail sentences or extended truancy;
- (c) language clinics for limited English proficient students;
- (d) remedial schools and programs for students with educational and learning deficiencies; and
- (e) teacher centers focused on helping teachers learn to cope with specific problems (such as a deaf child or a child who cannot speak English).

The significant question is, what percentage of the school-age population is regularly served by specialists? The existence of some specialized roles and schools does not change the basic condition of classroom teaching. As in the past, the common school ideology remains the prevailing model.

Implications. The main objection to privatization has nothing to do with the economic and moral consequences of using tax money for tuition. The problem is that it will not meet the needs of children who need special nelp: economically, culturally, and educationally handicapped children with physical and cultural handicaps, those who need remedial help, and those with behavioral and alcohol and other drug problems.

Therefore, I have proposed a system of specialized schools designed to provide comprehensive services to meet the needs of most students.



A specialized school can hire qualified personnel, concentrate on manageable problems, and be held accountable for results. Competition between identical schools evolves into mutually beneficial exchanges.

PART V CONCLUSIONS AND SUGGESTIONS

The private school choice idea is shrouded in a smog of dubious assumptions, frail claims, and hyperbole. Sweeping conclusions about entire institutions are being drawn from small differences within a data base consisting of only 84 Catholic schools and a handful of other private schools. Not designed to test the superiority of private schools, survey data are being analyzed with imperfect methods. Still, apart from these weaknesses, it makes sense that there are some good, affordable private schools. Why shouldn't all parents have access to them? However, the rationalizations being used to justify the privatization of education are self-defeating.

Synopsis

Consider the three-pronged campaign being conducted by privatization proponents.

The Prospect of Competition

The main prop of the movement, the creed of competition, is decisively flawed. Compulsory education is poorly suited to a free market model. Reform is more likely to occur through collaboration with effective private schools than from competition with them.

The private sector, sheltered within a special niche, is too small and too highly focused on a select clientele to be seriously competitive with public education. Some marginal public schools may become debilitated, but there is no way to ensure they will disappear. Furthermore, although competition can be a powerful incentive to undertake reform, it will not guarantee that an effective plan will be forthcoming. Nor will competition provide the resources and skills needed to carry it out.

Schools in high demand may expand, but they also may simply fill up. New schools may or may not open fast enough to meet growing demand, and if new findings lag, tuition in the most desirable schools will rise. Also, as risky new private schools open and close in response to market forces, children will be subjected to continual uncertainties of school closings.

Promises about the fruits of competition have been couched in language so flabby they are virtually unverifiable. The

proposition that competition from the private sector will force reforms in the public sector is not only vague; it is not testable. What will change, in which directions, and in which schools? How will we know? How long will it take? Without a time frame, how shall we know whether a flailing school has failed, or is valiantly hanging on, or perhaps is about to be rebern? Equally important, the details about how voucher plans will be carried out have not been worked out. Therefore, people can assume whatever they want. For a review of the underlying organizational ecology model, see Corwin (1987) and Namboodiri and Corwin (forthcoming).

Freedom From Bureaucracy

Proponents of vouchers like to think the private sector is not as bureaucratized as many big city school districts. However, there are thousands of school districts operating in a variety of ways. Moreover, bureaucracy is not exactly a discretionary item like swimming pools. Bureaucratic rules and procedures provide necessary academic standards and equity safeguards. Anyhow, bureaucratization follows size. If the private sector were to swell to the extent some voucher proponents promise, it will become more bureaucratic as well.

Superiority of Private Schools

Private schools may or may not be more effective than public schools; the evidence can be disputed. If they are more effective, it is because they use strategies and organizational designs that in principle can be adopted by public schools without going to the extreme of privatization. Thus, it is not clear there is anything inherently superior about private education after considering organizational differences and selectivity.

However, I am not ready to give up on private schools. The hyperbole is a nuisance, but it only tarnishes the role they play in a democracy. It does not discredit the general proposition that many private schools should be pulled into the orbit of the public sector. There are good and bad public and private schools. The trick is to link them more closely to take advantage of their strengths and to correct their weaknesses.

Recommendations

That privatization can cure the ailments afflicting public education is a fantasy (Bibbiani, 1991). It only diverts attention from the fundamental challenge, which is to provide better



2

35

alternatives from which to choose. To help every type of child, there must be a planned division of labor consisting of a comprehensive system of specialized schools. Their missions can go beyond regional schools devoted to academic subjects. They must be concerned with specific kinds of personal problems characteristically found in today's schools. Cooperative partnerships should be encouraged between selected private and public schools to take advantage of the unique strengths and needs of each sector.

Competition or Interdependence?

The private school choice debate artificially sets public and private schools against one another when competition is not the real issue. The fundamental property of any system of organizations is interdependency, not competition. Besides competing, all organizations make exchanges and form coalitions and mergers. See Corwin (1987) for a comprehensive review of network relationships. This applies to the commercial world as well. Subcontracting and franchises are prevalent in business. Schools can adopt similar forms of cooperation.

Schools in both sectors are dependent on the same public dollars, and both produce public goods. When one thinks of public and private schools as part of a larger network, the questions shift from "Which is better and more deserving?" to "What is the best mix to produce a given set of results?" And, "How can public and private schools work together to mutually reinforce the contributions of each sector?"

The answers to these questions are probably no easier than the ones we have been considering here. Yet, the questions themselves suggest a different trajectory, which promises more collaborative arrangements than the competition model allows. The question of mix hinges on first finding better alternatives and then forging a symbiotic network of schools to carry them out. There is some evidence that collaboration can produce improvement. My (1973) study of some innovations promoted by Teacher Corps programs in the early 1970s showed that those schools that changed worked closely with colleges and allied organizations. Collaboration can come about in one of three ways: (a) joint efforts to foster and protect mutual interests or common goals; (b) exchanges of goods and services; and (c) legal and financial coercion.

Joint Programs

As one option, for example, schools in the public sector can establish and operate joint programs with effective private schools, and otherwise obtain assistance with their reform efforts.³ Another option is for public schools to more aggressively franchise or contract with qualified privates to undertake tasks they can do better. School districts have experimented for years with the idea that educational services can be contracted out. A third option is to use public funds to reward collaborative efforts. Or alternatively, collaboration can be made a condition for obtaining public monies.

Systemic Reform

Focusing on only one part of the system, the part served by private schools, necessarily produces a myopic view of the consequences. Education is an expansive, interdependent social system. What happens in one part affects everyone. Therefore, education cannot be understood, and especially not reformed, by concentrating on the one part that is dominated by academically oriented schools for select students. We will find ourselves treating the other parts as a residual category, a huge vacuum. Educational reform must be systemic. We cannot do it with selective, piecemeal approaches.

The question now before us is this. Can we turn the tide of enthusiasm in favor of funding the private schools into an occasion for systematically restructuring the division of labor within and among the two sectors? It is obvious that both public and private schools need better facilities and programs designed to help students who have special problems. However, there must be incentives to ensure that schools will be prepared to actually help—rather than acting as dumping grounds.

The ultimate challenge will be to reserve a place for cultural diversity in any new division of labor as it emerges. The



37

³ The unsuccessful 1980 California voucher initiative proposed setting out a category of public independent schools to be established as independent entities within school districts. They would serve as alternative schools within the public sector (Coons & Sugarman, 1978). Currently, there is a movement in California to authorize "charter schools," which independent groups of teachers and/or parents could set up within the public sector. What I am suggesting is similar, except all such schools would have to comply with standards set forth in subcontracting agreements.

question is whether it is possible to replace the form of the common school without destroying its spirit and its cultural and assimilation functions. Some necessary mechanisms, such as base schools, rotation schedules, activity centers, short courses, and busing, may exist. However, that discussion is premature. First we must acknowledge the fundamental problem: The common school is an anachronism in an era of specialization.



REFERENCES

Alexander, K. L., & Pallas, A. M. (1985, April). School sector and cognitive performance: When is a little a little? *Sociology of Education*, 58, 115-28.

Barker, R. et al. (1962). Big school-small school: Studies of the effects of high school size upon the behavior and experiences of students. Lawrence, KS: University of Kansas.

Bibbiani, W. (1991, July 24). Abstract, unneeded fantasy of 'choice' in our schools. *Pasadena Star News*, Op-Ed Page.

Bidwell, C. E., & Kasarda, J. D. (1975). School district organization and student achievement. *American Sociological Review*, 40, 55-70.

Bowers, G. A. (1985). Culture against itself: Nihilism as an element in recent educational thought. *American Journal of Education*, 93, 465-90.

Brigham, F. H. (1992). Catholic elementary and secondary schools, 1991-92. Washington, D.C.: National Catholic Education Association.

Brown, B. W., & Saks, D. (1975). The production and distribution of cognitive skills within schools. *Journal of Political Economy*, 83, 571-593.

Bryk, A. S., & Raudenbush, S. W. (1989). Toward a more appropriate conceptualization of research on school effects: A three-level hierarchical linear model (pp. 159-203). In R. D. Bock (Ed.), *Multilevel analysis of educational data*. San Diego: Academic Press.

Chubb, J. (1990, December/1991, January). On local autonomy and school effectiveness: A conversation with John Chubb. *Educational Leadership*, 48(4), 57-60.

Chubb, J. E., & Moe. T. M. (1992). A lesson in school reform from Great Britain. Washington, D.C.: The Brookings Institution.

Chubb, J. E., & Moe, T. M. (1990). *Politics, markets, and America's schools*. Washington, D.C.: Brookings Institution.



Coleman, J. S. (1990). Choice, community, and future schools. In W. Clune & J. Witte (Eds.), Choice and control in American education, vol. II: The practice of choice, decentralization, and school restructuring. New York City: Falmer Press.

Coleman, J. S., & Hoffer, T. (1987). Public and private high schools. New York City: Basic Books.

Coleman, J. S., Hoffer, T., & Kilgore, S. (1982). High school achievement: Public, Catholic, and private schools compared. New York City: Basic Books.

Conant, J. B. (1948). Education in a divided world: The function of the public schools in our unique society. Cambridge, MA: Harvard University Press.

Coons, J. E., & Sugarman, S. D. (1978). Education by choice. Berkeley, CA: University of California Press.

Corwin, R. G. (1975). Education in crisis. New York City: Wiley.

Corwin, R. G. (1981). Patterns of organizational control and teacher militancy: Theoretical continuities in the idea of loose coupling. In R. G. Corwin (Ed.), Research in the sociology of education and socialization, volume 2. Greenwich, CT: JAI Press.

Corwin, R. G. (1973). Reform and organizational survival: The teacher corps as an instrument of educational change. New York City: Wiley.

Corwin, R. G. (1972, August). Strategies for organizational innovation: An empirical comparison. *American Sociological Review*, 441-454.

Corwin, R. G., & Wagenaar, T. (1976). Boundary interaction between service organizations and their publics: A study of parent-teacher relationships. *Social Forces*, 55, 471-92.

Dentler, R. A. (1991). The national evidence on magnet schools. Los Alamitos, CA: Southwest Regional Laboratory.

Dianda, M. R., & Corwin, R. G. (in press). The private sector considers educational vouchers: A survey of private schools in California. Los Alamitos, CA: Southwest Regional Laboratory.

Durkheim, E. (1961, reprinted). *Moral education*. Glencoe, IL: Free Press.

Elmore, R. F. (1990). Working models of choice in public education (mimeo reprint). New Brunswick, NJ: Center for Policy Research in Education.

Erickson, D. A. (1982). Disturbing evidence about the 'one best system.' In R. B. Everhart (Ed.), *The public school monopoly*. San Francisco: Pacific Institute for Public Policy Research.

Feistritzer, E. C. (1988). Profile of school administrators in the U.S. Washington, D.C.: National Center for Education Information.

Friedman, M. (1962). The role of government in education. In Capitalism and freedom (Chapter IV). Chicago: University of Chicago Press.

Friedman, M. (1955). The role of government in education. In R. A. Solo (Ed.), *Economics and the public interesi*. New Brunswick, NJ: Rutgers University Press.

Gallup: What Americans think of the schools. (1991, August 22). Education Daily.

Glenn, C. L. (1987). The new common school. *Phi Delta Kappan*, 290-294.

Goldberger, A., & Cain, G. (1982). The causal analysis of cognitive outcomes in the Coleman, Hoffer, and Kilgore Report. *Sociology of Education*, 55, 103-122.

Jencks, C. (1966, Winter). Is the public school obsolete? The Public Interest, 2, 18-27.

Katz, F. (1968). Autonomy and organizations: The limits of social control. New York City: Random House.



Katz, F. (1964). The school as a complex organization. *Harvard Educational Review*, 34, 428-53.

Lee, V. E., & Bryk, A. S. (1989). A multilevel model of the social distribution of high school achievement. *Sociology of Education*, 62, 172-192.

Levin, H. (1979). Educational vouchers and school policy (mimeo). Palo Alto, CA: Institute for Research on Educational Finance and Governance, Stanford University.

Levin, H. M. (1983). Educational choice and the pains of democracy (pp. 17-38). In T. James & H. Levin (Eds.), Public dollars for private schools: The case of tuition tax credits. Philadelphia: Temple University Press.

Levin, H. M. (1990). The theory of choice applied to education. In W. Clune & J. Witte (Eds.), Choice and control in American education, vol. II: The practice of choice, decentralization, and school restructuring (pp. 285-318). New York City: Falmer Press.

Lieberman, M. (1989). Privatization and educational choice. New York City: St. Martin's Press.

Mann, H. (1945). Lectures on education. Boston: W.B. Fowle and N. Capen.

Merton, R., Gray, A., Hockey, B., & Selvin, H. (1952). Reader in bureaucracy. Glencoe, IL: Free Press.

Michels, R. (1958). *Political parties*. Glencoe, IL: Free Press. (Original work published 1915.)

Morgan, J. E. (1936). Horace Mann, his ideas and ideals. Washington, D.C.: National Home Library Foundation.

Murnane, R. J. (1984). Comparisons of public and private schools: Lessons from the uproar. *Journal of Human Resources*, 19(2), 269-270.

Namboodiri, K., & Corwin, R. G. (forthcoming). Macro sociology: An input-output approach to organizational networks. Westport, CT: Praeger Press.



Namboodiri, K., Corwin, R. G., & Dorsten, L. (in press). Analyzing distributions in school effects research. Sociology of Education.

National Center for Educational Statistics. (1991). Private schools in the United States: A statistical profile, with comparisons to the public schools. Washington, D.C.: U.S. Department of Education.

Newman, K. (1980). Incipient bureaucracy: The development of hierarchies in egalitarian organizations. In G. M. Britan & R. Cohen (Eds.), *Hierarchy and society*. Philadelphia: Institute for the Study of Human Issues.

Newmann, F. M. (1981). Reducing student alienation in high schools: Implications of theory. *Harvard Education Review*, 51, 546-64.

Robinson, G. E., & Protheroe, N. J. (1987). Cost of education: An investment in America's future. Arlington, VA: Educational Research Service.

Rogers, D. (1968). 110 Livingston Street. New York City: Random House.

Rosenberg, B. 90, December/1991, January). Not a case for market control. *Leadership*, 48(4), 64-65.

Stinchcombe, A. (1965). Social structure and organizations. In J. G. March (Ed.), *Handbook of organizations* (pp. 142-193). Chicago: Rand McNally.

Swindler, A. (1979). Organization without authority: Dilemmas of control in free schools. Cambridge, MA: Harvard University Press.

Twenty-third Annual Gallup Poll. Phi Delta Kappan.

Tyack, D. B. (1974). *The one best system*. Cambridge, MA: Harvard University Press.

U.S. Department of Education. (1990, December). Choosing better schools: The five regional meetings on choice in education. Washington, D.C.: Author.



Weber, M. (1947). The theory of social and economic organization (A. M. Henderson & T. Parsons, Trans.). New York City: Oxford University Pres.

Weick, K. E. (1976). Educational organizations as loosely coupled systems. Administrative Science Quarterly, 21, 1-19.

Williamson, O. E. (1975). Markets and hierarchies: Analysis and antitrust implications. New York City: Free Press.

Wilson, J. Q. (1966). Innovation in organizations: Notes toward a theory. In James Thompson (Ed.), *Approaches to organizational design*. Pittsburgh: University of Pittsburgh Press.

Witte, J. F. (1990). The theory of choice and the control of education. In W. Clune & J. Witte (Eds.), Choice and control in American education, vol II: The practice of choice, decentralization, and school restructuring. New York City: Falmer Press.



Southwest Regional Laboratory

4665 Lampson Ave., Los Alamitos, CA 90720

Libertonia Co. 398 Phis

