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## **Human Life, Human Organization and Education**

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**Abstract:** The social structures within which we live and work have a profound effect on the success of our pursuits. These effects are too often poorly understood by those who shape public policy, leading to organizations that are antagonistic to the very goals they are meant to achieve. Unfortunately, this has been the case with public education in the United States. Data are presented that illustrate the way in which the incentive structure of our public school system leads the goals of its employees to diverge from those of the families it is intended to serve. Arguments in support of government-run schooling are discussed and refuted. An alternative system of mutually beneficial cooperation within a competitive market is proposed, based on its proven success in the more liberal parts of our economy. It is demonstrated that such a market system would unite the goals of educators and families, encourage innovation, and discourage many of the inefficient and educationally irrelevant practices engendered by the public school system.

### **Introduction**

Before we can attempt to understand the relationship between human beings, our organizations and education, we must determine the most suitable and effective method to apply. Adopting a systematic approach to our topic is crucial, for one of the gravest problems afflicting public policymaking is superficiality. Policies advocated with the best intentions, to solve problems of the most profound importance, often garner support because of their emotional appeal rather than any cogent analysis or supporting evidence. It would be difficult to find people willing to oppose a law that purports to eliminate crime and poverty, for instance, even if a careful examination showed that it would do just the opposite. The promise that a straightforward solution to such serious problems exists, acts to discourage any investigation which might call that solution into question. This was precisely the experience of alcohol prohibition in the United

States. Andrew Sinclair wrote that many progressives of the time looked forward to "a world free from alcohol and, by that magic panacea, free also from want and crime and sin, a sort of millennial Kansas afloat on a nirvana of pure water." (Morison et al., 1980, p.285). Irrespective of these well-intentioned goals, the naturally continuing demand for alcoholic beverages, coupled with their newly illegal status, led to bootlegging, border skirmishes in cars and gunboats, and collusion between the enforcement agencies and organized crime lords such as Al Capone. Good intentions are simply not a sufficient basis for sound policymaking.

The logical first step in trying to grasp the effects of public policies and organizations on human beings is to understand the fundamental character of human life. The introduction to the present work begins, therefore, with a treatment of this subject, and progresses to a discussion of how it is shaped by institutional factors.

## **Human Life**

The essence of life is action. In *The Biological Basis of Teleological Concepts*, Harry Binswanger (1990) draws on data from the life sciences, such as the work of evolutionary biologist George G. Simpson, and on the branch of philosophy dedicated to the study of purpose and causation, to show that goal-directed action is not only common but essential to all living things. This fact is most obvious in the pursuit of basic needs such as nourishment and protection from harmful aspects of the environment; predators or extremes in climate, for example. As a result of natural selection, an animal's chances of survival are determined by its success at directing its activity towards the satisfaction of these needs. To this basic level of teleological behavior, human beings add conscious awareness. Our ability to consider our needs and our past successes and failures allows us to act purposefully. We are able to predicate our actions on an assessment of which approaches we believe are most likely to achieve our goals.

Put succinctly, then, human action is the purposeful application of certain means to achieve a desired end. It should be noted that this definition includes "doing nothing" as a means. While dozing in bed on a warm Sunday morning, the decision not to get up and answer a ringing telephone constitutes action under our definition. Since our mental and physical resources are limited, action involves choice. We might want to answer the telephone, but since we can't do that and stay in bed at the same time, we have to choose one goal and abandon the other. This observation leads us to the question: how do we decide? Is there a general pattern to our choices? As noted above, if we made our decisions regarding the satisfaction of our basic needs on a random basis, we would not be long for this world. Regarding the necessities of life there are obvious biological forces influencing our decisions. When we are hungry we feel uncomfortable, as we do when overly fatigued, physically injured or in extremes of temperature. As a particular discomfort increases we are less and less able to think about anything save the means for alleviating it. Not surprisingly, a similar mechanism is at work in situations which are not life-threatening.

In the previous example, for instance, our life need not hang in the balance for us to decide whether or not to answer the phone--though presumably that would make the decision more clear-cut. We simply compare the unpleasant thought of getting out of bed with any worry we may attach to leaving a call unanswered, and choose the alternative we find most pleasing. As another example, consider a five year-old boy who wants some cookies. When presented with the possibility of getting the cookies, the five year-old is increasingly uneasy with his current cookie-less state. While his survival is in all likelihood not dependent on eating them, he is unhappy at the thought of going without. As a result, he will take whatever actions seem to him most likely to procure the desired sweets. In short, any human action can be understood as an attempt to substitute a more agreeable situation for a less agreeable one.

Having a goal in sight is a necessary but not sufficient condition for a person to act. For an

action to be undertaken there must be some expectation that the goal in question can be attained or at least approached. Many of us would love to travel through time, for example, seeking out the great people and places of human history, and perhaps even glimpsing our futures. In the absence of any known way for this to be accomplished, however, other than indirectly through the written word, people neither can nor do spend any effort in pursuit of time-travel.

While the determination of what is agreeable and what is not varies among living things, this variance is most notable in human beings. We are perhaps the only creatures, for instance, capable of finding our own lives so disagreeable that we sometimes voluntarily end them. Were such judgments not exceptional, however, our species could not have thrived as it has. In fact, our common biological heritage ensures us an area of shared values, centered around those values required for human life. Once our basic needs are met, we continue to push back our uneasiness as far as possible. In those social and economic settings which permit it, the vast majority of human beings do not stop laboring once they and their families have obtained the minimum requirements in food, shelter, and clothing. As long as our uneasiness can be further pushed back by improving our physical conditions, we strive to make such improvements. The dramatic rise in the standard of living in comparatively free countries over the last two hundred years is testimony to this fact.

All human lives are thus comprised of choices and actions intended to reduce stress or increase happiness, but how do they interact with one another? Human beings are demonstrably social animals. As far back as there are humans there are societies. This desire for social interaction can be partly explained by the human affinity for feelings of belonging and togetherness, and the commensurate unpleasantness of loneliness, but this explanation is insufficient. Obviously if social interaction was harmful to our pursuit of the basic necessities of life, it could not have continued to exist, much less have led to the elaborate modern nations so familiar to us. But what is it about human association that makes it so beneficial to our lives that we have raised it to an essentially global level? At the root of this phenomenon are two key forces: voluntary cooperation and the division of labor.

Many achievements which are impossible for a single individual are readily attainable by a group. While the prehistoric hunter who set out to single-handedly kill and bring back a woolly mammoth would probably have been greeted by snickers from his cave-mates, a team of hunters would have had a much better chance. In our times, the degree to which we rely on cooperation is almost unimaginable. The surgeon preparing for an operation relies on thousands of people-- just in her commute to the hospital. In all likelihood she drives a car, produced by large design, manufacturing and sales forces. She drives on pavement laid by road crews, and benefits from a traffic system maintained by city employees. She pumps a few gallons of gas into the tank which might have been drilled and shipped by sea from the opposite end of the world, and she parks in a lot built by a construction crew of a hundred. Even the self-reliant urban gardener, who believes himself to be independently growing all his vegetables, is likely to buy the seeds from one company, the soil from another, and undoubtedly makes use of his city's water supply system.

The vast nations and international trade of the late twentieth century could not exist without the widespread recognition of cooperation's value, but there are inevitably a few doubters. In the era of computer simulation, however, it is difficult to remain unconvinced. By allowing a wide variety of social strategies to compete against one another in repeated games of The Prisoner's Dilemma, political scientist Robert Axelrod and computer scientist John Miller have demonstrated "the evolution and dominance of one general type of strategy: a strategy of voluntary cooperation." (Lemieux, 1994, p.28). The Prisoner's Dilemma is a game of choice in which two or more individuals are accused of a serious crime. Each individual's fate rests on their own actions and on the actions of the others. If one person is silent and another accuses him of the crime, the silent one is given the maximum sentence while the accuser is set free. If each accuses the other, both are given the lesser sentence. If they are all silent, however, they are all

set free for lack of evidence. When the game is repeated over time, much like a prolonged social interaction, those players who cooperate thrive, and those who do not die out.

It is the nature of voluntary cooperation that all parties benefit, at least to the extent to which they are well informed about the exchange. While our surgeon happily fills her tank in the morning, looking forward to a weekend getaway after her day is done, the oil producers and distributors gain from her patronage. The gardener gets the vegetables he wants and the seed company profits from the sale. Of course if the exchange is marred by a misrepresentation of information, one or more parties may suffer, but the historical trend towards increasing reliance on cooperation in free societies, as predicted by computer modeling, is an indication that these costs are more than offset by the advantages over time. Indeed, few tasks are not made easier by cooperation. In the words of economist Ludwig von Mises (1966, p. 146):

Every step by which an individual substitutes concerted action for isolated action results in an immediate and recognizable improvement in his conditions. The advantages derived from peaceful cooperation and division of labor are universal. They immediately benefit every generation, and not only later descendants. For what the individual must sacrifice for the sake of society he is amply compensated by greater advantages. His sacrifice is only apparent and temporary; he foregoes a smaller gain in order to reap a greater one later... When social cooperation is intensified by enlarging the field in which there is division of labor or when legal protection and the safeguarding of peace are strengthened, the incentive is the desire of all those concerned to improve their own conditions.... Society is a product of human action, i.e., the human urge to remove uneasiness as far as possible.

The division of labor, as von Mises observed, is one of the chief factors behind the tremendous benefits of social cooperation. It is difficult to imagine our surgeon having the time, skills, and resources necessary to drill for and refine her own crude oil. Even if this were somehow possible it would be far more arduous and expensive for her to do so than to make an occasional stop at a gas station. Similarly, oil company employees gain a great deal from her specialization in the field of surgery if they fall victim to serious health problems. In addition to the increased skill and efficiency that come with specialization, the division of labor draws its strength from the unequal distribution of talents and interests among human beings, and the unequal distribution of the Earth's natural resources. A film can hope to be successful if it puts talented actors in front of the cameras, talented directors behind them, and the work of talented engineers inside them. Other arrangements of the available talent are bound to produce inferior results. In much the same vein, an enterprise that imports timber from North America and oil from the OPEC countries is likely to be more successful than one which does the inverse.

Not all labor is created equal. When seeking associations with others we don't necessarily choose the first person who happens along, but rather the one we feel will be most helpful in our pursuits. In some situations, such as when there are few people around who have the qualities we're looking for, the first one who shows up may seem like the best bet, but when there are many such people available we can be more picky. The cave-man looking for hunting partners is going to prefer individuals who can hit what they aim at over ones who can't-- a stray javelin is an unambiguous source of uneasiness. If there happen to be a lot of other hunters in the same position, each will seek to associate with the ones that seem most adept. In other words, they will compete to offer their services to the other hunters from whom they can reap the greatest benefits.

## **Organizations, Human Life, and Public Policy**

Competitive markets are the natural organizational outcome of free association and the division of labor. If one individual has a good that is desired by many others, those others will compete amongst themselves in order to gain it. The prehistoric hunter who can split a sapling with his javelin at a hundred paces, offers a service of tremendous value to his hunting party. In order to attract the services of such a hunter, the members of various parties would likely compete by offering incentives such as a larger portion of the take. Similarly, other hunters would be offered incentives to join in accordance with the value they would add to the party. The result of these competing offers is the assignment of reasonable values or prices to all the goods or services in the market. The competent hunter need not fear being underpaid for his skills so long as there are other hunting parties who value his services. In his book *Capitalism and Freedom*, Nobel Laureate in economics Milton Friedman describes the way in which free market competition benefits and protects its participants (1982, p. 14):

So long as effective freedom of exchange is maintained, the central feature of the market organization of economic activity is that it prevents one person from interfering with another in respect of most of his activities. The consumer is protected from coercion by the seller because of the presence of other sellers with whom he can deal. The seller is protected from coercion by the consumer because of other consumers to whom he can sell. The employee is protected from coercion by the employer because of other employers for whom he can work, and so on. And the market does this impersonally and without central authority.

Not only does the market prevent its participants from coercing one another, it helps to unite their goals. During her commute to work, our surgeon has the opportunity to stop at a variety of different gas stations. The one she chooses will depend on a variety of factors such as how much gas she currently has left, which stations are most convenient to her route, which charge the lowest prices, and which have the most practical payment options. Her goal is to get a full tank of gas with the least effort. The goal of the gasoline distributors is to make the largest profit possible, and so they compete in an effort to satisfy the goals of our surgeon and the other commuters like her. Those distributors who charge too much or are inconveniently located will attract less business and so are discouraged. Those who meet the criteria of the greatest number of commuters are encouraged. It is precisely the competition for profit between gas stations which unites their goals with the goals of the commuters they seek to serve. The "Western Miracle" of technological and economic growth has been attributed largely to this phenomenon, as exemplified by this excerpt from a paper by economists Nathan Rosenberg and L. E. Birdzell, Jr.:

The success of Western economies in assimilating Western technology is not a consequence of unregulated markets alone but of markets in which there are productive firms that can gain much by commercializing new ideas more quickly than their rivals can. (1990, p. 53).

This understanding of how the profit motive unites the goals of producers and consumers, thereby increasing productivity, is not limited to economists, nor are its effects limited to recent history. In the summary companion text to their monumental eleven volume history of civilization, historians Will and Ariel Durant, observe that:

The experience of the past leaves little doubt that every economic system must sooner or later rely upon some form of the profit motive to stir individuals and groups to productivity. Substitutes like slavery, police supervision, or ideological enthusiasm prove too unproductive, too expensive or too transient. (1968, pp.

Despite all this evidence to the contrary, the idea that human association could be regulated by a central authority became popular with the rise of Marxist social theory and its manifestation in post-revolutionary Russia. Many people of the time believed that markets were arbitrary in their distribution of goods and denied that they were the natural outgrowth of free association among individuals. In contrast, they suggested that human activity should be controlled by central planners to achieve a uniform distribution of goods. This view was flawed by its failure to acknowledge the nature of human activity, and by its misunderstanding of complex systems such as economic markets. Had human life and action been carefully considered, it would have become clear that a system which takes away the individual's control over the fruits of his or her labor provides no incentive for production. While Marxist thought had much to say on how the goods produced by a free capitalist society should be redistributed under communism, it failed to explain why people would continue to produce new goods once a communist economy was in place. Since human action is the application of certain means in the pursuit of desired goals, there is no reason to work hard if hard work is not a means to those goals. In a centrally planned socialist organization, therefore, hard work is not rewarded and so is not a means to anything other than fatigue and desperation. At the same time, the removal of this means prevents individuals from achieving many of the things they seek in life.

The second significant problem, blithely dismissed at the time, was the practical impossibility of centrally determining demand, prices, and distribution channels for the diverse array of goods in a complex economy. While these determinations occur naturally and implicitly in a decentralized market, Marxists believed that its pricing, distribution and supply activities were nonetheless arbitrary, and that they could therefore be replaced by a planned system aimed at achieving the goals of the planners. Had chaos theory, our modern mathematical conception of complex systems, been known at the time, the gross error of their assumption would have been evident. As we now realize, it is no more possible to centrally plan human interaction and exchange than it is to centrally plan the weather.

The essential idea behind chaos theory is that the interaction of large numbers of agents following fairly simple rules can lead to extremely complex but still deterministic (i.e. not arbitrary) systems. The weather, for example, is unpredictable beyond the immediate future even though it is largely determined by the interaction of air molecules bouncing off one another in accordance with known laws of physics. In much the same way, the economic activities of a vast nation are precisely determined by the straightforward pursuits of individuals, but when examined as a whole they are incalculable. Attempts to centrally plan the economy, which consider a limited number of factors and interrelations, are thus doomed to failure. In practice they produce shortages of most goods, and surpluses of the rest.

Even when we leave aside the complexity of national economic activity, the issue of its sheer size is enough to overcome efforts at central planning. While a single modern airliner might have well over a million parts, Goskomtsen, the pricing bureau of the former Soviet Union, only set about 200,000 prices per year (Fukuyama, 1993, p. 97).

Most fundamentally, value is not a free-standing concept. A good is valued *by* someone *for* some reason. Clearly the central planners could not get inside the hearts and minds of every Soviet citizen when setting prices, so even those prices which were set could not have accurately reflected the actual values placed on those goods by the citizens.

The ubiquitous lines of Soviets in front of virtually empty shops were the natural outcome of Marxist socio-economic theory. After thirty-five years of strict communism, Cuba is currently facing shortages of fuel, electricity, many food items, and consumer goods. In a painful but telling irony, communism has so crippled the country's economy that Cuba can no longer afford to celebrate its rise to power; Cuba canceled its May Day parade for 1994. In an effort to turn this

situation around, the country is reducing subsidies to state enterprises, and allowing limited private self-employment (Seattle Times, 1994, p. A12).

Clearly the organizational structures advocated by good public policies must take into account the nature of human life. The interplay between the actual pursuits of citizens, and the conditions required for these varied pursuits to be integrated in a harmonious and mutually beneficial way, dictate which social practices allow societies to flourish and which lead to their demise. Human beings thrive under cooperation and the division of labor in a free and competitive economy, and suffer under a centrally planned and uncompetitive system in which work ceases to be a means for pursuing one's needs and wants. Regrettably, the U.S. public education system is more similar to the latter than the former.

## **The Organization of Public Education**

In 1989, the president of the American Federation of Teachers, Albert Shanker acknowledged that (Boaz, 1991, p.2):

It's time to admit that public education operates like a planned economy, a bureaucratic system in which everybody's role is spelled out in advance and there are few incentives for innovation and productivity. It's no surprise that our school system doesn't improve: It more resembles the communist economy than our own market economy.

The data presented in this paper will identify some of these similarities, showing exactly how the bureaucratic public schools fail to unite the goals of their employees with those of the parents and students they are intended to serve. Far from implying that the individuals working within the public school system are wrong-headed, this paper will demonstrate that they are perfectly normal human beings acting in accordance with human nature. They pursue their goals as we all do, and they apply whatever means they deem most appropriate at any given moment. Unfortunately, the system is structured in such a way that their natural pursuits are often detrimental to the achievement and well-being of their students.

The second section of this paper addresses the arguments given in favor of the public school system, and demonstrates for each of them that either the organization of public schooling interferes with the attainment of the purported goal, or that the goal itself is unrelated or detrimental to educational quality. A variety of arguments have been put forward in support of our government-run education system over the years, and because the present work is an article rather than a book, the scope of discussion must be limited to only the most salient points. Three issues are at the center of the modern case for public schooling: preparation for citizenship, equality of opportunity, and the fair treatment of minorities. Following the treatment of these issues is an examination of how the public school system encourages the goals of its employees to diverge from those of its customers. The paper concludes with a proposal for a market approach to education, based on the demonstrated benefits of free association and competition in uniting the goals of producers and consumers.

## **Preparation for Citizenship**

It is generally agreed that a stable democratic society requires a citizenry with some minimum degree of education and certain shared values. This has often been held up as a reason not only for compulsory education but for the public provision of schooling. A careful scrutiny of the facts, however, reveals that compulsory attendance laws had a negligible effect on student enrollment, and that those values which are necessary for the peaceful and productive

coexistence of the people are obstructed by the state provision of schooling.

## **Mandatory Attendance Laws**

Long before the current pervasiveness of compulsory schooling and prior to the fruition of the common schools movement in this country, Alexis de Toqueville observed that

...in New England every citizen receives the elementary notions of human knowledge; he is taught, moreover, the doctrines and the evidences of his religion, the history of his country, and the leading features of its constitution. In the states of Connecticut and Massachusetts, it is extremely rare to find a man imperfectly acquainted with all these things, and a person wholly ignorant of them is a sort of phenomenon. (de Tocqueville, 1990, Vol. 2, p.315).

While noting that formal education was less common among the fragmented settlements of the Western pioneers, he wrote that

...no sort of comparison can be drawn between the pioneer and the dwelling that shelters him. Everything about him is primitive and wild, but he is himself the result of the labor and experience of eighteen centuries. He wears the dress and speaks the language of cities; he is acquainted with the past, curious about the future, and ready for argument about the present; he is, in short, a highly civilized being. (de Tocqueville, 1990, Vol. 1, p.317).

He later adds that "there is hardly a pioneer's hut that does not contain a few odd volumes of Shakespeare." (de Tocqueville, 1990, Vol. 2, p. 55).

It was not until 1852, twenty years after de Toqueville's appraisal of the general level of American education, that Massachusetts passed the first compulsory school attendance law. Over the next four decades about half of the States passed such laws, with the upper age limit ranging from twelve to sixteen. By 1918, compulsory education legislation had been passed in all the states (Krug, 1966, pp. 77-78). Despite the passage of these laws, school enrollment of persons five to seventeen years old increased only 3.7 percent from 78.1 percent in 1890 to 81.8 percent in 1918 (US Dept. of Commerce, 1975, p. 368). Furthermore, the enrollment for whites between the ages of five and nineteen actually dropped from 56.2 percent in 1850 to 53.6 percent in 1900, and the aggregate increased only as a result of the meteoric 28.2 percent rise in the enrollment of Blacks and other races following the abolition of slavery (US Dept. of Commerce, 1975, p. 370). It was only after 1920 that school enrollment began to increase at a faster rate, a phenomenon which coincided with the urbanization of the populace which reduced the need for children to labor on family farms, and the growing industrialization of the economy which increased the economic value of literacy and education generally.

This growth trend was setback more than a decade by the second world war, with rates for five to seventeen year olds dropping from 93.5 percent in 1942 to 89.5 percent in 1944, and not regaining their earlier level until 1958 (US Dept. of Commerce, 1975, p. 368).

Thus wars, industrialization, the emancipation of blacks, and shifts in demographics were all matched by commensurate changes in school enrollment over the last one hundred and fifty years, but no such relationship existed with the passing of mandatory attendance laws. This result can be readily understood in light of the fundamental characteristics of human action. As the value of an education increased, so did its desirability, causing it to be more actively sought. At the same time, the impediments to formal schooling--such as the need for child farm labor--decreased, allowing a greater number of people to reach their educational goals. Mandatory attendance laws, not in themselves increasing the value of an education, and not being

armed with penalties sufficient to force observance, had little impact on the actions of parents with regard to their children's schooling.

## **The Values of a Free and Productive Society**

As noted earlier, societies come together and persist because of the great benefits that cooperation and the division of labor bring to the participating individuals; increasing their ties to one another by uniting them in the pursuit of common goals. This fact was made explicit in the United States' Declaration of Independence which posits that governments are instituted to secure, among other things, the right to life, liberty and the pursuit of happiness. In diametric opposition to this is the belief of many public school advocates that high and low-achieving students must be forcibly kept in the same classrooms. This argument is frequently produced in debates over educational vouchers, attacking them for the freedom of self-determination which they would return to parents and students--a freedom that would undermine the ability of public schools to control pupil allocation. The argument essentially says that once parents are given the freedom to choose their children's schools, more able students will end up in different schools from less able ones, to the potential detriment of the latter. As a result, the argument goes, families should continue to be denied the freedom to choose their own schools.

It is unlikely that this denial of the right to self-determination would be allowed to continue if its primary victims were not children. Imagine the uproar if a similar policy affecting adults were proposed. Consider, for example, a plan restricting the freedom of association of the nation's most respected professors, scholars, and teachers, portioning them out like commodities to less successful schools and universities. Such a policy would never be adopted, and yet this is essentially what is happening to bright children across the country whose parents cannot simultaneously support the cost of private school tuition and the financial burden of government schools. This systemic compulsion by the public schools runs contrary to the principle of voluntary cooperation on which societies rest, and violates the spirit of the Thirteenth Amendment, which precludes involuntary servitude. In addition to its indefensible use of coercion, this policy also suffers from a false premise.

A great number of studies and literature reviews have been conducted on the subject of student groupings. Of these, the majority are unscientific in that they forego statistical analysis or fail to use experimental control groups. Among the remaining methodologically sound papers, the most recent and comprehensive treatment has been that of James A. Kulik at the University of Michigan. Robert Slavin of Johns Hopkins University has also made significant contributions in this area, but since the results of these researchers are essentially in agreement, it will suffice to focus on Kulik's work.

In his 1992 paper "An Analysis of the Research on Ability Grouping: Historical and Contemporary Perspectives", Kulik identifies four distinct categories of grouping. The first, "Tracking" or "curricular tracking", "refers to high-school programs in which students choose, on the basis of their educational and job goals, either college-preparatory, general, or vocational classes in English, mathematics, and other subjects" (Kulik, 1992, p. ix). The other three categories, collectively called "ability groupings", are "(a) programs in which all ability groups follow the same curriculum; (b) programs in which all groups follow curricula adjusted to their ability; and (c) programs that make curricular and other adjustments for the special needs of highly talented learners." (Kulik, 1992, p. xi).

The belief that grouping by ability or interest is inherently harmful to low-aptitude students has been most notably presented by Jeannie Oakes, in her book "Keeping Track". The evidence that she cites, however, does not support this conclusion. The problem is that she compares students in upper and lower high-school tracks to each other, rather than comparing initially equivalent students between tracked and untracked programs (Kulik, 1992, p. 14). Her

results, while clearly showing a difference between college and vocational tracks, are not relevant to the hypothesis that tracking itself has a negative effect on students. Kulik notes in his paper that so little experimental evidence for this hypothesis is available that no reviewer has yet conducted a statistical meta-analysis (Note 1) of the findings.

On the subject of ability grouping, by contrast, a great deal of evidence is available. Though critics such as Oakes suggest that separating students into bright, slow, and average groups hurts the self-esteem of the weaker students, the data show exactly the opposite outcome. Based on an analysis of the statistical studies of this subject, Kulik found that low-aptitude students enjoyed a small but significant increase in average self-esteem (+0.19 std. deviations). High-aptitude students suffered a smaller but still significant decrease (-0.15 std. deviations). The middle-aptitude students, and the overall average, showed no significant change. These results make sense in light of the fact that the bright students were no longer comparing themselves to the low and mid-level performers but rather to other equally talented individuals. Similarly, the slower students were less likely to be overwhelmed by children much further advanced than themselves. These studies involved programs of type (a), also called XYZ programs, in which all three groups follow the same curriculum.

When academic achievement is examined, a definite pattern emerges among the different approaches to ability grouping. In XYZ programs, low and mid-level students learn the same amount as they would in mixed classes, while high-aptitude students either learn the same amount or fractionally more than they otherwise would. Programs which tailor the curricula to the different abilities of each group show significant gains for all three student ability levels, averaging between 2 and 3 months of additional learning per year, on a grade-equivalent scale. These gains are more or less equally enjoyed by high, low, and middle aptitude pupils. Finally, plans particularly aimed at classes of high-aptitude pupils show dramatic gains of approximately one full year for acceleration (teaching the same material in a shorter period of time), and between 5 and 6 months for enrichment (teaching additional material in the same amount of time), both on grade-equivalent scales. In other words, acceleration programs carefully adjusted to the abilities of very fast learners, generated a 100 percent increase in the rate at which they could cover the material. Enrichment programs which integrated new material into their curriculum yielded 40 to 50 percent increases in learning.

These results confirm the common sense notion that the more an educational program's speed and content are tailored to the abilities of its students, the more those students will learn, regardless of their aptitude level. Obviously a student who has difficulty with algebra and arithmetic will benefit far less from a class in calculus than he or she would from one focusing on the mathematical basics. Similarly, the progress of children with a good command of grammar and spelling is necessarily slowed when they are placed in the same English classes as students without these skills. Unfortunately for America's school children, ability grouping has been falling increasingly out of fashion among public educators since the 1960s. This is not the only case in which the public school establishment favors coerced conformity over freedom and diversity in talent, skill, and experience, however. Teacher certification programs mandated by the public school system have a similar effect on the teaching workforce.

To a significant extent, entry into the public school teaching profession is restricted to certified graduates of schools of education. Even where these restrictions are occasionally by-passed, higher public school teachers' salaries are usually tied to advanced degrees from the same institutions, rather than to better teaching. This double-barreled approach discourages and sometimes prevents would-be teachers from other disciplines and professions from bringing their varied skills and experiences to the nation's students.

Because most of these colleges of education are themselves part of the public education system, it stands to reason that they would, in general, seek its perpetuation and resist change. It is unsurprising, therefore, that in summing up her year-long series of visits to schools of

education across the country, author Rita Kramer wrote "I found a striking degree of conformity about what is considered to be the business of schools and the job of teachers. Everywhere I visited, in new concrete structures and old stone halls of ivy, among undergraduates or older students, I heard the same things over and over again. And failed to hear others." (Kramer, 1991, p. 209). She further observed that this conformity is maintained by "many in the education establishment... [who] have shown a remarkable tendentiousness in the service of ideology, insisting that those who oppose their idea of the purposes of schooling are reactionary bigots" (Kramer, 1991, p. 173-4).

The main argument for the preservation of the current system of teacher certification is that it is necessary to ensure a high quality standard. There are two objections to this argument; the nature of teaching makes certification unnecessary, and the empirical evidence shows that it is not required for quality control. Three distinguishing characteristics of teaching, as compared with professions such as surgery or airline piloting, make the certification of its practitioners unnecessary. The first is that the potential damage of poor performance is infinitely less severe. A badly taught student may achieve less than if she had been well taught, but she will not be killed or physically crippled by the experience. Secondly, teachers work with their students over an extended period, generally a year, whereas surgeons and pilots usually have care of their charges for only a few hours. Thus, unlike surgeons or pilots, teachers can be evaluated over time. Finally, it is possible for parents to observe and compare the ability of different teachers. While it is conceivable that a patient could watch their prospective surgeon in action prior to their own surgery, the practice of internal medicine is so specialized that such observation would probably be unenlightening. Observing pilots would be similarly unhelpful for most travelers, not to mention the difficulty of doing so without already being on board the flying plane.

When taken together, these aspects of teaching make it quite safe and practical for parents to choose teachers based on their performance instead of their pedigree. By observing a class, or talking to the teacher, former students, parents of former students, and eventually their own children if and when they are enrolled in that teacher's class, parents can come to an informed opinion on the teacher's quality. Of course not all or even most parents will necessarily make this effort, but it is only necessary for a fraction of the consumers in a market to be informed in order for that market to be well structured by price and quality. Only a small percentage of supermarket customers have to painstakingly compare prices, for instance, for prices to be generally set at reasonable levels. Given the ability of parents to personally evaluate teachers, any restrictions on entry into the teaching profession harm parents by limiting their choices.

Even if there are a significant number of parents who value a teaching certificate conferred by the state more than their own evaluation, there is no reason for certification to be mandatory. In a free educational market, school principals would have a powerful incentive, i.e. the continued existence and profitability of their school, to hire as many certified teachers as their customers demanded.

The previous analysis indicates that in an educational market, mandatory teacher certification would be unnecessary to ensure teacher quality. The empirical evidence shows that it is not even required in the current system. New Jersey was one of the first states to experiment with more liberal public school teaching requirements. After four years of experience with a program allowing individuals without teaching degrees to instruct public school students, they found that these new teachers scored in the top fourth of those taking the National Teacher Examination, and "their scores in English, social studies, math, and science were higher than those of the traditional-route teachers, those with degrees in education." (Kramer, 1991, p. 204). The performance on standardized tests of students taught by this group was not substantially different from those taught by the regular teachers, but that is no reason to discourage them from entering the field, or for preventing parents from choosing them to teach their children.

In a study of the alternative certification program undertaken by the state of North

Carolina, Hawk and Schmidt concluded that its participants were "as competent and as successful on NTE [National Teacher Exam] exams as traditionally prepared students." (Hawk and Schmidt, 1989, p. 58). Similar results have been found in Georgia (Guyton, 1991). In fact, a recent survey of 19 different studies in this field concluded that, though many attempts have been made, alternative teacher certification programs "have not been shown to be inferior to traditional programs." (Sindelar and Marks, 1993, p. 153). There is thus no evidence to support the contention that traditional mandatory teacher certification is required to ensure teacher quality.

The point here is not that the profession of teaching requires no training; most of the alternative certification programs cited above included apprenticeship periods. The important observations are that state mandated certification and training are unnecessary, lead to conformity in the field, and unfairly restrict the rights of families and would-be teachers from voluntarily associating with one another.

This tendency towards conformity in public education is also visible in the textbooks that students are given to read. Due to the enormous economic clout of public school book buying committees such as those in Texas, Florida, and California, the nation's textbooks tend to follow a lowest common denominator approach to content.

With regard to the publication of textbooks, by contrast with trade books, freedom of expression seems to be guided by criteria other than the principles embodied in the U.S. Constitution. Censorship of any controversial issue or literary work in an attempt to avoid alienating a potential segment of the market is standard practice. Examples include the systematic exclusion of a play like Shakespeare's Othello. (Keith, 1991, p. 49).

Since any reference or element that offends a committee member could be grounds for rejection, these books must present only the barest skeleton of a field, stripped clean of any material which could generate controversy.

If one state provides a large enough market for a textbook, it can ask and sometimes get a publisher to change the content of the school book if the state decides to buy. Because publishers find it less costly to issue a single, nationwide edition, they will frequently incorporate these changes in future printings sold throughout the country. In short, it is possible for one state to determine the content of textbooks used from Maine to Oregon. (Keith, 1991, p. 52).

The existence of multiple states with this sort of influence has the effect of producing "national consensus textbooks."

Censorship of school libraries and textbooks by various interest groups also adds to the bland quality of public school reading materials. "The attempts to ban school textbooks-- either through formal litigation or informal political pressure --has had an impact on the editorial policies and practices [of textbook publishers]." (Keith, 1991, p. 50). It is precisely the institutional nature of public schools that leads to this filtering and homogenization of knowledge. It is only because the government runs public schools that a small group of parents can hope to prevent the children of an entire community from reading a book which only they find objectionable. Were they not compelled, through taxation, to send their children to a public school, they would have no grounds for forcing their will on others, nor, in all likelihood, the need. Voluntary cooperation, the action of markets, would allow them to associate with other parents and teachers who were like-minded, without trampling on the rights of those who did not share their views.

## **Equal Educational Opportunity through Equal Public School Funding**

Because they draw much of their funding from local taxes, the per pupil spending of public schools varies significantly from community to community. Many advocates of public schooling, most notably Jonathan Kozol, author of *Savage Inequalities*, identify this as one of the principal causes of the discrepancy in academic and career achievement between students of differing socio-economic backgrounds. They propose raising up public school spending nationwide to the levels common in wealthy suburbs, or, at a minimum, redistributing the current level of spending to achieve uniformity. This approach, based on incorrect assumptions and contradicted by a mass of evidence, does not yield the desired results. It is, furthermore, unachievable.

Learning is action. As such, a child must associate a reduction in uneasiness or a gain in happiness with education in order to pursue it. Since children cannot always grasp the full benefits of an education it is often necessary for these benefits to be repeatedly touted and for educational successes to be encouraged. Where this encouragement is absent, children are less likely to actively pursue learning. Additionally, a student must believe he or she is capable of some degree of educational success in order to undertake the effort to learn. In the field of psychology this is known as the "locus of control" effect; when a person believes a goal to be beyond his or her control, he or she is not likely to seek it. While it is possible for children to conclude on their own that they have the ability to learn, it is usually necessary and always helpful for respected adults or peers to draw attention to their past and present intellectual achievements as confirmation of this ability. Finally, the effort to learn must not be impeded by external factors such as threats to physical safety, and the sought-after knowledge must of course be accessible.

Money is a means of obtaining certain desired products and services. If the positive factors listed above are present, it can usually be productively applied to the pursuit of education via the purchase of instructional materials and teaching services. In the absence of these factors, spending increasing sums of money on the trappings of education will not yield any discernible benefit since education either is not, or cannot be, actively sought. Furthermore, since there is a limited supply of money for education, spending in inefficient ways precludes other more advantageous efforts. This analysis is substantiated by the empirical evidence.

### **More Money for Public Schools Generally Yields No Significant Benefits**

Since 1986, Kansas City, Missouri has been among the highest spending school districts in the country, particularly among urban centers. It was in that year that judge Russell Clark ordered the state to pay for a wholesale revamping of the existing system with the goal of enticing the white middle class back into Kansas City's public schools. By the summer of 1993 the bill had run to 1.3 billion dollars over and above the regular budget; an extra \$36,111 per student in the system. This dramatic spending increase produced 56 magnet schools (Note 2), a business and technology high-school, an agribusiness high school with two greenhouses and myriad laboratories, an engineering and technology high school, and an "advanced-technology" high-school featuring some sixteen fields of specialization. "Computers-unlimited" grace the new thirty-two million dollar Central High School. Teaching methods and curricula span the globe with eleven schools concentrating on international studies, and two elementary schools using the methods of Maria Montessori. They also reach back over two thousand years of history to a "Classical Greece" program focusing on the language, letters and emphasis on physical training of the Hellenic period; but with the slightly incongruous inclusion of fencing instruction by the former head coach of the Soviet Olympic fencing team (*The Economist*, 1993, p. 23).

Predictably, this enormous increase in public school spending, with its complete lack of understanding of human action, has produced no increase in learning for the children involved.

According to John Alspaugh, a professor of education at the University of Missouri who has kept a careful watch on the experiment, the past six years have seen no improvement whatsoever in children's scores in standardized tests of reading and maths. Indeed some key statistics suggest that things have gotten worse since the spending binge began. Pupils in elementary schools which have not been turned into magnet schools regularly outperform pupils in generously funded magnet schools. The rise in expenditure has coincided with a fall in the maths scores of middle school pupils and a surge in the drop-out rate... which has risen every year, without fail, since the decree was handed down, and now stands at a disgraceful 60%. (The Economist, 1993, pp. 24-5).

The decisive results of the Kansas City experiment are simply the most vivid in a long line of similar cases. In analyzing 65 studies which compared per-pupil public school spending to student achievement, economist Eric Hanushek found that eighty percent either showed no significant correlation ( $n = 49$ ) or a negative correlation ( $n = 3$ ) (Hanushek, 1986). He concluded that higher per-pupil spending in the public school system had little affect on student performance. Because of the damning nature of this evidence, and the fact that it was brought to political prominence several years ago by the U.S. secretary of education, it has been roundly attacked by supporters of public schools. Both the accuracy of its premises and the validity of its conclusion have been called into question.

One of the most frequently heard criticisms is that the studies analyzed by Hanushek were of varying quality and that some were out of date, coming from as far back as the nineteen twenties. Both of these criticisms are answered, however, in a study conducted by Stephen Childs and Charol Shakeshaft. Their analysis was expressly concerned with the quality of the data involved, and of the 467 studies they examined, only 45 met their stringent criteria. From these studies they obtained 400 separate correlation coefficients which led them to conclude that "the relationship between student achievement and level of educational expenditures is minimal." (Childs & Shakeshaft, 1986) The Childs and Shakeshaft paper is even more compelling in its refutation of the contention that Hanushek's data failed to reflect modern conditions. In observing the trend in the correlational data over time, they found that it has actually been decreasing. They saw the largest correlation among studies conducted prior to the nineteen sixties, a significantly smaller one during that decade, and actually noted a negative (though insignificant) correlation in studies performed thereafter. As we shall see later in this paper, the declining cost-effectiveness in the public education system was contemporaneous with an enormous growth in its bureaucracy.

The second form of criticism is typified by an article that appeared in the *Phi Delta Kappan*, written by Keith Baker. In his reanalysis of Hanushek's results, Baker makes the astonishing claim that "the important feature of the literature is not the significance but the direction of all studies" (Baker, 1991, p. 630). By this unique process of thought, it would be reasonable to pay your mechanic several hundred dollars as long as he made some improvement in your vehicle, however insignificant. In other words, you could bring in a car which was leaking gasoline and had brake trouble, and Mr. Baker would like you to feel satisfied as long as the cigarette lighter was working when the mechanic had finished; a positive, though insignificant, change. Alternately, Mr. Hanushek would suggest finding another mechanic whose approach to fixing automobiles produces significant results. This is the choice to be made regarding the organization of education in the United States.

One of the latest studies on the subject of increased spending to public schools was released in April of this year by Gary Orfield, of Harvard. Based on an examination of districts in Maryland, Arkansas, Texas, and Detroit, he concluded that despite two decades of additional court-ordered spending on students in predominantly black public schools, there was no

indication that the education of these students had improved (Orfield, 1994, p. A6). In Orfield's words "Just putting money into schools is not likely to produce benefits." The obvious question that comes to mind is: Why not? How is it that increased spending on public education, unlike increased spending on houses, or food, or pretty much anything else, doesn't lead to better quality? The answer is two-fold: the public education system doesn't always spend the public's money on education, and when it does it is inefficient. Both of these causes are examined in a later section of this paper entitled "Divergent Goals: The Public School System and the Families it is Intended to Serve".

### **The Impossibility of Equal Educational Funding.**

The example of Kansas City shows that when the dream of equal spending is realized it nonetheless does not come true. Even when the ideal was surpassed it not only failed to improve academic or career achievement, but in fact was met with a decline in the former and presumably the latter as well. Some people will nonetheless continue to advocate such means despite their ineffectiveness. It is therefore worth pointing out that equal educational spending is, additionally, unachievable. In much the same way that legal attempts at integration failed in many cases to integrate public schools, legal attempts at funding parity will also fail. Parents generally value the education of their own children above that of others. If public schools enforced funding parity there would be a flight from public schools much like the flight from urban areas which followed desegregation (see below), assuming it were even possible to pass such legislation in the first place.

### **The Fair Treatment of Minorities**

In keeping with the "equal protection" clause of the Fourteenth Amendment, the Supreme Court ruled in *Brown vs. the Board of Education* that public school segregation was unconstitutional. One argument given for the continuation of government-run schools is that no constitutional integration restriction applies to private institutions. It is important to distinguish this argument for public schools from the significance of the *Brown* ruling itself. The abolition of segregation in government run schools was sensibly pursued on the basis that all citizens of this country have equal rights under the law. In other words, because public schools are the product of state laws, they must abide by all constitutional requirements of laws, including equal treatment of the people. While this is eminently proper it does not constitute a justification of government being in the business of schooling in the first place. Were government not involved in schooling it could not violate this constitutional provision. There is thus no link between observance of the spirit and substance of the Constitution and the existence of public schools. The case for maintaining the public school system so that a predetermined level of racial mixing can be forcibly achieved must therefore be made on its own merits.

The distinction between forced and voluntary integration is an important one. We have already discussed the profound benefits to human life of voluntary association. Our only concern here is with the use and usefulness of coercion, which is immediately called into question by the fact that it is opposed or deliberately avoided by many of the people it is claimed to help. As we shall see in a later section, increasing numbers of urban blacks send their children to private schools which are not subject to this coercion. In fact, in a survey of the reasons that parents withdrew their children from the public system in favor of private schools, "*none* of the minority families cited reasons classified as 'Integration' for transferring their children." (Edwards and Richardson, 1981, p.13, emphasis in the original). The same study indicated that "busing... was criticized because it created an imbalance of neighborhood children and no lasting relationships". (Edwards and Richardson, 1981).

In Milwaukee, the black community has attempted to establish an independent and separate school system (Bell, 1987-88). Black Mayors from across the country, most notably Mayor Freeman Bosley Jr. of St. Louis, Mayor Norm Rice of Seattle, and Mayor Michael White of Cleveland, have begun efforts to replace mandatory school busing with voluntary programs (Seattle Times, Nov. 16, 1993b, p. A5).

Supporters of forced integration often claim to be seeking "social justice" for this community that they increasingly fail to represent. As this term is too vague for meaningful discussion, it shall be broken down into three likely components: higher academic achievement, more positive attitudes towards education, and higher socio-economic attainment.

### **The Failure of Forced Integration**

Early approaches to desegregation predominantly made use of district zoning changes that did not assign children to schools beyond a reasonable distance from their homes (Welch, 1987). As white parents increasingly moved out of urban areas into the suburbs, this approach was superseded by plans to bus children from their homes in one neighborhood to schools in another. Due to its enormous cost and controversial nature, busing has been the subject of numerous studies. One of the most comprehensive of these was ordered by a U.S. District Court to compare transfer students with those in the magnet, integrated and non-integrated schools in St. Louis City. It was carried out by Robert W. Lissitz, Chairman of the Department of Measurement, Statistics & Evaluation at the University of Maryland's College of Education, and focused on "the academic achievement and attitudes of the students in the St. Louis metropolitan court ordered desegregation program." (Lissitz, 1992, p. ii). The data were collected primarily from three sources; a writing achievement test used widely throughout the country, the Stanford Achievement Test, and a specially designed survey which included questions asking the students' personal beliefs on questions of school personnel, friends at school, personal work habits, and support from home. Remarkably, of the twenty-one conclusions arrived at in the study, the results in this avowed prime area of interest were relegated to the nineteenth position. The conclusion was that "the correlation of both attitude items and achievement to months in the transfer program is essentially zero." (Lissitz, 1992, p. 41).

A survey of the studies on the effects of desegregation confirms this conclusion. In 1984, the National Institute of Education commissioned seven papers from a disparate group of researchers to clarify the effects of school desegregation on black student achievement. This effort began with an examination of 157 studies, of which all but 19 were rejected because of poor quality or lack of necessary information (Note 3). The panel's conclusion, as summarized by Thomas Cook, was that desegregation generally had no effect on students' mathematics achievement, and only a small effect on reading achievement (Cook et al., 1984). The distribution of the results was also telling: mandatory programs resulted in zero effect sizes; the positive effects were found to come from voluntary desegregation programs. Also interesting is the fact that the positive results were heavily skewed, being generated by a small fraction of the schools studied. This finding lends support to the argument that institutional characteristics were largely responsible for the students' improvements.

One of the seven contributors to this panel, Robert Crain, actually refused to analyze the selected studies, preferring to defend a previous paper in which he and a co-author had argued that desegregation had a significant positive effect on black student achievement. Crain had been far less stringent in the quality control of his data in this earlier work than was the NIE panel, however. Regarding Crain's use of 93 studies, Thomas Cook commented that "Crain & Mahard were willing to accept pretest measures that the present panel would not accept because it required that pretest and posttest measures tap into the same conceptual domain." (Cook et al., 1984, p. 31). Citing previous evidence, he added that Crain and Mahard's choice of data would

"probably result in overestimating the effects of desegregation." (Cook et al., 1984).

Among his other criticisms of Robert Crain's work, Cook noted that since almost all of the studies were part of a single project, they offered "little comfort as to the generalizability of effects." (Cook et al., 1984).

A decade has passed since the NIE meta-analysis was conducted, and the evidence gathered during this period is even more conclusive. A search of ERIC, the most comprehensive database in the field of education, yielded 68 hits to a query for papers concerning the educational effects of desegregation programs on black students carried out between 1984 and 1994 (Note 4). Most of these either did not address the effect of desegregation on academic-achievement, or were not statistical studies. Including the Lissitz paper already mentioned, only six meet all or almost all of the NIE panel's criteria. Four of these six found no academic benefits to desegregation plans (Lissitz, 1992; Bennett and Easton, 1988; Mitchell, 1989; Easton et al., 1987). Of the remaining two studies, the first noticed "only a few positive statistically significant differences" among the students (Alkin et al., 1989), and these were concentrated in two of the district's voluntary desegregation plans. The final study involved a voluntary school choice plan (Note 5) in Cambridge Massachusetts, which only rarely (9 percent of the time) had recourse to entirely mandatory reassignments to maintain racial balance (Rossell and Glenn, 1988). The students in this program showed moderate academic improvements. Similar results for a school choice plan which did not involve desegregation are discussed below in the section entitled "Choice".

Another argument given for coercing integration is that it will eventually lead to greater career and social success for blacks. While this proposition is obviously extremely difficult to verify, Robert Crain has claimed that it is indeed true (Crain, 1970). Looking at virtually the same data, however, James McPartland judged there to be insufficient control over student background and other intervening variables to correct for the expected statistical errors (McPartland, 1978). Additionally, Crain's argument for causality rests on a variety of either unverifiable or even patently false assumptions. He asserts, for example, that "In a segregated community, Negroes must depend upon other Negroes for information about job opportunities." (Crain, 1970, p. 594). While this might be true of illiterates, it is not generally so; most people, irrespective of their skin color, can pick up a newspaper or a trade journal and look for want-ads or prospective employers to whom they can address a resume. Since basic literacy is required for most jobs, and virtually all high-paying jobs, illiterate individuals have little chance of moving up the socio-economic ladder. In other words, illiterate children are better served by learning to read than by looking for well-connected friends.

Crain's primary thesis is that black students benefit from integration because they make white friends who will later inform them of better job opportunities. This argument needs to assume a great many things as true. In addition to the already identified false premise, it assumes that a significant number of blacks get their jobs through the referrals of friends, that these referrals are better and more numerous when they come from whites, and that these white friends were either made during elementary or high-school, or could not have been made in college were it not for antecedent integrated schooling. Crain fails to prove even one of these premises.

According to his own data, the percentage of blacks who find jobs through friends is approximately the same as the percentage for the population at large; twenty-five. While he showed that blacks with no college education who attended integrated high-schools are more likely to have a college graduate friend from whom they could ask advice, he neglected to ask how many of these friends were white. In a later study where this information was available, Crain found that the fraction of the desegregated group which obtained jobs through friends only used white contacts between 5 and 8.3 percent more often than those in the segregated group, observing that both groups operated "in a social network which [was] predominantly black." (Crain, 1985, p. 24) Furthermore, job seekers without a college education would probably not

have the education and training required for many of the high-paying jobs suggested by their college graduate friends. Crain's figures for blacks with either college degrees or some college education actually contradict his thesis: black men and women from the North, as well as black women from the South, were more likely to have a college graduate friend if they had attended a segregated high-school than if they had attended an integrated one.

While a quality education is almost surely a more critical requirement for a high-paying job than white friends, a market approach to education would permit parents to chose for themselves. A variety of options would be available in both quality and level of racial integration. Parents of all colors would be free to spend some of their money on busing their children if their neighborhood schools proved unsatisfactory in one or both of these areas. (Note that in the plan advanced at the end of this paper, poor families would receive vouchers to help defray their educational costs.)

### **Unintended Consequences**

Despite the intentions of its supporters, therefore, forced integration either fails to achieve, or cannot be causally linked to, its worthy goals. Worse yet, it has unintentionally led to increasing separation of the races. In the refutation of an earlier study, Finis Welch concluded that not only was "white flight" a continuing demographic trend, but that "the losses resulting from mandatory reassignment are larger than those that accompany voluntary programs" (Welch, 1987, p. 215). These results have been more recently confirmed by Christine Rossell (1990) who found that white flight due to mandatory busing programs was more than double that caused by voluntary programs. Significantly, the term "white flight" is itself misleading. While it is often contended that the population shift out of urban areas was largely due to racism, the evidence indicates that economic level is a more accurate predictor of who leaves and who stays. Margaret Fleming and James Zafirau found that "those students from higher income families (of all racial groups) tended to outmigrate in much greater proportion than did students from lower family income," and that this was a more significant predictor of outmigration than race (Zafirau and Fleming, 1982, p. i). Those most able to flee the deteriorating urban schools did so, and those less able were and are condemned by the present system to remain in them. The exodus from urban public schools was not so much the flight of whites as the flight of all those with wings.

What then would be the socio-racial impact of taking the government out of the school business? It is argued that segregation would increase, but, given the almost total segregation of many existing urban public schools (Kurtz, 1987; Kozol, 1992), this is hardly possible. Moreover, the evidence suggests the opposite would happen. James S. Coleman and Thomas Hoffer have shown that there is less racial segregation in the private sector than there is in the public (see Boaz, 1991, p. 35). When we add to this the fact that there is no discernible benefit in either attitude or achievement for black students in public school busing programs, two more of its supporting arguments collapse. The greatest difference between the current government-run system and a market approach to education would be the unification of the interests of black families and their schools. Families and teachers would not be brought together because of a court ruling, but rather because they shared the common goal of educating a particular group of children to their utmost potential.

### **Divergent Goals: The Public School System and the Families it is Intended to Serve**

#### **Choice**

In "Patterns of Black Excellence", economist Thomas Sowell studied a range of currently and historically successful elementary and high schools, identifying and explaining the common elements leading to their success. One of the questions he sought to answer was whether there were significant systemic characteristics affecting student achievement, or if black academic success was instead a predominantly individual phenomenon. His answer was decisive,

Black successes--whether measured by academic degrees or career achievement--have not occurred randomly among the millions of black people scattered across the United States, as might be expected if individual natural ability were the major factor. On the contrary, a very few institutions... have produced a disproportionate share of black pioneers and high achievers. (Sowell, 1984, p. 23).

In examining the data from a broad survey of black educational institutions conducted by Horace Mann Bond, Sowell observed that "five per cent of the high schools produced 21 per cent of the later Ph.D.'s." (Sowell, 1984). Four of the high schools studied graduated an impressive list of achievers such as Thurgood Marshall, the first black Supreme Court Justice, Benjamin O. Davis, the first black general, Charles R. Drew the discoverer of blood plasma, Martin Luther King, Jr., civil rights leader and Nobel Laureate, and many others. While he found that spending was not related to educational excellence--the schools he studied "ranged from the most dilapidated wrecks to a sparkling plate-glass palace" (Sowell, 1984, p. 48)--a number of systemic characteristics did arise again and again. Order and discipline featured prominently in this list, as did self-selection, which is to say that most or all of the families with students attending these schools had deliberately chosen them. This last element ties in with a high value placed on education by the parents, though most did not have high levels of educational attainment themselves. As we have already mentioned, however, most public school supporters oppose the freedom of students and parents to choose their own schools.

In this and another article, "The Case of Dunbar High School", Sowell refutes the contention of the public school establishment that poor and/or poorly educated black parents cannot make good educational decisions for their children. He points out the distinction between recognizing a good education and knowing how to provide one. While the latter is a difficult task, it requires, in practice, only a small number of motivated people to accomplish. The fact that the majority of students in these excellent schools had parents employed in unskilled or semi-skilled work is clear evidence that neither wealth nor college diplomas are required to make sound educational decisions. This assertion is further supported by the large numbers of Protestant black families who send their children to private Catholic schools. A survey of 54 urban private schools that were overwhelmingly Catholic in affiliation found that 53% of their students were Protestant blacks (Blum, 1985, p. 645). Furthermore, parents who take little or no interest in education would, in a free educational market, benefit from the decisions of those more active and informed; as explained earlier in this paper. Opponents of educational vouchers, markets, and choice suggest that the vast majority of parents would care far more about a school's proximity than its quality, but here again the data contradict them. A recent report by the OECD (the international Organization for Economic Cooperation and Development) revealed that 57% of Boston area parents are sufficiently interested and informed to choose non-local schools (OECD, 1994, p. 83).

The most dramatic evidence for the benefit of choice in a free educational market is that even in the absence of its most powerful component, the profit motive, competition has a positive impact on student achievement. When the enormous regulatory burden of public schools is combined with the absence of the profit motive, it might seem that competition could not possibly have a significant effect, but this is untrue. In a study of the public school choice program in Kentucky, economists Melvin Borland and Roy Howsen (1993) found that competition had a small but significant positive effect on student achievement. They concluded

that:

Educational officials who are concerned with student achievement often emphasize attendance policies, pupil- teacher ratios, and teacher salaries. However, this study finds that these variables are either insignificant or have an incorrect sign... The over- riding result of this study suggests that elected public officials who are seeking higher student performance need to concentrate their efforts on policies that foster competition within the educational sector. (pp. 618-9).

Because public school teachers' and principals' salaries are not dependent on satisfying parents or increasing student achievement, however, competition offers them no benefits while decreasing their job-security at the same time. In other words, what is good for families is bad for public school employees.

## **Class Size**

One of the most frequent strategies applied by public school officials in the avowed pursuit of higher student achievement is the reduction of class size. This is perhaps the most clear cut example of how the incentive structure of the system leads its employees to pursue goals incompatible with those of its students and their parents. Class size reduction reduces teacher workload and increases teacher morale, but it has a negligible effect on student achievement and precludes the application of many more effective strategies because of its high cost.

In a 1990 survey of the field, Allan Odden observed that many of the studies were methodologically unsound and/or did not address academic achievement. He notes, for example, that one of the most influential meta-analyses on this topic included a study showing a large benefit to smaller classes-- in learning to play tennis (Odden, 1990). When this same meta-analysis was reconducted with the provision that only methodologically sound papers addressing academic achievement be evaluated, it found only negligible effects of 0.08 and 0.04 standard deviations for class sizes of 20 and 15, respectively. Pursuant to this reassessment, Odden added that the positive impacts reported for small classes were driven by one-to-one tutoring and very small groups, and that when these effects were eliminated "class size reduction even down to 15 or 20 would have shown essentially little or no impact." (Odden, 1990, p. 216) Since class size reduction beyond this level is prohibitively expensive, it is clearly not an effective systemic approach.

In his conclusion, Odden also noticed the divergent incentives for teachers and families on this issue, remarking that "although research shows that smaller classes improve teacher morale and produce changes in teacher classroom behavior, the dilemma is that it does not show the links to student performance." (1990, p. 224). Because of this phenomenon, public teachers and hence their unions are likely to carry on advocating this approach. Meanwhile, the evidence for more effective alternatives mounts.

A study conducted by Henry M. Levin, Gene Glass and Gail Meister (1987) found peer tutoring to be more cost effective than computer-assisted instruction, and both to be more cost effective than reducing class size or increasing the length of the school day. Tutoring was also considered to be significantly more effective than reduced class size by Theodore Chandler (1986). Christopher Moersch found computer based instruction to be effective but concluded that "Class size [reduction] had the least empirical support as a viable strategy for increasing student achievement" (1987, p. i). Dean Jamison has shown that increasing the availability of instructional media such as textbooks, radio programs, and computer learning systems is of greater academic benefit than class size reductions (1982). Even a critical paper by Henry Becker, which set out expecting to find that smaller class sizes and higher teachers' salaries

would be more valuable than computerized Integrated Learning Systems, decided that "students generally do somewhat better than expected using ILSs and sometimes the results are substantially superior." (1990, p. i).

What makes these results even more revealing is that they were collected between 1986 and 1990. Since that time computer technology has become fantastically cheaper and more advanced, while teachers' salaries have increased and instructional methods are relatively unchanged. The typical personal computer in 1987 had 64 to 640k of RAM, a 10meg hard-drive, monochrome screen, low resolution graphics (if any), fairly basic software, and a relatively slow microprocessor. The same buying power today provides five to forty times the RAM, ten times the hard-drive space, a 256-color monitor at four to sixteen times the resolution, and more than ten times the processing speed. The addition of perhaps one or two hundred dollars adds real-time video, and digital stereo sound. Software prices have tumbled even faster, with Borland dropping the price of its Quattro Pro spreadsheet application from \$495 in 1992 to \$50 in early 1994. A recent article in *The Economist* magazine states that "all told, the street price of applications software fell by around a quarter last year in America, and by a third in Europe." (*The Economist*, March 19, 1994, p. 81).

As prices have dropped, functionality has improved; while spelling checkers were just gaining ground in the consumer word-processors of 1987, today's products offer extensive dictionaries and thesauri, and even simple grammar-checkers which highlight passages, cite relevant rules of grammar, and suggest alternate words or phrases. The number and variety of educational software packages has also soared in the last four to eight years. The relative superiority of computer assisted instruction over class size reduction can only have increased substantially as a result of these changes. Within the public school system, however, where teachers are not rewarded for increasing achievement but rather for time-served, there is little incentive to obtain the necessary computer skills. Reducing class size, which commensurately reduces the teacher's workload, will continue to be championed over other more advantageous schemes so long as there are systemic incentives to do so. Teachers are human beings, and that is human nature.

## **Physical Conditions of School Buildings**

Even when addressing the narrow goal of simply improving physical conditions such as cleanliness, heating and safety in schools, public ownership is a serious impediment to success. The conditions of some urban public schools are clearly atrocious, but this sad fact follows inevitably from the severing of the relationship between expenditure and gain. As already observed, human beings pursue what they believe will minimize their uneasiness, and one of the most significant components of this phenomenon is the profit motive for voluntary exchange. A voluntary exchange is carried out precisely because each party feels they benefit from the transaction.

In a privately owned and operated school the same people who pay for building maintenance benefit from it as well. No parent would choose to send their child to a filthy, frigid, or structurally dangerous school if there were an alternative, and so there is a powerful incentive for private schools to keep up their buildings. The structure of public schooling inherently stifles the competition for students which would provide this incentive. In a quote from Johnathan Kozol's *Savage Inequalities*, principal Sam Morgan makes the issue plain: "we're losing thousands of dollars in our heating bills because of faulty windows and because the heating system cannot be controlled" (1992, p. 32). Whereas maintenance can be and is financed either through reinvestment of profits or long-term physical plant improvement loans in the private sector, public school bureaucrats go on wasting the taxpayers' money because it personally costs them nothing. Private institutions operated in this fashion go out of business, but, like all

government enterprises, the public schools are not subject to this fate and so they can continue to waste money indefinitely. Because most of this country's citizens understand this fact, they are naturally unwilling to throw good money after bad. Unfortunately, Kozol does not seem to be aware of this fact, as he and an editorialist he cites are forced to appeal to an "extraordinary combination of greed, racism, political cowardice and public apathy" to explain the very common and ordinary objections many Americans have (1992, p. 72).

### **"Do As I Say, and Not As I Do"**

A common position among public educators is that parents are often unqualified to make appropriate educational decisions for their children, and that these decisions should be left to themselves, the experts. If the American public actually followed the lead of its public school teachers, however, public school enrollment would be promptly cut by as much as a half, since teachers in the government schools are much more likely than the rest of the population to send their children to private schools.

In 1984, 22 percent of Chicago children were enrolled in private schools, but the figure rose to 46 percent when only the children of public school teachers were considered. In everyone of the thirteen cities for which data was available, private school attendance was "significantly higher" among the children of public school teachers (Boaz, 1991). Another illustrative if not illustrious public school statistic is that, "In New York City, as of 1988, no member of the Board of Education and no citywide elected official had children in the government schools." (Boaz, 1991, p. 9).

### **The Absence of Systemic Work Incentives**

The lack of positive incentives for teachers is particularly visible in urban areas. Since these teachers have little to gain from pursuing excellence, and even less to lose from poor performance, the system works to extinguish whatever motivation they may bring to their job. A few of the many examples from *Savage Inequalities* should suffice to make the point (1992, pp. 51-3):

We have teachers... who only bother to come in three days a week. One of these teachers comes in usually around nine-thirty. You ask her how she can expect the kids to care about their education if the teacher doesn't even come until nine-thirty. She answers you, 'It makes no difference. Kids like these aren't going anywhere.'

Another teacher slept through most of the semester. He would come in, the student says, and tell the students, 'You can talk. Just keep it down.' Soon he would be asleep.

'If a kid comes in not reading,' says an English teacher at Chicago's South Shore High, 'he goes out not reading.'

We're a general high school... We have second- and third-grade readers.... We hope to do better, but we won't die if we don't.

A principal lamenting the fact that a number of his teachers should not even be in the field of education explains that, "I can't do anything with them but I'm not allowed to fire them" (1992, p. 69). On a tour of this school, author Jonathan Kozol comments that,

Entering a biology class, we find a teacher doing absolutely nothing. She tells us that

`some of the students have a meeting,' but this doesn't satisfy the principal, who leaves the room irate. In a room he calls `the math headquarters,' we come upon two teachers watching a soap opera on TV. In a mathematics learning center, seven kids are gazing out the window while the teacher is preoccupied with something at her desk. The principal again appears disheartened. (p. 69).

Despite the fact that these teachers are already being paid up to \$40,000 a year to do "absolutely nothing", many public school advocates somehow feel that the solution is to pay them still more. In doing so they fail to grasp, or choose to ignore, an essential point of human action, namely that so long as people are paid independently of the work for which they are employed, there is no systemic incentive for them to produce any work at all. In the public school tenure system, salaries are increased for time-served rather than superior performance, so the incentive to work hard associated with higher salaries in a competitive market does not carry over into public schools. While it is certainly possible for public school teachers to work hard simply because of personal ethics, the system in which they labor ignores these efforts, unlike the market, which encourages them with better working conditions and higher salaries.

### **Innovation and the Role of Profit in Entrepreneurship**

The principal issue for an entrepreneur is risk versus potential gain. The risk in starting a business is the loss of all invested capital, and the potential gain is a profit greater than one could earn from other ventures. Industries with a relatively high risk and/or low potential gain attract few new businesses. Schooling fails on both these counts. In the grocery business it is only necessary to sell a comparable product at a lower price or a better product for a comparable price in order to attract local customers away from existing businesses. This is because customers of existing grocery stores pay no penalty for taking their business elsewhere. Compare this to the public schools, for which individuals must pay even if their children do not patronize the institution. In this case, offering a similar product for a lower price is unlikely to attract business, since the costs are cumulative rather than exclusive, i.e. parents have to pay for both, not one or the other. The same problem exists for prospective school owners who believe they can provide a better quality of service, since they must charge a sufficiently low price to account for this cumulative effect. The risk of failing to attract customers is therefore higher in the school business, and the potential profits are lower. Tax-supported public schools are thus a disincentive to the creation of new private for-profit institutions. Yet it is just such private entrepreneurship that is responsible for the enormous advances in other industries that we have experienced in the last century and a half. As economists Nathan Rosenberg and L. E. Birdzell, Jr. have written, "The great virtue of private businesses in market economies is that they become independent sources of decision making for exploring the frontiers of technology. No single individual or institution has the authority to veto an exploratory undertaking unilaterally". (1990, p. 52).

The negative impact of public schools on the development of education is not limited to this immediate effect of discouraging the creation of innovative new private institutions. The lack of competition for students resulting from government schools' virtual monopoly also removes the primary incentive for public schools to attempt innovations of their own. In the absence of this incentive, the research and development work necessary for technological and organizational advancement simply never materialized. A striking illustration of this fact can be seen in the table below (Perelman, 1992, p. 217):

Business	Education	Avg. Bus.	Hi-Tech
Labor Cost/Output	93%	54%	46%
R&D Investment/Worker	< \$50	\$5,000	\$30,000 - \$50,000

R&D Investment/Revenue	< 0.1%	2%	7% - 10%
Cap. Investment/Worker	\$1,000	\$50,000	\$100,000 - \$300,000

In a study conducted by Lewis Perelman to discover why the great majority of teachers in one of the nation's most affluent school districts had shown no interest in participating in a multimillion-dollar program aimed at expanding computer-based instruction, he summed up his results by quoting one of the teachers he interviewed: "Why should I do anything different next year from what I did last year? Who cares? Changing to new ways of teaching takes time, effort, risk, and money." The public school system, he then observed, offered nothing even to cover her costs much less reward her for success (pp. 185-6).

To observe a typical classroom today is to gaze back in time fifty or a hundred years; rows of students sitting in front of a teacher at the blackboard. Even James Mecklenburger, the technology expert for the National School Boards Association admits that "schools today reflect their nineteenth-century technological roots more than do most other institutions." (Fiske, 1991, p. 145). When modern devices such as computers eventually creep into the schools they are usually tacked on to the organization's existing structure, as an additional content area, rather than being used to revolutionize the process of education itself (Fiske, 1991).

### **Unproductive Bureaucracy**

While some aspects of public school spending are simply inefficient, others are entirely unrelated to education. Between 1960 and 1984, public school enrollment increased 9 percent. During that same period, the number of teachers grew by 57 percent, the number of principals and supervisors by 79 percent and the number of "other staff" by a staggering 500 percent. In other words, the number of individuals employed by public schools whose jobs had nothing to do with teaching or supervising teachers grew more than fifty times faster than student enrollment during that twenty-four year period. It is impossible to contend that this stupendous growth was warranted by previous deficiencies, because non-public school systems operate with far fewer bureaucrats per student (Boaz, 1991, p. 17):

As of 1987, there were 3,300 employees in the central and district offices of the Chicago public school system. By contrast, the schools of the Catholic Archdiocese of Chicago serve 40 percent as many students in a much larger geographical area but make do with only 36 central office administrators... In the nation's largest school district, New York, John Chubb found an even more striking contrast: 6,000 administrators in the government schools and only 25 in the Catholic schools, although the Catholic schools served about one-fourth as many students.

As indicated earlier in this paper, it has been found that the effect of public school spending on student achievement declined rapidly since 1960. Furthermore, it is incorrect to assume that these armies of bureaucrats cost the nation's taxpayers and children only their salaries. It was recently reported on a local television program in Seattle that the public school district spent 1.6 million dollars last year on public relations efforts; just slightly less than the 2 million spent on textbooks in the same period. An article in the December 1992 issue of "The Economist" magazine reported that in New York City only "32 cents of every dollar spent on education goes into the classroom: that is, for teachers' and assistants' salaries, textbooks, supplies and equipment.... The other 68 cents is spent on administrative staff, curriculum planning, bus services, security guards and such things as political lobbying and an office of public affairs." (Dec. 19, 1992, pp. 24-5). While security concerns are inevitable in a system which is unable to maintain discipline among its students, the article reported that the simple act

of hiring a security guard required the navigation of five different levels of bureaucracy.

Despite these expenditures on security, lack of public school discipline is one of the primary reasons parents give for moving their children to private schools (Edwards and Richardson, 1981). Supporters of public education often allege that private institutions are only able to achieve better discipline through expulsions, strict admissions policies, and a less disruptive, usually suburban student body. This notion is disproved by the well ordered inner-city private schools which enroll students very similar to their public counterparts, have few if any admissions requirements, and seldom resort to expulsions (Blum, 1985, p. 645).

## **Textbooks and Their Selection**

The systemic inefficiency of public schools is also glaringly obvious in the textbook selection process, in which more money clearly does not obtain better instructional materials. Harriet Tyson-Bernstein and Arthur Woodward (1991, p. 95) observe that the existence of "a consensus between publishers and the adoption authorities on the acceptable qualities of textbooks means that fundamental issues about curriculum, learning, and scholarship from the state and local perspective are ignored." They describe how this leads to frequent but insubstantial revisions to textbooks which allow adoption agencies to say they have chosen different and better books while there have really only been "elaborate changes in artwork with minimal changes in content and instructional design"(p. 95). Not only does the statewide adoption process create a tremendous gulf between the needs of individual students and the textbooks that are foisted upon them, it also fails to provide the selectors with any systematic incentive to a good job.

'New is better' as an overarching rationale for textbook selection can only work if selectors do not take time to review textbooks carefully. It has been found that those who serve on selection committees have little time to devote to the task and little training.

A few particularly telling examples are described by physicist and Nobel Laureate Richard Feynman (1989), who was asked to sit on the selection committee in California. After being repeatedly asked how he rated a book that he had not even been given, it became evident that the book had not been handed out because it contained only blank pages. What shocked him about this situation was that the blank book had actually been rated by some of the other members. "In fact, the rating for the missing book was a little higher than for the two others [in the set]. The fact that there was nothing in the book had nothing to do with the rating." (p. 268). Feynman also explains how the selection process, by stifling competition, regularly cost Californian taxpayers substantial amounts of money. As the adoption practice was structured, the cost of books was often not taken into account until very late in the process. This prevented direct price competition between the publishers, removing the incentive to set low prices. In one exceptional case, however, the committee was unable to decide between two texts, and recommended both to the school board asking them to choose between the two. Initially, since one of the two texts was slightly cheaper than the other, it was chosen, but then the issue of an earlier delivery date was raised.

One publisher's representative got up and said, 'We are happy that you accepted our bid; we can get it out in time for the next term.'

A representative of the publisher that lost out was also there, and he got up and said, 'Since our bids were submitted based on the later deadline, I think we should have a chance to bid again for the earlier deadline, because we too can meet

the earlier deadline.'

Mr. Norris, the Pasadena lawyer on the board, asked the guy from the other publisher, 'And how much would it cost for us to get your books at the earlier date?'

And he gave a number: It was less!

The first guy got up: 'If he changes his bid, I have the right to change my bid!--and his bid is still less!'

Norris asked, 'Well how is that--we get the books earlier and it's cheaper?' (p. 274).

At this point, the two representatives spouted some mumbo-jumbo about "special offset methods" and agreed that "When you do it quicker, it costs less!". Of course it does not take a Nobel Laureate to realize that this is utter nonsense, and that if there were a simple known way to decrease costs the publishers would already have been using it to make a larger profit. Feynman revealed that this accidental competition for a single textbook saved the taxpayers 2 million dollars. He traced the root of the problem to the selection process which prevented the publishers from bidding against one another. The books were supposed to be chosen without taking their cost into consideration, so there was no reason for the publishers to set a low price. Since there was no competitive advantage to low prices, "the way they competed was to impress the members of the curriculum commission." (p. 274). This latter form of competition manifested itself as gifts of dried fruit, monogrammed briefcases, "free" lunches, and seminars explaining the texts to the committee members; seminars which of course would not be given to the actual teachers or students using the texts.

The litany of problems inherent in this system stem directly from a single cause: the people choosing the textbooks are different from the individual students, parents, and teachers who stand to gain or lose from the selection. A teacher or school competing to provide the best education for a given amount of money must consider cost and content, and would stand to lose far more than a basket of fruit and a free lunch by choosing unwisely. The incentive structure of the market makes it much more difficult for publishers to sell their books at inflated prices or to bribe the decision-making individuals; not because the market engenders higher intelligence or ethical standards, but rather because the decision-makers personally have far more at stake.

## **Religion and Public Schooling**

Though the First Amendment guarantees the free exercise of religion, the public school system restrains it. For many Americans the practice of their religion requires some study and training, necessitates certain activities, and precludes others. The tax burden of public education makes it more difficult for religious parents to seek an education which is compatible with these requirements. They are forced to either forego religious education for their children, to teach them at home, or to pay tuition at a religious institution in addition to the taxes they must pay towards the public system. The public schools cannot themselves provide religious services as this would violate the first clause of the same amendment.

This dilemma is rousing increasing ire among religious parents, particularly those in the evangelical and fundamentalist Christian communities, who are currently waging a nationwide campaign to inculcate public schools with their religious values (Seattle Times, Sept. 6, 1993a). Though any substantial success in these efforts will inevitably come up against the First Amendment, and presumably be found to violate it, the process will take time. In the interim, people of other faiths, as well as the irreligious, will be forced to endure the results.

Meanwhile, problems of religious preference are easily avoided in those aspects of American life which operate outside of government control. Churches of all faiths abound in this country, and coexist more peacefully here than in virtually any other nation. Were schooling

allowed to exist in the marketplace rather than as a branch of government, parents of all faiths would be free to seek whatever sort of education they thought best for their children, without impinging upon the rights of other parents to do the same.

## **Organizational Effectiveness**

John Chubb and Terry Moe (1991) studied the effects of organizational structure on school performance in detail. They concluded that "if school performance is gauged by student achievement, school organization is a major determinant of effectiveness... Indeed, after the aptitude or entering ability of the student, no factor--including the education and income of the family or the caliber of a student's peers--may have a larger impact on how much a student achieves in high school than how a school is organized to teach its students." (p. 129). In answer to the question "What causes some schools to be more effectively organized than others?", they wrote that:

the single largest determinant of whether a school is effectively organized is not the influence of the students in the school but the strength of the pressures outside the school. Specifically, the more a school is subject to the influence of administrators, unions, and--indirectly--school boards, the less likely the school is to be effectively organized. (p. 134).

This result echoes the conclusion of Rosenberg and Birdzell cited earlier in this paper that the autonomy of individual businesses is a necessity for innovation and success. Chubb and Moe observed that the schools enjoying the most freedom from outside interference fostered better leadership and teaching, noting that the ability of the principal to make staffing and planning decisions had a strong positive impact. Supporting this finding is the work of Dominic J. Brewer (1993), who found that "principals do have a measurable impact on student achievement, through the selection of teachers and setting of academically oriented school goals." (pp. 281-2). Of course such public school organizational factors as the tenure system, powerful teachers' unions, and school boards limit the principal's ability to make planning and staffing decisions. Observers of public schools regularly report the frustration among principals caused by the tenure system, and pleas such as the following one are common:

[Elementary school] principal, Warren Franczyk, later tells me this: 'Teachers are being dumped from high school jobs because of low enrollment. But if they've got tenure they cannot be fired so we get them here. I've got two of them as subs right now and one as a permanent teacher. He's not used to children of this age and can't control them. But I have no choice.' (Kozol, 1992, pp. 46-7).

In their work *Politics, Markets, and America's Schools*, Chubb and Moe (1990) examined the variation in achievement among the students of 500 schools nationwide. Their conclusion, hotly debated by public school supporters, was that effective school organization was responsible for between one half and two thirds of a year in additional achievement over the final two years of high school. What makes this result even more impressive is that virtually all of these schools were either public or non-profit private institutions.

The criticism of their book falls into two categories: those who debate the solution proposed by the authors and those who debate the findings themselves. In the first category is Thomas A. Shannon's article inappropriately titled "Less Government is Not the Answer" (1990-91, p. 61). While Shannon claims that "Turning schools into a marketplace will create--rather than eliminate--bureaucratic chaos", his argument supports a very different conclusion. His criticism centers on the Chubb and Moe proposal that each of America's students

receive a voucher redeemable for educational services at a highly regulated, government-approved institution. His conclusions about the bureaucratic results of this proposal are entirely sound. As is demonstrated in the next section of this paper, government regulation imposes a heavy burden on both producers and consumers. It does not follow from this, however, that an actual market, in which vouchers are restricted to only the truly needy in both size and availability, would suffer the same problems. Since a limited voucher proposal would restrict government intervention to a small fraction of its current level, bureaucracy would necessarily be dramatically reduced. A more apt title for Shannon's article would have been "Chubb & Moe's Proposal Will Not Lead to Less Government".

The second popular criticism is that Chubb and Moe's results are unspectacular. Bella Rosenberg (1990-91), assistant to the president of the American Federation of Teachers, points out that the gap between the top and bottom quartiles in the study was equivalent to 6.33 years, while school organization accounted for one half to two thirds of a year. Many people, including Chubb and Moe, simply disagree with Rosenberg's opinion that these results are inconsequential. It would be hard to imagine a student seeking admission to college not wishing he or she had the benefit of this additional learning. In finding these results "very weak indeed", Rosenberg also omits an important consideration; most of the schools surveyed were public schools. As has already been shown, the public education system inhibits efficient school organization by restricting the freedom of principals and encouraging academically irrelevant expenditures such as busing and class size reduction. Truly effective schools will therefore constitute only a tiny subset within the public system and as such could not possibly have a greater effect on the system's overall outcome. What Rosenberg is really finding "very weak" is the public system's ability to produce effectively organized schools.

In *Politics, Markets, and America's Schools*, Chubb and Moe observed that school sector (private vs. public) was the most important influence on school organization, writing that "Its standardized influence is at least three times the magnitude of any of the other variables." (p. 181). When they held the variables of mean student achievement, behavior problems, parent socio-economic status and school contacts, and school size at average levels, they found that schools subject to market control tended to have highly effective organizations while public schools had merely average organizations. They noted too that "private schools are disproportionately likely to... post large [student] achievement gains". Private schools accounted for 38 percent of the schools they categorized as "high performance" with respect to increasing student achievement, but only 2 percent of their "low performance" category (p. 259).

Though Chubb and Moe did not distinguish in their sample between profit and non-profit institutions within the private sector, we can use as a guide the national estimate that between one and four percent of private schools are operated for profit (Lieberman, 1991, p. 107). This allows us to see a definite trend in the role of competition in increasing organizational efficiency. In both the Kentucky and Cambridge Massachusetts public school choice plans referred to earlier, a small but significant benefit due to competition was found. Chubb and Moe have shown that the effect is somewhat larger when private non-profit institutions are considered. These effects pale, however, when compared to those in the for-profit sector. In the economy as a whole, the interplay between the profit motive and free market competition is held to be largely responsible for the dramatic increase in technological advancement and the standard of living that has taken place in the free capitalist countries since the eighteen hundreds. Conversely, the absence of these forces has been associated with the stagnation, decline and collapse of a variety of nations. As already noted, private entrepreneurship in the educational field has been stifled by the high-risk, low-return environment created by the public school monopoly.

## **Regulation**

Not only has the advancement of the private sector far outstripped the limited progress in such government monopolies as public education, it has been shown that the more private industries are freed from regulatory intervention by government, the better off both the consumers and producers become. A comprehensive study carried out by Clifford Winston (1993) of the Brookings Institution estimated the combined deregulatory gains to American producers and consumers in higher revenues, lower prices and better services at between 36 and 46 billion dollars per year. He also found that these gains had in general been accurately predicted by microeconomists prior to the regulatory reforms. The principal exception to this pattern was that producers did better than expected. Their gains were attributed to the elimination of inefficiencies and excessive costs that had been caused by the regulations. This is one of the reasons that highly regulated "Vouchers for All" proposals, such as the one proposed by Chubb and Moe, are a less than ideal solution.

It has been observed that deregulation sometimes eliminates jobs in the newly liberalized industry, but for these jobs to be lost simply by removing barriers from the free and voluntary interactions of the industry's producers and consumers, they must have been created by those barriers in the first place. The harm done by such barriers is that they create jobs for which there is lesser demand at the expense of jobs for which the demand is greater, not only restricting the freedom of consumers and would-be producers, but making them pay for the restrictions as well. There is no need to conjure up hypothetical examples of the damage government education regulations cause, for as Kozol and innumerable other observers have shown, the public school system is rife with very real ones.

## **Education in a Free Market**

The central argument of this paper is that the success of any human organization depends on the unification of its participants' goals. In the case of a school, this means uniting the goals of the teachers, principals, and support staff with those of the students and parents. The public education system fails to accomplish this task, often leading its employees to work at cross purposes with their customers. In sharp contrast to this system is the free and competitive market, in which employees must satisfy the needs of customers in order to prosper. Applied to education, this approach would alleviate most if not all of the problems discussed earlier.

Schools operating in a market would be encouraged to tailor their methods and curricula to the students they enrolled. The more successful institutions would be able to offer better working conditions and compensation to their employees. This would in turn allow better schools to expand their operations at the same time as shrinking the number of poorly performing schools. Quality teachers would be recognized for their skills, and the minority who are currently permitted by the public education system to simply not do their jobs, would be presented with the choice between better performance and unemployment. Principals would have the power to make the planning and staffing decisions needed for well organized schools. Small groups of activist parents would not be able to dictate reading material for an entire school or district, being free to find other institutions which more closely meshed with their own views. Textbooks would be chosen by people with a personal stake in the effects of their decision. Religious tensions would dissipate in the absence of constitutional restrictions that inhibit religious instruction, and the abolition of partisan school boards that currently try to impose their religion on the public schools.

In addition to the organizational benefits that would accrue from a market in education, a great financial burden would also be lifted, namely the overhead of taxation. The median welfare cost, or excess burden, of public funds raised in the early seventies has been estimated at 36 cents (West, 1991, p. 162). That is to say, the total burden on taxpayers to raise one dollar was \$1.36. It is further held that the cost of taxation increases exponentially with respect to the government's

share of GNP, which has itself been rising steadily for the last fifty years. The estimate of 36 cents per dollar is therefore apt to underrepresent the current cost of tax money. The obvious conclusion is that this factor, by itself, would make a market in education significantly more efficient in its use of the limited wealth of American citizens than the current government-financed system.

## **The Objections**

The case for an educational market would not be complete without a treatment of the arguments against it. The practice of advertising, for instance, is roundly criticized by members of the public school establishment as a waste of money that the public sector is not subject to. This belief is mistaken. Evidence has already been presented in this paper showing that at least the larger public school districts have significant political lobbying and public relations budgets, with Seattle spending almost as much on public relations as on textbooks. In smaller school districts where these costs are presumably less, private enterprises would face less aggressive competition and so would also have commensurately reduced advertising costs. More fundamentally, advertising is a key element of market activity and has the potential to increase public awareness of the value of an education.

Advertising is an effective tool for communication between businesses and their prospective customers. Each enterprise attempts to present itself in the best possible light, pointing out its own strengths and its competitors' weaknesses. The interaction of these advertisements allows customers to identify the good and bad points of all the businesses in a given market. If one school is extremely effective at improving the achievement and discipline of normally disruptive students, it is likely to make this fact known in order to attract the parents of such children away from other institutions. If the same school is strong in the sciences, but weak in the arts and vocational training, its competitors will be sure to indicate their superiority in these fields. Advertising could also help to increase people's appetite for education in general.

In order for an education to be actively pursued it must offer a reduction in the uneasiness of parent and child. A family must have some confidence that the education being offered will improve the student's chances for success in life and career. Consequently, the success of a for-profit school depends on its ability to convince prospective customers that it will help them to achieve these goals. An educational market would therefore encourage advertising that showed the links between education and career achievement; a welcome situation given that current dropout rates in urban areas often reach fifty percent.

A second frequently produced criticism of the market approach to education is the risk of grade inflation. Since parents want high grades for their children, and since markets deliver what the customer wants, grade inflation is allegedly inevitable. The problem with this argument is in its first premise. Parents only seek high grades as a means to better academic and career opportunities for their children, not as an end in themselves. To the extent that high grades become useless in this pursuit, the demand for them will decline. In comparing the applicants from a variety of high-schools, for example, a university registrar will quickly learn to discount the grades of students coming from a school that gives A's to three quarters of its graduates. At best the registrar would simply ignore the grades and use S.A.T. and essay results in their place. At worst the school might be perceived as unprofessional and the quality of its graduates in doubt. Principals would be well aware of this effect, and since their livelihood would depend on the future accomplishments of their graduates, they would make every effort to explain the situation to parents. It is already common practice among modern corporations, particularly in high-technology industries, to take little notice of university transcripts, basing hiring decisions primarily on the results of technical interviews. If the meaning of academic grades were to further diminish, this trend would simply become more widespread, lessening the inflationary pressure.

Public school advocates often claim that private educators would only cater to the intellectual or economic elite. A casual glance at the U.S. economy is enough to dispel this misconception, with some of the most successful industries, such as fast-food, literally catering to the masses. Even more tellingly, this argument is already proven false by current for-profit schools. In "Profit Seeking Schools" Myron Lieberman noted that "Significantly, existing for-profit schools do not necessarily serve the most talented or the most affluent students. On the contrary, the largest group of for-profit schools are the schools serving the disabled." (Lieberman, 1991, p. 108).

The cost of an education is nonetheless beyond the financial means of some families. Happily, the majority of Americans share a desire to help those with more limited means to obtain an education. This desire is well met by the concept of educational vouchers, which would be redeemable by the recipients for the educational services of their choosing. Talk of educational vouchers has become increasingly common in the last few years, and several important issues have been identified.

## **Vouchers**

First it must be decided who would receive vouchers. The reductions in state and local taxes which would ensue from the abolition of the public school system would enable the vast majority of families to assume their own educational costs. The distribution of vouchers could thus be limited to the small percentage of families who could not otherwise afford to educate their children. Because the degree of need among these families would vary, the size of the vouchers would have to vary accordingly. The specific dollar values would necessarily be a function of many variables, and so a detailed treatment of this issue is best left to a longer work than the present one. College financial-aid programs based on student need are likely to shed some light on this issue.

Any activity in which funds are given from one party to another leaves open the possibility that they will not be spent in the intended manner. The voucher plan could be abused, for instance, by schools that offered kick-backs to parents who preferred cash to a quality education for their children. In keeping with the nature of human action, this abuse can be minimized by ensuring that proper use of the vouchers by recipients is in the best interest of the granting party. This would create an incentive for the grantor to police voucher redemptions. Such a system is successfully used in the insurance industry, which employs adjusters and sometimes investigators to confirm the validity of claims. Only those insurers that correctly identify false claims are able to stay in business. The feasibility of applying this technique to educational vouchers depends of course on the identity of the grantor.

While most plans propose a government agency as the dispenser of vouchers, governmental organizations are inherently incompatible with the incentive structure outlined above. Because government agencies are generally not subject to competition, and are neither allowed to go out of business when they perform poorly, nor enlarge their operations when they perform well, there can be little systemic incentive for their employees to carefully monitor the distribution of funds. This problem is already visible in such government programs as S.S.I (Supplemental Security Income), which the television news magazine 60 Minutes recently reported as giving lump sums of money to drug addicts, with predictable and unfortunate results.

In order to establish the necessary incentives, the granting agency would have to feel the pinch when it failed to adequately supervise the use of its vouchers, and be able to expand its activities when its supervision became more effective. Private charitable institutions operate under just such conditions. Because individuals have no desire to throw money away, they chose charities which are known to make efficient use of donated funds. Because these institutions would go out of business if they failed to attract sufficient donations, there would be constant

pressure on them to demonstrate that their vouchers were being properly used. Existing laws pertaining to fraud would of course continue to apply. Though abuse is also possible within the granting agency itself, competitive pressures discourage this as well.

Charitable institutions with solid reputations for ethics and efficiency attract larger donations than inefficient or potentially corrupt ones. Unlike government organizations, from which citizens cannot generally withdraw their funding when they are dissatisfied with the service, private charities must satisfy their donors in order to remain in operation. This has engendered a practice among some charitable organizations that is conspicuously rare in the public sector; advertising the number of cents per dollar of donations that are applied to the goals of the institution, and how many are spent on administration.

The optimal educational voucher system would therefore be composed of competing private charitable institutions. Due to the negative effect of government regulation on both producers and consumers, these institutions should be subjected to few if any new regulations. The majority of such organizations would be operated on a non-profit basis, to ensure the tax-deductibility of the donations they received. While the amount of money required for a limited voucher program would be vastly less than that needed to run the existing public school system, there is a widespread belief that a purely voluntary system would not raise sufficient funds to finance it. This problem can be solved by a state education tax, from which individuals voluntarily donating an equal or greater sum to the private voucher-granting institution of their choice would be exempt. Of course this solution has the unfortunate effect of reintroducing, if only to a limited extent, the dysfunctional incentive structure of government organizations and the cost of government regulation. The tax should therefore be gradually phased out if it becomes clear that it is not required.

This government participation in the voucher system would also raise the issue of public support for parochial education; however, both theory and precedent indicate that this would not be a problem. The purpose of the First Amendment was not to stamp out religion, but rather to prevent the majority from using the coercive power of government to dominate religious minorities. In a voucher system, the government would neither be favoring one religion over another nor raising religion above secularism (or vice versa). It would simply be allowing the poor to have the more varied educational choices which are currently enjoyed only by the wealthy. Furthermore, the Supreme Court has already established the constitutional validity of similar programs.

The case of *Mueller v. Allen* (1983) is illustrative. In this case the court was asked to decide the constitutionality of a state law providing a tax deduction to parents to defray the costs of tuition, transportation, and textbooks for their children. Even though the prime beneficiaries of this deduction were families with children in parochial schools, the majority opinion was that:

The historic purposes of the [Establishment] clause simply do not encompass the sort of attenuated financial benefit, ultimately controlled by the private choices of individual parents, that eventually flows to parochial schools from the neutrally available tax benefit at issue in this case. (Gedicks, 1992, pp. 720-1).

This reasoning has led to similar decisions regarding free transportation and textbooks made universally available to students, regardless of their public or parochial school affiliations (Gedicks, 1992).

## **Conclusion**

The incentive structure of our current government-run education system has retarded its progress in myriad ways, impeding its employees from efficiently organizing their activities, and

often placing their goals in conflict with those of their customers. Innovation has been stifled by the monopolistic clout of a guaranteed tax-base. Principals have been prevented from offering competent teachers the higher salaries necessary to retain them, and from dismissing those teachers who perform poorly. Public educators have supported a variety of practices such as mandatory busing and class size reduction which have little or no academic benefits and costs which preclude truly effective programs such as peer-tutoring and computer-assisted learning. Parents, students, teachers, and other citizens who wish to see this nation's children offered the best possible education have another option, however.

The same voluntary cooperation and free competition which have raised the standard of living of free countries the world over should be harnessed for the benefit of this country's children. Such a system, when coupled with educational vouchers to assist families with limited means, could provide a higher quality of education for every child, not simply for the wealthy. It is clear that many details remain to be settled regarding the optimal characteristics of such a voucher plan, and that the transition between government and market systems will require careful planning. The need for further work in these areas is indisputable. Equally indisputable are the implications of the data presented herein, and the lessons of history; namely, that human activity is most harmoniously orchestrated by free association in a competitive market, and is least well served by coercive and monopolistic organizations such as our government-run school system.

## Notes

1. The term meta-analysis refers to a survey of earlier studies that collects their data and determines their aggregate statistical significance. The conclusions of the original studies are disregarded. When properly done, a meta-analysis rejects poorly designed studies from consideration.
2. A magnet school is a public school that specializes in one or more areas in order to attract students away from conventional public schools or other magnet schools.
3. The following criteria were grounds for rejection by the NIE panel: "1) Type of study a) non empirical, b) summary report. 2) Location a) outside USA b) geographically non-specific. 3) Comparisons a) not a study of achievement of desegregated Blacks (except in cases where we use a White comparison) b) multi-ethnic combined c) comparisons across ethnics only d) heterogeneous proportions minority in desegregated condition e) no control data f) no pre-desegregation data g) control measures not contemporaneous h) excessive attrition (review must provide specific justification for the inclusion of studies with excessive attrition, but amount was not specified) i) majority Black in a segregated condition (unless the reviewer provides specific justification) j) varied exposure to desegregation (unless the reviewer provides a specific justification demonstrating that the variation in exposure time is not meaningful) k) groups are initially non-comparable (unless the reviewer provides a specific justification that the amount of divergence is not meaningful). 4) Study Desegregation a) cross-sectional survey b) sampling procedure unknown c) separate non-comparable samples at each observation. 5) Measures a) unreliable and/or unstandardized instruments b) test content and/or instrument unknown c) dates of administration unknown d) different tests used in pretests and posttests e) test of IQ or verbal ability. 6) Data Analysis a) no pretest means b) no posttest means, unless the author reported pretest scores and gains c) no data presented d) N's [numbers of subjects] not discernible.
4. The query used was: "Subject = Desegregation-Effects, Keywords1 = academic OR test OR scholastic OR educational, Keywords2 = statistical OR research OR study OR analysis, Year = 1984 TO 1994".
5. A school choice plan is typically one in which parents are free to send their children to any

public school in the participating district or districts. The Cambridge plan places some restrictions on this freedom of choice.

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Prior to entering the field of education several years ago, Andrew Coulson was a systems software engineer with Microsoft corp. So, while Bill Gates quit school to form Microsoft, Andrew Coulson quit Microsoft to reform schools. He received his B. Sc. Degree in Mathematics and Computer Science from McGill University in Montreal, Canada (Andrew, that is, not Bill).

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