

A Heritage Foundation Conference

**How Business Can Save Education:
A State Agenda For Reform**

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Introduction

Business and Education: Understanding Reform

Corporations in the United States spend an estimated \$40 billion annually on education programs, employee training, and remedial education. Faced with this heavy cost, much of it to compensate for deficiencies in the school system, a rising number of firms have begun to enter the public policy debate over reforming America's schools. Such issues as school spending, accountability for results, educational choice, and national testing today are discussed almost daily in corporate boardrooms and meetings of local business leaders. No longer are business leaders content to write checks to help fund public education and to leave the matter of education policy to the educators. Instead they are demanding a say in the education reform debate, and demanding results for their billion dollar investment.

To give guidance to businesses in their efforts to achieve reform, The Heritage Foundation decided in 1989 to launch a project to bring together experts from the business and public policy communities to review the reforms being tried in various parts of the country. After an initial conference in Washington, D.C., Heritage decided to take its show on the road, and inaugurated its "How Business Can Save Education" conference series in November 1990 in Dallas, Texas. Subsequent conferences were held in 1991 in Philadelphia, Pennsylvania, and in Detroit, Michigan.

At each conference, the first session is devoted to helping the audience of local business leaders understand the complicated business of the public education system, and challenging conventional wisdom. Is money the answer? How do we know when a child is learning? What is the role of the teacher, the principal, and the parent in alternative proposals? Answers to these and other questions are critical if business is to take part in the education reform debate, and if business leaders are to help improve the education of tomorrow's work force.

These sessions analyzing the nature of public education and the principles of reform have proved to be among the most popular at each conference. In them, four nationally recognized experts examine the causes of America's school education crisis and suggest ways in which business leaders can help solve that crisis.

As a service to the business community The Heritage Foundation has transcribed the first session of the conference held on April 24, 1991, in Philadelphia.

Other materials available from the Heritage Foundation on business and education include *Can Business Save Education*, an audio tape containing highlights of the 1989 inaugural conference, and *Business/Education Insider*, a monthly newsletter on education reform issues of interest to business leaders. Information on these and other items may be obtained from Jeanne Allen, Manager, Center for Educational Policy at The Heritage Foundation. Telephone: (202) 546-4400.



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How Business Can Save Education: A State Agenda For Reform

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Dr. John Chubb

Ten years ago, President Reagan appointed a blue ribbon commission, a very distinguished panel, to study the problems in education in the United States. It was the National Commission on Excellence in Education. On that panel were a good number of the nation's business leaders, and foremost among that Commission's concerns was the declining competitive position of the United States in world markets and the role that education played in the declining competitiveness of the American economy.

The Commission worked for more than a year, and in 1983 published a report entitled *A Nation at Risk*, which was hailed as a landmark report in educational reform. And, indeed, the rhetoric of *A Nation at Risk*, was extremely powerful. It warned of a "rising tide of mediocrity" that threatened to swallow this country's living standards and economic future if something was not done immediately. It indicated, moreover, that the situation was so dire that if a foreign power had done to us what we had done educationally to ourselves we would immediately declare war on that foreign power.

There wasn't just rhetoric in the report, however. It also presented some shocking statistics about the competitiveness of American education. It showed, for example, that in math and science the United States had slipped not to the second or third place in world competition, but rather the twelfth or thirteenth place, trailing every major nation in these areas. And the report recommended a long list of changes in American education, changes that critics said were so expensive that they could never be brought about.

This report sent shock waves throughout both the educational system and the political system, and reformers throughout the 1980s jumped into action and worked very hard to bring about the changes that were recommended in *A Nation at Risk*.

With the publication of *A Nation at Risk*, and its reception in the early 1980s, business was satisfied. The Commission had produced a penetrating report. It had recommended aggressive action, and now reformers were leaping into action. Everyone believed that a no-nonsense approach had been recommended and had been undertaken.

Well today, almost ten years later, it is clear that while much of what *A Nation at Risk* recommended has been carried out, the results have been very, very disappointing. I think most of us would agree that the nation is still at risk.

How could this happen? What went wrong? What are we to do about it? That is really why we are all here today, and that is what this conference is all about—trying to understand what went wrong, and what we can do now as we enter the 1990s.

You are going to hear a number of different ideas about what did go wrong, and about what needs to be done. But I think all of us probably would agree with one thing. It is this: *A Nation at Risk* really underestimated the severity of the problem. *A Nation at Risk* really did not get to the root of the problem. And despite all the rhetoric, *A Nation at Risk* really did not in fact recommend revolutionary reform.

What *A Nation at Risk* failed to recognize is that America's education problem or problems go way back. In the late 1950s the country was panicking about math and science achievement because of the achievements of the Soviets. It was not Japanese competition that we were concerned about in the late 1950s, it was Soviet competition.

In the middle 1960s the principal concern in education shifted to the cities, and to the horrible inequities in American education: the great gap between the achievement of whites and of blacks, and the differences in the conditions of schools attended by blacks and whites. In response to this concern we had major programs emanating from Washington: the programs of the War on Poverty and the Great Society.

The problems go way back, and *A Nation at Risk* really did not appreciate that. Another thing it did not appreciate was that this country actually has gone through many major waves of reform. The recommendations of *A Nation at Risk* were not the first major efforts to try to solve the education problem.

When the Soviets launched *Sputnik* in the late 1950s, for example, there was aggressive effort to try to upgrade math and science achievement, and in the 1960s aggressive efforts to try to address the problems of urban education. In the 1970s, too, there were countless experiments, school by school, with such things as individualized instruction, open classrooms, and a host of innovations in instruction and curriculum.

A Nation at Risk simply did not appreciate how long we had been trying to reform the schools, and how many times we had tried, and failed. As a consequence, it recommended reforms that were basically the same as reforms of the past. It really should come as no surprise, therefore, that it did not succeed.

If reform in the 1990s is going to be any different from reform in the 1960s and the 1970s and the 1980s, we have to understand why reform in the past has failed, and we have to be willing to entertain new ideas. If business is going to make a difference in education in the 1990s, business must be willing to reevaluate conventional approaches, and it must be willing to listen seriously to new ideas, as radical as those ideas may seem.

Last summer the Brookings Institution published a book that I co-authored with a Stanford colleague, Terry Moe. The writing of the book, *Politics, Markets and America's Schools*, was motivated basically by our concern with the failure of past reform. We wanted to know how the government, from Washington to the state level to the local level, could work so hard for so long and yet have so little success in solving the problem. That is what the book is about.

Our explanation is that the reason government has not solved the education problem is that in a very important respect the government has become a major part of the problem. What we found is that our system of public education, which tries to run the schools from the top down through a system of political and bureaucratic control, has created an environment in which the qualities that we most want in schools have a difficult time developing.

We found that politics and bureaucracy tend to stifle parent involvement in schools. They tend to discourage schools from having a clear focus on academics. They tend to discourage professionalism in teachers. They tend to discourage leadership on the part of principals. They tend ultimately to undermine school performance.

As we see it, the reason education reform has not worked is that it has never addressed the system itself—it has always addressed the school. We have had school reform after school reform, but no reform of the system in which those schools function. If the politics and bureaucracy that govern our schools are a large part of the problem, and we do not change those things, we are not going to make any progress.

We concluded our book, therefore, by recommending a restructuring of American public education, a restructuring to change it from a system that is controlled primarily from the top down, through politics and bureaucracy, to a system that is controlled more from the bottom up, through competition and choice. We recommended a system of educational choice as a way of turning around the country's poor educational performance.

Now that is a radical idea, at least by traditional standards. But it deserves to be heard because it does not recommend simply more of the past—it calls for something fundamentally different, and it has a very different probability of success.



Dr. Eric Hanushek

The main message I am going to give is a simple one: business as usual with respect to education is a real recipe for disaster. To make this case I am going to go carefully through some of the evidence we have about the operation of schools to show why we have to do something quite different.

From an economist's standpoint, education clearly has been an increasingly important contributor to the growth and productivity of the U.S. economy. This is for two reasons. First, there has been a substantial increase in the amount of school people get, how far they go in school. And second, this has been further enhanced by the fact that at least through the mid-sixties there were regular and systematic increases in the quality of the schooling everybody received. So that these two forces combined to help produce a steadily better work force that contributed substantially to productivity growth in the U.S.

What has happened in recent times is that there has been a very noticeable slowdown in the rate of growth of educational attainment in the population. The rapid growth in quantity of schooling received has leveled off, and at the same time we have been hit with what appears to be systematic and substantial declines in the quality of schooling given.

Now I am not claiming that this is an explanation of the productivity slowdown in the last ten years. Productivity growth went from two percent per year through the sixties to one percent a year going into the seventies, and has essentially been zero percent a year in the last decade. That is not a result of changes in schooling. It is the result of a variety of other forces that are not completely understood. But this lack of growth of educational attainment and quality is going to start hitting the work force with increasing intensity as the segment of the population affected by it moves into the labor force and becomes the dominant element there. So unless something happens, we can expect far poorer productivity growth in the future than we have seen in the past.

The other element in the equation is that the typical solution we think about for schooling just does not look as though it is going to work. There tends to be in the back of the American mind the analogy of putting a man on the moon. With a bit of effort and a national commitment, we did have people walking around collecting rocks on the moon. We have run an experiment along these lines in education.

I brought a graph to show you that we have indeed run such an experiment. What I have done is plot out two series for the period 1966 to 1989. The first is inflation-adjusted school expenditures

per pupil. That line keeps going up to the right. Real expenditures per student more than doubled in that period.

Next to that is the only series we have that records some measure of performance over the same period, which are the SAT scores. This series begins by rising, then falling off, making a little bit of a comeback at the beginning of the 1980s, and then essentially remaining constant or declining since then.

But there are, of course, a variety of reasons why you might want to quibble with these data, such as that the SAT tests might not be representative of the whole school system, or that expenditures might be going up for reasons somewhat unrelated to what we are trying to do in schools. For that reason I want to give you what I think is much better information.

Since the mid-sixties there have been around 200 studies looking at the relationship between the inputs to schools, the resources spent on schools, and the performance of students. These studies tell a consistent and rather dramatic story. Let me give you the three principal results that I draw from these.

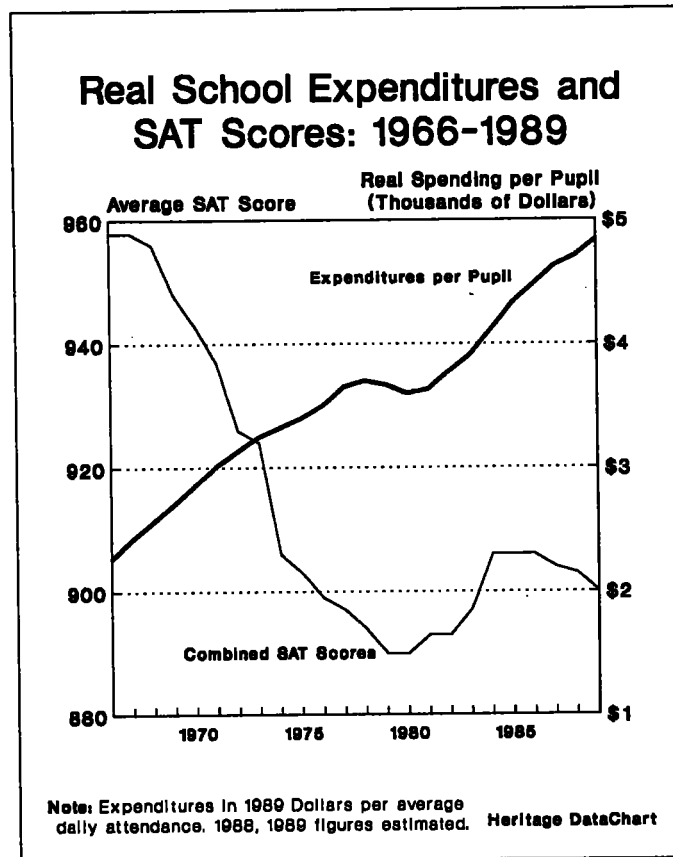
Result 1 is that there is no systematic relationship between expenditures on schools and student performance.

Result 2 is that there is no systematic relationship between the major ingredients of instructional expenditures per student—chiefly teacher education and teacher experience, which normally drive teacher salaries, and class size—and student performance.

Now it is important to concentrate on those because the first wrong response to what to do about schools is to lower class size or to buy more experienced teachers, or send people off for master's degrees. And we have run that experiment. We have dramatically changed the size of our classes. Over the period it has fallen from around 26 to around 19 students per teacher in the U.S. More than half of the teachers have master's degrees. Experience has been growing over time, too. Yet these factors have not shown any systematic relationship to performance of students.

Result 3 is that the lack of relationship between expenditures and these simple ingredients or measures of schools and performance does not mean that there are no differences among teachers and schools. There are large ones.

Why these results? In my mind the reason for the big problem we face is that in the current system there are absolutely no incentives for performance. John Chubb says that politics and bureaucracy are stifling schools. As an economist, I say that there are no incentives. We are saying basically the same thing—there are no forces driving the system to produce higher achievement. And there is no way in the current scheme to line up those forces to move systematically in the right direction.



I have been talking to business people where the importance of incentives is so obvious and pervasive that most business discussions do not even include them. In education they are equally the key, yet they just are not there.

How do we get the incentives right? The key to incentives that are going to work in my view, is very simple. You have to focus directly on the schools. You cannot, however, design school policies from Harrisburg or Washington that specify exactly what inputs to use in the schools, as we have tried to do in the past. Indeed, we have a variety of regulations, in every state of the union, that specify such things as maximum class size and a checklist of credentials a teacher must have to be allowed to teach. These just have not worked.

Now a variety of alternative approaches will be talked about today. They range from merit pay, to magnet schools, to a variety of other things like public school choice or tax credits and vouchers. All of these have the one common denominator: they try in some way to relate resources directly to performance. They use different mechanisms, but the idea is the same.

Now there may be some disagreement among the panel members, but my interpretation of the evidence is that, while the objective is clear on what we should do, there is very little evidence to suggest which, if any, of the alternative approaches will work. And in my opinion, the details are everything. We can agree on the overall broad concepts. For example, take choice—a popular term these days. The term choice conveys about the same information as saying that I just ate in New York City. There are a wide variety of places to eat in New York City. Some of them are good. Some of them are okay. Some of them are dreadful. And that is my view of what we will see in a number of these choice plans. Conceptually the idea of choice in schools has appeal, but the actual outcomes from any choice plan will depend very much on the details of the plan.

Now what is the role for business? I think the primary role for business is to make clear to both schools and students just what is being demanded of them. I do not think this has been clear in the past.

I have what might be a caricature of the interaction today between businesses and schools. First, businesses moan about the quality of students. Once the moaning has gone far enough, businesses decide they will “take action” and “get involved.” And this usually means providing a variety of extras to schools, from computers to guest lecturers.

Now I do not mean to denigrate these activities, or say they should be stopped. Some schools are quite dependent upon such things and probably get some benefit from them. But the overall message is that as businesses we are quite happy with the current organization of schools and what is going on. We will just increase the inputs a little bit, and that somehow will lead to better results. I think this is incorrect. Business as usual, again, is a recipe for disaster.

The things I think businesses productively can do are:

First, businesses can think of working to establish hiring incentives for students that are directly related to their performance in the schools. It is not now done very much, to my knowledge. That approach would do two things. It would give a message to schools as to what exactly business was looking for. And it would provide incentives for students who today do not have many. Most students are not interested in going to an Ivy League school, or a highly selective school, so grades in high school do not make any difference. Nobody currently ever knows about or cares about grades.

Second, businesses know a lot about incentive schemes to get people to do a variety of things that are productive and useful. Helping to design incentive schemes for schools is important and could be helpful.

Third, businesses can have a real impact on politicians and other people involved with restructuring the schools, and can use their influence to demand some very different forms of organization.

Let me end by speaking a little bit about the Bush *America 2000* plan. The first point is that I think you should give whole-hearted support to the development of various measurement instruments as included in the plan. One of the elements of the plan is to develop national testing of some sort that would allow us to develop performance standards. It is time for businesses to start asserting themselves to insure measurements that relate more directly to the skills that are of concern in business.

Second, business leaders should support the proposals to open up and restructure schools through the choice recommendations in the Bush plan. In line with that, as I said before, I think businesses actually have to help in this structuring activity, lending a hand and starting to talk about various management structures and other ideas that work. And you should be prepared for and expect a lot of failures when things are opened up. Not everything will work well, but you should not take that as evidence that choice is not working. Just as a report on one poor meal in New York City should not be interpreted as a general failure of restaurants in New York City.

Third, something less emphasized in the Bush proposal than I would like is the recognition that we have a learning problem here. We have to learn how to operate good schools, and so we have to push to have real experimentation in the medical sense of the reports you get in the *New England Journal of Medicine*—true experiments where you have control groups.

Finally, I think you should be skeptical about anything that says, "Let there be 535 points of light," in the sense of putting a new school in each of 535 locations. Anything that comes in lot sizes of 535 should be suspect.



Mr. Denis Doyle

I am pleased to be in Philadelphia. I am reminded, however, of one of the intervening cities on the way up here, Baltimore, and its sage H.L. Menken. He was fond of saying that for any complex problem there is a solution which is simple, direct, and wrong. I will, however, submit to you today that there is a simple and direct solution—which in this case is right—to the question before us.

What is the situation now with the business role? The answer is not yet completely in, but the news is not terribly encouraging. As John Chubb suggests, over a decade of ferment has produced lots of sound and fury and not an awful lot of concrete results. A cynic or a pessimist might conclude that the business role has been one which has been characterized more by smoke than light and forward movement.

I like to characterize this as the Paul Revere phase—the phase of sounding the alarm and consensus building—and I am quite optimistic about the nineties. So long, that is, as the business community does one thing, and one thing only: it must apply to the schools the same standards it applies to itself. I want to run through some of these standards to give you an idea of what I mean. This is not just empty rhetoric, but real reform agenda. I hope John will view this as supporting and reinforcing his work, as well as the analytic work that Eric and Herb have done.

The issues fall across a broad spectrum, all of which will eventually lead to the topic of choice. But I will mention choice last, because I think it is instrumental. It is a device to achieve the other objectives, and it knits together in a seamless web all the various component parts.

There really is no necessary order to the colors of this spectrum—they ought to be produced together—if we are to succeed. Clearly we must begin to think seriously about measuring and reporting results. That lies at the heart of any successful business. It is the single most distressing failure on the part of schools. We as the public, we as parents, and we as taxpayers have no real way to understand—except subjectively and intuitively—what the value-added of schooling is. That, indeed, is the principal attraction in many private schools, because there, at least, the value-added is quite candidly and freely offered in subjective terms. You make the decision as the consumer. You make judgments as a parent or as a student about the quality of the education you are receiving, and you can, in fact, develop some real sense of what it is worth. That, however, is clearly an aspect of choice simply unacceptable in a system designed to produce mass education. So we need better information, more of it, and of higher quality.

You must as well think about things like pay for performance, or if that is too strong a dose of medicine for the schools, then something as simple and as obvious as creating an environment in which teachers and administrators are paid on the basis of market sensitivity. Many business leaders are astonished to learn that schools, which claim to be professional institutions, are in fact blue collar operations in which teachers are paid as blue collar workers. Payment is on the basis of seniority and alleged academic accomplishments. Courses in basket weaving, undirected master's degree study activities, and courses in bird watching will advance teachers on the salary schedule as rapidly as longevity does. Teachers throughout the nation are paid on uniform salary schedules. Once this was viewed as a great reform, and indeed it may have been at the time. We began to pay secondary school teachers what we paid elementary school teachers, rural teachers what we paid urban teachers, black teachers what we paid white teachers, and female teachers what we paid male teachers. But this is a reform that has outlived its usefulness. It is clearly the case today that schools have got to begin to think about paying on the basis of market availability. That is the simplest, the most direct, and the most obvious solution to the problem posed by the insufficiency in numbers and quality of mathematics and science teachers.

What's sauce for the goose is sauce for the gander, however. If five years from now we have a shortage of kindergarten teachers, we should give them some additional pay. Market sensitivity is a simple lesson from the business world that would make a profound difference in schooling. It would break the lockstep of the salary schedule which has a suffocating effect on a whole institution nationally.

Think for a moment of how odd and bizarre it is to have a so-called profession in which the best are paid what the worst are paid, and the worst are paid what the best are paid, without reference to performance or scarcity.

Business also has a very clear sense of quality. The "quality process" has meant the transformation of a number of American businesses, and it is clearly the secret of Japanese commercial success in this country.

You will remember that when Japanese goods first entered American markets shortly after the Second World War, "Made in Japan" was tantamount to an admission that it was junk. But now, in industry after industry, the Japanese have set the world pace, not only in design and quality control, but also in execution, delivery, marketing, and service. No longer do we buy Japanese products because they are cheaper. We buy them because they are better. They are better because they attend to quality as a continuous process, a lesson that schools must clearly bring to bear.

We need to use the term common to most successful corporations today—to meet "customer requirements." In this case, of course, the customers are our students.

We need as well to borrow a concept from business known as "benchmarking," an idea wholly foreign to most schools, but an idea that potentially is enormously important. Organizations en-

gaged in benchmarking first compare themselves with their competition. Philadelphia schools should look at St. Louis, and Milwaukee, and Chicago, and Los Angeles. But they should also compare themselves to those with whom they are not in direct competition: fancy exclusive suburbs. But perhaps more important, and more to the point in 1991, they should compare themselves with the competition around the world—Bonn, Taipei, and Tokyo. That is where the education action is. That is where the work force is being trained, framing the knowledge industries of the future. If we fail to understand that as a society, then we are going to miss an extraordinarily important opportunity.

Benchmarking also means something else wholly foreign to schools, and that is to compare yourself to other institutions altogether. Xerox, for example, compares itself with L.L. Bean for its capacity to provide very short turnaround time to customers and provide inventory control. L.L. Bean is the exemplar. But some day L.L. Bean will be shoved to the side by some other organization, and they then will be the appropriate source of comparison.

Schools, too, should think about how for-profit and not-for-profit organizations meet their obligations to their clients and to their employees.

Most important, of course, is the dread word to many educators—choice. Choice will force schools to expose themselves to competition. And I choose those words with some care, because the benefits of competition are expressly designed for consumers and workers; not for managers, not for owners, and, for sure, not for suppliers.

Competition does help, of course, those who are successful managers and owners. They are able to take profits and enjoy the benefits of successful operation. But they run tremendous risks. They run the risks of failure. They run the risks of income loss, which is quite substantial. But the benefits and purposes of competition are not to make life easier for those who own the product, but rather for those who consume and work. It does lots of wonderful things in the economic realm. It weeds out the unfit.

The economist Schumpeter's great insight is what he called "creative destruction." That, in fact, is the great power of markets, of capitalism. It is the only system we know of that will do away with inappropriate and dysfunctional organizational forms. As all of you know, the command economies of the East, and even the socialist economies of the West, inevitably find that the failing industry is the one that gets more and more public attention. The shipyards of the Strathclyde River in Scotland, under Labour governments, became notorious as the world's most inefficient shipyards. The more inefficient they became, the more money was poured into them.

Another irresistible image for American schools is collective farming. If you have abundant sun, bountiful rain, wonderfully endowed soil, easy access to markets, and workers and farmers who are reasonably well trained, then collective farms can produce a little bit. Those that do not have such endowments do not produce much at all, and it is only the noncollective farms that keep the food flowing in most of these countries.

That is, I think, an apt image for most of our public schools. The suburban public school is well endowed with children of native ability, talent, and some motivation. It is endowed with the educational equivalence of sunlight and rainfall and good soil, so they can do well in spite of the limitations of the system. But they do not do nearly as well as they should, particularly if we take into account notions like benchmarking. Think of how well these youngsters must do if we are to compare ourselves with the best that the Japanese, the Chinese, the French, the Germans, and the English are doing.

Now this is by way of introduction. We are introducing the notion of restructuring, which has become the buzzword of the late eighties and early nineties. Every school district in the nation is talk-

ing about it. Most of them have taken the nomenclature to their bosoms, and they treat it as if it is something they are about to do momentarily. Some will even assert they have done it.

Well, I would urge a very great degree of skepticism as you listen and read about restructuring in most of our schools. The simple reason is that restructuring is about as painful a process as an organization can go through. And I cannot—at least in my reading of the literature—find any examples of organizations which have voluntarily done it just to feel good. Monopolies do not do it. A business does it, not because it is more virtuous or cleverer in any fundamental sense; it does it because it is restructure or die.

Restructuring painfully changes the relationships in the organization. It frequently results in major personnel shifts and often major series of firings. It changes the reliance upon technology. It changes relationships with customers, with owners, and with suppliers. Restructuring is about as difficult a process as a business can go through. And schools, notwithstanding all their brave talk to the contrary, will not restructure unless they have to.

To come full circle, if business is to see schools change and improve, you must apply to them the same standards you apply to yourself. You must demand diversity. You must demand specialization of function among schools, and division of labor. You must demand accountability, expressed in measures that make sense to you and to the public at large.

And you must think about certain things that you do very well. Not all American businesses provide education for their employees, but most do. I would like briefly to give you an illustration of what business can bring to bear on schools in a direct pedagogical and educational sense, not just in structural and external activities.

The biggest source of education and training in the country outside of the massive public school system is provided by business and industry. The numbers are very difficult to get, because no one collects them in any systematic way. The incentives to provide them are not very high, so we are going on radar in terms of numbers. But we do have some very good numbers on a few industries and a few subsets within industries. The example for which we have the best data is IBM.

IBM spends about \$1 billion a year in direct costs for employee education and training. Every employee in IBM, from the CEO down, is trained regularly and routinely in settings which are harmonious, interesting, and satisfying. This runs the full range from lectures to self-paced learning on fancy computers.

That \$1 billion includes the cost of salaries for 7,000 full-time faculty that work for IBM—all of them work on a merit pay basis, I might add. It includes the cost of accommodations, textbooks, and materials for the IBM employees who are in training. But it does not include the cost of salaries paid while these people are being trained on their two-week stints. If you add salaries in, according to a former head of training, the number is closer to \$2 billion.

Now IBM does this for a reason. Not to feel good. IBM doesn't do it because it is fun. Not as a perquisite. Not as a respite for overworked people. It's not something which is lightly entered into. IBM does it because IBM is convinced that it pays. It is an investment in long-term productivity. It provides dividends to the corporation over time. It is as important to the corporation as it is to spend money on R&D or market research.

That is, I think, a commentary on the nature of the economy of which we are all now a part. We are in a human capital-intensive economy in which a scholar at the Rand Corporation reports that the growing gaps in incomes is attributable to the increased capacity of educated workers to contribute wealth to the economy. Workers who know more get paid more because they can do more.

It is probably no accident, if the numbers are right, that 1989-1990 is the year in which the nation's annual human capital investment in the aggregate surpassed our aggregate physical capi-

tal investment. According to Roger Vaughn, an economist formerly with the Rand Corporation, aggregate human capital investment of \$600 billion surpassed physical capital investment last year by \$10 to \$20 billion. It is a new world we live in, a new world of very different demands and very different opportunities.

Let me close with an illustration. The IBM school, which is clearly a favorite of mine as you can tell, does one thing which is not surprising. It tests its students all the time. It also tests them very easily and rapidly because everything is computerized—as you would expect at IBM. The results are available at the podium to the lecturer or instructor, and he or she can find out as the day unfolds how much information is being learned by the students.

Now when a certain critical mass of students demonstrates through the little display panels that they are not getting the information, an assumption is made that is quite the opposite of the assumption ordinarily made in a public school. If information in a public school fails to flow, the presumption is that something is wrong with the student. In the IBM school the presumption is that something is wrong with the teacher and the lesson plan. And they go back and they learn how to do it right, so the student can learn.

In short, then, there are dozens and dozens of lessons that the business community has to offer. Enormously important information is there to impart, and I would simply urge those in the business community to take off their gloves. Be courteous where it is appropriate, but expect the schools to meet the same type of standards that you expect of yourselves and your suppliers and your competitors. With that as a lesson to the schools, the likelihood of significant change in American education will be greatly increased.



Mr. Herbert Walberg

The United States has 2.2 million teachers and 40 million students in its schools. By some estimates it is the largest industry in the United States, spending some \$300 billion annually. Yet the school industry, if I may use that term, has very poor productivity by international standards. It spends more per student than any other major industrialized country in the world, yet its students consistently rank among the worst on tested achievement among the affluent countries of the world.

As John Chubb pointed out earlier, the famous report, *A Nation at Risk*, first made the mediocrity of our system more widely known to Americans in 1983. But recent compilations of test scores indicate that our educational performance has not improved. Roughly 20 million students went through high school since the report was written in 1983 without getting an improved education.

For this reason I think we are ending a period of educational reform, as the term has been used, and entering a period of educational restructuring, or more radical and fundamental reforms. Educational consumers—by this I mean business and civic leaders, citizens and parents—are demanding evidence of learning value for money spent. In this respect, the views of educators and those they serve increasingly have diverged. A recent national poll shows that 86 percent of school superintendents give American schools a rating of good or very good, while 77 percent of business executives rated the scores fair to poor.

One third of the superintendents, but 92 percent of the business executives, thought that Japan has a better school system. Both groups recognize that we have very serious family problems in the United States and low motivation of students and teachers as underlying problems, but substantially higher percentages of executives cited low achievement standards, poorly trained teachers, and a lack of emphasis on basic skills as the major problems in this country.

Careful observational studies have illuminated the specifics of the instructional and educational process that lead to our problems. The important work of Harold Stevenson at the University of Michigan shows that American students do not lack ability when they begin school. They rank with other students in Asia. But careful studies show that with each grade level, from first to second and so on, American students fall further and further behind. By the end of fifth grade the best American classes were below the worst Japanese and Taiwanese classes. This suggests inefficiencies in our social system, but more particularly inefficiencies in our education system.

The steady progress of Asian students is due to a fast, unrepentive curriculum, parental support and encouragement at home, and belief in hard work rather than luck or talent as the chief determiner of success and learning. Japan in particular is an interesting country to contrast to the U.S. because it beats other countries around the world on two important criteria. The first is egalitarianism—something we traditionally have professed to be the goal of education in the United States. One aim of ours, in furtherance of egalitarianism, is to try to graduate all students from high school or secondary school. Well, we actually graduate about 76 percent. In Japan the figure is 96 percent.

And significantly, Japanese graduates of secondary schools also beat European in quality as well as in quantity. Japan typically has led all affluent countries of the world in achievement scores, or in how well the students can do on standardized tests in chemistry, mathematics, physics, and other critical subjects.

Just as Japan is an important competitor of the United States and Europe in business, it is also an astounding competitor and world leader in its education system. Japan attains the spectacular results I have just mentioned at very low costs. Among fifteen affluent countries for which data are available, Japan ranked last in per-student spending, from kindergarten through twelfth grade. Aside from Switzerland, the United States spent the most, and we have some of the worst achievement scores in the world, typically coming in at the bottom. Japan gets the best results at the lowest cost, and the United States gets nearly the worst results at nearly the highest cost.

Given these astounding comparisons and very poor U.S. results, considerable research has sought to identify experiences that influence achievement and related outcomes, especially those that are alterable by practical interventions. This research shows that the amount and quality of instruction, as well as extramural experiences are the chief determinants of educational outcomes.

Superior instructional techniques include such things as mastery learning, cooperative learning, computer-assisted instruction, and special teaching methods in the fields of mathematics, science, reading, and writing. Extensive learning time and parental involvement also promote success. Ironically, the better methods which do not necessarily cost more money are not necessarily the ones that are being used. And again, there is a certain irony here, because much of the research on what makes for effective education has been done in the United States, but the results are not necessarily being practiced here.

If we look at our chief competitor, Japan, we see there are some key factors that seem to be associated with its outstanding performance in elementary and secondary education. Japanese society and the schools, for instance, emphasize hard work and tie significant rewards to school success. Eric Hanushek pointed out earlier how important that is, and something business could do something about by giving more incentives for prospective employees to do well in school.

In addition, Japanese parents are engaged with the education of their children from infancy through high school. Schools are clear about their purposes. Japanese schools have a long school year and educators and parents make constructive use of within-school time and outside-school time.

A Nation at Risk pointed out that the United States has one of the shortest school years in the industrialized world. It is roughly 180 days, and it has not changed in the last fifty years. In Europe it is 200 to 215 days, and in Japan the school year is 240 days. Contrasting the 240 with the 180 in the United States, there are one-third more school days in Japan, so that by the end of high school, Japanese students have had the American equivalent of a baccalaureate degree.

There are lots of things that can be done, but certainly learning requires time, and students are getting insufficient time in the United States. This has been well known for a long time, as the 1983 *A Nation at Risk* pointed out, but we have not changed the learning time in school.

Another thing that we are going to have to face in the future, and Japan also exemplifies, is that children must master a balanced national curriculum of the three R's, history, science, art, music, physical education, practical studies, and foreign language study in compulsory school. The United States, along with Australia, Canada, and West Germany, has a highly decentralized system. You can say that we have fifty ministries of education in the United States. Most of the other countries in the world have a centralized curriculum where all students study more or less the same things.

Perhaps 80 percent of the curriculum in many Western European countries, for example, is standardized (schools are given some discretion on choice of extra subjects). Since we have a highly mobile society in the United States, when students move from California to Pennsylvania and then to Illinois, they may encounter substantial changes in the curriculum. Sixth-grade teachers, therefore, cannot depend on what fifth graders have been taught. I think we will see the trend, especially through national examinations, for the United States to standardize the curriculum so that business, universities, and other institutions can count on future employees having some common knowledge and skills.

Japanese Competitors. The Japanese put their money into a high quality teaching force and basic educational materials, not frills, large bureaucracies, lavish facilities, electives and specialist teachers. In contrast, student time in the United States devoted to academics is minimal. Homework is haphazard. Classroom work is passive, mostly using textbooks and lectures. Large numbers of students are not regular readers. And they spend an average of 28 hours a week watching television, according to our most extensive national polls. It is sometimes feared that more rigorous teaching in the United States would be destructive to morale or would cause too much stress. But if our students are watching 28 hours of television a week on average in high school during the school year, it means they have considerable discretionary time that could be used for additional schooling and extramural study.

Another problem we have in the United States, in contrast to many other countries in the world, is that many of our students begin work during the early high school years and increase that work with time, whereas very few students work in Japan and Europe.

The Japanese practices do not cost more money, although they do require organization and time investments for future returns. They appear to be the underlying reasons for Japan's superior educational productivity. Nor is their high performance purchased at a cost of stress. Contrary to the belief widely held in the West, Japanese youth suicide rates are now roughly half the rates in the United States.

To the extent that the U.S. education fails to improve, it jeopardizes the future of Americans. In order to improve outcomes, educators, parents, and students must work harder and smarter. Nor is business immune from criticism, as Eric mentioned. Despite their call for higher standards, American employers seldom require records of grades and test scores for employment, and better grades do not necessarily boost young people's starting wages.

American students in any case are graded relative to their classmates rather than on national achievement examinations. Such slack standards may explain why many high school students work outside of school, many of them more than fifteen hours a week, so that their full energies are not concentrated on their schooling.

It has been well demonstrated this morning that additional spending is not the answer to these problems. We need to look at more radical reforms. One area that we might look at is U.S. independent and sectarian schools—that is, private schools—that produce valued outcomes at a fraction of the cost of public schools.

The added value at lower cost seems to be attributable to their clearer goals, essential curriculum, small size, parental involvement, marketplace competitiveness, low overhead, and absence of political interference and bureaucratic regulation. One reason why public money for education makes so little difference is that so little reaches the student, and this is particularly attributable to the very high cost of administrative overhead in American schools.

Bureaucratic Growth. Albert Shanker, President of the American Federation of Teachers, says that the state of New York has more educational administrators than all of Western Europe. Bearing out Shanker's striking statement is an unusually detailed investigation of the \$1.4 billion spent on New York City high school students for the 1988-89 academic year.

Analysis of 16,000 employee time sheets showed that only about \$2,000 of roughly \$6,000 spent on each student was actually spent on classroom instruction, a classroom figure that is roughly equivalent to parochial school spending. Central office salaries took half of the money. That is, \$3,000 never left the central office and reached the school. And even of the roughly \$3,000 that went to the school, \$1,000 was absorbed in administrative costs, leaving only one third of the allocated money for direct services to students.

Detailed case studies carried out in the last twenty years show an inexorable administrative growth in public schools during the last half century. One detailed study in California, for example, showed that districts grew in size as they responded to external pressures to add specialized administrators and programs for health and psychological services. These were added as the legislators, special interest groups, regulatory agencies, and professional associations built consensus among themselves and brought pressure to bear on school districts to provide these specialized programs. These external pressures shaped school organization, and local school districts were unable to resist.

Other studies have similarly documented the rising power of state bureaucracy and the decline of local autonomy as districts grew ever larger. The transformation of U.S. education in this respect was from an informal community control into large scale bureaucratic organization, stemming in part from the expansionary role of the states.

As state funds and regulations increased, state and district administrations took on classical bureaucratic features: centralized control, formal hierarchies, professional credentialism, specialization of function, precedence of impersonal means over ends, and detachment and indifference to the clients of the system, mainly students and parents but also businesses.

This has been especially true in large districts. If you want to look at some of the worst performers in the United States, look at the large cities. Considerable research shows that the larger the administrative district, other things being equal, the worse the performance. So our big cities have the biggest problems of bureaucracy.

Smaller districts and privately financed schools can ill afford specialization, but may actually have advantages in maintaining a cohesive general curriculum, adapting to local preferences and

conditions, and strengthening the ties among educators, parents, and community residents. They may do fewer things, but do them better and avoid needless administrative complexity.

Some Answers. As we have learned from the work of Eric Hanushek and others, spending is not the answer. As we look to the future, we see that there are two views, and I think both of them merit our attention. Both are promising. Let us call them the "top down" and the "bottom up" approaches.

The top down view is that the nation as a whole is the ultimate educational consumer in a competitive international marketplace. Accordingly, President Bush and the governors have set forth unprecedented national goals for the first time in American history. Various groups have proposed ways of measuring progress. Various kinds of accountability programs would enable us to measure achievement and compare nations, states, districts, and schools within states.

The bottom up position encompasses Adam Smith's notion of consumer sovereignty. In this view, free markets respond best to individual wants. In principle, according to one view, private tuition is superior since consumers are most knowledgeable of the amount, character, and quality of educational services they require; and competitive providers respond best to their diverse preferences.

A revisionist view would allow choice only within the public sector. And to be candid, there are some tensions between those who argue for choice in the public school system and those who would like to allow choice to be opened up to the private sector. Certainly you would find that many people in public education are going to resist the choice movement. Something like 65 percent of the American public is for choice, and just about the same percentage of educators is against choice. So we will see a lot of controversy about that. But I think it is inevitable that we will see more choice in the system. It has great promise.

National Goals. In setting forth their national goals President Bush and the governors have identified two in particular that merit our attention. One is that our high school completion rate will be at least 90 percent. We are currently at about 76 percent, so we have a long way to go.

Another striking goal is that American students will leave grades four, eight, and twelve having demonstrated competency over challenging subject matter, including English, mathematics, science, history, and geography, and that students will use their minds well so that they will be prepared for responsible citizenship for their learning and productive employment.

It is a tall order to accomplish all these things, but I think we will at least be able to monitor progress or the lack of it. For the first time in our history we will be able to compare 41 of the states that voluntarily are participating in the National Assessment of Educational Progress. In the past we have simply been able to compare regions, but it will be much more pointed when we can compare Pennsylvania and New York, or Illinois and Indiana. This will focus more attention on the relative effectiveness and efficiency of state systems. Pennsylvania and many other states also have testing programs within their states.

Publishing test data in itself, however, does not raise test scores. So states are now passing legislation to employ indicator data for performance-based accreditation. Sanctions or targeted technical assistance and regulatory waivers are used in response to the data. This legislation responds to the things that Dennis and Rick had mentioned earlier, and John as well, about tying rewards to actual performance.

Restructuring. One state has a particularly striking program. In South Carolina, districts that do well according to various indicators may be deregulated; that is to say, they do not have to follow state regulations and they need not follow state prescriptions. Those that do very poorly risk losing

their autonomy unless they devise a school achievement plan, and they may get technical assistance from the state as well as other procedures to bring them up to standards.

Perhaps one of the most radical reforms that has been proposed in the United States is proposed by Commissioner Thomas Sobel for New York State. This is very much a results-oriented plan. The state would set goals for student achievement in grades four, eight, and twelve, and employ multiple choice tests and other assessments to measure school performance. Secondary school graduation would depend on passing a twelfth-grade test. High-performance schools would be granted relaxed regulation and extra money. Failing schools would be reviewed and subject to tighter regulation. Their boards and superintendents would be subject to removal. Their children would be given vouchers for private school tuition or to attend public schools outside their districts. All parents would have greater choice of schools to send their children within and across district lines.

Another notable program that has recently been proposed follows an eighteen-month study period by a group of chief executive officers from fifteen large Indiana corporations. They have decided that fundamental reforms are required, and they are proposing a radical restructuring of Indiana's public schools to free teachers and parents to educate their children. This program would allow Indiana parents to choose their children's school in the 1995 school year. Each child would have available a scholarship of public money that would be used to pay expenses at any qualified public or private schools of the family's choice.

Another plan that is related to both of these is represented in my home town of Chicago, where we have one of the most extensive restructuring plans in the nation. No longer do we have a large system of 600 schools governed by a school board of several people, but rather separate school councils for each school, comprised of eleven people, six of whom are parents of the children in school, two community representatives, two teachers and one principal. Thus, eight of the members of these local school councils are lay people or consumers. The council members thus are the clients of the system, not the producers. They have considerable authority, for they can choose the principal. And they can do what is a very tough thing in union town—they can dismiss teachers after 45 days' notice.

Conclusion. We are ending a period of insufficient incremental reforms, and we are entering this period that has been alluded to earlier—a period of restructuring. As in business, this term connotes a fundamental change in goals, governance, finance, staffing, and operations, and is forced on managers by boards or outsiders to improve failing organizations.

One logical first step has been taken by the highest public authorities, the President and the governors, setting forth national goals and a deadline of the year 2000. Other remedies would interject greater accountability, incentives, deregulation and consumer choice both in the public and the private sectors. The Chicago plan I briefly alluded to, as well as the New York State proposals, the choice system which has been working for several years in Minnesota, and other examples seem typical of what we will be seeing in the near future.

We have a very decentralized and complex system of education in the United States, and a great number of people will be involved in the further planning and the implementation of these ideas. Legislators, governors, business and special interest groups, local authorities and educators will all influence what happens. But as Dennis said this morning, I think that business has a special role to play here in looking for this crucial point of bottom-line accountability.



Dr. Chubb: I would like to reiterate briefly some of the points made by this panel, points I think we can agree on. The first is that the United States has an education system in which we have tried to bring about improvement over the years by manipulating inputs: changing class sizes, changing requirements for teachers, changing spending, and so forth. The basic problem with this input regulation approach is that we do not know exactly what inputs produce good results. There is no magical recipe for a quality education. We do not know precisely what inputs work, because different inputs work for different kids under different circumstances. Education is very complicated.

What we know about inputs is that those we have tried to regulate in this country bear no relationship to the performance of schools in this country or the performance of schools internationally. As Herb said, Japan is the top performer in the world, yet it is not the biggest spender. The biggest spender in the world is Sweden. Sweden outspends everybody else per capita by a large measure, yet Sweden's test scores basically are not very good.

So both internationally and domestically, the inputs we have tried to regulate simply have not produced reliably good results. Trying to improve schools by manipulating inputs does not appear to be very promising. I think that is the view of most of the panelists here.

In addition, regulating inputs is very expensive. Herb mentioned the rising cost of bureaucracy in education. That is a very large problem. In addition, the growth of bureaucracy tends to discourage parents from participating in their schools. Parents are intimidated by the system. The bureaucratic system also tends to fragment the educational experience into a bunch of special programs, rather than to focus it on the essence of education for children. In addition, bureaucracy tends to discourage the best kinds of people—people interested in professionalism—from taking part in the system.

I think all of us agree that if we are going to get better results in the future, we have to move from the regulation of inputs to an effort to try to regulate the outputs of the system, or to manage the outputs of the system. That means, first of all, specifying what we want from the schools. This is what the national goals process is all about, trying to reach a national consensus on what we want the schools to accomplish.

Second, managing outputs means trying to specify what we would like all children to achieve. If we are going to manage outputs, we have to measure outputs. That is why some form of national testing is probably essential.

Third, I think we all agree that we need to stop trying to regulate schools by managing all of their inputs. Instead, we should reward schools for their outputs: reward schools for good performance; sanction schools for poor performance.

There are at least two ways by which we can do this. One way is a top-down system of rewards and punishments, where schools are evaluated, rewarded, punished. The danger of that approach, however, is that it threatens to produce stifling bureaucracy. The alternative, generally preferred by the panelists, is a market-based approach, in which good performers are rewarded and bad performers are punished through parental decisions to accept or reject schools. Through the marketplace you will also encourage more of a focus on parents, you will reward professionalism on the part of teachers, and you will discourage bureaucracy. Most of all, we think, you will bring about performance.



Questions and Answers

Effect of Smaller Classes

Question: *Have there been any studies looking at the effect of classroom size on performance?*

Dr. Chubb: I would say the results of class size are really quite mixed. Catholic schools appear to have an advantage in performance over public schools, yet generally have larger classes than the public schools have. Some of the nonsectarian private schools, however, have very small classes. I would guess that most researchers believe that if class sizes could be truly small, say under fifteen, then you might well have benefits. But variations in class size that we have seen over the last ten or fifteen years in public schools do not seem to produce large payoffs, and they are also very expensive.

The other problem with just looking at class size is that if you reduce the size of classes but the instructional techniques remain precisely the same—that is you do not take advantage of the smaller class—then you are not likely to get results.

And we should also take some heart from the Japanese example. The Japanese have classes that are extraordinarily large, I believe on the order of 45 students per class, and they produce good results. So it does not seem that reducing class size is the most efficient answer to the problem.



Costs of Public and Private Schools.

Question: *What is the basic cost ratio between the average private school and public school per student?*

Dr. Chubb: There is a fair amount of variation in private school costs because there are some elite private schools that do spend a very large amount of money. But generally speaking, public schools outspend private schools by about two to one. If you want rough national numbers, about \$5,000 per child in public school, about \$2,500 per child in private school.

There are a number of explanations for that. Part of it is bureaucratic overhead. The last time I checked, New York City public schools had about 6,600 central office employees. The New York City Catholic schools, another very large system, had thirty people—just thirty people working in their central office. That is a very different way of running things.



Business' Reluctance to Join Debate

Question: *I have noticed in New England some reluctance on the part of corporate leaders to jump into the state politics of schooling. Is that true in other parts of the country? What hope is there that corporate leaders will get over this and realize that they have got to get involved at the political level if they want to really change the system?*

Mr. Walberg: I would cite the Chicago example. Chicago United is a group of business and civic leaders who got together because they were concerned about the economic dilemmas and difficulties in the city and because they were losing businesses, not just to southern states but to Hong Kong, Singapore, and other places.

And in the meantime then Secretary of Education, William Bennett, came to town and said that Chicago had the worst public school system in the United States. By saying that he probably did the greatest thing for the city's bold restructuring of its school system.

There was an unusual coalition of the consumers of education: parents utterly disgusted by the quality of the system, and the business community worried about attracting employees to Chicago, achieving business vitality. So they went to Springfield, our state capital, and won this extraordinary legislation. There was a transfer of power from a central board of education to local school councils. I think other kinds of coalitions like this could be very constructive in trying the experimental reforms, and I hope business plays a constructive role.



Choice and Less Able Students

Question: *The productivity of this nation is not going to be determined by rewarding the successful as much as by raising the bottom half. I am not sure that any of these choice and reward systems address that, and I am concerned about equity. I am concerned about our total population of student body.*

Mr. Hanushek: I think one of the worst areas of performance of U.S. public school systems is helping minorities and disadvantaged students. The data on performance on minority students, such as the SAT test, is more damning than the overall pictures that I showed you. So I think that this is a tremendously important problem.

But I do not think it is right to assume that these students will not respond to incentives if given the opportunity. In the current system we provide very few incentives for these students to remain in school or to perform very well. One of the ideas presented here is to try to link that more directly so that the students actually see the incentives.

The false accusation or assertion about choice is that there is a segment of society not doing well now that either does not care about schools or are very poor consumers. The evidence does not really support that. There are a large number of minority parents who are disadvantaged economically, not just racially or ethnically, who desperately want their kids to do better. They just do not know how, or do not have the wherewithal to provide for their kids to do better. That is why an essential ingredient of the choice idea is to help the people who are not being served now.

Dr. Chubb: In taking a look at inner city educational systems and schools that work, one of the things that strikes and encourages me is that there are many schools in inner cities working with difficult children that are making a difference. There are lots of schools out there that succeed despite the odds.

Among the characteristics of these schools is that they tend to work very hard to get parents involved. They go out to try to understand parental problems, reaching out to parents and bringing them into the school.

They also offer very distinctive programs that try to respond to the needs and interests of poor kids. Rather than offering the same standardized product to every kid, the schools try to be distinctive. And one of the features of choice systems that I think is appealing in an inner city situation is that choice incentives would reward schools for reaching out to the families, for figuring out what disadvantaged children most want and need, and for creating distinctive programs that make children feel special.



Registration of Private Schools in Choice Programs

Question: *Part of the value of the private schools has been that they have not required certification. They have had teachers come in with solid background and subject matter but without teaching certificates, and then taught them teaching later on. Yet, Dr. Chubb, you talked in your book about forms of choice where a private school can operate under contract to the public system, if it meets some state standards. But would not these rules undermine the advantages of private schools?*

Dr. Chubb: Terry Moe and I made some suggestions about health and safety rules applying, as well, as some of the basic curricular standards. We are certainly open to discussion about what the ground rules ought to be. I am just suggesting that if alternative providers are allowed into the system of public education, they need to be subject to some form of accountability. And that is our main point there.



Schools and Social Problems

Question: *How should school districts deal with the fact that they are being saddled with addressing social ills they are not equipped to handle, such as homeless children, teenage pregnancy, and family instability? What has your research revealed about how other industrial countries deal with these social problems?*

Mr. Walberg: We have to acknowledge that we have serious social pathologies in the United States. Japan does not have those kinds of problems, at least to the degree that we do. I calculate that in the first eighteen years of life, children spend just 13 percent of their time in school, and 87 percent of their waking hours outside school. So education can be only one part of the solution of these problems. At the same time, if educators are not doing their main job—teaching—well, they jeopardize students' futures. Disadvantaged students are especially at risk since success in school is one of the main chances for advancement. If they have these pathologies in neighborhoods, homes, families, and communities, it is at the school they have to get their education. Instead of the school trying to do a lot of other things, they have to do their first job well, which is promoting learning. If schools try to provide psychotherapy, nursing, and social work, they may not do their first job well, and they will fail at all of their responsibilities.

Dr. Chubb: None of us would deny that social problems are a serious obstacle to educational improvement, and that social problems need to be addressed along with educational problems. But I think for too long education has pointed to the kids and the families, and said that they are a large part of our problem. But the truth is that there are schools and school systems out there that are doing a pretty darn good job against the odds. If schools do their part, educational outcomes could be a lot better than they are right now.



Recipe for Effective Teachers

Question: *What are the hard yardsticks by which you would decide whether a teacher is effective or is not?*

Mr. Hanushek: The problem with merit pay systems that has been brought up by teachers' unions and teachers themselves is that there are no clear objective standards for performance, and therefore there can't be merit pay.

The vast majority of workers in this country, however, are evaluated. They are evaluated not on clear, objective standards, but a lot of subjective evaluations go into it. We do have evidence in the schools that principals can identify who the good teachers are and who the bad teachers are. It turns out that principals can identify reasonably well who gets the most out of the students.

So you could think of a system that used the information by principals and added the information by teachers themselves on who good and bad teachers are. I do not think there is much confusion among teachers about who is doing well and who is not.

But you cannot base merit assessments on tests. One of the things we have found out is that people are very good at teaching how to take tests and do well on specific tests. So if you made all rewards based on specific objective tests, you would find that test performance improved, but that teaching ability did not.



Values in the Schools

Question: *Dr. James Coleman, of the University of Chicago, concluded in study a couple of years ago that the non-public schools, particularly the parochial schools, produce better results than the others, particularly public schools, primarily because of the moral values that are an integral part of their system or education. Coleman found that those who benefit the most are the students from the inner city minority schools. In a public school within a pluralistic society like ours, however, we cannot agree on values. So what can we do?*

Dr. Chubb: You raise an important and highly controversial issue. Coleman's basic view is indeed that if a child is supported in his school by what Coleman calls a value community, then the child's chances of success are much greater. By a value community, Coleman means the existence of people within the school, as well as parents and other people in the larger community, who share a common set of moral and educational values that reinforce in the home and in the community what the child is learning in school. The importance of these shared values is one of the reasons Coleman recommends a choice system, where people can organize themselves into communities of common values which can provide educational reinforcement. That of course is one of the reasons why many other people support choice as well.

I will just add briefly that in New England there are a number of small towns that for 150 years have opted not to build their own high schools, but instead to provide their children with vouchers to attend local public schools or local private schools as they choose. The system has been around for ages, has never been the source of controversy, and has operated quietly and normally. So, there are a few places in the country that provide substantial choice, and have done so for a long time. It is important to recognize this because many critics of choice would have you believe that choice is an unthinkable idea in the United States. Yet choice has been a reality in some American communities since the inception of public schooling.

