

## *Address*

### THE CHALLENGE OF TRANSFORMATION

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**Michael Barber\***

I am going to discuss the challenge of transformation and education reforms in England. I want to emphasize the importance of Prime Minister Tony Blair's personal commitment to education. Several years ago, he made a speech in which he said his three priorities were "education, education, and education." He has stuck with that agenda well. I do not pretend to be objective or unbiased about this topic. I am very involved and passionate about it. I am very excited about what we are doing.

I am going to address four questions: How are we doing in England? What has worked? What has not worked? What is next?

#### **HOW ARE WE DOING?**

One of the things that is very important in answering the first question is that we have been on a reform trajectory since the late 1980s. The Blair government did not reverse some of the fundamental steps of reform that were taken under previous governments. As in Texas and North Carolina, this is a reform agenda that has had both parties in power and, in our case, three different Prime Ministers overseeing stages of it. There have been many mistakes along the way, but the narrative is very clear. The best data for international comparisons are the recent OECD Program for International Student Assessment (PISA) results, published in December 2001. In reading literacy among 15-year-olds, the United Kingdom ranked seventh out of the 32 countries; in mathematical

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literacy, we ranked eighth; and in scientific literacy, we ranked fourth.<sup>1</sup> These results surprised most people in England because for the last 30 years we have thought that everybody in either Germany or France, certainly Switzerland, and sometimes the United States and the Far East, is better at education than we are. But on the basis of these results, we compare reasonably well, although when we look at our own system, we are all too aware that for many children it is not yet good enough.

One of the key indicators of our progress over the last few years is in the success of our national literacy strategy, which includes a training program for all primary teachers in the best practices in teaching literacy to students aged five to 11 and a commensurate set of accountability measures. With this strategy, we have seen a very steady increase in test scores through last year. In 2001, around 150,000 more pupils achieved high standards at age 11 than in 1997. Through our national numeracy strategy, we brought about a similar rate of progress in mathematics, but with more undulations on the way. In 1998 we incorporated a new mental-arithmetic element into the test, which caused a dip in scores that year, but this was followed by a large rise in 1999. Since 2001, performance has plateaued at the new higher level, but we expect further improvement in the next two years.

The most impressive aspect of these two primary-level strategies is not so much the improvement in the average scores, but that there has been improvement throughout the spectrum. The biggest improvements in literacy have been at the high end of the spectrum, at level five, even though there was no target set for achievement at that level. In mathematics, similarly, although we set a level-four achievement goal, there has been very steady progress in reducing the number of students scoring in the below-basic category. Moreover, progress in both literacy and numeracy has been fastest in the most disadvantaged areas of the country. In other words, we are narrowing the achievement gap. Progress at the secondary level has also been impressive, though more incremental. But we expect to exceed our target for 2002.

So how are we doing? Test scores are rising very substantially and quite rapidly at the primary level and incrementally at the secondary level. They are rising throughout the ability range, throughout the age range, and the overall performance in the system is progressing. As a result of these reforms, the number of failing schools in the system has declined.

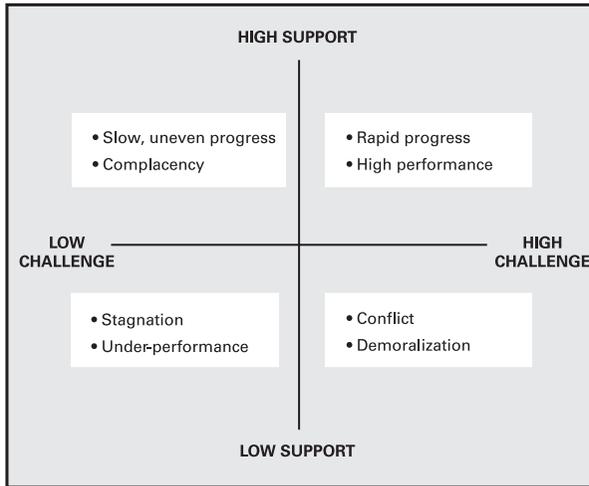
## WHAT HAS WORKED?

The first thing that worked—probably the most important thing—is that there is an underpinning framework for continuous improvement.

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<sup>1</sup> These figures include England and Scotland but not Wales, for reasons I have never understood. But I presume this does not affect England's position very significantly.

**Figure 1**  
**High Challenge–High Support Model**



This framework took five or 10 years of experimentation and continuous reform to put in place, but it emerged in its current form in 1998–99. We call the model high challenge–high support. (See Figure 1.) We set high standards both for the national curriculum and for school inspections, against which all schools are measured. We then devolved as much money as possible to the individual schools. Ninety percent of all our school funding is in the hands of schools themselves, to be deployed by the head teacher or the principal. They hire and fire staff. They choose how many teachers, how many other staff, and how many computers they want. Every year we process data that enable schools to see how well they are doing compared to other schools in a benchmark group and compared to all other schools in the system. We also use the data to identify successful practices and then invest in professional development related to best practices, so that best practices get transferred around as rapidly as possible.

Having given schools clear standards, greatly increased funding, comparative data, and best practices, we hold them accountable by publishing their test-score performance annually and by inspecting them on a four- or five-year cycle. This accountability system leads to rewards for the successful, assistance for those who are working hard in difficult circumstances, and consequences for those who are evidently, according

to the data and the inspection, underperforming. Underperformance may lead to a school being closed and the pupils transferred elsewhere, or it may lead to the school going through an improvement program.

This framework is undoubtedly very similar to many of the standards-based reforms in the United States. It provides an underpinning for a series of national strategies that have been developed, which reinforce it and accelerate its impact. In addition to the literacy and numeracy strategies at the primary level mentioned above, we now have a middle-years extension of those literacy and numeracy programs, which is at the end of its first year and we hope will deliver results this summer and next year. We have a program called Excellence in Cities designed to assist inner-city schools to collaborate in facing their problems. We have also been very tough throughout on school failure because we always put pupils first. We have a rapidly increasing number of “specialist” secondary schools that have centers of expertise in a particular subject but then share it with a network of schools. The evidence suggests that each of these programs is having a positive impact.

Investing in education is part of what works. By 2006, we will have had eight consecutive years of spending growth at roughly 5 percentage points above inflation. Not only is the total sum of money that we are spending increasing, but the amount that we are delegating to the schools year-on-year is also rising. Significantly bigger school budgets enable these improvements. But the key to Cathy Minehan’s point about scale and speed is high-volume, high-quality professional development at the same time as clear accountability. If you can effect high-volume, high-quality professional development, you can actually do large-scale reform pretty quickly.

## WHAT HAS NOT WORKED?

Quite a lot of things have not worked. There is not enough good behavior in secondary schools. A small but significant proportion of children aged 14, 15, and 16 do not attend school every day. Our vocational education compares very badly with other parts of Europe and parts of the rest of the world. We have a dropout rate at age 16 that is much greater than we would like when we look at international comparisons. We have introduced quite a lot of out-of-school education, but the connection between school and out-of-school is not quite right from the point of view of the student. Though our Centre for Gifted and Talented Youth has just been launched, we do not yet have real excellence in serving the most talented students, which seems to me a key element of twenty-first-century public education. And lower socioeconomic groups do not have sufficient access to universities.

Having devolved so much money to schools and given head teachers

so much responsibility, leadership development has become the fundamental building block of the next stage of reform, and we do not have that working as well as we would like. We have quite high volume, but it is not yet of sufficient quality to sustain the changes we want. Other issues follow from that: If we get the leadership right, we will generate the capacity to innovate and enable the system itself to lead the next wave of change.

To summarize, we are making progress, but we would like much faster progress at the secondary level than we have. We would like to see much greater belief among parents in the excellence of the education system. Too many of our reforms have been too clumsy and bureaucratic in their implementation, so that the reforms feel like impositions. We have not yet mastered this knowledge-transfer element. Too many teachers feel overworked and confused, although many of them also feel very proud of what they have achieved.

Despite the positives, this is quite a long list of negatives. Our reform agenda certainly is not finished yet; major challenges remain.

## WHAT'S NEXT?

In his book, *Good to Great: Why Some Companies Make the Leap . . . and Others Don't*, Jim Collins writes, "I am not suggesting that going from good to great is easy . . . I am asserting that those who strive to turn good into great find the process no more painful or exhausting than those who settle for just letting things wallow along in mind-numbing mediocrity" (2001, p. 205). I think our challenge is the same. We have to go from good to great, and we do not think that it will be easy, but we prefer it to the alternative.

So far I have given you a semi-official report on what the British government thinks about its own education reform. I will now discuss the reform agenda for the next five to 10 years, not just in our country, but in the education systems of all developed and possibly developing countries as I personally see it. Take my remarks in that context. At the beginning of *Huckleberry Finn*, Mark Twain observes that *Tom Sawyer* is "mostly a true book; with some stretchers." From here on, my remarks have a few "stretchers."

There are two goals for what lies ahead. The first is the fullest possible development of talent, wherever it can be found. There is a war for talent, globally, nationally, company by company, not to mention soccer team by soccer team. From a soccer team's point of view, there are only three ways to get talent. One is to work with and coach the players you have. That is important and will keep you going for a while. Then you can buy it, but as you know, as in baseball and American football, true talent is very expensive to buy. Or you can grow your own. You can

have a youth system that brings through, trains, and develops the sports people for your team of the future. The same is true for a company and true for a country. Each country needs a talent strategy that combines these three elements: growing your own (in other words, getting the education system to work well); buying talent (as, for example, California buys IT specialists from India); and of course, training and developing the workforce you have.

The second goal is equity. We have made real progress with the strategies that I have discussed. We have had the fastest improvement in the most disadvantaged areas, which is impressive and exciting. But if we are really serious, then, as we invest more in education, we should begin to identify learning difficulties early, we should spend money training specialists in identifying and dealing with these problems, and we should not give up until we have cracked the puzzle of how all these children—all of them—can learn to achieve high standards. The talent and equity goals are not in conflict as is sometimes presented in the education debate. They go together. Equity provides a level playing field so that everybody has the basic building blocks. The provision of opportunity is a key part of equity: If you never find the chance to play golf, for example, nobody will ever know whether you could have been a great golfer. Once the talent is sought, discovered, and identified, we need a ladder of opportunity that allows development. The top end of the ability range in any field is as much an equity issue as those that are more commonly debated in education circles.

How will education systems accomplish these goals? I will list nine means of developing this agenda.

**1. Informed Professional Judgment.** The first is to reform the teaching profession. When I was a teacher in the 1970s, we turned up in a classroom, shut the door, and did our best to teach the children in the class. We had a textbook or a curriculum set by the school, and we made it up as we went along. Some of us did quite well some of the time, but only a few people, of their own volition, chose to go out and find out what was the best practice in pedagogy and what the research said they should be doing in their classrooms. Only once in my years as a teacher did the head teacher of my school see me teach. When he left, he said, "Thank you very much," and he never came back. He did not fire me though, and he would not have had the power to then. I was an uninformed professional. I could have become informed if I had sought out the information, but the system did not inform me. I used my professional judgment, but actually it was not really professional judgment—it was just amateur judgment.

In the 1980s, our governments became very frustrated as the international comparisons that were beginning to emerge showed the flaws in our education system, and officials began to prescribe some reforms.

Some of them worked, and others did not. The reformers were uninformed, too. They decided to act, but nobody really knew what made for successful reform. The United States had *A Nation at Risk*, we had Margaret Thatcher, and the result was a growing interest in reform in both countries. At this point we had uninformed prescription. Out of that, some very important developments came, such as the National Curriculum, national testing, the inspection system, and the beginnings of the devolution of resources. By the early nineties something approaching systemic reform had emerged.

By the time the Blair government took office (and I joined the Department for Education and Skills), we knew a lot about how to prescribe changes. We had been learning about reform for 15 years. We wanted to prove that it was possible to implement system-wide change that delivered results rapidly because nobody believed it could be done. We set out to drive reform very quickly on a very large scale. We used informed prescription and made real progress, as the above results indicate.

But reform of that kind can take you only so far. It risks creating dependence and does not necessarily establish the foundations for the system to improve itself continuously. Keith Joseph, a British education minister in the 1980s, once said that the first words a baby learns are, "What's the government going to do about it?" This may describe the relationship now between government and teachers. As the problems develop, the teachers do not think, "How should we as an education system solve this problem?" They ask, "What's the government going to do about it?" Yet now that the government has devolved 90 percent of all the money to the schools, the money to solve the problems is in the schools, and so this is the wrong question.

The teaching profession and the government need to move toward a new phase: informed professional judgment. This means teachers who are driven by data and by what the data tell them. It means teachers who seek out best practices, who expect very high standards from all of their students, and who, when a student does not achieve high standards, asks the question, "How do we change what we do to enable that student to achieve high standards?" The shift over time is from a knowledge-poor to a knowledge-rich education system. We have a mass of very good data in the system. Shortly, we will have every individual pupil separately identified by a unique number in a national database, and we will be able to track different groups of pupils and individuals through the system. The combination of professional judgment with good data and a rich knowledge base will enable the era of informed professional judgment. This is a challenging but also an exciting concept for teachers, requiring a much higher level of discipline in relation to best practice than in any previous era.

**2. Time: The Hidden Variable.** Since 1988, we have reformed absolutely everything in the British education system except the one thing that dictates what people do all day: how they use their time. The way teachers use their time, the way students use their time, and the way the other adults in the school system use their time are the hidden variables in reform. Although we keep giving money to schools and allowing them the opportunity to change how they use their time, in fact, most of them, most of the time, just repeat the timetable they had last year, and the year before and the year before that. One issue for reform therefore is, how do you change the way people use their time? How do you, to put it in business terms, re-engineer the process, rather than use the extra money to do a bit more of the same process? And especially how do you persuade school leaders and teachers to undertake this re-engineering for themselves since prescribing it will not work?

Some leaders have begun to do some serious thinking about this. One head teacher in London said to me last year, "After four consecutive years of growth in the school budget, I suddenly realized doing more of the same wasn't the answer—we could transform our working patterns." So there are some schools at the cutting edge. The Milken Foundation in California has also published an excellent document showing how you could restructure a staff schedule with a 4 percent increase in an average high school budget. The schedule includes time for induction-year, associate teachers to do professional growth, planning, and mentoring, and includes blocks of time in a master teacher's timetable for mentoring, modeling, and coaching. All of this is perfectly possible in our system and would not require any extra money. But many schools are not actually rethinking time yet.

**3. Best Practice.** The third means is best practice. People who work in education have a tendency to shudder when you say "best practice" because they—we—were brought up in the period of uninformed professional judgment, when the core value of teachers was that it was up to each individual to make decisions on what should happen in his or her classroom. In fact, even after a period of prescription, the system has not yet become prescriptive enough about detail, which is what makes the difference in pedagogy, as it does in many other activities. When we trained teachers to teach literacy, they asked, "Can we be flexible about this?" We replied, "Well, this is the model that works. If you are flexible about it, it won't be pure, it won't be based on research, and then it won't work, and you'll tell us the program was a bad idea." Too much flexibility too soon has undermined many programs. Compare the impact in the United States of the flexible Coalition of Essential Schools with the much more powerful effect of "Success for All."

It is interesting to compare parallels in business, such as the 16 steps to checking into a hotel and then checking out again, published recently in the *Harvard Business Review*. For each of the 16 steps, there is a very

specific best practice (see Iacobucci and Nordhielm 2000). The article is interesting for its detail and for incorporating sources of best practice from outside the sector of interest. How often do we do that in education? For example, one of the things we know from education research is that a very good summary of a lesson by a teacher makes a huge difference in learning gains. But maybe the best person to coach teachers on how to give a good summary is not another teacher. It may, for example, be a very good chair of a business meeting. It may be somebody in a wholly different part of the economy. We are not yet obsessive enough about best practice or looking for it in all the right places—a thought that leads to my next point, about benchmarking.

**4. Benchmarking.** Benchmarking in education is becoming global. I do not know how much debate there has been in the United States about the PISA results published in December 2001. In our country there has been very little debate about it because it was good news, so needless to say, our press hardly reported it. But in Germany the results have caused a crisis. They have had the same effect that Sputnik had in America in the 1950s or that *A Nation at Risk* had in 1983. Two weeks ago, the front page of *Der Spiegel*, the best-selling news magazine in Germany, read, “Going Crazy, the New German Education Catastrophe.” It was the second front-page story on education in *Der Spiegel* within a few months. *Der Spiegel* is currently running a whole series on education, which is a central issue in the German election campaign. This is a system in crisis. Those of us involved in PISA, which includes the whole OECD, will find increasingly over time that its results will set the agenda. They will set us on the search for best practice wherever we can find it, not just about pedagogy, but also about system design, about specific reforms, and about processes for implementing reform.

**5. Transparency.** In England, we publish performance tables showing the performance of every school in the country every year. Parents are very interested, and schools are very interested. But maybe this is only the beginning. People in the United States, particularly in the Federal Reserve Bank, do not need to be reminded of the need for transparency and trust in the few months after the Enron/Arthur Andersen disasters. Transparency and trust go together. People are going to keep investing in education at the levels they are now investing only if they see where their tax pounds, or their tax dollars, are going and what results they are getting. Where is the money going? What outcomes is it delivering? There will be pressure from taxpayers for ever more transparency in the system. There will also be pressure from consumers over time—the parents, or the students as they get older. Many educators see transparency as a threat because it means you cannot hide failure. Indeed, this is the main benefit—once a problem is out in the open someone has to be on the case. But transparency also challenges government. We publish so much data now in our country that every government policy is judged by its impact

on results. This is a very good thing. If a policy appears not to be working, then we have to defend it, argue it through, fix it, or stop it. So, transparency cuts both ways. Evidence of the British government's continuing drive for transparency in the public services is its response to a recent inquiry into unnecessary deaths at a Bristol hospital: "From 2005 results will be published annually for each centre and for each cardiac surgeon on a rolling 3 year basis. . . . This is just the first step to publishing more information on individual consultant outcomes" (Department of Health 2002, p. 117). The question arises then, when will schools begin to report to parents and students on the performance of individual teachers at the school? This is not government policy, but it is the trend in business and in healthcare, and I suggest it will become the trend in education too at some point.

**6. Funding.** Funding is a central issue for every public service. It is related to transparency because people want to know where their money goes and what they get for it. Frederick the Great of Prussia, one of Europe's most influential monarchs, said that finances are "the nervous system of the country: if you understand them you will be the master of everything else." Watching where the money goes is a key issue. And we need to become cleverer about the way we put money through education systems. The devolution of funding to schools in our country has been a huge step forward. But what about other funding, funding for out-of-school programs, for example? Why not a voucher or tax credit for funding out-of-school learning activities of children from relatively poor backgrounds, as I proposed in my book *The Learning Game* (1997)? This way, we would provide the social-capital benefits of out-of-school learning for all children—benefits available right now only to children whose parents have the will and the means to provide them. Given the recent growth in funding of out-of-school learning and the expansion of provision, this is a question now of how the money flows, rather than finding large additional sums.

**7. Elegance.** Between the eighties and the nineties, we made a lot of progress in understanding how to achieve education reform, and we got better at it, but none of even the most passionate advocates, among whom I include myself, would call the reforms of the last decade elegant. But we will have to become elegant because we cannot keep creating so much "noise" with the way we do reforms. We have to get much cleverer in implementation. This requires government to learn rapidly and effectively from its own experience and that of others, and then to apply that learning. This is not a question of compromise; it is a question of clarity.

If we seek elegance, here are four questions we could ask about any reform before embarking on it:

- Does the particular reform fit well with the overall strategy both in concept and in timing?

- Second, are we getting the maximum change for the minimum investment? In other words are we maximizing leverage? Our national literacy strategy costs £80 million a year. But we spend £6 billion a year on primary teachers' salaries, so it is a good investment, a gearing ratio of about 1:80.
- Third, does the investment in the reform also strengthen the intellectual and social capital of the system as a whole, for example, by enhancing teachers' skills? If designed properly, every reform can achieve its objectives and simultaneously build capacity.
- Fourth, which levers should be used to implement the strategy? Do we really need to create new levers, or could we adapt the ones we have already? Are we using traditional bureaucratic or regulatory means of bringing about change?

I think the question of elegance is going to be a key part of reform because we are going to need faster reform at a larger scale, and if we do it with clumsy tools, we will drive reform into disrepute and teachers into despair.

**8. Collaboration.** One of the big paradoxes in education reform relates to the source of innovation. We have put so much money into the schools so that they can innovate and become the leaders of reform. The goal is that instead of the reform being driven from the center, schools take over the leadership. But it turns out that an individual school, even with control of 90 percent of the funding in the system, is not necessarily innovative. Most individual schools turn out to be rather conservative and risk-averse.

In the next phase, we will need to build schools into networks. Just as individual schools do not innovate, neither do hierarchies and bureaucracies. But networks may. Individual schools or organizations from outside the school system could lead networks, and government should enable them to do so. It might be, for example, that Chester Finn's virtual charter schools could become a source of innovation. Networks will form not on the orders of government, but because government has created the circumstances that will allow them to happen.

**9. Customers.** Finally, the reason education systems required powerful accountability systems in the nineties was that school systems until that time were not truly responsive to students and parents, though they sometimes spoke that language. They were not actually really meeting students' needs nor were they seeking out what the aspirations of students and parents really were. On the contrary, it was the interests of producers that came first. Accountability systems redressed that balance. The key to moving to lighter accountability systems with greater precision is building the customer into the equation. If schools were genuinely

accountable to parents and students, then accountability systems in their current form would turn out to be much less necessary than at present.

## Conclusion

In conclusion, if we can get to a system where the data motivate schools to improve teaching and learning continuously while simultaneously seeking to understand profoundly the needs and aspirations of their students, then we will have a system that is one of informed professional judgment and is led by innovators in the teaching profession. Accomplishing this will not be easy. No one anywhere really knows how to do this yet. We are looking at a whole new frontier—as when Jefferson sent Lewis and Clark out to find a navigable route from the East Coast to the West. We have reached Kentucky, perhaps, but we do not yet know what is beyond the Mississippi. We have challenging questions ahead. Research and, eventually, policy will need to address these questions, because in the long run, the capacity to bring about rapid, continuous, large-scale education reform, and therefore raise standards of student performance to unprecedented levels, is fundamental to all our social and economic prospects.

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