Realising the Potential of System Reform

For a country to succeed it needs both a competitive economy and an inclusive society. That requires an education system with high standards, which transmits and develops knowledge and culture from one generation to the next, promotes respect for and engagement with learning, broadens horizons and develops high expectations. We want to ensure all young people progressively develop the knowledge, understanding, skills, attitudes and values in the curriculum, and become effective, enthusiastic and independent learners, committed to lifelong learning and able to handle the demands of adult life. This is a pretty good description of an educational system committed to ensuring that every school is at least a good school and that most are on the journey to becoming great.

Unfortunately, national policy in educational reform until recently has proved inadequate to the challenge of delivering such education systems. So much so that in the early nineteen nineties, Milbrey McLaughlin (1990:11) on the basis of her reanalysis of the extensive Rand Change Agent study, originally conducted in

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the United States during the 1970s, asserted that ‘policy does not mandate what matters’. This mantra caught the zeitgeist and established an orthodoxy that conditioned policy, research and practice for the first half of the decade.

By the mid nineteen nineties however the almost global concern over standards of learning and achievement led to a renewed interest in large scale change. Many national and local governments were advocating programmes commonly called ‘performance based reform’ in an effort to raise standards across local and regional boundaries. The general approach was to set targets for performance and then hold schools responsible for meeting them. This fairly crude approach to raising standards predictably had little positive impact on student achievement. Leithwood’s meta analysis of five such programmes noted the “disappointing contribution that performance-base reforms have made to improving the core technology of schooling” (Leithwood, 1999: 40).

Although the impact of large-scale change on student achievement is notoriously fickle, the fact that these reform strategies neglected to focus on teaching and learning and capacity building must have contributed to their inability to impact positively on student achievement. The argument that I am making in this paper is that unless reform strategies address the context of teaching and learning, as well as capacity building at the school level, then the aspirations societies have of their educational systems will never be realised.

In making the case in this paper for the potential of systemic reform to enable every student to reach their potential and for every school to be great, I will:

- refer to the experience of Primary Schooling in England as a paradigmatic example of the transition from large scale to system wide reform;
- clarify the central policy conundrum of balancing national prescription with schools leading reform;
- identify the four key drivers that underpin system change;
- propose the concept of system leadership; and
- suggest a model for coherent system reform.
The case of Primary Schooling in England

Although the reform effort in England has involved both primary (elementary education for 5 – 11 year olds) and secondary schools (ages 11 – 16 or 11-18 for those schools with ‘sixth forms’) the focus of this section will reflect the performance of students within the 5 -11 year age range during the first two terms of the New Labour government. The reason is because it is here where the link between reform strategy and student performance is most clearly seen.

England has since 1997 taken the opportunity to achieve high standards across an entire system of 24,000 schools and over 7 million school students. In order to move from the evidently underperforming system of the mid-1990s the government put in place a policy approach best described as “high challenge, high support”. The way in which these principles of “high challenge, high support” are turned into practical policies to drive school improvement is summarised in the following diagram (Barber, 2001:4).

![Figure 1 – The High Challenge High Support Policy Framework](image-url)
The policies for each segment (starting at 12 o'clock) are set out in the chart below. The important point is that the policy mix was complementary and mutually supportive (Barber, 2001:4).

<table>
<thead>
<tr>
<th>AMBITIOUS STANDARDS</th>
<th>ACCESS TO BEST PRACTICE AND QUALITY PROFESSIONAL DEVELOPMENT</th>
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<tr>
<td>• High standards set out in the National Curriculum</td>
<td>• Universal professional development in national priorities (literacy, numeracy, ICT)</td>
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<td>• National Tests at age 7, 11, 14, 16</td>
<td>• Leadership development as an entitlement</td>
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<tr>
<th>ACCOUNTABILITY</th>
<th>DEVOLVED RESPONSIBILITY</th>
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<tr>
<td>• National inspection system for schools and LEAs</td>
<td>• School as unit of accountability</td>
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<tr>
<td>• Publication annually of school/district level performance data and targets</td>
<td>• Devolution of resources and employment powers to schools</td>
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<tr>
<th>GOOD DATA/CLEAR TARGETS</th>
<th>INTERVENTION IN INVERSE PROPORTION TO SUCCESS</th>
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<tr>
<td>• Individual pupil level data collected nationally</td>
<td>• school improvement grant to assist implementation of post-inspection action plan</td>
</tr>
<tr>
<td>• Statutory target-setting at district and school level</td>
<td>• monitoring of performance by LEA (district)</td>
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Table 1 – Complementary policies to drive school improvement

The positive influence of the National Literacy and Numeracy Strategies on student performance attracted worldwide attention. A graphic illustration of the impact that the strategies have had on the system as a whole is seen in the following series of maps. The first map reproduced below gives an indication of the number of Local Education Authorities in England in 1998 where 75%+ of 11 year old students were reading at their chronological age. This by itself provides sufficient justification for introducing the strategies (the map for numeracy was
similar). The situation in 2002 is illustrated in the second map and in 2004 in the third map. The picture for numeracy in 2002 and 2004 was also similar. Although there is still progress to be made the transformation of the National picture in six years is striking.

Figure 2 – LEAs achieving 75%+ Level 4 English 1998
Figure 3 – LEAs achieving 75%+ Level 4 English in 2002

Figure 4 – LEAs achieving 75%+ Level 4 English in 2004
The analysis of this success is however not entirely straightforward. Following an initial and significant increase over the first three years there was a levelling off performance for the next three years, and only recently has further progress been made. This is a trend that has been noted in virtually every large scale reform initiative. What usually happens is that early success is followed by a stalling in progress and a subsequent lack of commitment to the programme of reform.

This however has not happened in England and over the past couple of years standards have continued to rise again. It is clear to me that recent progress is because in 2003 the National Literacy and Numeracy strategies merged into a National Primary Strategy following the publication of the *Excellence and Enjoyment* White Paper (DfES, 2003). As a consequence, the reform of primary education moved from a single focus on curriculum change to a whole school improvement effort with literacy and numeracy at its core, but that also had a:

- strong focus on Personalised Learning and Assessment for Learning;
- re-orientation of materials to support the quality of teaching and learning and whole school curriculum planning;
- move from top-down to bottom-up target setting with an increase in moderated teacher assessment;
- clearer identification of and support for those schools and local authorities where progress was too slow; and,
- system wide programme of leadership development and networking.

Let us now draw from this narrative a general lesson for large scale / systemic reform. It is in the logic of large scale reform that an early narrow focus on key skills produces an initial rapid increase in standards. To move beyond this plateau of achievement requires a system wide school improvement approach that can deliver continuous improvement beyond the early gains. In other words, large scale reform has characteristically focused on short term objectives, whereas systemic change envisages a multi phased process that ensures that early gains do not level off, but continue to improve as a consequence of employing strategies that at the same time raise achievement and build capacity.
Still using the English experience as the point of departure, we explore the implications of this observation in more detail in the following section.

**The Crucial Policy Conundrum**

The argument I am making is that there is a growing recognition that schools need to lead the next phase of reform. Using the analysis of the English experiment with large scale reform the argument goes something like this:

- Most agreed that standards were too low and too varied in the 1970s and 80s and that some form of direct state intervention was necessary. The resultant ‘national prescription’ proved very successful particularly in raising standards in primary schools – progress confirmed by international comparisons.
- But as we have seen, progress plateaued in the second term and whilst a bit more improvement might be squeezed out nationally, and perhaps a lot more in underperforming schools, one has to question whether prescription still offers the recipe for sustained large scale reform in the medium term.
- There is a growing recognition that schools need to lead the next phase of reform. But if the hypothesis is correct, and this is much contested terrain, it must categorically not be a naïve return to the not so halcyon days of the 1970s when a thousand flowers bloomed and the educational life chances of too many of our children wilted.
- The implication is that we need a transition from an era of Prescription to an era of Professionalism – in which the balance between national prescription and schools leading reform will change.

However, achieving this shift is not straightforward. As Michael Fullan (2003:7) has said, it takes capacity to build capacity, and if there is insufficient capacity to begin with it is folly to announce that a move to ‘professionalism’ provides the basis of a new approach. The key question is ‘how do we get there?’, because we cannot simply move from one era to the other without self consciously building professional capacity throughout the system. It is this progression that is illustrated in Figure 5.
Towards system wide sustainable reform

Every School a Great School

System Leadership

National Prescription

Prescription

Building Capacity

Professionalism

Schools Leading Reform

Figure 5 – Towards system wide sustainable reform

It is worth taking a little more time unpacking the thinking underlying the diagram. This is because it is fundamental to an understanding of the argument being made in this paper. Five points need making.

The first is to emphasise that this not an argument against ‘top down’ change. It is clear that neither ‘top down’ nor ‘bottom up change’ work just by themselves, they have to be in balance – in creative tension. The balance between the two at any one time will of course depend on context.

Secondly, it must be realised that in England in 1997 it was obvious that more central direction was needed. This reflects the balance towards national prescription as seen in the left hand segment of the diagram. If we assume that time moves from left to right in the diagram, then in the case of England it is most probably correct to say that in terms of both policy and practice the balance is currently located in the middle segment of the diagram. This is contested terrain
and there is no guarantee that there will be an inevitable movement into the right hand segment.

Third it should be no surprise to realise that the right hand segment is relatively unknown territory. It implies horizontal and lateral ways of working with assumptions and governance arrangements very different from what we know now. The main difficulty in imagining this landscape is that the thinking of most people is constrained by their experiences within the power structure and norms of the left hand segment of the diagram.

The fourth point is both complex and critical. In terms of the diagram, effective system wide sustainable reform requires a movement from the left to right to the right segment, with all that implies. The left to right movement is necessarily incremental as it builds on, rather than contradicts, the success of previous phases. Yet, and this is the crucial point, the achievement of creating the educational landscape implied by the right hand segment represents a step change from what has gone before. Yes, the difference between left and right hand segments represents a radical change or a transformation; but the process or journey from left to right will be incremental, building on past success and re-shaping in light of learning from experience. It is in this way that the language of school improvement (logical incremental steps building on past experience) and transformation (a qualitatively different state from what was known previously) is reconciled.

Finally, of course I am not suggesting that one always has to start from the left hand side of the diagram and move in some sort of uniform way to the right. That is just how it was in England in 1997. Other systems may well be in the middle and need to move left briefly to firm up certain conditions before rapidly proceeding into the right hand segment. Some may believe that they are already in the right hand segment. If this diagram has any value it is as a heuristic – its purpose is to help people think rather than tell them what to do.
Four Drivers for System Reform

I need to re-iterate that the transition from ‘prescription’ to ‘professionalism’ is not straight forward. In order to move from one to the other strategies are required that not only continue to raise standards but also build capacity within the system. This point is key, one cannot just drive to continue to raise standards in an instrumental way, one also needs to develop social, intellectual and organisational capital. Building capacity demands that we replace numerous central initiatives with a national consensus on a limited number of educational trends. There seems to me to be four key drivers that if pursued relentlessly and deeply will deliver both higher standards and enhanced professional capacity. These are personalised learning, professionalised teaching, networks and collaboration and intelligent accountability.

As seen in the ‘diamond of reform’ below (Figure 6) the four trends coalesce and mould to context through the exercise of responsible system leadership. Before elucidating the concept of system leadership let me briefly describe each of the drivers and give illustrations from policy trends in a number of different countries.

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*Figure 6 – Four key drivers underpinning system reform*
**Personalised learning** – The current focus on personalisation is about putting students at the heart of the education process so as to tailor teaching to individual need, interest and aptitude in order to fulfil every young person’s potential. Many schools and teachers have tailored curriculum and teaching methods to meet the needs of children and young people with great success for many years. What is new is the drive to make the best practices universal. A successful system of personalised learning means clear learning pathways through the education system and the motivation to become independent, e-literate, fulfilled, lifelong learners. Obviously personalised learning demands both curriculum entitlement and choice that delivers a breadth of study and personal relevance, as well as emphasising the development of the students metacognitive capacity, in other words ‘learning how to learn.’ The personalisation however is in terms of flexible learning pathways through the education system rather than personalised goals or institutional tracking, which have often been shown to lower performance expectations for students and to provide easy ways out for teachers and schools allowing them to defer problems rather than solve them. The drive for high standards applies to all. Examples of policy options supportive of ‘personalised learning’ would be the emphasis on formative assessment as seen in the recent OECD survey, an approach to curriculum that embraces learning skills as well as content knowledge as seen in Finland, and an integrated approach to academic and vocational subjects in secondary education as seen in a number of States in Australia.

**Professionalised teaching** – Significant empirical evidence suggests that teaching quality is the most significant factor influencing student learning that is under the control of the school. It is also clear that the forms of teaching that promote high levels of student learning vary in some instances quite dramatically from country to country. The phrase ‘professionalised teaching’ implies that teachers are on a par with other professions in terms of diagnosis, the application of evidence based practices and professional pride. The image here is of teachers who use data to evaluate the learning needs of their students, and are consistently expanding their repertoire of pedagogic strategies to personalise
learning for all students. It also implies schools that adopt innovative approaches to timetabling and the deployment of increasingly differentiated staffing models. Examples of policy options supportive of ‘professionalised teaching’ would be – teacher selection processes as seen in Finland, highly specified professional development programmes as with the National Literacy Strategy in England, and teacher promotion based on professional competence as in Canada or Sweden. Instructional and information technology maybe important aspects to be considered in this context as well.

**Intelligent accountability** – This refers to the balance between nationally determined approaches to external accountability on the one hand and the capacity for professional accountability within the school that emphasises the importance of formative assessment and the pivotal role of self-evaluation. In any debate on accountability it is important to distinguish between means and ends, methods and purpose. There are two key purposes for accountability. The first is as a tool to support higher levels of student learning and achievement; the second is to maintain public confidence. The means of achieving this will inevitably vary from country to country and from situation to situation. In general where there are high levels of student achievement and small variations of performance between schools then pressures from external accountability will be modest. In those situations where there is a need for more robust forms of external accountability it should always be designed to support teacher professionalism and the school’s capacity to utilise data to enhance student performance. Examples of policy options supportive of ‘intelligent accountability’ would be – the approaches to professional accountability developed in Finland, the use of pupil performance data and value added analyses in England and the approaches to school self evaluation in Denmark.

**Networking and collaboration** - This relates to the various ways in which networks of schools can stimulate and spread innovation as well as collaborate to provide curriculum diversity, extended services and community support. The prevalence of networking practice supports the contention that there is no contradiction between strong, independent schools and strong networks, rather the reverse. Effective networks require strong leadership by participating heads
and clear objectives that add significant value to individual schools’ own efforts. Without this networks wither and die, since the transaction costs outweigh the benefits they deliver. Nor is there a contradiction between collaboration and competition – many sectors of the economy are demonstrating that the combination of competition and collaboration delivers the most rapid improvements. Although evidence of effectiveness is still accumulating, it is becoming clear that networks support improvement and innovation by enabling schools to collaborate on building curriculum diversity, extended services and professional support to develop a vision of education that is shared and owned well beyond individual school gates. Examples of policy options supportive of ‘networking and collaboration’ would be – the approaches to schools as community social centres being seen in Sweden, the way in which leading schools are partnering with ‘failing schools’ leading to rapid improvements in England, and burgeoning networks of schools disseminating innovative practices in the USA.

Although these key drivers provide a core strategy for systemic improvement, it is system leadership, as we will see in the following section, that adapts them to particular and individual school contexts. This is leadership that enables systemic reform to be both generic in terms of overall strategy and specific in adapting to individual and particular situations. It is system leaders who reach beyond their own school to create networks and collaborative arrangements that, not only add richness and excellence to the learning of students, but also act as agents of educational transformation.

**System Leadership**

‘System leaders’ are those Head teachers who are willing to shoulder system leadership roles: who care about and work for the success of other schools as well as their own. In England there appears to be an emerging cadre of these head teachers who stand in contrast to the competitive ethic of headship so prevalent in the nineties. It is these educators who by their own efforts and commitment are beginning to transform the nature of leadership and educational improvement in this country. Interestingly there is also evidence of this role
emerging in other leading educational systems in Europe, North America and Australia (Hopkins, forthcoming).

The proposition is simple:

*If our goal is ‘every school a great school’ then policy and practice has to focus on system improvement. This means that a school head has to be almost as concerned about the success of other schools as he or she is about his or her own school. Sustained improvement of schools is not possible unless the whole system is moving forward.*

The first thing to say is that system leadership as Michael Fullan (2003;2005) has argued is imbued with **moral purpose**. Without that, there would not be the passion to proceed or the encouragement for others to follow. In England for example, where the regularities of improvement in teaching and learning are still not well understood, where deprivation is still too good a predictor of educational success and where the goal is for every school to be a great school, the leadership challenge is surely a systemic one. This perspective gives a broader appreciation of what is meant by the moral purpose of system leadership.

I would argue therefore that system leaders express their moral purpose through:

1. measuring their success in terms of improving student learning and increasing achievement, and strive to both raise the bar and narrow the gap(s).
2. being fundamentally committed to the improvement of teaching and learning. They engage deeply with the organisation of teaching, learning, curriculum and assessment in order to ensure that learning is personalised for all their students.
3. developing their schools as personal and professional learning communities, with relationships built across and beyond each school to provide a range of learning experiences and professional development opportunities.
4. striving for equity and inclusion through acting on context and culture. This is not just about eradicating poverty, as important as that is. It is also about giving communities a sense of worth and empowerment.

5. realising in a deep way that the classroom, school and system levels all impact on each other. Crucially they understand that in order to change the larger system you have to engage with it in a meaningful way.

Although this degree of clarity is not necessarily obvious in the behaviour and practice of every head teacher, these aspirations are increasingly becoming part of the conventional wisdom of our best global educational leaders.

It is also pleasing to see a variety of system leader roles emerging within various systems that are consistent with such a moral purpose. At present, in England, these are (Hopkins and Higham, forthcoming):

- Developing and **leading a successful educational improvement partnership** between several schools, often focused on a set of specific themes that have significant and clear outcomes that reach beyond the capacity of any one single institution.

- Choosing to **lead and improve a school in extremely challenging circumstances** and change local contexts by building a culture of success and then sustaining once low achieving schools as high valued added institutions.

- **Partnering another school facing difficulties and improve it**, either as an Executive Head of a federation or as the leader of a more informal improvement arrangement.

- Acting as a **community leader** to broker and shape partnerships and / or networks of wider relationships across local communities to support children’s welfare and potential, often through multi agency work.

- Working as a **change agent** or expert leader within the system, identifying best classroom practice and transferring it to support improvement in others schools.
No doubt these roles will expand and mature over time; but what is significant about them is that they have evolved in response to the adaptive challenge of system change.

**A Model for System Reform**

Having described the pivotal role of the system leader it is now instructive to turn to the contribution to be made by National and Local authorities in achieving system reform. A major problem here is that policy debates in many countries are often conducted with insufficient empirical evidence and policy claims are often made on the basis of tradition, aspiration or ideology. What is needed are policy frameworks that will allow countries to relate their policy choices more directly to student outcomes, to monitor the impact of changes in policy direction over time and possibly to compare policy options between countries. These are some of the issues I have been thinking through in a preliminary way with colleagues at the OECD responsible for the PISA programme.

Our initial analysis suggests that there now seem to be six ‘policy drivers’ that are being actively debated in many countries as being critical to not just enhancing student outcomes, but also to building capacity in the education system overall. Although these trends are often interpreted differently in different contexts, they do however provide the possibility of a framework in which to discuss global approaches to school change.

Three of these six policy drivers relate to teaching and learning and are consistent with the analysis already conducted in this paper:

- teaching quality;
- personalised learning; and
- school leadership and ethos.

The three other policy drivers relate to the approaches to reform taken at the system level:

- Standards and accountability;
• Networking and collaboration; and,

• Choice and contestability.

With this in mind, we are now in a position to revisit the policy framework that underpinned the success of the first term New Labour educational reforms. The broad argument was that a national education strategy based on the principle of “High Challenge and High Support” - that contained a complementary cocktail of policies that linked together:

• High standards with quality materials and professional development;

• Demanding targets but support for schools in the most challenging of circumstance; and

• Linked accountability with increasing devolution of responsibility

- is highly effective at raising standards in the short term.

The ‘high support, high challenge’ strategy was an outstandingly successful strategy for the policy objectives of the first term New Labour government. But system wide strategies are not immutable; they evolve with their societies and changing educational demands. The subsequent argument in the paper has been to stress that for learning and achievement to continue to rise into the medium to long term we need a different policy arrangement because of the need to re-balance national prescription with schools leading reform. This re-balancing is necessary for building capacity for sustained improvement and leads to a transformed and re-imagined educational landscape implied by the right hand segment of our ubiquitous rectangle.

The argument that has been building throughout the paper is that the policy framework for ‘every school being great’ is equally sophisticated in terms of its aspiration but is more reflective of a context that has increasingly lateral responsibilities and alignments. This framework, which should be recognisable to those who have read so far, is seen below. In the centre is system leadership with the implication that it applies at a range of levels and roles within the system. The key policy drivers should also be familiar by now:
• The demand for personalisation requires a professional practice for teaching
• The systemic potential of networking and collaborations requires new arrangements for governance and agency; and
• The realisation of ‘intelligence accountability’ within the school needs to be matched by a willingness to fund students who are most ‘at risk.’

Figure 7 – The Every School a Great School Policy Framework

For the sake of completeness one can see that the ‘every school a great school’ policy framework is as appropriate for the right hand segment of the rectangle as the original framework was to the left hand segment in the early days of New Labour’s educational reforms. This equilibrium is captured in the figure below.
Figure 8 – Complementary Policy Frameworks for System Reform

The substantive point that we have been making is that different stages of reform require different strategies. This though is not an ‘either-or’ issue, but more an evolutionary process that respects the wide degree of differentiation or segmentation within the system.

One can sharpen the point by looking at three trajectories for system reform in the diagram below.

Figure 9 - Three trajectories for system reform (adapted from Michael Barber)
The first trajectory is the conventional straight line analysis that rarely reflects real life situations. More usual are one of the other two trajectories numbered 2 and 3 in the diagram. What is clear in both cases is that an initial (slow or rapid) stage of development is followed by a second stage that is qualitatively different. One could say that the first stage takes us half way there and the second the remaining distance.

This thought is captured in the table below that illustrates the range of different strategies at each stage of development based on 12 dimensions of system reform.

<table>
<thead>
<tr>
<th>A “Halfway There” – “Halfway To Go” Analysis on 12 Dimensions of School Reform</th>
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<tbody>
<tr>
<td><strong>Dimension</strong></td>
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<td>Standards</td>
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<td>Government</td>
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*Table 2* - A “Halfway There” – “Halfway To Go” Analysis on 12 Dimensions of School Reform

In reflecting on this analysis it is important to remember that:
1. “Everything Counts” on the dimensions of system reform, it is not an *a la carte* menu;

2. There are qualitative differences between each stage;

3. The second stage however needs to build on the first;

4. In some cases, progress may not move beyond the first stage; and,

5. Both stages need to be considered together in a long term systemic strategy.

It is interesting to realise that this analysis is equally important for individual schools or groups of schools as they are for national or local governments. What often happens however is that initiatives tend to be worked on individually, rarely is the entire framework considered at one time. What is needed is a framework to help governments (and schools) to reflect on how best to balance these various strategies in a comprehensive approach to systemic educational change. Figure 10 provides an example of such a framework. It seeks to identify three key elements of a coherent approach to school change. The framework also suggests how these three elements may interact and impact on the learning and achievement of students.

This educational model was developed by Michael Barber (2005) based on the Thomas Friedman’s analogy (in his book *The Lexus and the Olive Tree* (1999)) of a nation’s economy being compared to a computer system. Originally developed for educational systems it can also apply to schools. There is the hardware – the infrastructure, funding and physical resources as well as human and intellectual capital. There is also the software – the interaction between the school and the student, the process of teaching and learning infused by the leadership of the school. In between the two there is the operating system, or the strategy for change the school or system chooses, or not, to employ to develop itself as a whole.
Figure 10 – A coherent system design framework

Many schools, as well as Ministries of Education, assume that there is a direct link between the hardware and the software – as long as the resources are in place then student learning will be satisfactory. This is rarely the case and the reason is simple. We need a change strategy to link inputs to outputs: without it student and school outcomes will remain unpredictable. With it, schools will be more likely to translate their resources more directly into better learning environments and therefore enhanced learning outcomes for their children.

The same argument goes for local and national governments. The existence of such a framework allows for a more intelligent debate over the policies adopted by different countries in terms of all three elements – the hardware, the software and the operating system and their integrated impact on standards of learning and achievement.

In many ways the structure and argument of this paper also reflects this framework. Earlier, we discussed aspects of various national policies that provide the hardware or infra-structure for system improvement. The ‘drivers’ especially those related to the learning and teaching aspects reflect the software
aspects of the diagram. The concepts of system leadership, accountability and networking relate to the operating system. The key issue to remember is that operating systems are, as was said earlier, not immutable; they need to reflect their context. The two policy frameworks described earlier in this section are a good example of how strategies or ‘operating systems’ evolve and build on each other as the system as a whole develops.

In concluding, it is important to remember that the challenge of system reform has great moral depth to it. It addresses directly the learning needs of our students, the professional growth of our teachers and enhances the role of the school as an agent of social change. This is why I have argued that as we imagine a new educational future in line with the ‘policy conundrum’ analysis outlined earlier, so we require a new operating system capable of realising a future where every school is a great one. That is why the discussion on coherent system reform is so important. The operating system is not just a technical device for linking inputs to outputs; it is also a metaphor for those strategies that when implemented lead towards ‘every school a great school’ as well as the ‘good society.’

References: