Michael Fullan's argument is simple and profound: if a system is striving for both 'high equity and excellence' then policy and practice have 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. And even more than that: they need to make sense not just of their own reality and work, but to reconceive the system at the same time.

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innovation

Systems thinkers in action:
moving beyond the standards plateau

Michael Fullan

teachers transforming teaching

In partnership with

department for
education and skills
creating opportunity, releasing potential, achieving excellence

NCSL

This is the third in the series of short publications by the DfES Innovation Unit, intended to stimulate debate within and beyond the teaching profession on key issues. Previous pamphlets have touched on the importance of networks in stimulating and transferring better practice[1]; and on how the concept of personalisation has radical potential for transforming our education service[2]. This third concerns the systemic nature of modern education leadership. It is absolutely appropriate that it should be authored by Michael Fullan, who has been a leader in the field for over three decades.

1 *Working Laterally: how innovation networks make an education epidemic* by David Hargreaves
2 *Learning about Personalisation: how can we put the learner at the heart of the education system?* by Charles Leadbeater

Foreword
David Hopkins – Chief Adviser to the Secretary of State on School Standards

In 1972, Michael published a seminal paper on 'The role of the user in educational change'. The paper was important because in it Michael was outlining a fundamentally new approach or paradigm in which to consider educational change. He argued against the 'top-down' approach to reform that had characterised all post war educational change efforts to that time. In its place he proposed an approach to implementation that saw the user, the implementer, as the key figure in the change process and reform as essentially a dialectical process. The genie was out of the bottle, and Michael took to pursuing so productively 'the meaning of educational change' as the guiding *leitmotif* for his research, policy advice and practical school improvement work ever since.

In *Systems Thinkers in Action* Michael makes a futuristic statement that moves beyond the arid polarity between 'top down' and 'bottom up'. Here he argues that the future of educational reform lies not only in co-production – the working together of policy makers and consumers towards a common goal, but also that the actors are involved not just with making sense of the action but also in leading it. The argument is simple and profound: if a system is striving for both 'high equity and excellence' then policy and practice have 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. And even more than that: they need to make sense not just of their own reality and work, but to reconceive the system at the same time.

And it is happening. Weekly I receive emails from head teachers, and LEA Directors, who are increasingly forming the vanguard of our own systems thinkers in action. As they and we grapple to make general sense out of their individual context and progress we are beginning to use Michael's insights to discipline our actions and make significant gains for the system as a whole. Michael argues, compellingly, that this is the nature of the leadership which will be needed as we move into a phase of reform characterised by continuous improvement and capacity-building. I am certain this publication will engender a productive debate on this and related questions.

Even the most ambitious education reform initiatives amount to adjustments to the present system rather than a new and more fundamental way of working.

The most noteworthy example of successful large-scale reform is the National Literacy and Numeracy Strategy, which saw some 20,000 primary schools move forward on average from 62% proficiency in literacy for 11 year olds in 1997 to 75% in 2000. Similar results were obtained for numeracy.

This represents a remarkable achievement, but there are two related problems with the strategy. First, results have plateaued since 2000, holding at 75% through 2003. Second, heads and teachers do not deeply own the strategy, which accounts for the inability to go beyond 75%, not to mention the need for deeper and wider reform in pedagogy and other aspects of the curriculum. Lack of deep ownership is not just a matter of commitment. Without engagement you don't get the ingenuity and creativity of practitioners that is necessary for developing new and better solutions.

To move beyond plateaus requires what Heifetz and Linsky call tackling "adaptive challenges" rather than "technical solutions". The key difference between the two is that knowledge required for addressing technical problems is currently available (it may still be difficult to implement, but much is known in relation to the problem), while adaptive challenges go beyond our current capacity or current way of operating. The main properties of adaptive challenges include:

- the challenge consists of a gap between aspiration and reality, demanding a response beyond our current repertoire

- adaptive work to narrow the gap requires difficult learning

- the people with the problem are the problem, and they are the solution

- adaptive work generates disequilibrium and avoidance

- adaptive work takes time

(Heifetz & Linsky, 2002)

These new challenges represent a golden opportunity to rethink how we approach reform drawing on the do's and don'ts lessons of the past. For example, on the one hand we know that even the most sophisticated centrally-driven reform – what has come to be called "informed prescription" – can only take us part way

toward the solution; on the other hand, even highly supported decentralized strategies which seek "a thousand flowers to bloom" do not take us very far (not enough flowers bloom; good flowers do not get around or amount to critical mass breakthroughs).

The solution we need must meet two main criteria:

- it must mobilise the ingenuity and creative resources of a critical mass of the whole system

- it must foster a "we-we" or collective commitment and identity with the system as a whole, and its transformation

Thus, the world of ideas and intellectual power must marry the world of moral purpose and collective identity. Put another way, our approach to reform must make the extraordinary (i.e. meeting adaptive challenges) do-able. By working together differently the goal is to produce quality ideas and practices on an ongoing basis, and to inspire collective effort to the extent that it becomes possible to achieve breakthroughs never before experienced. The best system produces a culture in which it becomes easier to accomplish more by moving beyond dependence on the heroic or martyr-like efforts of a few (which in any case does not produce sustainable reform).

As we attempt to move beyond plateaus it will be easy to get the strategy wrong. We are not talking about *replacing* "informed prescription" with "informed professionalism". We are not moving

from command and control to letting "a thousand networks" bloom. Instead, the goal is to create a new blended system in which local and central levels are interactively influential both within and across levels. It is crucial that plateau piercing not be seen as requiring different strategies. The idea is to keep what is working and to develop powerful additional ideas for achieving new breakthroughs.

It is clear that we have to unleash, develop, and cultivate the intellectual and moral resources and commitment of those at local and community levels across the system. We have to, in James Surowiecki's phrase, access "the wisdom of crowds". Surowiecki suggests four key conditions for collective wisdom to function well:

1. the members need to feel *independent* of one another – where people's opinions are not determined by those around them

2. the members need to be *diverse* enough to represent the range of backgrounds, needs, and interests of the group

3. they need to be sufficiently *decentralized,* whereby people are able to specialize and draw on local knowledge

4. there has to be some means, either formal or informal, of *aggregation* or turning independent judgments or information into collective decisions

As I will argue later, we need first to sort out quality ideas, and then to incorporate them into collective action. It is not so much that we have to put blind trust in the wisdom of crowds, but rather we have to create the conditions under which local wisdom can be amassed and mined. In this respect, the role of the centre is to set up the conditions for cultivating and sorting the wisdom of the system. And it must do this in the face of expectations from the public for transparent accountability, including monitoring and reporting on ongoing achievement.

Let us be clear (and this may not be as obvious as it seems), that if the goal is to move beyond the standards plateau we still have to *focus on the plateau problem* (indeed, focus on it more intensely than ever with more parts of the system involved in addressing it). This is Michael Barber's argument; "if we want to get off our present plateau we have to apply the lessons more deeply rather than abandon them". Whether one agrees with Barber's more particular lessons (assert moral purpose; restate the priority; build capacity to deliver the next step change; pay attention to alignment; incentivise success), we are after all talking about tackling a particular plateau and going beyond it.

> "The role of the centre is to set up the conditions for cultivating and sorting the wisdom of the system."

The difference is that we are now inviting the system as a whole to engage in this specific adaptive challenge of reaching levels never before achieved. The challenge does not have to be confined to literacy and numeracy, but we had better move literacy and numeracy substantially forward. If informed prescription only brought us to 75%, what policies and strategies are more likely to bring us to 90%? I do not mean that we should be narrowly preoccupied with targets and tests, but that the goal should be to engage the ingenuity of those at the local level to help another step change that is simultaneously important to local communities and the system as a whole.

Homer-Dixon argues in *The Ingenuity Gap* that "the complexity, unpredictability, and pace of events in our world…are soaring", and that "if our societies are to manage their affairs and improve well-being they will need more ingenuity, that is, more ideas for solving their technical and social problems". As a result, he says, we face an "ingenuity gap" – "a shortfall between [the] rapidly rising need for ingenuity and [its] inadequate supply".

The beyond plateau problem is an ingenuity gap problem. To address it, we need to be able to mobilize, draw on, and reconcile the power, resources and action of the centre on the one side, with the ideas, wisdom, and engagement of the field on the other side. We need a system that mitigates the weaknesses of both central authority and local autonomy as it builds on their combined strengths.

> "To change organisations and systems will require leaders to get experience in linking to other parts of the system. These leaders in turn must help develop other leaders with similar characteristics."

In my own view, the breakthrough we are seeking is best captured by the concept of "Systems Thinkers in Action" or what could be called 'the new theoreticians'. The rest of this booklet elaborates on this powerful concept, which can be defined as the presence and proliferation of practitioner leaders at all levels of the system who experience and base their thoughts and actions on larger parts of the system as a whole, thereby producing other leaders who think and act accordingly. We pursue this definition in the following two sections: What is Systems Thinking in Action? And, How do we get more of it?

What is systems thinking in action?

Peter Senge popularized the concept of systems thinking as "the fifth discipline". The first four disciplines were: personal mastery, mental models, shared vision and team learning. Senge claimed that systems thinking integrated the other four disciplines. He states:

Systems thinking is a conceptual framework, a body of knowledge and tools that have been developed over the past fifty years, to make full patterns clearer, and *to help us see how to change them effectively.* (my emphasis)

And again:

At the heart of a learning organization is a shift of mind—from seeing ourselves as separate from the world to connected to the world, from seeing problems as caused by something "out there" to seeing how our own actions create the problems we experience. A learning organization is a place where people are continually discovering how they create their reality and *how they can change it.* (my emphasis)

Senge is theoretically on the right track (especially in the second quote), but, in this context, systems thinking has done virtually nothing to promote the "in action" component. We have made no gains in conceptualizing, let alone promoting, systems thinking on the ground, despite Senge's emphasis on using it to bring about "effective changes". Indeed, I would say that we cannot make advances in systems theory itself unless we learn theory by doing.

Practical systems theory addresses the entire system – what I have called the tri-level reform perspective: school and community, district or local education authority (LEA), and state or national policy. Systems thinkers in action experience and take into account all three levels (no matter at what level they reside) for two reasons: first, because they know that all three levels impact each other, and second, because they are aware that in order to change (transform) the larger system you have to engage it. In other words, they know that context matters, for better or for worse, and that part of their work entails changing context, which you can only do by being active in wider contexts.

A new kind of leadership is necessary for breaking through the status quo. Systemic forces, sometimes called inertia, have the upper hand in preventing system shifts. Therefore, it will take powerful, proactive forces to change the existing system (to change context). This can be done directly and indirectly through systems thinking in action. These new theoreticians are leaders who work intensely in their own schools, or national agencies, and at the same time connect with and participate in the bigger picture. To change organizations and systems will require leaders to get experience in linking to other parts of the system. These leaders in turn must help develop other leaders with similar characteristics.

Two concrete examples demonstrate this idea. First, when directors or superintendents of education transform the culture of the LEA or district so that school heads interact with each other's schools, help shape and reshape district policies, and are exquisitely aware of what the district as a whole is attempting to do – including going beyond plateaus – we see a definable movement in systems thinking in action. Actions must be driven by our two main criteria cited earlier: (i) the focus must be on what David Hargreaves described as "disciplining innovation" – the continuing identification of high leverage best practices and in-depth interaction conducive to transferring best ideas into practice, and (ii) the cultivation of a "we-we" or collective identity (in this case, laterally across schools and vertically between schools and the LEA). One indicator of collective identity is when individual school heads become almost as concerned about the success of other schools as they are about their own school. When this happens greater system knowledge and greater system identity are the twin outcomes.

When best ideas are freely available and cultivated, and when collective identity prospers, we have a change in the very context of the local system. The context or system will change in a way that benefits all schools. And system change is the kind of change that keeps on giving.

A second example concerns the role of Primary Strategy Consultant Leaders within the Primary Leadership Programme now entering its second year. Over 1700 Primary Strategy Consultant Leaders, all heads with successful track records in raising literacy and numeracy, have been trained to engage with, support and challenge other primary schools in their area. Around 7000 schools – over one third of all primary schools – have been involved in the first two years of the

> "One indicator of collective identity is when individual school heads become almost as concerned about the success of other schools as they are about their own school."

programme. Improvements in Key Stage 2 results in English and mathematics indicate that the programme is already having a significant impact, even though it was not designed solely as a short-term intervention strategy. It is a step in the right direction, although a more radical approach might also apply itself across different system levels.

At the present time in England two parallel emphases co-exist: one continues to emphasise standards and attainment results; the other sponsors networks of learning communities. To go beyond the plateau will involve reconciling these two strategies towards greater connectivity and cohesion. The whole must become greater than the sum of its parts. As Levin points out, networks of schools can be engaged in critiquing as well as pursuing national goals, and central policies can be shaped and reshaped through continuous interaction with the field.

The recently introduced Primary Strategy Learning Networks represent another example of potential constructive cohesion, and reconciliation of the two approaches. In the course of the coming eighteen months, 1500 networks of around 6 primary schools are to be supported to establish themselves as engines of improvement. This and similar strategies involve cultivating the development of quality networks working within the parameters of national policy and local needs in order to foster, evaluate and spread high quality practice. This initiative has the potential to join the

intellectual capital of the National Strategy with the social capital of local level collaboration to produce disciplined, purposive and locally owned innovation. If the initiative can be informed throughout by emerging knowledge about how networks function most effectively – which is becoming available from a number of sources, particularly the NCSL – then it may become a powerful assault on the standards plateau.

The rest of this section provides a framework for considering the focus or content of systems thinking as a means for reconciling central and local forces. At the core of this framework is the linkage of systems thinking in action, sustainability and leadership. The kind of system transformation we need is one which establishes the conditions for sustainability (defined as the capacity of a system to engage in the complexities of continuous improvement consistent with deep values of moral purpose), and the key driver that can get us there is a new form of leadership which works on this agenda. What needs to be sustainable is not particular practices but rather the capacity and process of continuous problem solving and improvement. This is not simply linear improvement. One can expect to encounter plateaus along the way, but ingenuity represents the capacity to dig deeper in order to break through each one.

The agenda involves eight elements of sustainability which leaders at all levels must address to enact systems thinking in action.

1. Public service with a moral purpose

Moral purpose must transcend the individual to become a quality of organisations and the system itself. Both need to be committed to pursuing moral purpose in all their core activities. I define moral purpose in four ways:

- commitment to raising the bar and closing the gap of student achievement

- treating people with respect – which is not to say having low expectations

- orientation to improving the environment, including other schools within and beyond the LEA

- engaging in the big picture of national policy and societal goals

2. Commitment to changing context at all levels

Changing whole systems means changing the entire context within which people work. Researchers are fond of observing that "context is everything", usually in reference to why a particular innovation succeeded in one situation but not another. Systems thinkers in action basically say, if context is everything let's change it for the better.

On a small scale, Gladwell has already defined context as key in *The Tipping Point*: "the power of context says that what really matters is the little things". And, if you want to change people's behaviour "you need to create a community around them, where these new beliefs could be practiced, expressed and nurtured".

> "Lateral capacity means deliberate strategies where peers learn from each other – across schools, across LEAs, and so on."

Systems thinkers in action create opportunities for people to interact beyond their own situation in order to change the climate or context for getting things done.

3. Lateral capacity building through networks

Lateral capacity means deliberate strategies where peers learn from each other – across schools, across LEAs, and so on. Networks are not ends in themselves and must be assessed in terms of their impact on changing the cultures of schools, LEAs and the system as a whole. David Hargreaves has made the case for lateral learning and the conditions in which it flourishes. These include:

- sufficient opportunity for ongoing purposeful exchange

- a limited focus which can be pursued in depth in order to identify specific, high-yield best practices

- mechanisms for transferring and implementing best ideas

- developing and mobilizing leadership in many quarters

- motivation and ownership at the local level is deepened – a key ingredient for sustainability of effort

• the focus of innovations must take into account or otherwise link to the LEA and national system of priorities

Lateral capacity building is not about loose, diffuse networks. Exploration and development of new practice is evidence based, focused and results in the accumulation of leading practices permeating the system.

The Leading Edge Partnership programme seeks to model this approach. It is increasingly focused on the development of partnerships that characterise the Hargreaves model. The programme seeks to identify, extend and share innovation and excellence in ways that contribute to system-wide improvement.

4. New vertical co-dependent relationship

We know that problems have to be solved locally. Solutions rely, at least in part, on users/learners themselves and their capacity to take responsibility for positive outcomes. The question is what is going to motivate people to seek positive outcomes, and how are people and groups to be held accountable? The answer is a mixture of "disciplined" collaborative networks on the one hand, and what David Miliband calls "intelligent accountability" on the other. Networks do build in a strong, but not complete, measure of accountability. As such communities interact around given problems, they generate better practices, shared commitment and accountability to peers and other constituencies.

There will always be a tension between local and vertical authority. Systems thinking means that both parties are empowered and move toward mutual influence. In systems thinking, those at both local level and at the centre take into account each other's world, i.e. their world-view enlarges. Recall Senge's phrase –"a shift in mind from seeing ourselves as separate from the world to connected to the world" – in fact, as part and parcel of the world. Both groups redefine their world to include the other as part of the same system. Connectivity and cohesion are constantly cultivated, while recognising that the interests of local and central entities are in dynamic tension. The idea is to find complementary synergy while appreciating differences.

The recent reintroduction of school and LEA-based self-evaluation strategies represents an extremely valuable potential tool for traversing the two worlds with a single mechanism. Good self-evaluation focuses on local development while explicitly addressing LEA and national priorities, standards and performance. There is still a tension, but a productive one, in redefining the system as including local, regional and national realities.

> "There will always be a tension between local and vertical authority. Systems thinking means that both parties are empowered and move toward mutual influence."

5. Deep learning

Sustainability requires continuous improvement, adaptation and collective problem solving in the face of complex challenges that keep arising. Going beyond the standards plateau by definition requires deeper solutions. These solutions are of two types. The first concerns teaching and learning and related pedagogy; we need disciplined innovation which zeros in on those innovations which engage otherwise disengaged learners.

The second concerns changes in the culture of learning organisations. In a word, we need to create *cultures* of systems thinking in action. Clearly, deep pedagogy and deep learning cultures feed on each other. The reason we have not gone beyond plateaus is that we have not yet fostered and harnessed the creativity, commitment and access to leading practices across the system.

6. Dual commitment to short-term and long-term results

Short-term progress can be accomplished at the expense of the mid-to-long term, but this need not necessarily be the case. LEAs and schools can set targets and take action to obtain early results, intervene in situations of poor performance all the while seeking deeper change which could pay off down the road. Over time, the system gets stronger and fewer severe problems occur as they are pre-empted by corrective action sooner rather than later. The shorter-term results are necessary to build trust with the public for continuous investment.

The matter of results raises the question of what kinds of outcomes we are talking about. Here the concept of 'personalised learning' is critical. David Miliband states that personalised learning involves "decisive progress in educational standards where every child matters". The paradox is that personalised learning requires system cohesion. To meet the needs of every child, says Miliband, will require "a new relationship between the Department, LEAs and schools that brings a sharper focus to our work".

Toyota's foundation principle is: "Base your management decisions on a long-term philosophy, even at the expense of short-term financial goals". The long-term philosophy at Toyota is comparable to our moral purpose: "Toyota's strong sense of mission and commitment to its employees, the customer and society is the foundation for all the other principles". When it comes to moral purpose concerning short and long-term goals, only a win-win relationship will do – one that gets short-term results, while simultaneously paving the way for long-term development.

Systems thinking in action runs the risk of being interpreted as a call for abstract, diffuse action. Let us remember that the goal is to use applied systems thinking in the service of providing sustained, coordinated effort in order to go beyond specific existing plateaus. Part and parcel of systems thinking in action is focus, cohesion, evidence-based best practice, assessment and accountability. Above all, it means greater connectivity within and among levels of the system because cohesion involves bringing diverse elements together amid common principles and habits. It is less a matter of alignment, and more a matter of permeable connectivity.

7. Cyclical energizing

Sustainability does not mean linear, upward success. It is cyclical for two reasons. One has to do with energy and the other with periodic plateaus where additional time and ingenuity are required for the next adaptive breakthrough. Primary literacy and numeracy results plateaued because the set of strategies that brought initial success could not be maintained, and were not powerful enough to take us to higher levels.

To go beyond plateaus we need further innovative work to investigate, learn, experiment, and develop better solutions. Systems thinkers in action actually create the intellectual (ideas) and moral (purpose and social commitment) conditions that increase motivation without sapping energy. Put another way, because the ideas are better, and because people are

committed to each other, more can get done with less effort. The new theoreticians in action keep an eye on energy levels (overuse and underuse) and build the kind of cultures that are sensitive to overload and to energizing conditions. Energy, not time, is the key to sustainability.

8. The long lever of leadership

If a system is to be transformed, leadership at all levels must be the primary engine. The main work of leaders is to help put in place all eight elements of sustainability including this one – fostering leadership in others. To do this we need a system laced with leaders who are trained to think in bigger terms and to act in ways that affect larger parts of the system. One of the marks of systems thinkers in action is not just their impact on the bottom line of student achievement, but also equally how many good leaders they develop who represent a critical mass for going further. By definition, good system leaders directly spawn and develop other system leaders.

Having laid out the framework, there are at least two implications for those in the education system—one is for all leaders; and the other for leaders who are prepared to take direct responsibilities for improving the system. Relative to the former, the general argument is that all school leaders, for example, should redefine their existence as being part of the larger system. Again this is Senge's "not seeing ourselves as separate from the world". In practical terms it means that every leader should commit

in principle to sharing school knowledge with other schools, and to learning from other schools. This also includes seeking experiences for themselves and others that take them outside their own settings.

The other role involves explicit assignments to promote system improvement. There are currently a number of roles of this type in England in which NCSL, DfES, and others have invested.

Clearly the idea is that these two forces – every leader, and leaders with system responsibilities – should feed on each other and create greater system awareness and engagement. When this happens on a large scale, not only does the system transform (context changes), but it keeps on transforming by definition because individuals, groups and the system become more indivisible as they are truly interacting as a system.

Philosophical? Yes, but also practical because innovative ideas that solve deeper problems, and collective motivation that takes us beyond previous plateaus, are the litmus tests of highly engaged systems.

How do we get more systems thinkers in action?

If we acknowledge that the educational problems we need to address in the 21st century require the intellectual ingenuity, shared moral purpose, and engaged energy of large swaths of the system, systems thinkers in action provide the

philosophical and practical means of realising these synergistic forces.

We are left with the chicken and egg problem. If we need systems thinkers in order to develop other systems thinkers (in order to transform the system), but don't have enough of them in the short run to make a difference, how do we go about getting more of them?

I won't take the time to analyse all the obstacles in the way – we can immediately imagine several: policies that rely wholly on competition, inadequate preparation prior to and in leadership posts, overload, lack of time, punitive accountability schemes, and so on. We need to acknowledge why present leadership development and appointment procedures are inadequate, and, correspondingly, focus on how we might deliberately go about developing systems thinkers in action.

It will come as no surprise to hear that the only way to do it is to base it on the "in action" part, but first we can consider what will not work, or at least is not sufficient. For example, we are not talking about "letting a thousand networks bloom". We need networks and exchanges that meet the systems thinking in action criteria discussed earlier, and that do not dissipate energy by overcommitting leaders to multiple networks simultaneously.

What will also not be sufficient is to build in systems thinking into leadership qualifications frameworks. This should be done, but it is not the main point. Qualifications frameworks are insufficient because they suffer from "the

individualistic bias", that is to say that individuals as individuals meet the qualifications (even if some of the experiences are team based) detached from their home contexts. The danger is best captured in the admonition "never send a changed individual back into an unchanged environment".

What we need are cultures which are established on the premise that current and future leaders learn in context. When you learn in context two things happen. One is that, by definition, the learning is specific to the contexts which you are experiencing. The other is that because you are learning in context you are doing so with others. Thus, shared ideas and commitment are simultaneously being cultivated. Pfeffer and Sutton make a similar point when they propose embedding "more of the process of acquiring new knowledge in the actual doing of these tasks and less in formal training programmes that are frequently ineffective". Nothing beats learning in context.

To the charge that learning in context means you are only learning about the status quo, we should note that the very premise of systems thinking is that you continually expand the contexts which you experience and learn from as you seek solutions to complex adaptive challenges. Learning in wider contexts leads to changing these very contexts as one interacts with others to develop new solutions.

> "What we need are cultures which are established on the premise that current and future leaders learn in context."

The goal of developing systems thinkers in action leads us to a radically different approach to leadership development and selection. School systems have terrible or non-existent leadership succession plans, often including the over reliance on charismatic or highly visible leaders to bring about what turns out to be episodic change. What is needed instead is the selection of leaders who have a track record and commitment to developing other leaders on the job through expanding their learning contexts.

Henry Mintzberg's devastating critique of existing MBA programmes launches a similar claim. He argues forcefully that MBA programmes develop the wrong people in the wrong way with corrupting consequences for "the education process", "management practices", "organizational functioning" and "social institutions".

Mintzberg's conclusions corroborate the argument we have been pursuing. He observes that "successful management is not about one's own success but about fostering success in others". And, we need "programs designed to educate practicing managers in context; (such leadership) has to be learned, not just by doing it but by being able to gain conceptual insight while doing it".

The goal, says Mintzberg, is not just to develop better leaders, but also to develop the organisation and to improve the larger system (shades of the tri-level model). We need, according to Mintzberg, "management development to promote organization development to attain social development". Add to this Mintzberg's

emphasis on the need to develop "a worldly mindset" where one's own mindset gets enlarged through other people's worlds, and you have a resounding endorsement of systems thinkers in action. Such leaders change context by immersing themselves and others in those very contexts.

There are three implications for the direction of policy and practice. First, I have already outlined the consequences

for leadership training and development. Leadership development should not just be about qualifications frameworks or about diffuse experiences in networks. We need deliberate, focused learning in context around significant problems – led by systems thinkers in action who model and mentor job-embedded learning in expanded contexts.

Although it focuses on one company, Liker's analysis of what makes Toyota consistently successful over time reinforces many of the points made by Mintzberg and elsewhere in this pamphlet. We have already seen the first foundation principle that underpins all other 13 management principles at Toyota. Several other Toyota principles are consistent with our analysis:

- build a culture of stopping to fix problems, to get quality right the first time

- grow leaders who thoroughly understand the work, live the philosophy and teach it to others

- respect your network of partners and suppliers by challenging them and helping them improve

- go and see for yourself to thoroughly understand the situation

- become a learning organisation through relentless reflection and continuous improvement

The point is not to endorse Toyota's culture per se but rather to appreciate the points of resonance with an increasingly clear picture of what is wrong with leadership and system development in education, and why and how it should be rethought and redone. In short, we have the philosophical, conceptual and design elements necessary to build a radically new approach to system transformation through the development of systems thinkers in action.

Second, every policy or strategic initiative should be informed by how it will further connectivity of local and central ideas. Primary Strategy Learning Networks, mentioned earlier, is a case in point.

Third, there are implications for new forms of accountability. A combination of local self–review and external assessment will be required. This is a difficult but potentially high yield strategy which links assessment for (organisational) learning with transparent accountability. Moves in this direction are underway in England and this is encouraging. In addition, however, if we value and promote the assumption of broader responsibility by systems thinkers in action, then the accountability framework should reflect this. For example, schools in a given locality should take responsibility for the performance of all the students in their area as well as for their individual institutions.

It's going to be hard

It is going to be hard on every level. The new system will not be as politically simple as the present one. It is always easier for politicians to endorse ad hoc solutions than systemic ones which are more complex, difficult and take more time. It will be hard on the ground because it is extremely difficult to change cultures. Regressive actions are easier and more tempting than progressive actions which require ongoing engagement of others.

On the positive side, the moral and intellectual appeal of going beyond plateaus has an enormous push and

> "Intellectual ingenuity and new levels of collective commitment will be the core drivers to achieve system transformation."

pull combination in its favour – the push because we know that current strategies are no longer adequate for moving forward; the pull because we can see and sense the potential power and excitement of new learnings and accomplishments never before achieved.

In line with the basic premise of this pamphlet, I would argue we need to get going by doing it – through purposeful examples of new learnings in expanded contexts. Of all the things we need to keep in the forefront of our thinking, two stand out for me. One is the merging of individual, organisational and societal development in the same action. Every new leader needs to be cognizant that her or his actions should always be judged in terms of how they serve or contribute to all three purposes, usually in a mutually inclusive, synergistic manner.

The second key for developing more leadership is not so much for leaders to become more global minded, but rather more worldly. To learn in expanded contexts is to become more worldly knowledgeable about other people's experiences, ideas and purposes. The idea is to reinvent the future by locating, expanding, and creating from what we have in the world in the present. Intellectual ingenuity and new levels of collective commitment will be the core drivers to achieve system transformation.

The basic message of this pamphlet is that rigid boundaries at all levels should give way to partnerships (horizontally and vertically) which pursue the principles and assumptions of taking collective responsibility for achieving new levels of performance. It takes system change to go beyond plateaus.

Join the debate

Moving beyond the standards plateau is a critical issue which will require the engagement of the system as a whole. You can enter into the debate about how this can be achieved and tell us what you think as part of the Innovation Community at **www.standards.dfes.gov.uk/innovation-unit**.

Michael Fullan will also be responding personally to comments when he attends the online talk2learn 'hotseat' for a fortnight shortly after the publication of Systems Thinkers in Action. We will then publish your comments, suggestions and ideas.

DfES Innovation Unit

The DfES Innovation Unit acts as a creative catalyst for change in the school sector. We do this by forming an arena between policy-makers and practitioners so that all parties can work together to develop innovative responses to the learning-related challenges that face the education system. Where appropriate, we also work with other organisations.

We are a small team of Innovation Directors. We have all been teachers and then either become headteachers or worked in LEAs at a senior level. Some of us have also previously worked in Universities, the DfES, the GTC and the BBC, and one of us is returning to the DfES. We're supported by a small civil service team.

Our vision is one in which professionals from all areas of education share successful developments in an accountable system where disciplined, informed innovation is the norm.

We aim to help every part of the system be confident in its ability to do this so innovation that genuinely improves teaching, raises standards and makes learning personal and powerful for every student flourishes. We see innovation as a key route to excellence and equity.

The Unit provides strategic direction to existing system-wide programmes, and to ideas in development. It seeks out and supports projects from practitioners or elsewhere that have the potential to provide strategic intelligence or widespread practical benefit for the system. It provides opportunities for practitioners, policy-makers and other interested parties to share and develop their insights in open-source settings.

One of the Unit's activities is to manage a piece of legislation called The Power to Innovate. This is the provision whereby the Secretary of State can exempt schools, LEAs and Education Action Zones wishing to test new ideas for raising standards in education from any education legislation that is preventing them putting their ideas into practice.

Log onto our website to find out more about the Power to Innovate, our publications and materials, and the new themes we are exploring. We'd also like to extend a warm invitation to all teachers and headteachers to join our very lively online Innovation Community. You can do this via our website. We look forward to hearing from you.

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National College for School Leadership (NCSL)

NCSL was formed in 2000 to provide a single national focus for school leadership development. In collaboration with Demos, the Innovation Unit, OECD, Hay Group and many others, it encourages national and international debate on leadership issues.

Through its website, online communities and research publications, NCSL acts as a primary resource for school leaders. It also provides support through its leadership development programmes, ranging from opportunities for bursars to headteachers to leadership teams.

Working directly with schools, NCSL is leading on workforce remodelling, the national primary strategy and increased collaboration and networking among schools.

The cumulative goal of all these activities is to have every child in a well-led school, and every school leader committed to continuous learning.

www.ncsl.org.uk

References

Barber M (2004)
Plateaus and How to Get off Them
Speech to the Chief Education
Officer's Conference

Department for Education and Skills (2004)
Primary Network and Leading Practice
DfES

Fullan M (2003a)
Change Forces with a Vengeance
RoutledgeFalmer

Fullan M (2003b)
*The Moral Imperative of School
Leadership*
Corwin Press

Fullan M (2005)
*Leadership and Sustainability:
systems thinkers in action*
Corwin Press

Gladwell M (2000)
The Tipping Point
Little, Brown

Hargreaves A & Fink D (in press)
Sustainable Leadership
Jossey-Bass

Hargreaves D (2004)
*Working Laterally: how innovation
networks make an education epidemic*
DfES Innovation Unit

Heitfetz R & Linsky M (2002)
*Leadership on the Line: staying
alive through the dangers of leading*
Harvard Business School Press

Homer-Dixon T (2000)
The Ingenuity Gap
Knopf

Levin B (2004)
*Connecting Central Policy and
Networked Learning Communities*
Paper prepared for DfES/NCSL seminar
on Evaluation of the Networked Learning
Communities Initiative

Miliband D (2000)
*Personalised Learning: building
new relationships with schools*
Speech to the North of England
Education Conference

Liker J (2004)
The Toyota Way
McGraw Hill

Mintzberg H (2004)
Managers not MBAs
Berrett-Koehler

Perkins D (2003)
*King Arthur's Roundtable: how
collaborative conversations create
smart organizations*
Wiley

Pfeffer J & Sutton R (2000)
*The Knowing-Doing Gap: how smart
companies turn knowledge into action*
Harvard Business School Press

Senge P (1990)
The Fifth Discipline
Doubleday

Surowiecki J (2004)
The Wisdom of Crowds
Doubleday