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Change theory
A force for school improvement

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Introduction 3

Section 1: Flawed Change Theories 4

Section 2: Theories of Action with Merit 8

Section 3: Prospects for future use of change knowledge 13

References 14

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Introduction

Change theory or change knowledge can be very powerful in informing education reform strategies and, in turn, getting results – but only in the hands (and minds, and hearts) of people who have a deep knowledge of the dynamics of how the factors in question operate to get particular results. Ever since Chris Argyris made the distinction between 'espoused theories' and 'theories in use', we have been alert to the problem of identifying what strategies are actually in use (see Argyris, 2000, although he made this distinction much earlier).

> Having a 'theory in use' is not good enough, of itself. The people involved must also push to the next level, to make their theory of action explicit

In this paper I want to take this question a step further and ask what 'theories of action' really get results in education reform. I also want to ask why, once identified, such 'successful' theories are not embraced more widely? Having a 'theory in use' is not good enough, of itself. The people involved must also push to the next level, to make their theory of action explicit, as it relates to the specific assumptions and linkages that connect the strategy to the desired outcomes.

This paper is organised in three sections.

- Let me start by saying what I will not be doing in the paper. I will not focus on change theories that are obviously inadequate. What I will be doing is focus on a number of change theories that look on the surface to have great merit but which, upon closer inspection, are seriously flawed and found wanting. I will be suggesting it is not that the strategies in question are wrong, but that it is more about them being incomplete, relative to what is needed for reform to work.
- Second, I will consider what theories of action appear to have more merit (ie, theories that are getting results) and discuss why that is the case.
- In the final section, I explore the prospects for using change knowledge more fully in the future. I also identify some barriers that may stand in the way of moving to a deeper set of strategies.

Section 1: Flawed Change Theories

Let us take three current examples, all of which appear strong, and all of which are based on what their proponents would consider state-of-the-art change knowledge. These are

- standards-based district-wide reform initiatives;
- professional learning communities; and
- 'qualifications' frameworks that focus on the development and retention of quality leaders.

> If teachers are going to help students to develop the skills and competencies of knowledge-creation, teachers need experience themselves in building professional knowledge.

Standards-based district-wide reform initiatives

Taking an example from the North American context, let's say a district receives a large grant from a foundation, to improve literacy and mathematics across all 150 or so schools in the district. Their change theory leads district leaders to include the following components in the strategy:

- identification of world class standards in literacy and mathematics;
- a system of assessments mapped on to the standards;
- development of curriculum based on the standards and assessments; and
- a serious investment in ongoing professional development, for school leaders and teachers.
- What is wrong with this theory of action? First, what is the theory? It assumes that, by aligning key components and driving them forward with lots of pressure and support, good things will happen, on a large scale. What is missing from the strategy is any notion about *school or district culture*. If theories of action do not include the harder questions – 'Under what conditions will continuous improvement happen?' and, correspondingly, 'How do we change cultures?' – they are bound to fail.

Richard Elmore (2004) whom we will visit later in the paper, emphasises that educators must learn to do new things in 'the setting in which they work'. Standards-based reform by itself does not address changing the setting in which people work.

To illustrate further, we can take the heavily funded and supported reform initiatives in Chicago, Milwaukee and Seattle, as described in the detailed case studies from the Cross City Campaign for Urban School Reform (2005). All three school systems had the attention of political leaders at all levels of the system, focused on many of the 'right things,' such as literacy and mathematics. In addition, all of the systems used obvious choice strategies, including concentration on 'assessment for learning' data, invested heavily in professional development, developed new leadership, and focused on system wide change.

And they had money – Seattle had $35 million in external funds, Milwaukee had extra resources and flexibility, and Chicago had multimillions. There was huge pressure, but success was not expected overnight. Decision makers and the public would have been content to see growing success over a five-year or even ten-year period. The upfront conclusion of the case study evaluators was as follows.

> ... the unfortunate reality for the many principals and teachers we interviewed is that the districts were unable to change and improve practice on a large scale. (Cross City Campaign, 2005, p 4)

The issues in the Chicago, Milwaukee, and Seattle reforms help to identify the missing ingredient, even though they appear to get most components right. Chicago, for example, appeared to have an impressive

strategy, including:

- academic standards and instructional frameworks;
- assessment and accountability systems; and
- professional development for standards-based instruction

... among the tools of systemic reform that are used to change classroom instruction (Cross City Campaign, 2005, p 23).

So, here is a 'standards-based' system-wide reform that sounds like it should work. The failure, I think, is that the strategy lacks a focus on what needs to change in instructional practice and, equally important, what it will take to bring about these changes in classrooms across the districts.

The Cross City Campaign documentation (2005, p 23) reports that in Chicago, teachers did focus on standards and coverage but that, in interviews, they 'did not articulate any deep changes in teaching practice that may have been under way'. Furthermore, instructional goals were more often articulated in terms of student outcomes or achievement levels rather than in terms of instructional quality, that is, *what the schools do* to help students achieve (p 29, italics in original).

Milwaukee reveals similar problems in achieving instructional improvements while using greater decentralisation in the context of system support and competitive choice. The focus in this case was on literacy. A literacy coach was housed in every school in the district and considerable professional development and technical support services were available. Education plans for each school were to focus on literacy standards through:

1. data analysis and assessment; and
2. subject-area achievement targets, including literacy across the curriculum.

As was the case in Chicago, this sounds like a convincing strategy. However, what is missing again is the black box of instructional practice in the classroom. The case writers observe that

> ... we placed the Education Plan in the indirect category due to its non-specificity regarding regular or desired instructional content and practices. (Cross City Campaign, 2005, p49)

More generally, the report concludes that while these serious district-wide reform initiatives 'appeared' to prioritise instruction, they did so indirectly (through standards, assessment, leadership responsibilities). In the experience of principals and teachers, the net effect was that 'policies and signals were non-specific regarding intended effects on classroom teaching and learning' (p 65).

The third case I want to look at here is Seattle, which provides a variation on the same theme. Again, the game plan looks good. Standards defined the direction, while the district's Transformational Academic Achievement Planning Process

... was designed as a vehicle for helping schools develop their own strategy for (1) helping all students meet standards, and (2) eliminating the achievement gap between white students and students of color (p 66).

Like Milwaukee, the district reorganised to support site-based management, including the allocation of considerable resources to schools. The case writers observe the following.

> The recent effort to become a standards-based district was one of the first sustained instructional efforts with direct attention to teaching and learning. However, the conversations district leaders had about standards *were rarely connected to changes in instruction.* (Cross City Campaign, 2005, p 69, my italics)

The report continues as follows.

> At the school level, finding teachers who understood the implications of standards for their teaching was difficult (p 72).

Let me re-emphasise what I said in the introduction. I am not saying that standards, assessment, curriculum, and professional development are wrong things to do. I am saying that they are seriously incomplete theories of

action because they do not get close to what happens in classrooms and school cultures. The latter is not easy to alter and this is indeed why people have failed to tackle it. It is easier to go to the formal definable elements which, although they are not 'quick fixes' (Chicago et al would have been thrilled to see success after five years) are comparatively easier to define and manipulate.

Professional learning communities

A second example of change theories that appear to be on the right track concerns the proliferation of 'professional learning communities' (PLCs). In critiquing PLCs I will end up with a warning – that we don't throw out the baby with the bath water – but, in the short run, I will say that because the theory of action underpinning PLCs is not deeply enough specified by those adopting PLCs, they will again fall short of getting results.

> I am not saying that standards, assessment, curriculum, and professional development are wrong things to do. I am saying that they are seriously incomplete theories of action because they do not get close to what happens in classrooms and school cultures.

PLCs involve developing communities of learners in which teachers and school leaders work together to improve the learning conditions and results of students in given schools. The Dufours et al (2006) represent the most advanced example of the PLC framework, which consists of six components:

- a focus on learning;
- a collaborative culture stressing learning for all;
- collective inquiry into best practice;
- an action orientation (learning by doing);
- a commitment to continuous improvement; and
- a focus on results.

Here the theory of change is quite good. It does focus on the school, and involves the right components. But look what happens on the way to the theory of action. There are three reasons to be worried about the spread of PLCs.

1. The term travels faster and better than the concept. Thus we have many examples of superficial PLCs – people calling what they are doing 'professional learning communities' without going very deep into learning, and without realising that they are not going deep. This is a kind of 'you-don't-know-what-you-don't-know' phenomenon. So, problem one is the danger and likelihood of superficiality.
2. People make the mistake of treating PLCs as the latest innovation. Of course, in a technical sense it is an innovation to the people first using it, but the moment you treat it as a program innovation, you run two risks. One is that people will see it as one innovation among many – perhaps the flavor of the year – which means it can be discarded easily once the going gets rough, and that other innovations come along next year. The other risk is that once you see it as an innovation 'to be implemented' you proceed in a fashion that fails to appreciate its deeper, more permanent meaning. Professional learning communities are in fact about establishing new collaborative cultures. Collaborative cultures, ones that focus on building the capacity for continuous improvement, are meant to be a new way of working and learning. They are meant, so to speak, to be enduring capacities, not just another program innovation.
3. Also, PLCs can be miscast as changing the cultures of *individual* schools, rather than their deeper meaning that PLCs need to be part and parcel of creating new multiple-school *district cultures*. I know of more than one superintendent who is saddened by the fact that this or that school has a wonderful internal PLC but eschews working with other schools. The work of transforming schools means we are talking about all or most schools, and this means that it is a

system change. For system change to occur on a larger scale we need schools learning from each other and districts learning from each other. My colleagues and I call this 'lateral capacity building 'and see it as absolutely crucial for system reform (Fullan, Hill and Crevola, 2006; Fullan, 2006). Put another way, individual, isolated PLC schools are 'verboten' in any deep scheme of reform – and PLC as an innovation can easily slip into this trap. The third problem then is how PLCs can unwittingly represent tunnel vision, reinforcing the notion of the school as an autonomous unit, not as part and parcel of a wider system change.

I am not concluding that PLCs are bad to do. I am, in effect, arguing that we must use our change knowledge in order to identify weak elements in the approach, and so that we can keep our eye on the more basic purpose to which PLCs are presumably a solution. The basic purpose, in my view, is to change the culture of school systems, not to produce a series of atomistic schools – however collaborative they might be internally (not to mention the fact that many PLCs, as I have said, do not result in within-school cultural change either).

Without a deeper concern for transforming school cultures on a large scale, the three problems just described – superficiality, PLC as a program innovation, and focus on individual schools – can easily marginalise the value of PLCs as part of the movement to transform school system cultures.

'Qualifications' frameworks that focus on the development and retention of quality leaders

The third popular theory of change currently in vogue involves establishing incentives and various standards and qualifications requirements (along with corresponding professional development), to attract and retain people to the teaching profession, and to leadership positions.

The theory here is that if we can get the best possible people in the classroom and in the principalship we can change the system for the better. A good recent example is the final report of The Teaching Commission (2006). This high-profile group made recommendations in four main areas, which were to do with

- transforming teacher compensation;
- reinventing teacher preparation;
- overhauling licensing and certification; and
- strengthening leadership and support.

The report contains good recommendations, as well as a number of concrete examples from around the US of quality initiatives that address the ideas in the report.

Similarly, large urban districts, having recognised the key role of principals, have established their own leadership academies, in partnership with universities or other agencies, to provide job-embedded leadership development. For example, the Education Leadership Development Academy in San Diego prepares aspiring principals for positions in the district, and pairs novice principals with mentor principals who serve as ongoing coaches (see Hubbard et al, 2006). New York has just established a Leadership Academy to cultivate and place aspiring principals, who are carefully prepared for the realities of being a school leader amidst the reform aspirations of the district. In all these cases the goal is to develop school leaders who can focus on instruction, coach others and generally lead the transformation of schools into continuous improvement.

These initiatives obviously can do some good but our change theory of action tells us that they have one fatal flaw. They base all the possibilities on producing more and better *individuals* as the route to changing the system. This individualistic bias is understandable – let's get a high quality principal in every school – but nonetheless incomplete. This strategy can at best in my estimation contribute about 30 per cent of the solution. The other 70 per cent depends on the culture or conditions under which people work. Thus, our theory of action informs us that any strategy of change must *simultaneously* focus on changing individuals and the culture or system within which they work.

In effect, what I have done in this section is to use my theory of action, at least implicitly, in order to critique existing seemingly state-of-the-art, large-scale improvement strategies. I contend that as leaders hone their theory of action it will become more easily evident what represents good, bad and incomplete theories. In the next section I make more explicit our own theories of action that inform our current strategies of reform.

As leaders hone their theory of action it will become more easily evident what represents good, bad and incomplete theories.

Section 2: Theories of Action with Merit

We have been using and refining our change knowledge over the past decade, in particular in order to design strategies that get results. In these cases the change knowledge at work is being used deliberately and in a self-reflective and group-reflective manner. When I say 'we' I mean some academic colleagues and key practitioners, at all levels of the system, who are actively leading the use of change knowledge. I refer to the latter as 'system thinkers in action' (Fullan, 2005). In this section I set out the core underlying premises of our theory of action, and furnish two examples to illustrate how the basic premises translate into concrete strategies and actions.

There are seven core premises that underpin our use of change knowledge. (True to the theory of action itself, it should be noted that the seven premises have been 'discovered' via reflective action especially, over the past decade). The seven premises are

1. a focus on motivation;
2. capacity building, with a focus on results;
3. learning in context;
4. changing context;
5. a bias for reflective action;
6. tri-level engagement;
7. persistence and flexibility in staying the course.

Premise 1: A focus on motivation

If you take any hundred or so books on change, the message all boils down to one word: motivation. If one's theory of action does not motivate people to put in the effort – individually and collectively – that is necessary to get results, improvement is not possible.

Let me make two points.

1. The other six core premises are all about motivation and engagement – ie, they are about accomplishing the first premise.
2. As we shall see, motivation cannot be achieved in the short run. In fact the beginning of all eventual successes is unavoidably bumpy. However, if your strategy does not gain on the motivation question over time (eg, end of year one, year two etc) it will fail.

Certainly moral purpose is a great potential motivator, but by itself won't go anywhere, unless other conditions conspire to mobilise several key aspects of motivation, including

- moral purpose;
- capacity;
- resources;
- peer and leadership support;
- identity and so on.

It is the combination that makes the motivational difference.

Premise 2: Capacity building, with a focus on results

Capacity building, with a focus on results, is crucial. Here is an example of where our theory of action became more refined over time. Around 1995 we coined the phrase that for large-scale reform we need a combination of 'pressure and support'. This was on the right track, but not precise enough. For one thing many policy makers overdosed on the side of pressure. When they did attend to support, it was segmented from pressure and was not

specific enough to have an impact. Now the integrated phrase of 'capacity building, with a focus on results' captures both aspects well.

Capacity building is defined as any strategy that increases the collective effectiveness of a group to raise the bar and close the gap of student learning. For us it involves helping to develop individual and collective

- knowledge and competencies;
- resources; and
- motivation.

These capacities are specifically about getting results (raise the bar, close the gap). Our theory of action says that nothing will count unless people develop new capacities. And, indeed, that new capacities are a route to motivation (as I said, all our premises contribute to increased motivation).

Most theories of change are weak on capacity building and that is one of the key reasons why they fall short. As Elmore (2004) advised, no external accountability scheme can be successful in the absence of internal accountability – in fact, the latter is none other than capacity building with a focus on results.

A key part of the focus on results is what I call the evolution of positive pressure. An emphasis on accountability by itself produces negative pressure: pressure that doesn't motivate and that doesn't get to capacity building. Positive pressure is pressure that does motivate, that is palpably fair and reasonable and does come accompanied by resources for capacity building.

The more one invests in capacity building, the more one has the right to expect greater performance. The more one focuses on results fairly – comparing like schools, using data over multiple years, providing targeted support for improvement – the more that motivational leverage can be used. In our change theory, it is capacity building first and judgement second, because that is what is most motivational.

Premise 3: Learning in context

The third basic premise is that strategies for reform must build in many opportunities for 'learning in context'. In fact, creating cultures where learning in context is endemic is the point. Again Elmore (2004) has pinpointed the issue:

> Improvement is more a function of *learning to do the right things in the settings where you work*' (p 73)
>
> the italics indicating his emphasis for 'learning to do the right things'; mine for 'in the settings where you work'.

Most theories of change are weak on capacity building and that is one of the key reasons why they fall short.

He goes on to say

> The problem [is that] there is almost no opportunity for teachers to engage in continuous and sustained learning about their practice in the settings in which they actually work, observing and being observed by their colleagues in their own classrooms and classrooms of other teachers in other schools confronting similar problems.

He then puts forward the positive implication (it is no accident that he uses the exact phrase – 'theory of action'):

> The theory of action behind [this process of examining practice] might be stated as follows: The development of systematic knowledge about, and related to, large-scale instructional improvement requires a change in the prevailing culture of administration and teaching in schools. Cultures do not change by mandate; they change by the specific displacement of existing norms, structures, and processes by others; the process of cultural change depends fundamentally on modeling the new values and behavior that you expect to displace the existing ones (p 11).

In this way learning in context actually changes the very context itself. Contexts do improve.

Premise 4: Changing context

Fourth, theories of action must also have the capacity to change the larger context. Let me put this both positively and negatively. We assume that the larger infrastructure must change if success is to occur. That is to say that the bigger context in which one works must incorporate the other premises, such as promoting capacity building and being motivating. This leads on to establish 'lateral capacity building' in which schools and districts learn from each other. When this happens two change forces are unleashed, namely,

- knowledge (best ideas flow); and
- motivation (people identify with larger parts of the system).

For example, when principals interact across schools in this way, they become almost as concerned about the success of other schools in their network as their own school. This is an example of changing for the better the larger context within which they work.

Shared vision and ownership is more an outcome of a quality process than it is a precondition. This is important to know because it causes one to act differently in order to create ownership.

The negative aspect of getting at context concerns what we call 'proactively addressing the distractors'. There are many things occurring in the system that favor the status quo by diverting energy to maintenance activities, which are at the expense of devoting resources and attention to continuous improvement. Thus it is necessary to address these issues explicitly. Distractor issues that we have taken up include:

- collective bargaining conflicts and strikes;
- unnecessary bureaucracy; and
- finding efficient ways to address managerial issues.

Premise 5: A bias for reflective action

For the previous four components to move forward in concert, they must be fueled by a bias for reflective action. Here our change knowledge is quite specific, and any leader must know this. There are several aspects to the reflective action premise.

First, shared vision and ownership is more an outcome of a quality process than it is a precondition. This is important to know because it causes one to act differently in order to create ownership.

Second, and related, behaviour changes to a certain extent before beliefs. Again there are do-and-don't change actions that derive from this knowledge, such as our third aspect, which is that the size and prettiness of the planning document is inversely related to the amount and quality of action, and in turn to the impact on student learning (Reeves, 2006). Pfeffer and Sutton (2000) emphasise our action theme in their book about the knowing–doing gap book – for example with the first barrier that they identify: when planning substitutes for action.

We need to dig a bit deeper to understand the theory of action underpinning the bias for reflective action. The reflection part is crucial. This goes back to Dewey, who offered the insight that it is not that we learn by doing but that we learn by *thinking* about what we are doing. It is the purposeful thinking part that counts, not the mere doing. Mintzberg (2004) makes the same point when he says 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' (p 200).

All the current emphasis about evidence-based and evidence-informed leadership is based on this same premise (Pfeffer and Sutton, 2006). People learn best through doing, reflection, inquiry, evidence, more doing and so on.

Premise 6: Tri-level engagement

Sixth, we have concluded that tri-level engagement is essential for system reform.

'Tri-level' here refers to

- school and community;
- district; and
- state.

It is not so much that we must align these levels, which is a static unachievable goal, but rather that we must foster 'permeable connectivity'. This is a bit of a mouthful but basically means pursuing strategies that promote mutual interaction and influence within and across the three levels. If enough leaders across the same system engage in permeable connectivity, they change the system itself (Fullan, 2005).

Premise 7: Persistence and flexibility in staying the course

Lastly, because the above six premises are complex to manage and must be cultivated over time, including bumpy cycles, a strong resolve is necessary to stay the course. It takes what I would call resilience – persistence plus flexibility. Rigid persistence begets push-back in equal or greater measure. Failure to keep going in the face of inevitable barriers achieves nothing. Being flexible, in fact, is built into the action theory. Because the theory is reflective and inquiry-based, and because it is cultivated in the minds and actions of key players operating with a similar theory of action (the seven premises), there is plenty of self-correction and refinement built-in.

In the seven premises of change knowledge I have attempted to capture the underlying thinking of effective change strategies – the theory of action if you like. It is essential to understand this thinking deeply, rather than just knowing the concrete strategies. If you do understand the thinking you spontaneously get the strategies right, and self-correct as you experience them unfolding. If you don't understand the thinking you are more likely to use even the best strategies (such as capacity building) superficially or in a piecemeal fashion.

We can now put some meat on the theory of action by referring to two examples of how they translate into a specific set of strategies in concrete situations (see Fullan, Hill and Crevola, 2006, and Fullan, 2006 for more elaboration on these and other examples). The first example refers to district-wide reform in a large urban district; the second to a state-wide reform.

Example 1: District-wide reform

York Region District School Board just outside Toronto, Ontario is a multicultural district with a growing and diverse population. Over 100 different languages are spoken in the schools. There are 140 elementary schools and 27 secondary schools. We have been working in partnership with York for the past five years, including monitoring the processes and results as we go (see for example Sharratt and Fullan, 2006). The focus is on literacy, in an initiative called the Literacy Collaborative (LC). The basic approach is designed to shape and reshape district-wide continuous improvement – what I called capacity building with a focus on results (see above).

Key features of the approach include

- a clearly articulated vision and commitment to a system of literacy for all students, which is continually the subject of communication in the district;
- a system-wide comprehensive plan and framework for continuous improvement;
- using data to inform instruction and determine resources;
- building administrator and teacher capacity to teach literacy for all students;
- establishing professional learning communities at all levels of the system and beyond the district.

All schools, including all secondary schools, joined the LC in a phased-in fashion, with school-based teams being the focal point for capacity building. At the elementary level, teams consisted of the principal (always the principal), the lead literacy teacher (a leadership role within the school of a teacher released for 0.5 to 1.0 time to work with principals and teachers), and the special education resource teacher.

High school teams were slightly larger and focused on literacy especially in grades 9 and 10. The LC model has evolved to contain 13

parameters, which I will not list here in detail. It includes such components as embedded literacy teachers, timetabled literacy blocks, case management approach that focuses on each student, cross-curricular literacy connections and so on (see Sharratt and Fullan, 2006). There is constant interaction, action research and capacity building through formal monthly sessions, and many 'learning in context' interactions carried out daily by school and district leaders within and across schools.

The results, as measured by province-wide assessments, were significant after a three-year period (2001 to 2004), but not as substantial as district leaders had hoped. On a closer examination of the initial cohort of 17 schools it was found that 9 of the schools had implemented the 13 parameters more deeply, compared to the other 8. When these schools were separated, it showed that the 9 schools, despite starting below the York Region and Ontario provincial average in 2001 had risen above both averages by 2004. In the meantime the district was working with all 167 schools. Province-wide results in 2005 showed that York Region increased by a full 5 per cent on the average in literacy, across its 140 elementary schools. High schools also did well for the first time on the grade 10 literacy test. Reflecting our theory of action the district identified, in 2005, 27 elementary schools and six high schools that were still underperforming and designed an intensive capacity building interaction for the 2005–2006 school year (as they continued to work with all schools).

We can consider the theory of action reflected in the approach in York Region. First, we have many of the elements we have seen previously – standards, assessment of and for learning, instructional leadership etc, but we also see two new significant emphases. One is that the leaders have taken a long-term perspective. They realise that it takes a while for change to kick in. They frequently speak of 'stay the course', 'persistence but flexibility'. The pace is steady, even pushy, but not overwhelming. They expect results, not overnight, but also not open-ended. The other new aspect is that leaders are careful not to judge slow or limited progress in given schools. They take what I called earlier a 'capacity building first, judgment second' stance as they have with the 33 lower-performing schools.

Large-scale change is all about moving the whole system, in which more and more leaders permeate the system, and take daily actions that build capacity and ownership, to put in the effort with colleagues in order to get results.

Example 2: State-wide reform

We have had the opportunity since October, 2003 in Ontario to implement a more fully developed version of using change knowledge to influence an entire state. In this case, starting with literacy and numeracy up to the age of 12 and working with all 72 districts and all 4000 elementary schools that constitute the public school system of the province. We do not have the space here to elaborate the strategy in detail (see Fullan, 2006, Chapter 4). Suffice it to say that the overall strategy is based on the seven premises above, and is pursued by having leaders, at all levels of the system, become more aware of the strategies as a tri-level partnership.

There are eight interlocking strategies that we are putting into place. As I list them briefly here, recall from the earlier discussion that the main measure of an overall strategy is whether it is *motivational,* mobilising a large number of people to put in their energy and otherwise invest in what will be required to reap and sustain major improvements. The key in large-scale reform is whether the strategy can get a large number of leaders (change agents), within and across the three levels, to own the enterprise jointly. There are eight components to the strategy, which are

1. a guiding coalition constantly in communication;
2. peace and stability and other 'distractors';
3. the Literacy and Numeracy Secretariat;
4. negotiating aspirational targets;
5. capacity building in relation to the targets;
6. growing the financial investment;
7. evolving positive pressure;
8. connecting the dots with key complementary components

The seven basic premises that we considered earlier will be recognised across the 8 components. The guiding coalition consists

of leaders at the top who cultivate the use of change knowledge, and thus are

- more likely to be in sync; and
- more likely to make the right decisions at the outset and as they go along.

Peace and stability refers to establishing a four-year set of collective agreements with the teachers unions, which provide a frame of minimising distractors. The Literacy and Numeracy Secretariat is a newly created body of some 80 people who are in the business of capacity building with a focus on results (specific annually adjusted targets and related capacity building vis-à-vis the 72 districts and 4000 schools). Evolving positive pressure consists of using data, and supportive action, for schools and districts doing less well than their statistical peers (comparing apples with apples). Growing financial investment means additional money, which keeps flowing as long as there is an upward trend. Connecting the dots refers to co-ordinating other policy and strategy sets necessary for overall continuing success, such as: early childhood, preservice and continuing teacher education, leadership development, secondary school reform, and so on.

The point of these two concrete examples is to show that the theory of action translates powerfully into specific, inter-related strategy that gets results. It is using change knowledge for school and system improvement. Both York and Ontario are getting improved results following a previous period of flat-lined performance. Change knowledge does matter. Ignore it at your peril.

Section 3: Prospects for future use of change knowledge

The chances for the increased use of change knowledge are mixed, although I perceive an upward trend in the number of leaders gravitating to its use. The inhibiting factors are threefold.

- First, the use of change knowledge does not represent a quick fix, which is what many politicians seek.
- Second, not only is the knowledge difficult to grasp, but many leaders must possess it simultaneously (our guiding coalition) for its use to spread and be consistent. This is a tall order given the turnover in leaders.
- Third, it does represent deep cultural change, which many people resist, tacitly or otherwise. Consider, for example, the de-privatisation of teaching – through observing and improving classroom teaching. This has proved to be one of the most intractable aspects of getting at continuous improvement.

Change knowledge does matter. Ignore it at your peril.

On the positive side, there are three things going for the increased use of change knowledge.

- First, after 50 years of trying everything else, we are still not getting anywhere. More and more policy makers, and the public, know that what is being done does not work. This makes people generally more receptive to alternative strategies, if they can become clear and promising.
- Second, change knowledge and its specific strategic manifestations are indeed becoming more and more clear. How it works and why it works are more evident. And while not a quick fix, it is also not open ended. We are now able to claim that by using this knowledge you should get discernible, valuable results – and within one election period, so to speak.
- Third, and critical, we now have more leaders – what I called 'system thinkers in action' – who are actively using and refining the knowledge. The reason that this is so crucial is built into our seven premises. The change knowledge is not a disembodied set of facts, but rather a deeply applied phenomenon in the minds of people. Moreover for this knowledge to have an impact it must be actively *shared* by many people engaged in using the knowledge.

There are more examples of such shared use

in evidence, and if it continues to spread we may have the breakthrough required for change knowledge to have an enduring place in the field of education reform. As always the route to achieving such a critical mass is not to wait for it to happen but to be among those promoting its use, even if those around us seem disinterested or against it. Large-scale successful reform occurs in a thousand small ways during the journey. Don't go on this journey without being equipped with an active and open-ended grasp of change knowledge.

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References

Argyris, C (2000) *Flawed Advice and the Management Trap*, Oxford University Press, New York.

Cross City Campaign for Urban Reform (2005) *A Delicate Balance: District Policies and Classroom Practice*, Author, Chicago.

Dufour, R, Dufour, R, Eaker, R and Many, T (2006) *Learning by Doing: A Handbook for Professional Learning Communities at Work*, Solution Tree, Bloomington, Indiana.

Elmore, R F (2004) *School Reform from the Inside Out: Policy, Practice, and Performance*, Harvard University Press, Cambridge, MA.

Fullan, M (2005) *Leadership and Sustainability*, Corwin, Thousand Oaks, CA.

Fullan, M (2006) *Turnaround Leadership*, Jossey-Bass, San Francisco.

Fullan, M, Hill, P and Crevola, C (2006) *Breakthrough*, Corwin Press, Thousand Oaks, CA; Ontario Principals Council, Toronto.

Hubbard, L, Mehan, H and Stein, M K (2006) *Reform as Learning*, Routledge, London.

Mintzberg, H (2004) *Managers not MBAs*, Berrett-Koehler Publishers, San Francisco.

Pfeffer, J and Sutton, R (2000) *The Knowing–Doing Gap*, Harvard Business School Press, Boston.

Pfeffer, J and Sutton, R (2006) *Hard Facts, Dangerous Half-truths and Total Nonsense*, Harvard Business School Press, Boston.

Reeves, D (2006) *The Learning Leader*, Association for Supervision and Curriculum Development, Alexandria, Virginia.

Sharratt, L and Fullan. M (2006) 'Accomplishing district wide reform', *Journal of School Leadership*.

The Teaching Commission (2006) *Teaching at Risk: Progress and Potholes*, Author, Washington, DC.

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