

CHANGE

making it happen
in your school
and system

MICHAEL FULLAN
2013



Welcome to the workshop.
We hope you have an enjoyable time.

The goal of this workshop is to establish a change process that successfully accomplishes large-scale reform as measured by teacher and student engagement, and increases in student achievement including raising the bar and closing the learning gap for all students.

TABLE OF CONTENTS

Introduction	1
Module I The Right Drivers	3
Module II Professional Capital	7
Module III The Stratosphere	19
Module IV Motion Leadership in Action	27
Library	29



Our work with schools and systems around the world is heavily biased toward purposeful action. We have four key concepts focused on realizing the moral imperative of raising the bar and closing the gap for all students.

1. *Simplexity*
2. *Motion Leadership*
3. *Whole System Reform*, and
4. *'The Skinny'*

Simplexity

- Identifying a small number of core factors (6 or so) that must be included in your focus (the simple part); and realizing that the problem is how to make them gel—the chemistry of getting them to play out among individuals and groups (the complex part).

Motion Leadership

- The kind of leadership actions that cause 'positive movement' forward in individuals, schools, and systems.

Whole System Reform

- Making the entire system the focus—all schools, all students—in clusters, regions, states, and countries.

The Skinny

- Our summary term for the previous three.
- The answer to 'what's the skinny of change' is the essence of what you need to know to get success—an essence that can be easily grasped by leaders who apply themselves (and then they continually get better at the skinny through deliberate practice, reflection and learning).

Moral Imperative

My moral imperative is...

How closely is my moral imperative linked to the moral imperative of the school/system?

What evidence do I have that I (we) can (are) making progress on realizing our moral imperative?

When the Centre for Strategic Education in Melbourne commissioned and published the policy paper, *Choosing the Wrong Drivers for Whole System Reform*, in April 2011, it hit a massive responsive chord. Whether people agreed with the argument or not, they knew that thinking about effective and ineffective policy ‘drivers’ was a productive way of considering whole system reform. In this module we will re-examine the drivers with a view to seeing how we:

- a) Might contend with wrong drivers, and
- b) Position right drivers within our strategies.

Choosing the Right/Wrong Drivers:

Four Criteria:

- 1. Foster intrinsic motivation
- 2. Engage teachers and students in continuous improvement
- 3. Inspire collective or teamwork
- 4. Affect all teachers and students

Right vs Wrong Drivers

Wrong

- Accountability
- Individual teacher and leadership quality
- Technology
- Fragmented strategies

Right

- Capacity building
- Collaborative work
- Pedagogy
- Systemness

Good Accountability

- Is a function of good data, used as a strategy for improvement.
- Requires non-judgmentalism.
- Depends on widespread transparency.
- Produces strong ‘internal accountability’ which in turn produces strong public accountability.
- Fuses assessment and instruction.

- | | |
|--------------------------------|---|
| Capacity Building | <ul style="list-style-type: none"> ▪ Focus on the development of individual and collective competencies essential for improvement at school and district levels. |
| Human vs Social Capital | <ul style="list-style-type: none"> ▪ Team work trumps individual work (do both) ▪ Be careful: focusing on school principal competencies and professional development of teachers is NOT the driver (it is an enabler) ▪ 'Learning is the work' is the driver, not personnel decisions |
| Technology vs Pedagogy | <ul style="list-style-type: none"> ▪ Technology is seductive ▪ It outraces pedagogy every time ▪ The digital revolution is now unstoppable: technology for learning becomes 24/7; roles of student and teacher are flipped. |
| Fragmented vs Systemic | <ul style="list-style-type: none"> ▪ It's a system thing. ▪ You need inspirational focus, good diagnosis and a coherent plan of action (the latter based on the four right drivers, using the so-called wrong drivers judiciously). <p style="text-align: right; margin-top: 0;">—Mourshed, et al, 2010</p> |
| Coherence Making | <ul style="list-style-type: none"> ▪ Alignment is about structures; coherence is about mindsets ▪ System coherence is about shared mindsets ▪ A tool is only as good as the mindset using it |
| Elements of Coherence | <ul style="list-style-type: none"> ▪ A small number of ambitious goals ▪ A focus on instruction and the student achievement agenda ▪ Continuous capacity building around that agenda ▪ Cultivation of 'systemness' on the part of all |

Strategies for Coherence

- Good and bad plans
- Getting the right kind of excitement
- Effective and ineffective communication
- Managing resistance
- Fostering leadership at all levels: learning is the work, reinforced by personnel practices
- Finessing school and district energies: mutual allegiance and collaborative competition
- Learning from implementation during implementation
- Changing the culture of the district
- Handling distractors: activity trap, et al
- Exploiting public policy

Impact of Coherence

- Focus/Consistency
- Sustained attention on improved practice
- Multiple reinforcing energies to get results
- Better performance
- Large numbers of people talk the walk as they walk the talk

Systemness

- Beware of school autonomy

Action Steps

1. Exploit policy: you are not stuck with their mindsets.
2. Maximize the right drivers.
3. Integrate the so-called wrong drivers, so that they play a supporting role in reinforcing the direction of your change.

Debrief

- What best resonated with you about the 'drivers'? (the aha question)
- What question/puzzle or worry do you have about the 'drivers'? (the worry list)

System/School Self Assessment of Drivers

Current State:

- Record evidence of policies and practices you are currently using on the self assessment organizer.

Reflection:

Use the 3-step interview process to reflect on your practice—

- What is driving your reform/change efforts and where is your emphasis?
- Describe how you have integrated your use of the drivers?
- What steps will increase your integrated use of the drivers?

Moving to Action:

- What 3 steps will you take to increase your use of the right drivers?

Self Assessment Organizer	
Wrong Drivers	Right Drivers
Accountability	Capacity Building
Individual Teacher and Leadership Quality	Collaborative Work
Technology	Pedagogy
Fragmented Strategies	Systemness

This module goes deeper into what is the most powerful of all the change drivers, namely the development of Professional Capacity. Change leaders have to become experts at fostering professional capacity within their schools, in clusters and networks and in the system as a whole. Andy Hargreaves and I mapped this area out in our recent book *Professional Capital*.

Building Community

Professional Capital

- Read the quotes and select the one that is most important to you.
- Complete a Quick Write explaining why you selected it.

Professional Capital: Quotes

Hargreaves, A., & Fullan, M. 2012. Teachers College Press.

#	Quote	Quick Write
1	People are motivated by good ideas tied to action; they are energized even more by pursuing action with others; they are spurred on still further by learning from their mistakes; and they are ultimately propelled by actions that make an impact—what we call ‘moral imperative realized’. (p.7)	
2	Dangers, risks, opposition and disappointment all lay in wait. But professional capital can be both your armor and your sword. It can cut through the misunderstandings and misrepresentations of teaching. It can protect you again attacks on your profession. (p. 7)	
3	...collective responsibility is not just a commitment; it is the exercise of capabilities on a deep and wide scale. It encompasses positive competition: challenging the limits of what is humanly and professionally possible. (p. 142)	
4	The core principles that draw on and build professional capital in schools are the same as those that cultivate professional capital through an entire system...They are about developing your commitments and capabilities, pushing and pulling your peers, exercising collective responsibility together and collaborating with your competitors across the whole system for the great good that transcends us all. (p. 146)	

Two Kinds of Capital

A Capital Idea

Capital relates to one’s own or group worth, particularly concerning assets that can be leveraged to accomplish desired goals.

**Activity:
“Say Something”**

- Form pairs and agree on a place to stop reading in the middle of the following passage from *Professional Capital*.
- Use the ‘Say Something’ strategy and have a brief discussion at your mid-point. Record in Section 1, the ‘I didn’t know that...’ and ‘I wonder about...’ on the table below.
- Complete the reading, add to your recording, and discuss the key ideas.

“Say Something” Worksheet

1.	I didn’t know that	I wonder about ...
2.	I didn’t know that	I wonder about ...

Professional Capital

Hargreaves, A., & Fullan, M., 2012. New York, Teachers College Press; Toronto, Ontario Principals' Council.

People don't really disagree about the importance of getting and keeping good teachers and good teaching. However, two schools of thought about different kinds of capital are driving entire nations in diametrically opposite directions on this front.

Business Capital

In the first view, what kinds of teachers we need and how best to get them are driven by ideas about *business capital*. Here, following the collapse of worldwide property and financial markets, the primary purpose of education is to serve as a big new market for investment in technology, curriculum and testing materials and in schools themselves as for-profit enterprises. In the estimates of some multinational moguls, this is a massive \$500 billion market.

When education is organized to get quick returns on business investment, and to increase immediate returns by lowering that investment, it favors a teaching force that is young, flexible, temporary, inexpensive to train at the beginning, un-pensioned at the end (except by teachers' own self-investment), and replaceable wherever possible by technology. Finding and keeping good teachers then becomes about seeking out and deploying (but not really developing or investing in) *existing human capital*—hunting for talented individuals, working them hard, and moving them on when they get restless or become spent. This is the human widget image of the profession.

The *business capital* strategy towards teaching is advocated aggressively in the US and gaining ground in places like the UK, and several countries in Europe. Yet, as we will see later, none of the most successful school systems around the world go anywhere near this approach in building one of their most valuable societal assets. In Finland, South Korea and Singapore, teachers are nation builders, top leaders say. They are indispensable national assets.

Professional Capital

A second view—our own—promotes what we call *professional capital*. This strategy has already been adopted by the highest performing economies and educational systems in the world. Countries and communities that invest in *professional capital* recognize that educational spending is a long-term investment in developing human capital from early childhood to adult life, to reap rewards of economic productivity and social cohesion in the next generation. A big part of this investment is in high quality teachers and teaching. In this view, getting good teaching for all learners requires teachers to be highly committed, thoroughly prepared, continuously developed, properly paid, well networked with each other to maximize their own improvement, and able to make effective judgments using all their capabilities and experience.

Professional capital is itself made up of three other kinds of capital—human, social, and decisional. A lot has been written about the first kind—*human capital*. Alan Odden's book on *The Strategic Management of Human Capital in Education* defines human capital as 'talent' and describes how to get more of it, develop it, and sustain it. Strangely, though, as we will show, you can't get much human capital by just focusing on the capital of individuals. Capital has to be circulated and shared. Groups, teams and communities are far more powerful than individuals when it comes to developing human capital.

Human capital therefore has to be complemented by and even organized in terms of what is called *social capital*. Like human capital, the idea and strategy of social capital, as we will explain later, also has a distinguished history. The important point for now concerns the contributions of human and social capital respectively. Carrie Leana, a business professor at the University of Pittsburg, points out the well-known finding that patterns of interaction among teachers and between teachers and administrators that are focused on student learning make a large measurable difference to student achievement and sustained improvement. She calls this *social capital*, which she contrasts with *individual capital* that is based on the belief in the power of individuals to change the system. By contrast, Leana shows that the group is far more powerful than the individual. You need individuals of course, but the system won't change, indeed individuals won't change in numbers, unless development becomes a persistent collective enterprise.

Leana has been closely examining the relationship between human and social capital. She and her team followed over 1,000 4th and 5th grade teachers in a representative sample of 130 elementary schools across New York City. The human capital measures included individual teacher qualifications, experience, and ability to teach. Social capital was measured in terms of the frequency and focus of conversations and interactions with peers that centered on instruction, and was based on feelings of trust and closeness between teachers.

Leana also obtained the mathematics scores of the students at the beginning of the year compared to the gains by year-end. She found that teachers with high social capital increased their mathematics scores by 5.7 percent more than teachers with lower social capital scores. Teachers who were both more able (high human capital), and had stronger ties with their peers (high social capital) had the biggest gains in mathematics achievement. She also found that low-ability teachers perform as well as teachers of average ability *"if they have strong social capital in their school."* In short, high social capital and high human capital must be combined.

Since it is necessary to have both high human and social capital, the question remains how to develop both of them? Here is the answer. If you concentrate your efforts on increasing individual talent, you will have a devil of a job producing greater social capital. There is just no mechanism or motivation to bring all that talent together. The reverse is not true. High social capital does generate increased human capital. Individuals get confidence, learning and feedback from having the right kind of people and the right kinds of interactions and relationships around them.

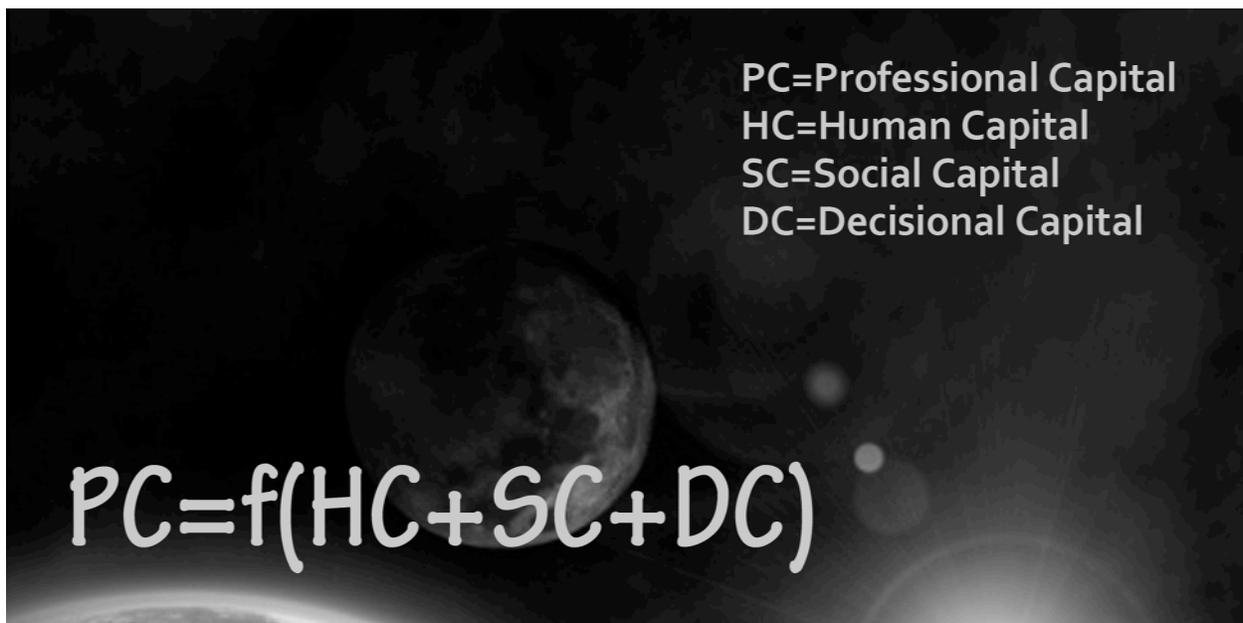
Consider what happens when a talented individual enters a school low on social capital. Although it is possible to make a difference through heroic effort, eventually the overwhelming likelihood is that the person will leave or burn out in the process. We set out considerable evidence later on to back up this observation. Now consider the reverse: a teacher who is low on human capital and has poor initial confidence or undeveloped skills enters a highly collaborative school. Chances are high that this teacher will be socialized into greater teamwork and receive the assistance, support, ideas and feedback to help him or her improve. This is dramatically powerful when you stop and think about it. Imagine that you would become a better teacher just by joining the staff of a different and better school.

Everything we say about individual human capital versus collaborative social capital applies not only to teachers but also to schools. A few unusually innovative schools or ones that beat the odds here or there through the brilliance of individual teachers, the charismatic leadership of their principals, and the endless self-sacrifice of everyone may perform far beyond expectations for a few years. But efforts to turn around individual schools by finding the right individual leaders or replacing all the bad individual teachers with good ones, or by parachuting in an outside

intervention team are doomed to get temporary gains at best. The gains almost always disappear after the intervention teams pull out, once the key leaders leave or when the overworked and isolated staff finally run out of steam. If we need much more social capital within our schools—colleague to colleague, peer to peer—we need this just as much across and between our schools. Professional capital as human capital plus social capital is therefore a personal thing, a within-school thing and a whole-system thing. In the end, professional capital must become a system quality and a system commitment if it is to develop school systems further.

There is more. *Professional Capital* also has a third essential element. We will unpack this later but think of professional capital as the product of *human capital*, and *social capital* and *decisional capital*. Making decisions in complex situations is what professionalism is all about. The 'pros' do this all the time. They come to have competence, judgment, insight, inspiration and the capacity for improvisation as they strive for exceptional performance. They do this when no one is looking, and they do it through and with their colleagues and the team. They exercise their judgments and decisions with collective responsibility, openness to feedback and willing transparency. They are not afraid to make mistakes as long as they learn from them. They have pride in their work. They are respected by peers and by the public for knowing what they are doing. They strive to outdo themselves and each other in a spirit of making greater individual and collective contributions.

When the vast majority of teachers do come to exemplify the power of professional capital, they become smart and talented, committed and collegial, thoughtful and wise. Their moral purpose is expressed in their relentless, expert-driven pursuit of serving their students and communities, and in learning, always learning, how to do that better. Those few colleagues, who persistently fall short of the mark, even after extensive assistance and support, will eventually not be tolerated by their peers because they let their profession and their students down by not teaching like pros!



PC=Professional Capital
HC=Human Capital
SC=Social Capital
DC=Decisional Capital

$$PC=f(HC+SC+DC)$$

Business Capital view assumes that good teaching...

- May be emotionally demanding but it is technically simple
- Is a quick study requiring only moderate intellectual ability
- Is hard at first, but with dedication can be mastered readily
- Should be driven by hard performance data about what works and where best to target one’s efforts
- Comes down to enthusiasm, hard work, raw talent, and measurable results
- Is often replaceable by online instruction

Professional Capital view assumes that good teaching...

- Is technically sophisticated and difficult
- Requires high levels of education and long periods of training
- Is perfected through continuous improvement
- Involves wise judgment informed by evidence and experience
- Is a collective accomplishment and responsibility
- Maximizes, mediates, and moderates online instruction

Views of Teaching

Teaching Like a Pro

“Teaching Like a Pro” — What does this phrase mean to you?

Point and Go!

- Share your thoughts on ‘teaching like a pro’ with a colleague from another table group.
- Note any commonalities and differences.
- Be prepared to share with the whole group.

Commonalities	Differences

Teaching Like a Pro

... is about undertaking difficult, inspiring work; constantly trying to improve practices and working with all the collective might and ingenuity of professional colleagues to do so.

Teaching Like a Pro Means

1. Continuously inquiring into and improving one's own teaching.
2. Planning teaching, improving teaching and often doing teaching not as an isolated individual but as part of a high performing team.
3. Being a part and parcel of the wider teaching profession and contributing to its development.

Investing in Capability and Commitment

Investing in Capability and Commitment

Even with the best of intentions, even if you seem like a 'natural' as a teacher, unless you deliberately learn how to get better so you can teach the students of today for the world of tomorrow, you will not be teaching like a pro. You will be just an enthusiastic amateur.

The Five 'C's of Professional Capital

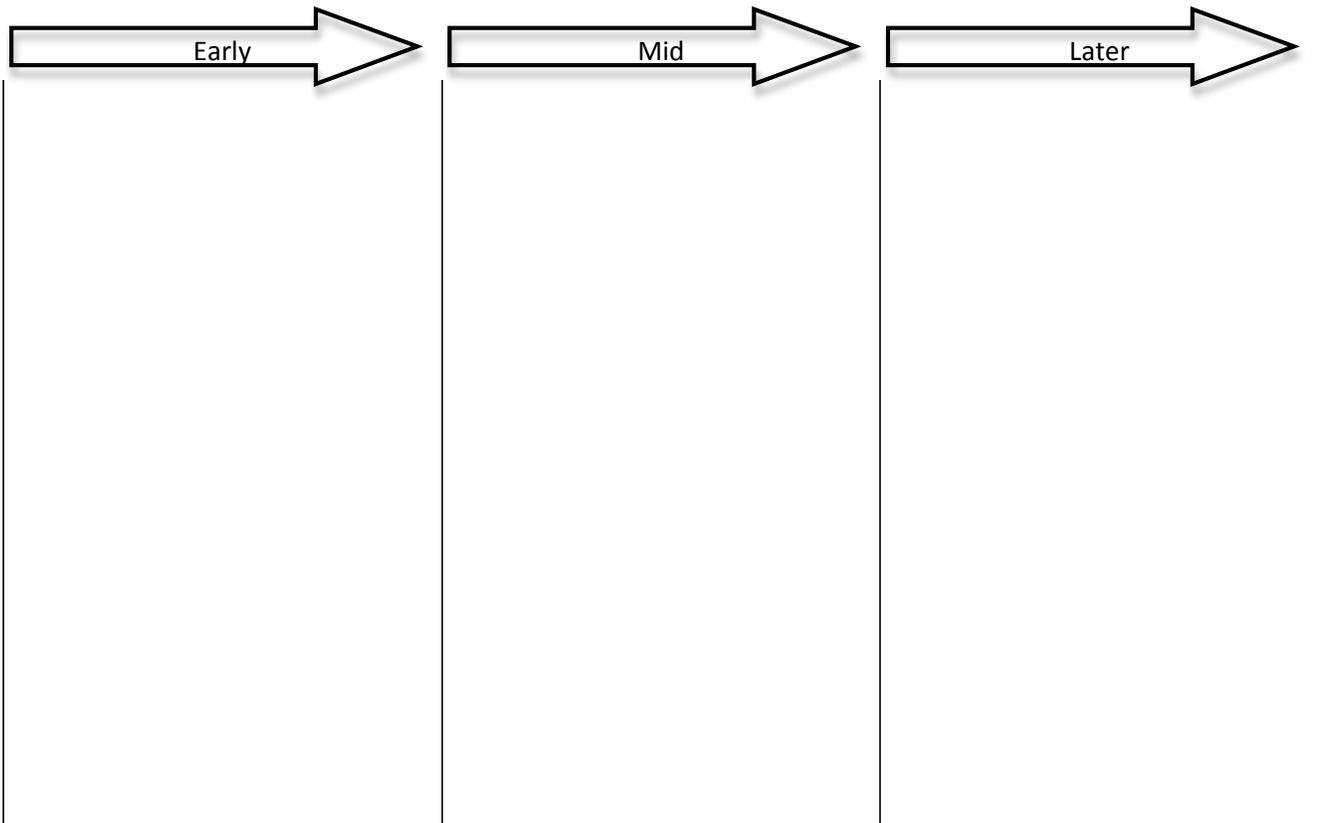
1. Capability
2. Commitment
3. Career
4. Culture
5. Contexts or conditions of teaching

Relationship Between Career Stage and Capability/Commitment

		Commitment	
		Higher	Lower
Capability	Higher	Mid-career	↑ Late Career ↓
	Lower	Early career	

Career Support

Brainstorm strategies to support teachers during each of the three career stages.



Professional Culture and Communities

Culture, in other words, is affected by the conditions and contexts in which it operates.

Professional Learning Communities

- Communities
- Learning communities
- Professional learning communities

Change Strategy

Read the passage below.

As a change strategy how would you rate it:

- 1-2 I like it
- 3 I am ambivalent
- 4-5 I don't like it

Pushing

In that teacher's first week in the new school, two of his colleagues visited him and suggested that he should use word walls because they had both found them to be effective. When, two weeks later, he had not yet put up the word walls, his colleagues visited him again, this time urging him more strongly to put up the word walls, sitting him down to share why this was the practice in their school and the difference it had made for students. A few weeks later, by then well into the school term, he had still not put up the word walls. His colleagues stopped by again after school, this time simply saying: "we are here to put up your word walls and we can help you to plan how to use them".

—Mourshed et al, 2010

Professional Learning Communities

Courageous leaders of PLCs are not bullying and self-congratulatory. They are humble and self-reflective.

When push comes to shove, they know and are alert to when they have overstepped the mark and gone too far; they know when they need to remain committed but not push too heavily and too hard.

Professional Learning Communities...

- Push and pull
- Focus on flexibility
- Are committed to relationships and results

Teachers will be short on professional capital if they ...

- are under qualified
- come from the lower end of the graduation range
- have not been screened for their emotional capability
- have not been screened for their previous experiences of working with young people
- do not get feedback and support from colleagues
- spend most professional time alone
- are not connected to teachers in other schools
- do not put in the time to perfect their practice
- are not provided with the coaching, mentoring and time that helps them reflect on that practice

Enacting Change

It's time to invest and reinvest in your own and your colleagues' professional capital—for the good of yourself and your whole profession! And it's time to persuade, push, pull, and nudge the public and policy makers to invest in teacher's capital as well.

Children need it, teachers will thrive on it, and achieving a productive economy and cohesive society demands it.

Clusters and Networks

Effective Networks

- Focus on student achievement
- Require effective leadership
- Have adults as learners
- Learn 'specific practices'
- Combine mutual allegiance and collaborative competition
- Reach outside the network to learn from and contribute to others' learning

Professional Capital

Hargreaves, A., & Fullan, M., 2012. New York, Teachers College Press; Toronto, Ontario Principals' Council.

Individual school autonomy is just as problematic as individual classroom autonomy. Several jurisdictions around the world are beginning to employ the same principle of schools learning from each other in systemic designs that promote win-win relationships, focused inquiry, and widespread development. Two examples documented by OECD and McKinsey & Company come from Asia.

Shanghai—a city of over 20 million—literally came from nowhere in the period 2006-2009 to become the world's highest performing system in the PISA/OECD assessment of 15-year-olds in literacy. One of the ways they did this was to pair high-capacity schools with lower capacity schools and enable them to work together in a non-judgmental relationship.

In Singapore, every one of its more than 400 schools in a formal network of 12-14 schools with a full-time coordinator to run the cluster. Here, talented people work purposefully to leverage each other's knowledge while focusing on personalized learning for all students. Effective collaboration requires teachers with strong capabilities. In McKinsey & Company's description of this case, one Singaporean educator made clear that "we could not have implemented professional learning communities as effectively in the 1980s. We did not have the skill levels in schools for it, and it may have backfired. However our teachers and leaders are highly skilled now, and therefore we have shifted to peer collaboration and it works.

We need to be careful, of course, about how we transplant principles of success from Southeast and East Asia to non-Asian contexts—as we should be cautious about transplanting any reforms internationally. Many Asian cultures, for example, have a traditional and historical respect for teachers, a traditional family focus on learning and achievement, and an established deference to hierarchical authority. So educational mandates work out differently here than they do in many other cultures—even when the mandate is to collaborate. Even so, it is encouraging that federations, networks, and clusters can be as widespread and effective in cultures as different as Anglo-Saxon and Asian ones.

There are yet more examples of successful peer-to-peer improvement in places such as Finland, where there is a national network of innovation; Alberta, where the province's schools, now in their fourth 3-year cycle of school-designed innovation, are concentrating on networking innovative practices within and across school districts; and York Region School District, just north of Toronto, which has all of its almost 200 schools in clusters of 6-8 schools. So the reach of these ways of circulating and sharing professional capital across cultures is considerable. Where it is difficult to establish cross-school networks or indeed any kind of professionally collaborative behavior is in countries that have been, within the memory of one or two generations, form despotisms or dictatorships, where fear and corruption were (or still are) widespread and habits of suspicion and compliance are deeply ingrained; or in places where there is a deep-seated political culture of top-down control or competitive individualism.

In the United States, there are a few small pockets of school clusters within districts, but they are not nearly as formally structured as in the previous examples, and they are still very much the exception. Sanger Unified School District near Fresno, California, a district that one of us has filmed, has every one of its 15 schools in small clusters of 3 or 4 schools that meet regularly and learn from each other. The student achievement results are consistently impressive.

All these examples are *systemic*—the whole system of schools sets about improving on a comprehensive and mutually supportive basis. Some systems mandate federations or clusters, but mandating professional changes like these is likely to be counterproductive in cultures that do not defer to hierarchical authority. In the main, then, in our view, complete participation or almost complete participation in networked professional capital should be an energetic aspiration and normative expectation with a system's professional culture, rather than a bureaucratically enforced mandate. These forms of learning together can be powerful system builders leading to the mutual development of new capabilities and commitments, or they can become the system-level equivalent of comfortable collaboration (shared practice) or excessively contrived collegiality, which all too often characterizes collaborative efforts within schools. When you circulate professional capital freely, energetically, and inclusively, you get wholesale professional improvement at its best.

This can be true even in very large-scale systems that appear to be and often are, in some respects, competitive. This competitiveness, we believe, is not just an obstacle that can be overcome, but a force, when it is not of a win-lose nature, that can actually be capitalized upon. This occurs when two powerful forces come together: collective responsibility and collaborative competition—or what the business literature call *co-opetition*.

Collective responsibility consists of the enlargement and deepening of identity beyond oneself. When individual teachers within a school start identifying with all students in the school, not just those in their classroom, that is collective responsibility. When individual school principals become almost as concerned about the success of other schools in their cluster as they are about their own school, we see enlarged commitment again. When districts see themselves as part of a state's or country's quest for success for all their students and as part of the nation's or state's development of its common identity, we see the force of collective responsibility once more. Moreover, as countries around the world attempt to learn from each other, and openly share what they know, we see the makings of a global identity that will contribute powerfully to the future of humankind.

But the collective responsibility is not just a commitment; it is the exercise of capabilities on a deep and wide scale. It encompasses positive competition: challenging the limits of what is humanly and professionally possible. In every healthy cluster or network that we have studied or been part of, there has also been a powerful tendency to try to compete, but in a spirit of how we can outdo ourselves as well as each other, for the good of the whole, or even the good of the game, to use a sports analogy. We call this "collaborative competition," co-opetition, or friendly rivalry, because concepts both of collaboration and competition come together to form an unbeatable combination.

We certainly have seen many bad forms of win-lose competition that include self-centeredness, widespread cheating, divisive effects of performance-based pay, envy and jealousy, unwillingness to offer assistance to struggling neighbors, and, like a spoiled child, finding yourself all alone with no one to share all your expensive toys (books, interactive whiteboards, sporting facilities, or highly skilled teachers) when you keep all your goodies for yourself. But when you get collective responsibility on the rise, and embrace strong developmental strategies in pursuit of a noble cause, you also get a kind of "Moral Olympics" where there is almost no ceiling to what can be accomplished.

This is the kind of professional capital worth fighting for—collective responsibility and capability, as well as collaborative competition or friendly rivalry for the good of everyone in the system.

The Resistance Mindset

Motivational Work

- Is meaningful, accomplishable work
- Enables development
- Promotes a sense of camaraderie
- Means being well led

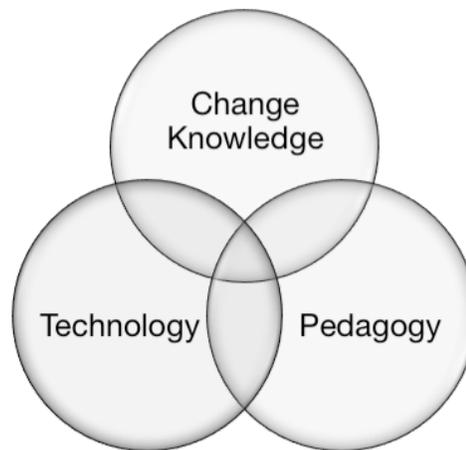
Resistance Mindset Means:

- Giving people respect before they have earned it
- Requires leaders to have impressive empathy
- Doing everything possible to make people more loveable
- Dealing firmly with what is left over

It is ironic that we fingered technology as a wrong driver, and now we are touting it as part of a breakthrough solution. The consistency is that pedagogy is the driver, but one wonders now that technology is becoming supercharged whether it might take an equal place. The important thing is that technology and pedagogy be integrated. In this module you will examine why and how teachers and students can partner for learning with technology as a powerful accelerator.

Stratosphere | Integrating technology, pedagogy and change.

Stratosphere Defined



Jigsaw

- Read the quotes and select the one that is most important to you.
- Complete a Quick Write explaining why you selected it.

Stratosphere: Quotes

Fullan, M. 2012. Pearson Canada.

#	Quote	Quick Write
1	Only those who know how to learn, who can relate to others and the environment and who can make the world part of their own evolving being will thrive in this world. pg. 3	
2	Students take greater charge of their own learning and each other's learning and teachers become agents of change. pg. 47	
3	...we need to create the new digital learning reality on a massive scale—for all students and teachers. ...Pedagogy is becoming sharper and more penetrating; technology is becoming mightier and easier to use and integrate. pg. 54	
4	Technology has dramatically affected virtually every sector in society that you can think of <i>except</i> education. pg. 72	
5	If you want to head off destruction, we need to make it all about learning, let technology permeate and engage the whole system. pg. 74	

The Challenge for Education

- It is time that gadget goes to school and schools go to gadget 24/7.
- It is teachers with technology who will make the difference.
- Students are partners.

Stratosphere is About:

- Making explicit connections between technology, pedagogy and change knowledge
- Mystery, intrigue and the unknown

**New Learning—
Exciting innovative
learning experiences for
all students needs to be:**

- Irresistibly engaging for both students and teachers
- Elegantly efficient and easy to use
- Technologically ubiquitous 24/7
- Steeped in real-life problem solving

The New Pedagogy

Teachers are needed but it is a new role that is required—the teacher as change agent.

**The New Pedagogy
A New Role for Teachers**

Turn and Talk:

- What does it mean for teachers to be agents of change?
- What does it look like and sound like?

**Teachers and Students
as Pedagogical Partners**

- Teacher as Facilitator .17
(simulations and gaming; inquiry based; smaller class sizes; individualized instruction; problem-based learning; web-based; inductive teaching)
- Teacher as Activator .60
(reciprocal teaching; feedback; teacher-student self-verbalization; meta-cognition; goals-challenging; frequent effects of teaching)

Expert Teachers

Expert teachers can provide defensible evidence of teaching on learning.

—Hattie, J., 2012

Park Manor Middle School

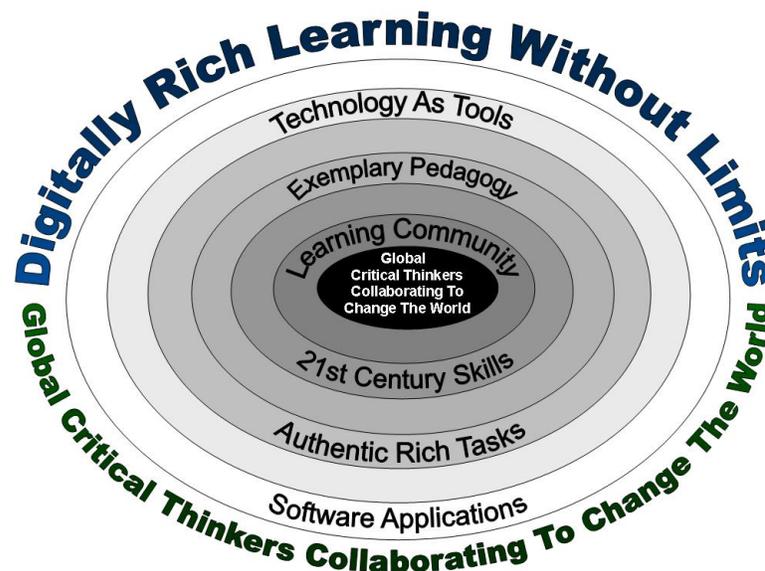
Fullan, M., 2013. *Motion Leadership in Action*. Corwin.

James Bond wasn't always 007. In fact when it came to technology he and his colleagues were 000 in 2009 (I promise that this is the first and last James Bond joke, but that is the name of the principal). Park Manor is a senior public school (Grades 6-8) with 300 students in the town of Elmira, just west of Toronto. I don't usually write about individual schools in isolation (because a key principle of motion leadership is multiple schools moving, or system change), but Park Manor is one of the few examples of an ordinary school becoming technologically dynamic in a short period of time. And a reminder once more: Although I am personifying motion leadership around a specific individual, all such leaders if they are to be successful mobilize leadership throughout the staff. It is principal James Bond, lead teacher Liz Anderson, and the whole staff ensemble at Park Manor who deserve the credit.

When Bond started as principal in September 2009, the school had two data projectors, and old computer lab, and no technology integration in the classrooms. As of June 2012, the entire school is wireless and every one of the 16 classrooms have a document camera and an HD data projector; half have SMART boards; there are 104 PlayBooks; and the computer lab has 36 new dual-boot iMacs. Pedagogical practice has changed dramatically, teachers are engaged in purposeful learning, and student learning is thriving. What's the skinny here?

In a nutshell, Park Manor's success is built on three key change drivers. One places the moral imperative and pedagogy in the driver's seat; a second is to make technology non-threatening to use—to treat it as an opportunity to learn new things where mistakes will be normal; and the third is to set up means for teachers and students to learn from each other during implementation. The whole idea is to minimize judgmentalism so that people can learn, a kind of attitude that says, "I don't want to complicate the lives of teachers, I want to enliven them." Learning is voluntary but inevitable!

First, let's establish the pedagogical focus. The school has developed an Accelerated Learning Framework reproduced here:



In the center of the framework are the specific goals and success criteria that pertain to global critical thinkers (communication, critical thinking, problem solving, teamwork, citizenship). The success criteria explain in detail how students and teachers can determine that technology, tools and applications add value to student learning. These criteria pertain to student engagement, active learning, easier learning, assessment for learning (student feedback), assessment as learning (students monitoring their own learning), assessment of learning (concrete evidence), and so on.

Thus the success criteria are linked to evidence of accomplishments (what success looks and sounds like; what students are doing, saying and producing. In the course of using this framework, the school assesses how much accelerated learning is occurring as a result of particular technologies. Does the technology in question enable the student to *meet* (M) the success criteria? Does it help the student get there *faster* (F)? And does it assist the student in achieving *higher levels* (H) of learning than might have been the case without using the particular technology?

Park Manor, like other successful schools we work with, uses techniques that *personalize progress for each and every student* and does so with *full transparency* for all students that all staff process. For every student in the school there is a simple one-page diagnostic sheet called a Sticky Note that contains the following information:

- Student's Name
- Learning Problem
- Why Analysis
- Root Cause (e.g., engagement, skills)
- Countermeasure
- Verification (Did the intervention work?).

Students, all of them, are then tracked according to progress (color coded) for all teachers to see and learn from. Lyn Sharratt and I call this "putting the faces on data," and if you visit Park Manor you will see word walls galore—very specific, very much living action mechanisms to make and track progress. All of this pays off. Teachers are excited, students are engaged, and test scores have risen dramatically (although attributing specific causal relationships is difficult). The gains as measured by Ontario's assessment agency have been substantial. The number of student achieving Levels 3 and 4 (standards that reflect higher-order skills) in writing, for example, increased from 49% to 82% from 2008-2012. Stated even more dramatically, in 2008 Park Manor was 15% below the school district average (49% vs. 64%); by 2012 it was 9% above the district average (82% vs. 73%). While the trends started prior to the technology infusion, I would suggest progress was strongly leveraged by the integration of pedagogy and technology in the past 2 years. We should also realize that this initiative is still very much at the beginning, less than 3 years old.

The more interesting motion leadership story is how the school did this in such a short period of time and without the normal change resistance. One of the teachers put it this way:

What made the change easier was making it clear to us that part of using technology is having to take the risk that what you try at first may not work, or not work as planned. This made it much less threatening to try new things, and the added value was that the kids got to try new things as well. I think that just the continued encouragement and exposure to technology will naturally keep people trying new things, make them comfortable in learning from mistakes.

Another key feature of improvement at Park Manor, and one central to our motion leadership repertoire, is that if you want to change something deeply and quickly, *use the group to change the group*. Thus set up the expectation and the means for teachers to continually learn from each other. Several teachers commented on the use of the Sticky Note mentioned earlier: We can see where students are visually; there is consistency across the school; when I see better progress in other classes I can find out why and learn from it; it helps us set school goals; it deepens my understanding of what Level 3 is; I can find out what types of pedagogy can move a student forward.

In an e-interview with James Bond he reflected on his own change stance:

You need to be willing to get messy with technology as every tool, program and application will not work perfectly every time, and tools are always changing.

I tried to make it easy for teachers to use technology by having it in their classrooms set up for them all the time, so they just have to turn it on. I was also willing to help them so that they would be okay with not knowing how to use it in front of me, and see that it was okay not to use the technology perfectly.

As more technology expertise grew in the building, I encouraged the staff to learn from each other and then even from their students. I connected teachers who were learning how to use technology to those teachers who were reluctant to start.

During one staff meeting last February, we toured each classroom, where the teacher shared an application of a technology tool, program, or website, and one piece of evidence of accelerated learning. From this one staff meeting, we were exposed to 16 different examples of how using technology had helped students learn better using the success criteria for accelerated learning.

And during our staff meeting in June, teachers shared one thing they learned from another staff member and its impact on student learning. It was amazing to hear how much learning among staff was going on.

Just as in the best learning with students, you have to create an atmosphere of fun and learning. In *Stratosphere* when I set the first criterion for the new learning as *irresistibly engaging*, I was getting at this element; as was Tony Wagner (2012) when he wrote about "creating innovators," showing that you need to combine "play, passion, purpose" (p.26). James states his version as a culture of FIRE (fun, innovation, respect, and excellence). The staff at Park Manor are always sorting out whether a new way or app is value-added or wasteful, including having students be evaluators in this respect.

Another aspect of motion leadership is whether the so-called espoused theory of action by the leader is the one that teachers recognize and can describe and appreciate with equal clarity. Some leaders talk a good game, all the right words are there, but their actions are not authentic or are not experienced as authentic by those with whom they are working. More subtly, leaders sometimes *think* they are implementing a given practice but may unknowingly be doing so superficially.

If you are a follower, you may perceive the leader's actions as a matter of trust (a leader does not walk the talk) or as lack of clarity (he or she made me an offer I can't understand). So the test is whether the leader and staff experience and appreciate the strategy with equal clarity. Here are a few comments in this regard from the range of teachers at Park Manor.

James allowed collaboration time with other “informed” staff members—shared apps, sites, and tips with us technologically inept individuals.

James allowed us to explore technology at our own pace...did not push it on us. He encouraged those who were comfortable with new uses and applications to share their successes with us, which in turn made some of us try.

James helped me ask students how they like to use different technologies and to show me how to use it.

Motion leaders also model what they learn about the change process, including when they made mistakes. James learned from one episode when he veered too much into a push strategy. During one staff meeting, he asked teachers to stand in a circle based on their perceived proficiency with understanding and using technology (those with more knowledge standing in closer). James said he had hoped to show that it doesn't matter where you were in the circle as long as they get a little better and that there is lots of expertise in the building. What actually happened was that the circle made many staff members self-conscious and embarrassed (both those on the inner and outer circles). James learned that sometimes the best intentions can have negative outcomes.

Lead teacher Liz Anderson says that she found herself sometimes overusing technology. She had to learn that some uses are not best for student learning. She then paid more explicit attention to the links between specific learning activities and accelerated learning. By also focusing on what other staff and students were doing to add value to student learning, she was able to build better integration of technology and learning.

Why will it be easy?

1. The old technology of 'tell and test' does not work.
2. Examples of the new pedagogy partnering with students are rapidly under development.
3. There will be great appetite for new ways.
4. People will like doing what they like and many will be helping.

Taking Action: Whole System Reform

The solution lies in the concentration of the three forces of pedagogy, technology and change knowledge:

- Make it all about learning
- Let technology permeate
- Engage the whole system

Motion Leaders ‘cause’ positive movement forward. To accomplish this, great leadership requires mastering the three tranches below in concert. These stances are not simply linear: you will need to be good at change by paying attention to all three from the beginning. Think of sustainability from day one, and engage in all three on a continuous basis.

Components of the Change Stance

1. Deepen your **moral imperative realized**.
2. **Focus** on a small number of ambitious goals.
3. Build and extend a **guiding coalition**.
4. Toughen your **resolve**.
5. Practice **impressive** empathy.
6. **Push, pull, and nudge**.
7. Think **bigger**.

Components of the Implementation Stance

1. **Premature excitement** is fragile.
2. Make **capacity building** central.
3. Beware of **fat plans**.
4. **Communication during implementation is paramount**.
5. Have **purposeful data permeate**.
6. **Use the group to change the group**.

Components of the Sustainability Stance

1. Stay the course.
2. Leadership for all—position leadership for the present and the future.
3. Balance improvement and innovation.



Next Steps

| Use the Change Leader Checklist to identify where you might strengthen your plan.

Change Leader Checklist	
Checkpoint	Evidence
Do I have a small number of priorities?	
What am I doing to communicate with organization members both initially and on an ongoing basis?	
Have I stopped to see if I am practicing impressive empathy in relation to potential naysayers?	
Have I spelled out the norm of speaking up when there are persistent problems and provided opportunities for people to identify problems?	
Are we gathering data that are simple, ongoing, and used for quick feedback on how well things are going? Are the data helping us to focus or are we drowning in it?	
Have I specified when the team needs to meet periodically to discuss progress and problem solve? In the past six months have I stopped to acknowledge mistakes publicly, and to learn from them?	
Do we have a fat or skinny plan—one that is clear, actionable, and sticky?	

- Dufour, R., Dufour, R., Eaker, B. (2010). *Raise the bar close the gap*. Bloomington, IL: Solution Tree.
- Dufour, R., Dufour, R., Eaker, R. and Karhanek, G. (2010). *Raising the bar and closing the gap: Whatever it takes*. Bloomington, IN., Solution Tree Press.
- Fullan, M. (2008). *The six secrets of change*. San Francisco: Jossey-Bass.
- Fullan, M. (2008). *What's worth fighting for in the principalship*. 2nd Edition. New York: Teachers College Press; Toronto: Ontario Principals' Council.
- Fullan, M. (2010). *Motion Leadership: The skinny on becoming change savvy*. Thousand Oaks, CA: Corwin Press; Toronto: Ontario Principals' Council.
- Fullan, M. (2010). *All systems go: The change imperative for whole system reform*. Thousand Oaks, CA: Corwin Press.
- Fullan, M. (2011). *Change Leader: Learning to do what matters most*. San Francisco: Jossey-Bass.
- Fullan, M. (April, 2011). Choosing the wrong drivers for whole system reform. *Seminar Series 204*. Melbourne, Victoria: Centre for Strategic Education.
- Fullan, M. (2011). *The moral imperative realized*. Thousand Oaks, CA: Corwin Press; Toronto: Ontario Principals' Council.
- Fullan, M. (2013). *Stratosphere: Integrating technology, pedagogy, and change knowledge*.
- Fullan, M. (2013). *Motion Leadership in Action*. Thousand Oak, CA: Corwin Press; Toronto: Ontario Principals' Council.
- Fullan, M., Hill, P., & Crévola, C. (2006). *Breakthrough*. Thousand Oaks, CA: Corwin Press; Toronto: Ontario Principals' Council.
- Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school*. New York: Teachers College Press; Toronto: Ontario Principals' Council.
- Hattie, J. (2009). *Visual learning*. London: Routledge.
- Herold, D., & Fedor, D. (2008). *Change the way you lead change*. Stanford, CA: Stanford University Press.
- Leana, C. (2011) An open letter to Bill and Melinda Gates on the value of social capital in school reform. *Stanford Social Innovation Review* (Draft, February 28, 2011).
- Levin, B. (2011). *Leading an improving school*. Unpublished.
- Mintzberg, H. (2004). *Managers not MBAs*. San Francisco: Berrett-Koehler.
- Moeller, B., & Reitzes, T. (2011). *Integrating technology with student-centered learning*. Quincy, MA: Nellie Mae Education Foundation.
- Mourshed, M., Chinezi, C., & Barber, M. (2010). *How the worlds most improved school systems keep getting better*. London: McKinsey & Company.
- Organization for Economic Cooperation and Development (2010). *Are the new millennium learners making the grade: Technology use and educational performance in PISA*. Paris: Centre of Research and Innovation, OECD.
- Prensky, Marc. (2012). "The Reformers Are Leaving Our Schools in the 20th Century." In *Digital natives to digital wisdom: Hopeful essays for 21st century learning*. Thousand Oak, CA: Corwin.
- Pfeffer, J. & Sutton, R. (2008). *Hard facts, dangerous half-truths and total nonsense*. Boston: Harvard Business School Press.
- Reeves, D. (2009). *Leading change in your school*. Alexandria, Virginia: Association of School Curriculum Development.
- Robinson, V. (2011). *Student-centered Leadership*. Jossey-Bass.
- Sharratt, L., & Fullan, M. (2009). *Realization: The change imperative for deepening district-wide reform*. Thousand Oaks, CA: Corwin Press; Toronto: Ontario Principals' Council.
- Sharratt, L., & Fullan, M. (2012). *Putting FACES on the data: What great leaders do*. Thousand Oaks, CA: Corwin Press; Toronto: Ontario Principals' Council.
- Timperley, H. (2011). *Realizing the power of professional learning and development*. Open University Press.



Michael Fullan is professor emeritus of the Ontario Institute for Studies in Education at the University of Toronto. Recognized as a worldwide authority on educational reform, he advises policymakers and local leaders around the world in helping to achieve the moral purpose of all children learning. Michael Fullan received the Order of Canada in December, 2012. He holds honorary doctorates from Duquesne University, Pittsburgh, Pennsylvania; University of Edinburgh, Scotland; Newman University College, University of Leicester; and Nipissing University in Canada.

Fullan is a prolific, award-winning author whose books have been published in many languages. His book *Leading in a Culture of Change* was awarded the 2002 Book of the Year Award by Learning Forward (formerly the National Staff Development Council), *Breakthrough* (with Peter Hill and Carmel Crévola) won the 2006 Book of the Year Award from the American Association of Colleges for Teacher Education, *Turnaround Leadership in Higher Education* (with Geoff Scott) won the Bellwether Book Award in 2009, and *Change Wars* (with Andy Hargreaves) was awarded the 2009 Book of the Year Award by Learning Forward.

His latest books are

- *Stratosphere: Integrating Technology, Pedagogy, and Change Knowledge* (2012)
- *Motion Leadership in Action: More Skinny on Becoming Change Savvy* (2012)
- *Professional Capital: Transforming Teaching in Every School* (with Andy Hargreaves) (2012).

Special thanks to Joanne Quinn and Eleanor Adam for their training design contributions.

Produced by Claudia Cuttress

Please visit our website
michaelfullan.ca