LEARNING TO LEAD CHANGE

BUILDING SYSTEM CAPACITY

Core Concepts

CHANGE FORCES
education in motion

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Learning to Lead Change: Building System Capacity is a series of publications developed for Microsoft's Partners in Learning initiative. The five documents are:

- Core Concepts

- Overview

- A Short Course

- Case Studies

- Trainer Guide

Core Concepts is a stand-alone document that provides the basic change knowledge related to successful educational reform. These ideas also form the basis for other documents in the series.

Educational Improvement Pillars

Microsoft describes the purpose of the Partners in Learning initiative as "part of Microsoft's comprehensive commitment to promoting digital inclusion and to partnering with governments to bring the benefits of technology to communities and classrooms around the world. Microsoft believes that through our collaboration, we can empower schools, strengthen teacher leadership and increase student achievement throughout the world."

The focus is on what role technology can play in enhancing educational improvement, as it links to innovations in teaching and learning or pedagogy, and to change knowledge. These three pillars – technology, pedagogy and change are all required for reform to work.

This pamphlet captures what is meant by the 'change knowledge pillar'. Failure to understand change knowledge means that even the best ideas will have limited impact.

The history of educational reform and innovation is replete with good ideas or policies that fail to get implemented or that are successful in one situation but not in another. A missing ingredient in most cases is insufficient appreciation and use of

> *Change Knowledge:*
>
> *Understanding and insight about the process of change and the key drivers that make for successful change in practice.*

what we will call **change knowledge**: understanding and insight about the process of change and the key drivers that make for successful change in practice. The presence of change knowledge does not guarantee success, but its absence ensures failure.

In this brief primer we describe what essentially we mean by change knowledge. We focus on 'what it is' (a list of related references that represents 'a crash course' in change knowledge is provided at the end). In the companion publications we address the matter of how to develop leaders with greater change knowledge and provide related case studies and training materials.

Here, we spell out what is meant by 'change knowledge' and make the case that it is the missing or neglected and thus fatal element in most educational change efforts. It will not be easy to rectify this deficit. Policymakers do not want to be slowed down by knowledge of change — it takes time to address this knowledge — even though ironically, they are eventually slowed down even more by failed implementation.

Let's start with the distinction between innovation and innovativeness (see Glossary for a definition of key terms). Strange as it seems, innovation is not the kind of change knowledge we have in mind.

Knowledge of innovation is knowledge that pertains to the content of a given idea, program or practice; for example, knowledge about how to teach literacy, how a new technology works, and so on. Such knowledge is necessary but not sufficient for achieving change in practice. Thus, being an expert in a given innovation does not by itself mean that you will be good at getting others to implement it.

It is for this reason that innovativeness is a more appropriate concept. Innovativeness is the process of engaging in producing change in practice. In the past twenty years we have learned a great deal about innovative processes that work (and those that don't). We distill this knowledge here according to eight key drivers for change:

Key Drivers for Change

1. Engaging peoples' moral purposes
2. Capacity-building
3. Understanding the change process
4. Developing cultures for learning
5. Developing cultures of evaluation
6. Focusing on leadership for change
7. Fostering coherence-making
8. Cultivating tri-level development

1 THE FIRST DRIVER: ENGAGING PEOPLES' MORAL PURPOSE

The first overriding principle concerns knowledge about the why of change, namely moral purpose. At a fundamental level, moral purpose in educational change is about improving society through improving educational systems and thus the learning of all citizens.

In education, moral purpose involves a commitment to raising the bar and closing the gap in student achievement, for example, increasing literacy for all with special attention to those most disadvantaged. There is a wide gap, particularly in some countries between groups at the bottom and those at the top. Thus, schools need to "raise the floor" by figuring out how to speed up the learning of those who are at the bottom for whom the school system has been less effective.

Moral purpose in educational change is about improving society. It is about raising the bar and closing the gap in student achievement.

Improving overall literacy achievement is directly associated with economic productivity in a country. In countries where the gap between high and low performance of students is reduced, the economic health and well-being of citizens is measurably better.

In change knowledge, moral purpose is not just a goal, but more importantly is a process of engaging educators, community leaders and society as a whole in the moral purpose of reform. If moral purpose is front and center, the remaining seven drivers become additional forces for enacting moral purpose.

2   THE SECOND DRIVER: CAPACITY-BUILDING

The second driver is capacity-building which involves policies, strategies, resources and other actions designed to increase the collective power of people to move the system forward (schools, districts, state levels). This will involve the development (collective development) of new 'knowledge, skills, and competencies', new resources (time, ideas, materials) and new 'shared identity and motivation' to work together for greater change.

In addition to individual and collective capacity as defined by increased knowledge, resources and motivation, organizational capacity involves improvements in the infrastructure. The infrastructure consists of agencies at the local, regional and state levels that can deliver new capacity in the system such as training, consultancy, and other support.

Capacity is crucial because it is often the missing element even when people are in agreement about the need for change. For example, to improve literacy, teachers and principals must develop new skills and increased commitment in the face of inevitable obstacles (see the third driver). Similarly, in the case of new technologies not only must educators acquire new skills and understandings, they must integrate technology into curriculum, teaching and learning, and the assessment of learning.

Two characteristics of capacity:

1. **It is a 'collective' phenomenon.** Whole schools, whole districts and whole systems must increase their capacity as groups. This is difficult because it involves working together in new ways.

2. **Capacity must be evident in practice and be ongoing**. This is why front-end training is insufficient – it does not transfer into improvements in the daily cultures of how people need to work in new ways.

3   THE THIRD DRIVER: UNDERSTANDING THE CHANGE PROCESS

For change to work you need the energy, ideas, commitment and 'ownership' of all those implicated in implementing the improvements.

Understanding the change process is a big driver because it cuts across all elements. It is also difficult and frustrating to grasp because it requires leaders to take into account factors that they would rather not have to stop and deal with. They would rather lay out the purpose and plan and get on with it. Change doesn't work that way.

For change to work you need the energy, ideas, commitment and 'ownership' of all those implicated in implementing improvements. This is perplexing because the urgency of problems does not allow for long term 'ownership development' (in fact more leisurely strategies do not produce greater ownership anyway).

Ownership is not something you have at the beginning of a change process, but rather something that you create through a quality change process. Here are some of the things you need to know to push as hard as the process will allow while increasing your chances for success.

Understanding the Change Process

i.   Strategizing vs strategy

ii.   Pressure and support

iii. Know about the implementation dip

iv.   Understand the fear of change

v.   Appreciate the difference between technical and adaptive challenges

vi.   Be persistent and resilient

i. Strategizing will help us evolve and reshape ideas and actions.

There is a great temptation to develop the complete strategic plan and then allocate mechanisms of accountability and support in order to implement it. This leads to the first lesson in the change process: the strategic plan is an innovation; it is not innovativeness.

We need strategy and strategic ideas, but above all we need to think of the evolution of change plans as a process of shaping and reshaping ideas and actions. Henry Mintzberg, in his 2004 critique of existing MBA programs (**Managers not MBAs**) captures this idea precisely:

> Strategy is an interactive process, not a two-step sequence; it requires continual feedback between thought and action … Strategists have to be in touch; they have to know what they are strategizing about; they have to respond and react and adjust, often allowing strategies to **emerge**, step-by-step. In a word, they have to **learn**.

Effective change is more about strategizing which is a process than it is about strategy. The more that leaders practice strategizing the more that they hone their scientific and intuitive knowledge of the change process.

ii.
Pressure means ambitious targets. Support involves developing new competencies.

The second element of understanding change dynamics concerns the realization that all large scale reform requires the combination and integration of 'pressure and support'.

There is a great deal of inertia in social systems which means that new forces are required to change direction. These new forces involve the judicious use of pressure and support.

Pressure means ambitious targets, transparent evaluation and monitoring, calling upon moral purpose, and the like. Support involves developing new competencies, access to new ideas, more time for learning and collaboration.

The more that pressure and support become seamless, the more effective the change process at getting things to happen. As the eight drivers of change begin to operate in concert, pressure and support, in effect get built into the ongoing culture of interaction.

iii.
Knowledge of the implementation dip can reduce the awkwardness of the learning period.

The third aspect of understanding the change process is to understand the finding that all eventual successful change proceeds through an 'implementation dip'.

Since change involves grappling with new beliefs and understandings, and new skills, competencies and behaviors, it is inevitable that it will not go smoothly in the early stages of implementation (even if there has been pre-implementation preparation). This applies to any individual, but is much more complex when (as is always the case) many people simultaneously are involved.

Knowledge of the implementation dip has helped in two important ways in our work with change initiatives. First, it has brought out into the open the fact that all changes worth their salt involve a somewhat awkward learning period.

Second, it has resulted in us being able to reduce the period of awkwardness. By being aware of the problem, we are able to use strategies (support, training, etc) that reduce the implementation dip from (in the case of school change) three years to half that time. This obviously depends on the starting conditions and complexity of the change, but the point is that without knowledge of the implementation dip, problems persist and people give up without giving the idea a chance.

Shorter implementation dips are more tolerable and once gains start to be made earlier, motivation increases. Note that motivation is increasing (or not) during the implementation process. This is a sign of a quality (or poor) change process.

The next two elements of understanding the change process – the fear of change, and technical vs adaptive challenges – delve deeper into 'the implementation dip'.

The fear of change is classical change knowledge. What people need to know for starters is that at the beginning of the change process the losses are specific and tangible (it is clear what is being left behind), but the gains are theoretical and distant. This is so by definition. You cannot realize the gains until you master implementation, and this takes time. More than this, you don't necessarily have confidence that the gains will be attained. It is a theoretical proposition.

Black and Gregersen (2002) talk about 'brain barriers' such as the failure to move in new directions even when the direction is clear. The clearer the new vision, the more immobilized people become! Why? (p. 69)

Their answer:

> The clearer the new vision the easier it is for people to see all the specific ways in which they will be incompetent and look stupid. Many prefer to be competent at the [old] wrong thing than incompetent at the [new] right thing (p. 70).

In other words, an additional element of change process knowledge involves realizing that clear, even inspiring, visions are not sufficient. People need the right combinations of pressure and support to become adept and comfortable with 'the new right way'.

The fifth element comes from Heifetz and Linsky's (2003) distinction between 'technical problems' and 'adaptive challenges'.

Technical problems are ones in which current knowledge is sufficient to address the problem. Technical problems are still difficult, and people will experience the usual implementation dip, but they are solvable in terms of what we know.

Adaptive challenges are more complex and the solutions in a sense 'go beyond what we know'. Heifetz and Linsky identify some properties of adaptive challenges as follows:

- Adaptive challenges demand a response beyond our current repertoire
- Adaptive work to narrow the gap between our aspirations and current reality requires difficult learning
- The people with the problem are the problem and are the solution
- Adaptive work generates disequilibrium and avoidance
- Adaptive work takes time

Most of the big moral purpose goals we aspire to these days tend to be 'adaptive challenges'. The change knowledge, then, involves strategizing with Heifetz's five assumptions in mind. When you do this, you set up a sounder and more realistic change process.

The final aspect of understanding change as a process is a kind of retrospective overlay of the previous five components.

3 vi. Engaging others in change requires persistence to overcome the inevitable challenges.

Engaging others in the process of change requires persistence in order to overcome the inevitable challenges – to keep on going despite setbacks – but it also involves adaptation and problem-solving through being flexible enough to incorporate new ideas into strategizing.

Both focus and flexibility are needed.

The concept that captures persistence and flexibility is 'resilience'. Because change processes are complex, difficult and frustrating it requires pushing ahead without being rigid; regrouping despite setbacks; and not being discouraged when progress is slow.

The reason we emphasize persistence and resilience is that people often start with grand intentions and aspirations, but gradually lower them over time in the face of obstacles and in the end achieve precious little. Thus, armed with change knowledge, people should approach the change process with a commitment to maintain, even increase high standards and aspirations. Obstacles should be seen as problems and barriers to be resolved in order to achieve high targets rather than reasons for consciously or not lowering aspirations.

The fourth driver, cultures for learning, sounds like a general statement, but it means something specific in establishing the conditions for success. It involves a whole set of strategies designed so that people can learn from each other (the knowledge dimension) and become collectively committed to improvement (the affective dimension). Strategies for learning from each other involve:

- Developing learning communities at the local, school and community levels
- Learning from other schools, regional and otherwise (lateral capacity-building)

We develop learning communities at the local school and community level.

Successful change involves learning during implementation. One of the most powerful drivers of change involves learning from peers, especially those who are further along in implementing new ideas. We can think of such learning inside the school and local community, and across schools or jurisdictions. Within the school there is a great deal of practical research that demonstrates the necessity and power of 'Professional Learning Communities'.

Newmann and his colleagues (2000) identified five components of change capacity within the school which include the development of new knowledge and skills, establishing professional learning communities, program coherence, access to new resources, and principal/school leadership. Schools and their local villages and communities must develop new cultures of learning in order to improve.

When school systems establish cultures of learning they constantly seek and develop teachers' knowledge and skills required to create effective new learning experiences for students. In addition to within school and community learning, a powerful new strategy is evolving which we call 'lateral capacity-building'. This involves strategies in which schools and communities learn from each other within a given district or region and beyond. This widens the pool of ideas and also enhances a greater 'we-we' identity beyond one school (Fullan, 2005).

People learn from each other within and across units — turning knowledge into action.

Knowledge sharing and collective identity are powerful forces for positive change, and they form a core component of our change knowledge. We need to value these aspects and know how to put them into action. Pfeffer and Sutton (2000) reinforce this conclusion in their analysis of **The Knowing-Doing Gap**. They claim that we should 'embed' more of the process of acquiring new knowledge in the actual doing of the task and less in formal training programs that are frequently ineffective (p. 27). Change knowledge has a bias for action. Developing a climate where people learn from each other within and across units, and being pre-occupied with turning good knowledge into action is essential. Turning information into actionable knowledge is a social process. Thus, developing learning cultures is crucial. Good policies and ideas take off in learning cultures, and go nowhere in cultures of isolation.

Cultures of evaluation and capacity deepen the meaning of what is learned by using technology for improvement.

Cultures of evaluation must be coupled with cultures of learning in order to sort out promising from not so promising ideas and especially to deepen the meaning of what is learned. One of the highest yield strategies for educational change recently developed is 'Assessment for Learning' (not just assessment of learning). Assessment for learning incorporates:

- Accessing/gathering data on student learning
- Disaggregating data for more detailed understanding
- Developing action plans based on the previous two points in order to make improvements
- Being able to articulate and discuss performance with parents, external groups

When schools and school systems increase their collective capacity to engage in ongoing assessment for learning, major improvements are achieved. Several other aspects of evaluation cultures are important including: school-based self-appraisal, meaningful use of external accountability data, and what Jim Collins (2002) found in 'great' organizations, namely, a commitment to 'confronting the brutal facts', and establishing a culture of disciplined inquiry.

Cultures of evaluation serve external accountability as well as internal data processing purposes. They produce data on an ongoing basis which enables groups to use information for action planning as well as for external accounting (see Black, et al., 2003, and Stiggins, 2001).

One other matter: technology has become an enormously necessary and powerful tool in our work on assessment as it makes it possible to access and analyze student achievement data on an ongoing basis, take corrective action, and share best solutions. Developing cultures of evaluation and capacity to use technology for improvement must go hand in hand; both are seriously underdeveloped in most systems we know.

THE SIXTH DRIVER:
FOCUSING ON LEADERSHIP FOR CHANGE

As might be expected, one of the most powerful lessons for change involves leadership. Here change knowledge consists of knowing what kind of leadership is best for leading productive change. It turns out that high-flying, charismatic leaders look like powerful change agents, but are actually bad for business because too much revolves around themselves.

Leadership, to be effective, must spread throughout the organization. Collins (2002) found that charismatic leaders were negatively associated with sustainability. Leaders of the so-called 'great' organizations were characterized by 'deep personal humility' and 'intense professional will'. Collins talks about the importance of leadership which 'builds enduring greatness' in the organization rather than just focusing on short-term results.

To provide a specific illustration, the main mark of a school principal at the end of his or her tenure is not just their impact on the bottom line of student achievement, but rather how many leaders they leave behind who can go even further. Mintzberg (2004) makes the same point:

> Successful managing is not about one's own success but about fostering success in others. (p. 16)

> While managers have to make decisions, far more important, especially in large networked organizations of knowledge works, is what they do to enhance decision-making capabilities of others. (p. 38)

Effective leaders foster leadership in others.

Change knowledge, then, means avoiding leaders who represent innovation, and seeking those who represent innovativeness – the capacity to develop leadership in others on an ongoing basis. We need to produce a critical mass of leaders who have change knowledge. Such leaders produce and feed on other leadership through the system. There is no other driver as essential as leadership for sustainable reform.

Sustainable reform requires leaders who are experts in change knowledge.

THE SEVENTH DRIVER: FOSTERING COHERENCE-MAKING

When innovation runs amok, even if driven by moral purpose, you get overload and fragmentation. To a certain extent this is normal in complex systems.

Change knowledge is required to render overload into greater coherence. This is a never-ending proposition that involves alignment, connecting the dots, being clear about how the big picture fits together. Above all, it involves investing in capacity-building so that cultures of learning and evaluation through the proliferation of leadership can create their own patterns of coherence on the ground.

Change knowledge is not about developing the greatest number of innovations, but rather about achieving new patterns of coherence which enable people to focus more deeply on how things interconnect.

The eighth and final driver lies in the realization that we are talking about 'system transformation' at three levels. Those interested in change knowledge must realize that we are not just talking about changing individuals, but also about changing systems – what we call the tri-level model.

A tri-level lens on this problem:

- What has to happen at the school and community level?
- What has to happen at the district level?
- What has to happen at the level of the state?

We need to change individuals, but also to change contexts. We need to develop better individuals while we simultaneously develop better organizations and systems. This is easier said than done, and it involves what we have recently called developing 'system thinkers in action' (Fullan, 2005).

For our purposes, we need only say 'beware of the individualistic bias' where the tacit assumption is that if we change enough individuals then the system will change. It won't happen. We need to change systems at the same time. The single guideline we will provide here is that in order to change individuals and systems simultaneously, we must provide more 'learning in context', that is, learning in the actual situations we want to change. Mintzberg (2004) focuses on this when he says,

> Leadership is as much about doing in order to think as thinking in order to do (p. 10). We need programs designed to educate practicing managers in context (p. 193). Leadership has to be learned… not just by doing it but by being able to gain conceptual insight while doing it (p. 200).

In any case, tri-level development involves focusing on all three levels of the system and their interrelationships, and giving people wider learning opportunities within these contexts as a route to changing the very contexts within which people work.

'System thinkers in action' strive to change and develop individuals, organizations and systems simultaneously.

Our purpose has been to capture the essence of what is meant by 'change knowledge'. There has been enough research on implementation from the past 35 years for us to say quite literally, "if you don't know the eight guiding drivers of change (in the sense of being able to use them for insight and action), even the best ideas will not take hold." Without change knowledge you get failure.

It is difficult to grasp the nuances of the eight drivers we have been discussing. The route we need to take involves developing leaders who have greater change knowledge who can, in turn, foster such leadership development in others. This also will be challenging because these developments do not just involve identifying and memorizing the knowledge base. Knowing is not sufficient, only knowing-by-doing-reflecting and re-doing will get us anywhere.

This pamphlet is about the nature of change knowledge, not about how to develop it in practice. The companion documents (Overview, A Short Course, Case Studies and Trainer Guide) take us further in this direction, but are still only introductions to the development of change knowledge.

Once people grasp the nature of change knowledge, and appreciate its centrality to success, we have a chance of developing it further in practice. This will require going beyond superficial knowledge of the key concepts toward a deeper commitment to developing knowledge, skills and beliefs related to being change agents in collaboration with others.

When leaders and other participants are given opportunities to learn more deeply in context they have a chance of transforming the contexts that constrain them.

Change capacity	The collective ability to make change happen based on new knowledge, new resources and new commitments or motivation.
Change knowledge	Knowledge about how change occurs and the key drivers that cause change.
Change processes	Understanding the dynamics of change as it unfolds in a situation, including insights into how to manage change.
Coherence-making	Change processes that help connect elements of reform so that groups gain shared clarity and shared commitment.
Culture	The way we do things around here; behaviors and attitudes.
Cultures of evaluation	Behaviors and attitudes that value assessing what is done and acting on such assessments.
Cultures of learning	Behaviors and attitudes that value seeking new ideas, learning from existing practices and engaging in continuous improvement and doing so collectively or collaboratively.
Implementation dip	The inevitable bumpiness and difficulties encountered as people learn new behaviors and beliefs.
Innovation vs innovativeness	Innovation refers to the content of a particular new idea, program, policy or thing; innovativeness is the process of engaging in making change happen in practice.
Leadership	Leaders focus on individuals. Leadership involves developing leadership throughout the system. It involves the capacity to lead change, and to develop others so that there is a critical mass of people working together to establish new ways.
Moral purpose	The human desirability of a goal; in education moral purpose often involves raising the bar and closing the gap of student learning in the society as a whole.
Organizational capacity-building	Improvements in the infrastructure that represent new capabilities in government and non-government agencies to provide support, monitoring and other capacity-building resources for the system.
Pressure and support	The combination of high challenge (pressure) and high support (capacity-building) required for whole systems to reform.

Strategizing vs strategy	Strategy is innovation or content; strategizing is innovativeness or process. Strategizing involves developing a strategy and then continually refining it through feedback between thought and action.
Technical vs adaptive challenge	Technical problems are ones in which current knowledge is sufficient to address the problem (still difficult); adaptive challenges are problems that are more complex and go beyond what we know. Adaptive work is more difficult, more anxiety-producing and takes more time.
Tri-level development	Movement forward involving all three levels of the system and their interrelationships: school and community; district/region; and state.

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