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Strategic Planning and Quality Assurance

Education Transformation Framework

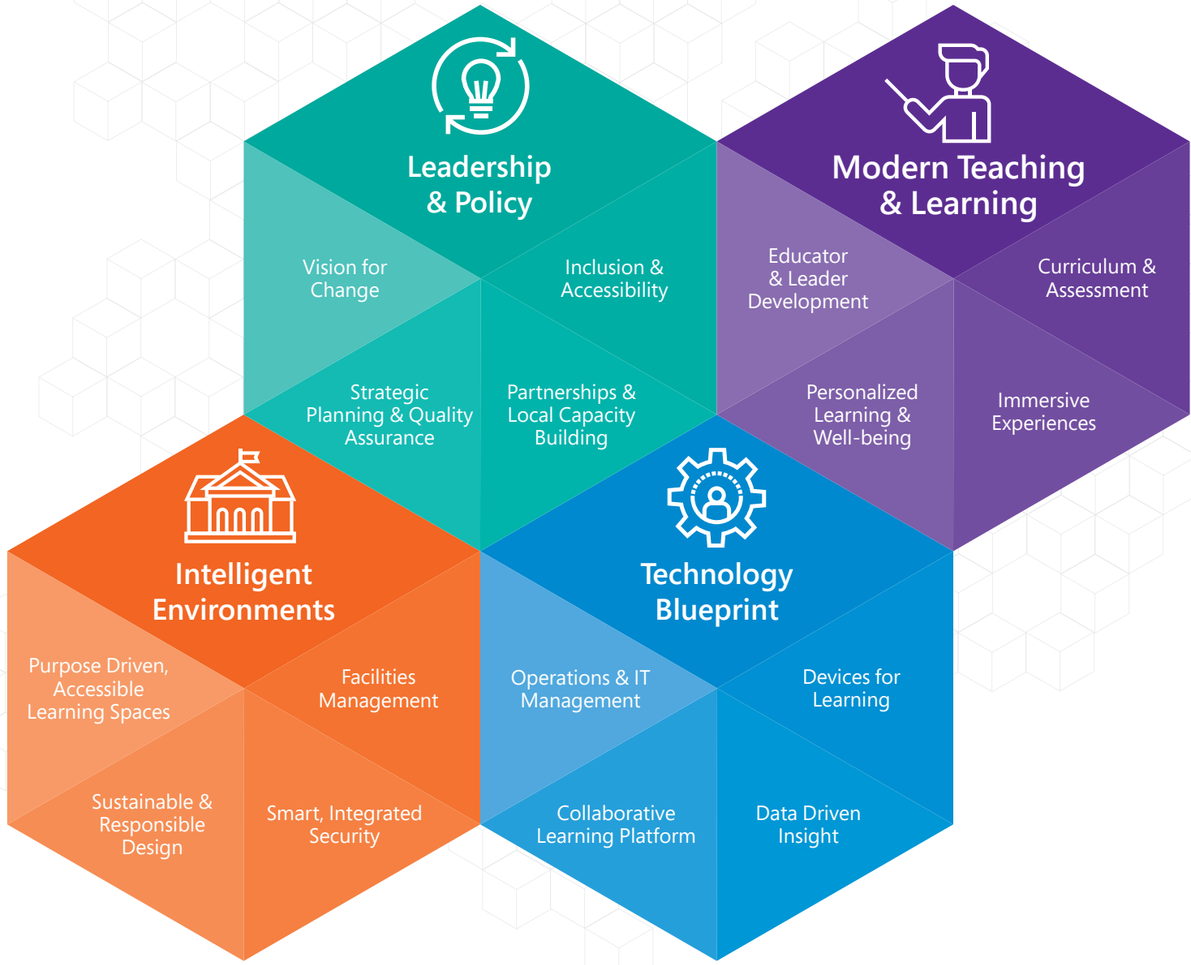
Strategic Planning
& Quality Assurance

This paper examines one of the critical components of effective transformation in schools and education systems. Each paper is produced by an expert author, who presents a global perspective on their topic through current thinking and evidence from research and practice, as well as showcase examples. Together, the papers document the contributions of 'anytime, anywhere' approaches to K-12 learning and explore the potential of new technology for transforming learning outcomes for students and their communities.

Enabling Transformation with Strategic Planning, Organizational Capacity and Sustainability

In most countries, education strategy – including strategy for 1:1 learning – is increasingly aligned to evidence of effectiveness. This paper proposes that reliance on the evidence base must be balanced with strategic approaches. High-performing education systems lead by applying a behavioral change strategy, the parameters of which are set by the evidence base. This nuanced approach can have profound impacts on the effectiveness of education strategy at all levels of education.

At the core of these strategies is a focus on improving learning and teaching. What matters is the recognition that improving learning and teaching is a behavioral change process. Thus, an effective change strategy focuses on organizational change and individual behaviors. At its core, it focuses on implementation and alignment, because the strategy must detail how behaviors will be changed. Alignment of organizational needs, implementation plans, and professional actions are therefore at the core of a change strategy.



About the author

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As CEO of Australian education consultancy firm Learning First, Ben has considerable experience in education reform, advising governments in numerous countries. He spent five years at the OECD conducting international research on school and teacher effectiveness, and led an international expert group on how to develop and use measurements of school performance. Ben recently left the Grattan Institute where he was Director of the School Education Program for five years. His reports had a significant impact in Australia and internationally. Ben has also held positions in government and academia.

What is the Education Transformation Framework?

The Microsoft Education Transformation Framework helps fast track system-wide transformation by summarizing decades of quality research. It includes a library of supporting materials for transformation, each underpinned by an executive summary and an academic whitepaper detailing global evidence. This provides a short-cut to best practice, speeding up transformation and avoiding the mistakes of the past. Microsoft also offers technology architectures and collaborative workshops to suit your needs.

Rethinking school education strategy

Why aren't we getting results from evidence-based change?

We have come a long way in education strategy. While previous decades saw a host of policy interventions fail to reflect (or in some cases substantially contradict) the evidence, there is now a greater focus on evidence-based policy.

A host of influential policy documents have had an impact.[1] At the same time, education research has produced many more quantitative analyses of the effects of various school and policy interventions – with Hattie's meta-analyses probably being the most well-known.[2] While it is probably impossible to measure their impact, there is little doubt that, for example, more systems now focus on improving teachers than reducing class size.[3] While we need to go further to analyze and promote cost-effectiveness in education (as opposed to the simple effectiveness studies that are much more common), education strategy is much more aligned to the evidence than it used to be in most countries around the world. The difficult question, therefore, is: Why aren't greater gains being made with more evidence-based approaches?

In this short paper I posit that part of the reason may lie in an over-reliance on evidence-based approaches rather than more strategic approaches. That the focus on the evidence base leads to what is termed here as a 'policy lever approach' that is generally having minimal impact.

In contrast, high-performing systems are pursuing a behavioral change strategy, the parameters of which are set by the evidence-base. This may sound like semantics, but it can have profound impacts on the effectiveness of education strategy at all levels of education.

At the core of these strategies is a focus on improving learning and teaching. This is not unique. Most education systems around the world will put learning and teaching front and center. What is different is the recognition that improving learning and teaching is a behavioral change process.

Change should be behavioral, not just strategic

Improving children's learning is much more than simply changing the level at which they learn. It is changing their learning behaviors at school, in the classroom and at home. This will become even more important if the growing focus on 21st century skills – complemented by significant technological change in the classroom – is to truly transform the way children learn. Shanghai has finished atop of the previous two rounds of the OECD Program for International Student Assessment (PISA). School improvement and evaluation and accountability policies in Shanghai continually measure children's learning habits in order to identify and develop the habits conducive to improved learning.[4]

Many schools want to improve teaching practices, but fail to realize this requires fundamental behavioral changes.

Many policies around the world aim to improve teachers and teaching.[5] Some are startlingly successful. But the lack of progress made by the majority of systems around the world indicates that most have minimal impact. These policies don't fail because they ignore the evidence; evidence indicates that improving teachers and teaching is the most productive reform that policy-makers can implement.[6] But what makes these policies effective in high-performing systems is that the strategy focuses on behavioral change. To improve teaching requires teaching practices (or behaviors) in schools to change. It is impossible to change teaching without changing teaching practices. Therefore, almost by definition, improving teaching is a behavioral change process. While most systems around the world focus on improving teachers and teaching, relatively few are driven by a behavioral change strategy. Instead, a 'policy lever approach' dominates.

can lead to a 'policy lever approach' of minimal impact. Meanwhile, high-performing schools see success through behavioral change strategy.

1 OECD, 2010.
2 Hattie, 2009.
3 Barber & Moorshed, 2007.
4 Jensen & Farmer, 2013.
5 OECD, 2014.
6 Aaronson et al., 2007; Jordan et al., 1997.

The 'policy lever approach' focuses on quantitative results, which can result in an emphasis on accountability and development rather than successful implementation.

The dangers of the 'policy lever approach'

The 'policy lever approach' occurs as governments and other stakeholders are encouraged to pull on those levers that have the biggest quantitative impact on outcomes. The result is that governments pull on a few of the biggest levers. They are rewarded for doing so as they are following the evidence. And in comparison to their predecessors this often a considerable improvement. But the lack of progress made by many systems around the world suggests that this approach will only result in limited improvement.

This policy lever approach has led to a greater national and international focus on teaching.[7] Numerous policies have been aimed to better develop teachers, or to hold them more accountable for their performance.[8] Reflecting the policy levers approach, governments have emphasized either accountability or development policies. Unfortunately, both regularly have minimal impact when they are not driven by a change strategy. The policy debate of development versus accountability is simply a by-product of the policy levers approach. It is driven by a levers approach that permits an artificial distinction between development and accountability that is not possible in a change strategy. A change strategy develops learning and teaching behaviors (with developmental policies) and continually reinforces them (with evaluation and accountability policies).[9]

More detailed policies are now reflecting a growing evidence base showing the importance of providing feedback to teachers.[10] Providing feedback for teachers regularly requires substantial increases in collaboration and classroom observation to be effective.[11] This requires substantial organizational and behavioral change in most schools but this rarely features in policies to increase teacher feedback.[12]

Governments are, through the political process, incentivized to pursue a policy lever approach. A more systematic approach is much more difficult to communicate to stakeholders, to the media, and to the general public. This means that a simplistic pull the levers and follow the evidence communications strategy is preferred. Government bureaucracies are encouraged to follow suit. Ministerial briefs are written to cite the evidence and rarely cover more than one policy lever. Change strategies are made much more difficult given the structure and internal incentives of the process.

7 Asia Society, 2014.
8 See Fullan 2011 for key examples of these policy approaches.
9 Jensen et al, 2012.
10 Hattie, 2009; The Bill & Melinda Gates Foundation, 2010, 2013.
11 Clement & Vanddenberghe, 2000; Zwart et al., 2007.
12 Jensen & Sonnemann, 2014.

is often blamed.

Poor policy leads to poor implementation

A lack of progress from the policy based approach has led to interesting policy discussions. Rarely has the strategy been questioned; it is very difficult to argue that an evidence based approach could be the wrong strategy. Instead, the problem is assumed to lie elsewhere. Poor implementation is often blamed.

Regularly in policy discussions we hear of strategies that would have worked if they had been implemented with fidelity. Teacher professional development wouldn't have been a waste of time if it had have been implemented with fidelity. The teacher evaluation program wouldn't have failed if it had been implemented with fidelity. The school accountability program wouldn't have caused schools to revolt if it had been implemented with fidelity.

There are many reasons for these discussions and explanations for a lack of effectiveness. But for this short paper, it is important to recognize that poor implementation is regularly a direct result of the policy levers approach.

The policy lever approach is not focused on implementation. In fact, implementation is often kept quite separate or viewed as another lever. It also affects organizations dealing with reform. Too often they are separated into programmatic areas with each area representing an evidence-based lever. Strong distinctions between the development of a strategy and how it will impact schools makes it very difficult for the strategy to be effective. Sometimes, those in charge of the implementation stage are charged with creating a systematic approach. That somehow implies, during implementation period, the strategy could be redesigned. But of course, by this stage the horse has already bolted.

Poor alignment of policies and interventions in schools are also often blamed for an evidence based strategy being ineffective. Alignment in high-performing systems is often highlighted. This is an important discussion. But what is often missing in the discussion is recognition of the difference between alignment in a policy lever approach and alignment in change strategies. These differences are too detailed for a paper of this length but in short, the key difference is that the policy lever approach often implies alignment being ensured after the policy levers have been chosen and developed.

Developing your own change strategy

In contrast to the policy levers approach, a change strategy focuses on organizational change and individual behaviors. It is immediately focused on implementation and alignment because the strategy must detail how behaviors are changed. The effectiveness of the strategy relies on alignment of how the interventions will alter behaviors. Alignment is therefore at the core of a change strategy.

A behavioral change strategy is an implementation strategy as it is all focused on how learning and teaching behaviors are changed in schools and classrooms. It is much harder to separate strategy and implementation when a strategy documents learning and teaching behaviors across a system and shows how policies interact to take these behaviors from where they are to where we want them to be.

Guiding questions for strategic planning, organizational capacity and quality assurance

- What does an innovative school look like here?
- What is the right teacher/ student ratio?
- What eSafety/ eAware policies are required?
- What impact will the vision have on income, costs and parents?
- What impact will the vision have on teacher requirements and expectations?
- What are the minimum qualifications/expectations for new and existing teachers?
- What are the critical attributes of our new learning environments?
- What learning outcomes, curriculum requirements need to be used /developed?
- Is there a time requirement for a school day, term, or year - can it be changed?
- What is the right size/type of classroom/school to be classified as a 21st century smart classroom?
- What policies exist/need to be changed, enhanced or developed to ensure the vision allows for responsible and effective execution?

The four key components of a change strategy

1	2	3	4
Provides a rationale for change by detailing the desired changes in learning and teaching that will increase learning outcomes.[13]	Describes how system and school leaders will role model the new behaviors and practices.[14]	Strengthens the capacity of leaders and teachers so they can make the required changes.	Introduces evaluation and accountability mechanisms that continually reinforce behavioral change.[15] Systems should monitor how, for example, professional learning is conducted in schools.[16]

13 Barber et al., 2011.
14 Fullan, 2009.
15 Lawson & Price, 2003.
16 Jensen & Farmer, 2013.

Case Study:

Hong Kong

A best practice change strategy

Hong Kong is a leading example of how education strategy can be developed and implemented with a change strategy. In 2000, Hong Kong outlined its education reform proposals.[17] The main objective was to improve student learning and shift it from being dominated by rote learning focused on exams to one that encouraged critical thinking, problem solving and communication skills through broad learning experiences.[18] This required a change in teaching practices and behaviors of every teacher in every classroom. To achieve this, every part of the reform supported behavior change within the teaching profession.

Teacher Professional Development

Improving student learning

The rationale for change was provided with a single strategic objective to improve "the core business of learning".[19] The strategy clearly articulates the objective of changing student learning from a process that was monotonous, exam driven and characterized by passive learning, to one where students learn through activities, building on what they know, interacting, creating and exploring new knowledge.[20] Therefore, teaching needed to change from one-way knowledge transmission geared towards examinations, to helping children develop learning skills.[21] This was done through project- and enquiry-based learning in order to develop critical thinking, problem solving and communication skills.[22]

Role modeling

Consistent role modeling is important for behavior change: People model their behavior on those in positions of influence. Hong Kong political, government and business leaders were engaged in and advocated for the reforms. School leaders were crucial to implement reforms and role model change in every school. School principals were trained in the strategy and reform process and new school principals now undertake a certificate course.[23] This includes detail on Hong Kong's policy environment, as well detail on the reform elements such as learning and teaching, curriculum and assessment reforms plus quality assurance and accountability mechanisms.

At the teacher level, new curriculum leaders in every school helped implement curriculum and pedagogy change.[24] These new positions were created in every primary school; in secondary schools, curriculum leaders were assigned to each key learning area. Each leader was given extensive training in the curriculum and pedagogy reforms and undertook some training in conjunction with their school principal to ensure a consistent understanding of reforms.

New curriculum leaders in every school helped implement changes.

17 This commenced with a detailed strategy and implementation plan: Education Commission (2000).
18 Curriculum Development Council (2000).
19 Cheng, K-M (2011) quoted in Jensen, B. et al (2012), p. 16. The education strategy was developed through 20 months of consultations with schools, teachers, parents, teacher unions and the business community. This included working groups including more than 100 educators and members of the public, plus three phases of consultation on the aims of education, the framework of education reform and proposals for reform: Education Commission (1999).
20 Curriculum Development Council (2000) p.10.
21 Education Commission (2000) pp. 60-62 details the new culture in learning and teaching including 'shifting from transmission of knowledge to learning how to learn'.
22 These were the four pillars of curriculum reform: Education Commission (2000).
23 Education Bureau (2012).
24 These positions were initially established for a five-year period, but converted to permanent positions in 2007-08. See Education Bureau (2006).

Case Study:

Hong Kong

In 2001, Hong Kong ranked 17th in the Progress in International Reading Literacy Study but jumped to 2nd in 2006 and improved again in 2011.

Building capacity

Behavior change often requires people to develop new skills and capacity to make the change.[25] Hong Kong invested significant time in developing teachers' skills and providing them with resources to implement curriculum and pedagogy changes.

All schools and teachers attended workshops on implementing curriculum reforms. The Education Bureau developed teaching and learning resources for teachers to help with curriculum and assessment reforms. Teachers were given curriculum and assessment guides that contained practical examples of changing pedagogy and suggested ways for schools to implement school-based curriculum and assessment.[26] A range of professional development opportunities for teachers were developed to help teachers learn from each other. These included:

- A new Continuing Professional Development (CPD) framework requiring teachers to undertake 150 hours of professional development over a three year cycle.[27]
- A professional development and induction tool kit for beginning teachers.[28]
- The development of learning communities and district level clusters to help teachers learn from others' experiences and reinforce effective implementation within schools.
- In-school support programs to provide professional development and advice to teachers and schools. On-site support was negotiated with individual schools but could include collaborative lesson planning, research projects and consultancy services for curriculum and pedagogical issues.[29]

The Education Bureau also targeted its funding for higher education research. Funding was targeted towards collaborative research and development projects for pedagogical reform in schools.[30] This helped teachers develop effective practices within their local school context.[31]

Reinforcement mechanisms across the system

Behavior change will be more readily embraced when organizational structures, operational processes and performance measures are consistent with the behavior that people are asked to change.[32]

A new school development and accountability framework was introduced to ensure that schools were effectively implementing changes to teaching practices. Two types of school inspections were used: External school reviews and focus inspections. School-specific inspections evaluated learning and teaching changes, management and organization, student performance and student support.[33] Evaluations were conducted using lesson observations, staff questionnaires, evaluation of students' work and discussions with parents and broader school community.[34] In contrast, focus inspections targeted specific areas of reform such as assessment or classroom observation techniques.[35] Teams of teachers and Bureau staff spent one to three days in schools observing lessons, interviewing and discussing teaching and management practices with staff. The inspection report detailed feedback and provided assistance to improve teaching practice.

The ultimate result can be seen in Hong Kong's improvement in international test results. In 2001, Hong Kong ranked 17th in the Progress in International Reading Literacy Study (PIRLS) but jumped to 2nd in 2006 and improved again in 2011.[36] This success doesn't mean that the Hong Kong strategy is the only possible improvement strategy. But it is an excellent example of a strategy that focuses on changing learning and teaching behaviors.

Conclusion

A change strategy offers much potential for policy makers but can also create issues and questions in some systems. Does a change strategy require a more interventionist approach? This is difficult to answer (partly because interventionist regularly carries negative connotations) but in some respects, yes. For example, accountability regimes that focus on changing teaching and learning behaviors require stronger connections with schools and classrooms than an accountability policy that compares test scores. Most high-performing systems that pursue a change strategy therefore have much greater observation and monitoring.[37]

But we should also not pretend that more market based approaches are not trying to change behaviors. In fact, it is often the core of the policy to create incentives for improvement. It is therefore important to be precise about the specific behaviors that are being incentivized. This requires detailed analysis of the extent of market failure (and the resultant incentives), and of the precise learning and teaching behaviors being incentivized.

Compared to evidence-based strategy, behavioral change strategy can enable more effective use of that evidence.

The focus on the evidence has been a huge step forward for education strategy and this paper is not arguing that we ignore the evidence. This would be disastrous. Nor does it criticize evidence-based researchers. They have and continue to make a huge contribution. They should not be blamed for how policy makers use and misuse their research. This paper is trying to address the unfortunate fact that evidence based policy is not producing the gains in learning outcomes that we would like (or expect). This paper posits that a behavioral change strategy can result in a more effective use of the evidence base. It would be terrible if we continue down the same path and reach a stage where we realize that our unrelenting focus on the evidence base has made most education reforms largely ineffective.

25 Lawson, E. and Price, C. (2003).
26 For example, see Hong Kong Education Bureau (n.d.) Senior Secondary Curriculum Guide Series Booklet 3: Effective Learning and Teaching. Learning in the Dynamic World of Knowledge and Booklet 4: Assessment. An Integral Part of the Curriculum, Pedagogy and Assessment Cycle.
27 Advisory Committee on Teacher Education and Qualifications (2003). See for example Appendix E: Major Modes of Teachers' CPD Activities, p. 42.
28 Advisory Committee on Teacher Education and Qualifications (2009). See also Ng, S.W. (2012) for a discussion of the mentoring and induction framework.
29 A range of school-based support services and resources is provided for each level of schooling – Kindergartens, primary and secondary schools. See Education Bureau (2014). A whole suite of in-school support programs operate including a Principal Support Network, Professional Development Schools Scheme for schools to share their learnings with each other, University – School Support Program to provide.
30 The Education Bureau established the Quality Education Fund (QEF) to finance research projects designed to promote effective learning, implement school-based management, explore education issues and research the application of IT in schools. Each year QEF funds research based on project themes, aligned with the implementation of reform, or need of the education system. The QEF See www.qef.org.hk
31 In addition to research assisting schools and teachers in their local context, the QEF also disseminates and promotes research findings within the education system.
32 Lawson, E. and Price, C. (2003).
33 Education Bureau (2013b).
34 Ibid.
35 See material related to focus inspections of the use of English as the medium of instruction for further detail: http://www.edb.gov.hk/en/sch-admin/sch-quality-assurance/sda/moi/index.html
36 Mullis et al (2007), p. 44 and Mullis et al (2012), p. 38.
37 Jensen et al., 2012.

Resources schools can use to support change

School Transformation Process
School systems are faced with both a challenge and an extraordinary opportunity. Identifying readiness and putting in place transformation is laid out in our step-by-step guide.
https://aka.ms/6iprocess

School Transformation Survey
This tool is a free, online survey that measures educators' and leaders' perceptions on the current state of innovative teaching practices in their school or class. It is a self-assessment and serves as an important first step in bringing about awareness of the current state of transformation of the teaching and learning experience.
https://education.microsoft.com/GetTrained/schooltransformationsurvey

21st Century Learning Design Courses for Educators
The 21st Century Learning Design program provides a 21st Century skills framework to guide a new model of educator professional learning. The program is based on Innovative Teaching and Learning (ITL) Research's 21st Century skill rubrics and research on the most effective models of professional development.
http://aka.ms/21cldcourse

38 For example, see the Assessment for Learning Resource Bank, Education Bureau (2013a).

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