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Introducing the drivers for whole system reform

'Whole system reform' is the name of the game and 'drivers' are those policy and strategy levers that have the least and best chance of **driving** successful reform. A 'wrong driver' then is a deliberate policy force that has little chance of achieving the desired result, while a 'right driver' is one that ends up achieving better measurable results for students. Whole system reform is just that – 100 per cent of the system – a whole state, province, region or entire country. This paper examines those drivers

long as you make sure the less effective four play a decidedly second fiddle role to the right four.

This distinction is critical because the evidence is clear: the wrong four as drivers de-motivate the masses whose energy is required for success; the right four drivers do the opposite. Countries that are successful (increasingly on a sustained basis) have figured this out and will only get stronger. All systems need to shift toward the right constellation of drivers because this will give them success, and will result in global advances. Every country that gets better educationally becomes a better neighbour. The moral imperative in education is about the whole world advancing. Systems that embrace the four right drivers using the so-called wrong drivers in a supportive role can win at home as they win abroad.

Before turning to the four flawed drivers (and their more effective counterparts) we need to consider the national reforms currently being pursued in the United States and in Australia. These are big audacious efforts that I cannot do justice to in this brief paper but we can get a good appreciation of their profile and main elements.

The US and Australia

The US

The Obama administration and the Secretary of Education, Arne Duncan, have launched a massive reform effort that generally goes under the banner of 'race to the top'. The best accessible version is contained in

(US Department of Education, 2010a). American aspirations include leading the world 'once again' in college completion by 2020. 'Our goal', says Obama, 'must be to have a great teacher in every classroom and a great principal in every school' (p 1). Four pillars are seen in such a system:

- new world class standards and corresponding assessments;
- a robust data system that tracks student achievement and teacher effectiveness;

- improving teacher and principal quality through recruitment, training and rewarding excellence; and
- turning around the 5000 worse-performing schools (out of a total of 100,000) in the country.

Put another way. the big drivers include: new world class standards; aligned assessments, and focused feedback including student performance and teacher effectiveness often tied to merit pay or similar rewards. For example 48 states, two territories and the District of Columbia have developed a new set of Common Core State Standards (CCSS) in English Language Arts (ELA), and in Mathematics from Kindergarten to Grade 12. These standards are positioned as rigorous, relevant to higher-order skills, informed by the standards in top-performing countries like Singapore, and as evidence- and research-based.

Two consortia have been funded by the Federal Government to develop new assessments for the CCSS set of standards. One group, the Partnership for Assessment for Readiness for College and Careers (PARCC) is developing 'summative' evaluations in the two K-12 strands (ELA and Mathematics) including 'through-course assessments' that will be administered

large scale the kind of intrinsic motivational energy that will be required to transform these massive systems. The US and Australian aspirations sound great as **goals** but crumble from a **strategy or driver perspective**. At best they can tighten up an otherwise loose system

intrinsic motivation. Do testing, but do less of it and, above all, position assessment **primarily as a strategy for improvement**, not as a measure of external accountability. Wrap this around with transparency of practice and results and you will get more accountability all round.

Playing down blatant accountability to get more real accountability is a hard argument to grasp, but we get some great insight from one of the findings in the McKinsey study of 20 strongly improving systems (Mourshed et al, 2010). In all of these systems the McKinsey group measured the number of interventions that could be classified as 'accountability' based, and the number that focused on 'professional learning' (capacity building). Accountability interventions included externally conducted performance assessments with consequences,

Individual Quality (vs Group Quality)

This is a tricky one because it looks so rationally obvious – teacher and school leader quality are the two most critical factors; therefore improve them directly through incentives, teacher appraisal, development and punishment for those who lag behind. This logic is deceptively fatal for whole system reform.

The problem starts innocently enough, with the much cited finding about two students who start at the 50th percentile: Student A has very good teachers for three years in a row; Student B has poor teachers for this period of time. At the end of the third year, student A is at the 75th percentile, and student B at the 25th percentile – a difference of 50 percentile points or the equivalent of at least one full year ahead or behind. So, the wrong driver takes over and we get merit and performance pay for the top 15 per cent, tough measures for the bottom 10 per cent, and teacher evaluation with new effectiveness measures. You will appreciate here that the solution has compounded the problem – a kind of double jeopardy that combines wrong-headed accountability with individualistic application – drivers one and two in cahoots.

teachers. Teacher appraisal will not work unless it is embedded in a school culture of learning where teachers are motivated to learn from feedback. Hattie's findings are over-interpreted if you just take the literal notion that all good feedback is automatically beneficial. As he puts it, 'it is the willingness to seek negative evidence (seeking evidence where students are not doing well) to improve the teaching ... the keenness to see the effects on all students, and the openness to new experiences that makes the difference' (p. 181). This is a **cultural** phenomenon not a procedural one. The practice of integrating feedback into actions that result in improvement is embraced by teachers and their leaders essentially because their culture values it. That is why it works. Throw a good appraisal system in a bad culture and you get nothing but increased alienation. When the Grattan report says that their proposed appraisal system 'will require a change in culture' it is fundamentally correct (Jensen and Reichl, 2011). This innocent little phrase 'change in culture' is the Elephant in the room. This is the very Elephant that the four right drivers are dying to ride. Culture is the driver; good appraisal is the reinforcer, not the other way around.

Teacher appraisal and feedback would seem to be a good idea (CCSSO, 2011; Gates, 2010; Jensen and Reichl, 2011). This strategy is justified on the basis that feedback improves performance. The logic is reinforced by the finding that focused feedback to students has the most powerful impact on student learning of all pedagogical practices (Hattie, 2009). It should be the same for adults. Note, however, that student feedback only works when it is embedded in a classroom culture that is supportive of learning. The same is true for

patterns of interaction among teachers and between teachers and administrators when focused on student learning make a large measurable difference on student achievement and sustained improvement. This is called ‘social capital’, which she contrasts with ‘individual capital’ that is based on

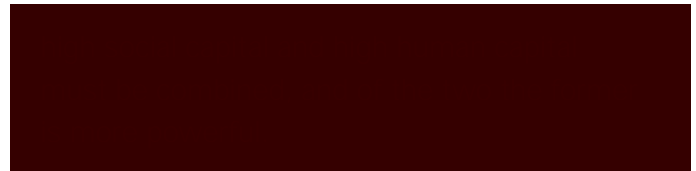
(p 2)

This dependence on human capital to carry the day is, of course, our wrong driver.

Leana set out to test the relationship between the power of 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 teacher qualifications, experience and ability in the classroom. Social capital was measured in terms of the frequency and focus of conversations with peers that centered on instruction, and that was based on feelings of trust and closeness between teachers. She studied the impact on mathematics achievement over a one-year period.

Leana uncovered several interrelated themes directly related to my argument here. If a teacher’s social capital was one standard deviation higher than the average, her students’ mathematics scores increased by 5.7 per cent. It is of course the case that teachers with high ability outperform teachers with low ability, but that is not the big driver. Leana reports that teachers who were both more able (high human capital), and had stronger ties with their peers (high social capital) had the biggest gains in math achievement. She even found that low-ability teachers perform as well as teachers of average ability ‘ they have strong social capital’ in their school (p 10, italics in the original). In short, high social capital and high human capital must be combined, and of the two the former is more powerful.

Recall that human capital refers to the teacher’s cumulative abilities, knowledge, and skills developed through formal education and on-the-job experience. Social capital is not a characteristic of the individual but instead resides in the relationships among teachers and between teachers and principals. Leana’s findings mean that having bad working conditions (low social capital) makes good teachers less effective, and makes poor teachers get even worse. Her findings also mean that the goal is to develop in concert **both** high human and high social capital. More than that – high social capital is a powerful strategy to leverage human capital.



Imagine that you would become a better teacher just by virtue of the fact that you are on the staff of a particular school in a particular district in a particular state or country. That is the power of social capital.

Even more disturbing for those riding the wrong drivers is the realisation that even if driver one (standards, assessment-based accountability) produces some increase in human capital, it will be swamped by the failure to pay equal attention to social capital. You do not have to choose one over the other, but make sure that strategies based on team work are more prominent.

The good news is that the right drivers in combination – capacity building and group development – generate greater success and greater accountability. Dylan William (2011) captures this phenomenon in his book *Formative Assessment*. He shows how five key strategies of formative assessment strengthen both instruction and achievement. These strategies

- clarify learning intentions and criteria for success;
- engineer effective learning experiences;

- organising to implement strategic human

And don't make the mistake of thinking because you involve some teachers in key deliberations that you have involved the profession. Rather what works is the daily experience of all teachers – peers working with peers in a purposeful profession that is effective at what it does while it embraces public accountability. We are, after all, talking about changing the day-to-day culture of the teaching profession.

The question of ownership and engagement is the crucial factor. The right drivers embed both of these for students and teachers. Similar extensions of policies and strategies aimed at generating ownership on the part of parents, communities, business leaders and the public at large will also be required. It is beyond the scope of this paper to take up these matters, but

Ownership is not just for commitment. The process of ownership, represented by the flip side of the wrong drivers, develops strong instructional expertise on an ongoing basis. Motivation **and** expertise go hand in hand. I hope it is also abundantly clear that the two wrong drivers discussed so far undermine widespread ownership and its twin powers of motivation and competence across the profession.

Policy makers in a hurry are prone to choose the wrong drivers. Thus, when they see good reports such as those by Odden and OECD, they are likely to fix on the wrong solutions and hence miss the heart of the matter. The essence of whole system success is **continuous instructional improvement** closely linked to student engagement and success, again for all students. The drivers that work motivate teachers to engage in instructional improvement with peers. Revealingly, the reverse causal sequence is just as crucial; that is, increasing instructional improvement causes motivation to increase – what we call 'the moral imperative realised' (Fullan, 2011). Success means greater efficacy and the latter breeds greater commitment.

much as the other way around. This is the new work that will be necessary to reverse the trend of technology racing ahead of pedagogy.

The good news (mostly) is that the further development of technology has a life of its own. It will get more and more powerful, cheaper and more available. In the latest work, learning and instruction become the driving forces, so that we will ride the technology wave instead of being at the mercy of a powerful but intrinsically aimless phenomenon.

Fragmented (vs systemic)

Along with cultural traditions of individualism come tendencies to focus on single rather than systemic solutions. Thus the US, for example, has a habit of breaking things into pieces – and what looks like a system is not, because the pieces are not well connected. This problem is aggravated when some of the pieces are the wrong ones to begin with. Standards over here, assessments over there, and teacher appraisal and incentives in still another box: what can be portrayed as a system (the pieces are there, and can be made to **sound** comprehensive) is not integrated as a coherent whole, and thus does not function ‘systemically’. Implementation then becomes a hodgepodge. Countries without systemic capacities have great front end, episodic fanfare but have a constitutional inability to put things together during implementation.

Systemic does not mean that the various elements can be described as linked. This is only systemic **in theory**. It is practice that counts. Thus systemic strategies both require and support on-the-ground improvement efforts in **every school and every district**. This is why the ‘right’ sides of drivers one, two and three are the winners. Capacity building, group work and deep pedagogy, accelerated by technology, are in effect processes that support, indeed require, all schools to engage in the improvement of practice. The natural definition of systemic means that all elements of the system are unavoidably interconnected and involved, day after day. In a systemic world evidence-based

learning really is the daily work. Systemic is experiential not theoretical. In other words the four wrong drivers are not ‘systemic’ by this definition.

Without a systemic mindset, countries fail to focus on the right combination with the right mindset. In the successful countries it is clear that there is an absolute belief that quality education for all is crucial to their future (OECD, 2011). These countries then approach the task with the knowledge that everyone must be part of the solution. They know that teachers are key to improvement and can only work effectively when they are supported. They make major, coordinated efforts to improve the quality of teachers through various forms of support: from recruitment to the profession at initial teacher education through the early

This dynamic, of committing to respect before it is well-established, is something that non-systemic oriented people don't get easily. When Finland and Singapore began their reforms 40 years ago they did not have a profession that warranted respect, but they set about to build such a system. This is essential for whole system reform. Unless the US and Australia back off low-trust strategies, and start engaging the profession in the solution (OECD's (2011), Chapter 4, Teacher Engagement in Education Reform) they will get neither the commitment nor the skills sufficient for whole system success. The funny thing about systemic implementation is that it ends up building greater accountability into the system among teachers and others than can be obtained by more overt accountability measures. This does not occur overnight but it can be achieved in reasonably brief timelines – half a dozen years as the McKinsey group found – if you employ the right combination of drivers. It is time for a fundamental shift in strategy.

can motivate the masses, which is required for

Implications

My main purpose in this paper has been to shift policy makers' thinking away from big drivers that are counterproductive. Thus the first idea is to focus on the actual limitations of current levers – limitations that are fatal to the goal of whole system reform. I do not for a moment want to convey that everything about accountability, individualism, technology and given pieces of the reform packages is worthless. These elements have their place in a more fully developed system. My main point is that these four policy/strategy levers are miscast as drivers of whole system reform. Used alone or as the central drivers they certainly will not get us where we need to go and, very probably, will do more harm than good.

In the cases of the US and Australia one could argue that since their seemingly comprehensive reforms are very recent that it is unfair to judge them. They have not yet had a chance to have an impact. I hope I have made it clear that there is no way that the four 'wrong drivers'

Second, use the group to accomplish the new learning-instruction culture. More specifically, approach the solution as a **social capital** proposition to build the new teaching profession. This will require building collaborative cultures within and across schools. Within this approach there is a crucial role for key personnel and other human capital policies and strategies – those very components that have been spelled out well by Odden (2011) and OECD (2011). However, if development of individuals is not surrounded by a culture of developing social capital it will fail.

Third, go all out to power **new pedagogical innovations with technology**. As I noted, there are numbers of these developments currently under way that are aimed at the next generation of learners. What makes these advances crucial is that they combine so many elements needed for success: engagement; entertainment; ease of access to information and data; group work; humanity; social relevance; and so on. In a word they make education easier and more absorbing. Learning and life become more seamless.

Fourth, the set of good drivers must be **conceived and pursued as a coherent whole**. This is not as difficult as it seems. There are only a few key components. Focus on the right ones, and treat them as feeding on each other. They actually serve as mutually supportive and interactively corrective. The strengths of one complement the weakness of another, and vice versa (for example, transparency helps with accountability as it adds to capacity building); each driver is generative in serving two or more purposes simultaneously (for example, peer learning and accountability are promoted equally within the same strategy). Do not make the mistake of thinking because you have the

right pieces that you have a system. The four right drivers must be conceived and designed as working interactively. Recall that the main criterion of systemic reform is that **all** schools and districts are engaged in improvement efforts, while being aware that they are part of bigger phenomenon to change the world.

The drivers I am recommending create the very fundamentals that I started with in this paper – learning and teaching become driven by the individual and collective intrinsic motivation that has permanent staying power. This is what the successful world systems are doing, and if countries lagging behind do not change their ways the gap will become larger and larger. Societies that do not respond well will suffer. They will suffer internally in body and soul, and will suffer on the world stage. It is not far-fetched to link lack of progress over subsequent decades to societal disintegration in affected countries.

There is a choice and some countries have made

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