I was a primary school principal in Victoria from 1997 until 2001 and an elementary school principal in the USA from 2001 until 2006. I witnessed first-hand the devastating effects of high sakes standardized testing on the quality of education in the USA. Since returning to Australia and working with schools as an educational consultant I have watched the Australian education gradually but inexorably come to more closely resemble the flawed USA system. And this is happening just as the USA begins to wake up to the damage that high stakes testing has caused.

Arne Duncan, the USA Secretary of Education recently stated at a meeting of the American Educational Research Association that standardized tests are not an effective or valid means of assessing student achievement, teacher proficiency or school effectiveness.

Pasi Sahlberg has called it GERM – the Global Education Reform Movement. It's an apt acronym because it is infectious and it is doing us no good at all. In fact it is doing what all infections do – weakening us and making us vulnerable to all sorts of other opportunistic infections.

A GERM infection happens when policy makers see that something is wrong with education and instead of drilling down to find out what is causing the problem and then seeking solutions, they decide to measure what is wrong and then try and use that metric as a solution. That is tantamount to taking the temperature of a child with the flu, discovering that it is too high, and putting him outdoors in the snow.

In all GERM countries we see the same scenario:

- blanket standardized multiple choice style testing of all kids – in the belief that this one test is a measure of the effectiveness of everything important that goes on the school
- shock horror reactions to the published results, followed by the apportioning of blame – and the imposition of sanctions against low scoring schools and teachers
- mammoth efforts to lift the scores in the next round of tests leading to narrowing of the curriculum, teaching to the test, teaching of test taking skills, loss of free play time, development of scripted teaching programs that de-skill teachers, devaluing of subjects that are not tested

The USA is deeply enmeshed in this epidemic with the majority of school districts GERM ridden. One of GERM's prominent advocates Joel Klein invited Australia's Prime Minister and

Minister for Education to discover what the infection had done to his New York City schools. The inevitable happened. When you are exposed to GERMS you become infected. That infection is spreading through the Australian school population.

There are a few school systems that remain immune to GERM – Finland is one – but without action this growing epidemic may become a pandemic.

The root of the problem lies in the belief that one standardized test, administered in the same way, to every child, in every school at the same time is capable of measuring the complex, rich, varied nature of education and, more importantly, is capable of measuring our children. It is not. It is appallingly misleading that the metric for describing schools on the My School web site are the results from the NAPLAN test.

Let me tell you just how bad it can get – this relentless striving towards the 'benchmark'. This is what NAPLAN and My School as they currently stand will give us. It reaches a pinnacle in the creation of the Pacing Guide. This nightmarish document becomes the focus of everything the teacher does in the classroom.

How is it created? Not by evil trolls beavering away in subterranean caves, lit by the flickering fires of hell. No. It is created by well-meaning souls who believe they are doing Something Good for education.

And it's done more or less like this.

A careful examination of past standardized tests reveals the sections of the mandated curriculum that have been tested most frequently as well as the number of questions that relate to each area of the curriculum.

Each section of the curriculum is given a loading based largely on the proportion of questions it attracted in these past tests. This analysis will form the basis of the content and timing of the Pacing Guide.

A curriculum is developed for each grade level based on this analysis, making sure that previously untested areas of the curriculum are not left out entirely, but ensuring that the topics attracting the largest number of questions also get the most time.

The school year is broken up into, for example, nine week units or terms. The curriculum is similarly divided.

A test is devised for the end of each nine week period/term. Its format will closely resemble the high stakes test to be taken at the end of the school year. It will test exactly what was in the nine week/term curriculum and its questions will reflect the same priorities that went into the decisions about the content focus – the more likely it is to be tested, the more questions we focus on it.

The data obtained from these tests will be provided to principals quickly so that they can call to account every teacher whose students are not meeting expectations. There will be an accountability meeting with each of these teachers in the principal's office.

We now have a system in place that provides a 'laser-like' focus on the material to be tested by the State. From time to time an Assistant Superintendent will visit the school and pop into classrooms. Her task is to make sure that on this particular Tuesday, or Friday, or whenever, every teacher is teaching exactly what is expected according to the Pacing Guide. The teachers know better than to deviate from the Pacing Guide because its content will be tested at the end of the nine weeks and they will be held to account. This is exactly what I experienced in my school in the USA.

Let's get something very clear.

The role of the kids in these schools is to pass the tests so the schools are accredited or have no red bands on My School.

The students' task is to make sure the school doesn't look bad.

It doesn't matter if there is a violent thunder storm rolling about over the top of the school, fascinating the kids. We can't talk or read or write about that. It's Wednesday and the Pacing Guide says we should be learning about Mali.

It doesn't matter that James has just come back from a holiday in Mexico and saw a parade on the Day of the Dead. He has photos, and a head full of questions. But it's Monday and the Pacing Guide says we need to work hard on understanding the water cycle.

It doesn't matter that Timmy still doesn't understand the multiplication of fractions. He has to move on or he won't have covered the rest of the topics by the end of the nine weeks. He can come back after school, at the weekend, in the summer … to plug the gaps in his understanding. We know that the building of mathematical understanding is a cumulative process and a misunderstanding now will undermine everything that comes next, but we just have to move on.

Yes, this is how bad it gets.

Perhaps the greatest evil of high stakes standardized testing is that it takes our eyes away from the children and focuses them instead on the tests themselves.

Children become sources of data.

Learning becomes something that is cut, sliced, packaged and weighed.

Until we rid ourselves of this impediment to education and find valid, humane, child centred forms of assessment, testing will continue to STOP our children from learning.

Why is it that so many of our schools continue to be run as if they were nineteenth century factories? We focus on standardization and its measurement. We process in batches. We talk about 'value added' assessment as if we viewed our children as raw material to be processed in some kind of assembly line. We focus on eliminating outputs that do not meet our predetermined standards of quality for the end product.

We do our best to standardize the inputs in the only way we know how – by original date of manufacture or birth date. We then develop processing techniques that we try hard to standardize across every factory/school . These are the curricula and teaching practices that are required in order for the process workers/ teachers, to get positive evaluations. We design cheaply administered tests to ensure that every end product/child meets the same criteria of successful processing/schooling. At the end of each processing year every module/child submits to the same test to determine the value added to the raw material. Faulty modules/children who do not meet the standard are reprocessed through either the repetition of the previous processing system or some form of modified processing, until they do meet the standard.

The core of the assembly line factory, the practice on which its products would stand or fall, was standardized measurement of quality. It is precisely this practice permeating current education systems, and it will destroy quality education and ensure that our children fail in the 21st century.

Why? Because our children are not widgets and learning does not work like that.
Real, transformational learning takes place when we are fascinated by something, when we develop a passion for a subject. Our strength as a species comes from our diversity not our uniformity. Every child has the capacity to be fascinated by something different and schools, with their standardized curricula and testing, will stifle this diversity, to ensure that every kid learns exactly the same thing.

We learn best when we take risks, when we chance failure because even though it is really difficult material, it fascinates us enough to make the risks and the hard work worthwhile. I recall my horror when I was informed by a group of young women in the final year of their undergraduate degree in a US university that they were withdrawing from my subject because they felt they would not get an A and that would have a negative effect on their Grade Point Average. This is what a focus on testing leads to. Our developing testing regime, our relentless focus on end of manufacture measurement, is stopping our kids from learning.

Seth Godin, in a recent TED talk (http://getideas.org/resource/seth-godin-stop-stealing-dreams/?v=1352307111) uses a powerful analogy. He says that we are focused on getting our kids to collect dots and we measure success by how many dots they have accumulated by the end of the school year. Instead, we should be teaching them to **connect the dots**, and this we are failing to do.

There is one thing we need to focus on in education – thinking. Google has made the belief that there is some set of facts that is somehow mandatory learning for every student an archaic notion. You cannot think without something to think about. The content of any curriculum should be determined and judged by one fundamental criterion – how does it advance the students' ability to think?

We need more brave schools, prepared to turn their backs on the factory model and actually encourage kids to try to do things that are too hard. We need more people in positions of influence to say, "Our kids want to come to school every day. They are intrigued by the things we do every day. They create new ideas, they innovate, they take risks, they are excited about the

things they have already learned and they want more. And I can't focus on your standardized test. We are doing something much more important. We are educating."

Don't get me wrong. We need standards if we are not to flail around in a free for all soup of educational practices. The standards as expressed might well be sound and significant but the dangers lie in the implementation and evaluation.

Let's not fall for the standardization myth, the one that says unless every kid reaches the same standard with the same material in the same time frame, our system has somehow failed. Our kids are not assembly line products. The assembly line, quality control model works well for cars and hamburgers. But some kids grow up on farms and others in high rise tenements, some kids love to bury their noses in books, others need to push their bodies around, move and do stuff with their hands. Some kids' brains are eager to accept abstract concepts at an early age and some want images, pictures and sounds with their learning. Some kids can't sit still. And we really don't have a clue what they will need to be successful in thirteen years' time – except for one thing. They will need to be able think flexibly, creatively, effectively and efficiently.

Whatever the world looks like in 2025, we know this ability to think will be a foundation for whatever their lives look like. It's hard to test innovative, creative, flexible thinking with a four point multiple choice question.

My hope is that as we continue to reform our education systems in Australia and the USA, we don't lose sight of the fact that the declaration of standards needs to remain flexible, adaptive to the needs of kids and open to change. The teaching of thinking needs to be explicitly embedded within the standards. It should be foundational, not incidental. In addition, our methods of assessment need to reflect the rich and totally desirable variation among children.

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