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exhibition, performance, delight: the future of learning

Friend - and now as visiting prof at CEMP in Bournemouth Uni - colleague Anthony Lilley (who amongst a hugely hectic life runs Magic Lantern) asked me to write this for an Arts Council publication he was assembling. I finished it skiing at the end of 2009

In the rather sad factory learning era that was the 20th century, the twin Dementors of managerialism and incrementalism stalked education unremittingly. The result was that learners at every level were trapped by the structures and strictures that were put in place to deliver on some depressingly basic and joyless KPIs. "Was education working?" the Treasury would ask, and their simple answer would be to solely look at the number of children who attained 5 GCSEs at C or above. Teachers and others in education are smart - that is how they got to be there. So it wasn't long before schools were focussing efforts on getting the Ds up to Cs rather than stretching the Bs or delighting the As, and rather sadly they abandoned the Es. It would be hard to devise a metric more likely to disengage a generation of learners, or to dismay a generation of teachers. It was and is a disaster.

Worse still, on the international stage the World Bank's sole measure of educational success was even dafter: they simply looked to see how much money had been spent - on the assumption that all spending was gainful - and of course this hardly helped the battle against corruption, or for effectiveness. For the World Bank giving \$5bn to a nation, when \$4bn ended up in a corrupt government's pocket, seemed more effective than giving \$2bn directly to schools. Looking back it is hard to believe the naivety of these and other 20th century measures and for certain we will laugh at them in the future as heartily as today we laugh at the memory of leeches in medicine.

Today, decision making is passing right on down to the schools and communities that are making learning happen. There is good data, scholarly forensic analysis, copious experience and indeed plenty of common sense all of which suggests that we might focus more effectively on rather subtle, and useful, measures. Our schools and other learning institutions themselves have begun to properly value outputs that were unexpected or undervalued in the last century: ingenuity is beginning again to run ahead of conformity, standards are beginning to replace standardisation, universities are beginning to explore graduation by exhibition; it is not fanciful to imagine that even the delight on children's faces might inform a metric of engagement. Other metrics might also include employment, reduced teenage pregnancies, attendance, parental engagement, applicants for vacant posts, employee churn, and stage not age based success. We know with certainty that where engagement and application are key, the learners' voices are suddenly more resonant and urgent than the Minister's in helping us to know what works best. And learners have said "no" resoundingly to cells and bells, to the disaggregation of knowledge, to Dick Turpin style (Stand and Deliver) teaching, to copying swathes in class but being banned from copying from the web at home, from learning being "delivered" rather like milk once was. It seems as though, in a rather gentle and bottom up way, a learners' revolution is sweeping aside that old factory model of learning. All this might be rather encouraging, and it warrants some exploration. How did all this happen?

Why isn't it happening everywhere? Is this the future of learning?

In very many ways we stand at a significant crossroads in this first decade of our fresh millennium: new technologies, remarkably confident young users, new models of business and organisation, fresh approaches to work, ubiquitous media, global scale but with small communities increasingly sovereign, a world of unexpected and sudden social change, a palpable tilt in the economic world order, and more. Only a little way into the next 1,000 years and already it feels very different from 1999. Sitting in our many millennium parties just a few years ago the emphasis seemed to be on looking back smugly: how far we had come, what progress we had made, how well we had done, how clever we all were, how modern. Ten years on it is clear that we should all have been looking forwards instead. Recent seismic changes, from a massive economic "credit crunch" to rapidly worsening climate instability make the last century seem pedestrian and snoozy by comparison. The 1990s look dated from here, and we have a better sense of the progress we need to make, the distance we have to travel, to cope with the unexpected changes of this tempestuous new era. It looks as though we weren't very clever at all.

It would be a wild and reckless gamble to think that we might move forward into this new millennium with the same education system that served a previous century, any more than we would expect the same power stations, or the same medicines, to suffice. Few adults would now wish their children to be in a school that is like the one that they themselves left a generation before, just as few have ever wished their dentist to be like the one we went to as a child! But what to change? what to keep? what to abandon? what are others doing better? Perhaps in the 1870s policy makers, responding to the industrial revolution around them, faced a similar challenge as they migrated learning into formal institutions, but they had the luxury of so much time to decide on action. No one has previously faced the pace of change that characterises this decade so far, and that pace of change will no doubt accelerate further yet as we climb to the steep part of the exponential curve that is 21st century technological progress. Pace changes everything and it will change learning too, for the good.

In post war Europe, facing an unprecedented baby boom and unrelenting mass production, factory schools looked to policy makers like a very good idea indeed: a one-size-fits-all curriculum, with uniformity, conformity and rigidity at its heart, with everything broken up into manageable pieces, appeared to be able to process the booming numbers and to provide a time-aware, production-line savvy, workforce for the burgeoning automobile and washing machine factories. School time was broken up into ridiculously small blocks with bells to punctuate the day in a way that many commentators since have paralleled with the tea break bells in those same factories. How on earth could anyone engage in a learning task that had any ingenuity or creativity in a 30 minute lesson? But Ford's et al didn't want ingenuity or creativity on their production lines, they wanted compliance and acquiescence. At one point in the 1970s the UK was opening a school every day, somewhere, and most were flat roofed, galvanised windowed, corridor rich pastiches of the factories down the road - both with industrial scale toilets and rather over-grand entrances. In this context, it is no wonder that standards got muddled with standardisation and learning got utterly lost.

The standardised "output" from these cells and bells schools filled the many mindless jobs of post war economic Britain. Single figure graduation rates from university - around 7% for England, reflected the lack of national and economic ambition for learners. "Too clever by half" was an insult, not a complement. Today of course things are different. The mindless jobs are outsourced or done by robots. In the 21st century the economic need is for ingenious, creative, collaborative, engaged children who can go on to manage the outsourced global teams, or design better robots. In employment, the job category that has collapsed fastest has been unskilled clerical work. Technology has simply taken that work over in the way that the early photocopiers replaced rooms full of copy typists in the 20th century. Ironically, factory schools remained dominated by repetitive clerical tasks, preparing children only for unemployment as the end of the last century demonstrated all too depressingly. The Campaign for Learning's IPSOS / Mori poll of 2007 revealed that the top item reported by children as required learning activity in school was simply copying from a board or worksheet. How could that possibly be useful? There has been no work for copyists for decades. Cells and bells schools do not produce the fresh, innovative, creative, sometimes maverick thinkers we need to approach tasks differently, to innovate, to break through past assumptions - to solve the unexpected problems of global warming, economic collapse and conflict. For children to think outside of the box we need first to let them escape from it. Life changes, schools must too.

Of course, technology changes too and it has been a huge catalyst in allowing so much of what we "always did" to be rethought. Technology's changes currently are exponential: the processing power of computers, internet data traffic, the adoption of mobile phones, the number of transistors on a chip, bandwidth available wirelessly, the falling price of storage, GPS in cars... It doesn't matter which 21st century technology you plot on a graph against Time, it will yield an exponential curve taking a moment to gather pace, but then rushing skywards. As time goes by the pace of change increases substantially. You think it is quick now, but you haven't seen anything yet.

Looking at an exponential curve, with its flat start and precipitate conclusion, you can see just why pace changes everything. Early on, at the dawn of micro-computers for example, with the curve still flatish, we had a relatively long time to reflect on comparatively small changes. I remember debating for some years the merit, or not, of a colour rather than green and black, computer screen, or of a move from 5.25" "floppy" discs to the more robust little 3.5" ones. Should computers be in "suites" facing the wall (no!), or more ubiquitously distributed? Cue debate throughout the entire 1990s. With the luxury of time, policy could be piloted, conclusions mulled over, iteration could occur, consultation and debate absorbed, Quangos could proclaim, draft proposals would be circulated. However, today the really substantial technological seismic shocks are "out there" in the consumers hands before a policy debate has even had time to start, let alone conclude. As schools debate acceptable use policy for their managed IP networks, students are arriving with more personal bandwidth, unfettered, on their 3G dongles, or tethered mobile phones, than the school offers, filtered, and shared between whole classes. The first 3D printers I saw recently were in schools, not in policy quangos or strategy think tanks. or ministers' offices. or tech shows. The impact of children

"printing" otherwise unmanufacturable 3D physical objects as components of their Design and Technology projects and coursework will have been addressed, and solved, by the children and their schools before the policy and strategy folk have even perceived the problem. Top down is blind in this rush, bottom up has the breadth to offer insight. Bottom up will evolve wise decisions too, because children have an acute sense of what is right and just. Earlier in this decade, policy folk were still debating the merits and dangers of Google (which was for a mad while banned in many schools) as the children themselves were already switching to YouTube as their primary search engine. Whilst the government floundered and obfuscated around its promise for an email address for each child, the children themselves had dropped email ("It's what you dad does") in favour of the greater conversational granularity of social networks and messaging. Policy looks backwards in this hectic rush, but children and (many of) their teachers look forward. The gap between their visions widens as a result.

However, the pace of change is not a benign neutral influence - it can and has transformed other sectors - sending shock waves through them in many cases, hugely challenging our existing models of organisation and the of the structures that they support. It is surely apparent to all but the most stubbornly deluded that one significant impact of this accelerating pace of technology is that it breaks cartels. Any organisation who seek to build barriers around themselves - for example by substantial merger activity, or through legislative requirements - as a way to vouchsafe their economic futures - will be doomed because technology has tipped the power balance back in favour of users. It is a people century already. Is is instructive to consider some examples, because education could easily be next: since the 1960s the music industry sought to persuade us that live music had no value whilst the "high fidelity" perfect studio recording was a treasure to be purchased and held dear. This lie ended with the complete nonsense of "performers" lip synching at their "live" shows accompanied by a recorded invisible multi-tracked orchestra. It was in every sense laughable. Youngsters have seen clear through this madness and will not tolerate it. Today's youngsters see a recording as having simply no value - in the way that a camera-phone photo of the Mona Lisa, or a photocopy of a banknote, is clearly not valued as original either - and thus these youngsters swap digital facsimiles as downloads guilt free. However, they do see where true value and scarcity lie, and they have poured back into live music gigs paying high prices and everyone from an ageless Tina Turner to a kissed-and-made-up Spandau Ballet are wonderfully back on the road and making substantial profits from live performance, again. The music industry, confronted by the collapse of their Great Lie about recordings rush cap in hand to Downing Street or to the White House pleading for protective legislation against "pirates" whilst sales of live event tickets look like a gold rush! The market, and the rules, have changed. People have broken the cartel.

A second example, Media, has also long been characterised by these artificial cartels - the results of merger and protection. Inevitably then, media has come under siege from these same formerly passive but now empowered consumers. Currently, it is impossible to think of a broadcasting, or newsprint, organisation that is not in fear of its life. Youngsters have called the bluff of media too. They see "establishment" shows like Top Gear with its edited and part scripted "adventures" and its bullvning of the ecologically aware as no different at all from their own

copying of the ecologically aware as no different at all from their own phone based media fictions, as personified by the demonised Happy Slapping, with its bullying too. Not unreasonably, they ask how could one be acceptable and legitimate media, while the other is apparently evidence of a subversive youth turning bad? Of course the youngsters are right - Top Gear IS Happy Slapping, but with budget. Unsurprisingly, that is not how the media cartels see it. The result is another 20th century cartel structure crumbling before our 21st century eyes with a new generation enjoying doing it for themselves. Education must learn from this: the learners want an active role, they want honesty, they are armed and deadly with their new technologies.

It is not rocket science to see these same dangers building for Education. Children's learning lives have been filled by schools with copying - from whiteboards, worksheets and books - and they are not unreasonably starting to question the value of this facsimile learning. Children are mostly obliged to attend school because of the law, not because they particularly want to. Legislation defines a very narrow prescription of who and what can be involved in "delivering" Education (just look at the hugely complex bureaucracy surrounding the creation of Academies!). This is classically protection of the supply side rather than stimulation of the demand side. If education is an artificial cartel - and surely it is - then it will inevitably be under considerable threat too, and soon. We already have UK schools following the International Baccalaureate, or even the Queensland curriculum, we have on-line providers sourcing their mentors on other continents, global consortia of schools with centralised administration and culturally diverse locations, we have virtual and alternate provision burgeoning, we have the beginnings of phaseless cradle to graduation institutions and everyone, from Pearson to Oxfam now see education as a central part of their business. The cartels are already crumbling. No amount of legislation will protect our learning institutions if they simply don't offer what is needed. If they don't offer learning that is seductive and engaging, producing learners who are valued and valuable, then they will be surpassed by others who can, and will be surpassed rapidly and inevitably. And there is no likely scenario that sees government intervening with huge offers of finance to support learning institutions because their learners have defecting in droves. These are not banks. Governments will simply shut them and be glad for the savings.

So what is to be done? Probably, as I have observed often elsewhere, this is the beginning of the Death of Education. It has no more hope of survival than the old Music industry or the crumbling media cartels. But if this is the Death of Education then, rather encouragingly, it may also mark the Dawn of Learning. It simply needs a moment of clarity and an agreement that the period from 1950 - 2000 was a wild gamble on factory education, which has now failed, or perhaps more charitably, has run its course. People can, and will, redefine Learning using the new tools that surround their 21st century lives. That is more evolution than revolution, but the evolution will be, already is, pretty rapid. I'm often asked what governments might do to jumpstart a new 21st century world of learning - to have a significant role at this new dawn. In practice, it doesn't need jumpstarting, that change is happening, unstopably, all round the world. Fortunately a huge amount of thinking is already being done, not at the policy or strategy level, but in classrooms and communities everywhere. It is a curious thing to observe, but most of what passed for success in the 20th century consisted of building big things that did things for or often to people. The BBC a

building big things that are things for, or given to, people. The BBC, a national railway system, a national curriculum, an Education service. In contrast, almost all the successes of the 21st century - from eBay through Facebook to microbanking - are about helping people to help themselves and right there is the clue to what this future era of Learning might be like. In 2002, I asked a large sample of children, in several countries, to recall what their best piece of work ever was, and if their parents had seen it, and where it was now. The survey produced some pretty dismal results. For many of them their best piece was produced for an assessment task. It was bundled away for moderation, never got home and is now lost - presumably shredded somewhere. It is hard to think of a less motivating way to treat excellence. That good work needed to be exhibited, shared and celebrated. It needed collegiality and mutuality rather than individualisation and secrecy. Today, learners everywhere are discovering, or perhaps rediscovering, the power of exhibition and exchange, of mentoring and esteem. They share, swap, and exhibit, both on-line and face to face too. Just watch any group where one person takes a digital photograph - most often the rest will immediately gather round to view the picture right away on the camera's screen - a shared social experience of smiles and joy. Feedback really matters. Even institutions can be engaging when they are feedback filled and praise rich. Prof Mitra's remarkable "hole in the wall" research project in India and elsewhere has had a recent twist where he asks someone to simply stand and praise children at their shared wall mounted computer screen; despite dire economic circumstances, the children support each other in their discovery learning and the praise input adds further engagement. Results leapt ahead even faster. Helping people to help each other.

In a way, seeing the future of learning clearly is not a great challenge. Einstein famously once commented that "The only thing that interferes with my learning is my education". New 21st century learning will be full of exhibition, performance and delight. It assuredly won't get in the way. It will be built on communities of practice, and collegiality will matter. It is the most natural thing. It is not unreasonable to imagine that evolution favoured learners. Why else would we be so driven to learn? It is interesting to reflect that when educational structures with their dismal factory schools stood in the way of learning we probably took ourselves nearer to the end of our evolution than at any other time in our history. Suddenly the phrase "don't we ever learn?" sounds very very dangerous indeed...

It's time to change.
