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*The Future of a Concept: The Case for Sustaining 'Innovation' in
Education*

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Abstract

Innovation is a prominent feature of current governmental discourse, and in whose name large amounts of public money is spent. Innovation in this context is valued because of its perceived potential to do things in new or better ways that creates desirable outcomes. In recent years, innovation in an educational context, has been identified among policy-makers as one of the key mechanisms by which significant and effective change is meant to be introduced and sustained. Yet based on research conducted over the last three years by the author and others, innovation's potential to transform schooling in particular, is not being realised. The key issue impeding innovation's potential in transforming educational practices lies in the basic but fundamental problem that the dominate ways of conceptualising innovation are largely inadequate. They neither accurately describe or capture the experience of innovative practices on the ground. Nor do they offer an adequate framework in which innovation as a process could be better managed. What is needed is a more rigorous and useful understanding of innovation that can pragmatically used by schools and others attempting to undertake innovation. Such an understanding would also assist policy-makers in setting policy frameworks that actually encouraged and sustained innovative practices in education. This paper is a first step toward developing such a concept.

Innovation is a particular type of process that offers educators the means to implement change, which is inherently dynamic, inclusive and open-ended. Hence the promise that innovation, as a change process, is commensurable with the rapidly shifting contexts in which educators currently work. Innovation is a kind of wager, where a favourable outcome is hoped for but not guaranteed. And while the signifier innovation currently enjoys a revival of sorts, based on implied associations with notions of technology, progress and relentless improvement, its days in an educational context are probably numbered. For the moment though, innovation in education still counts.

Innovation has become an integral feature of both the Australian federal and state governments' discourse of education reform, and in whose name large amounts of public money are spent. For example, the 2002 Victorian State Budget specifically allocated \$84.3 million to the 'Schools for Innovation and Excellence' initiative, which

draws to a close this year.¹ Under the *Backing Australia's Ability – Building Our Future through Science and Innovation* initiative, the Australian Government is providing an estimated \$532 million over 2005-2008 toward, among other things, developing “school based innovation.”²

Innovation in this context is promoted on its perceived potential to do “things in new or better ways to create new and valued outcomes.”³ Yet the concept which underwrites these activities is both poorly understood and dominated by a narrow understanding of innovation.⁴ Symptomatic of this are the ways other notions are paired with innovation: Innovation and diffusion; innovation and reform, innovation and best practice or innovation and excellence. Typically, it is the other term – diffusion or reform that is spoke to, once the definitional issues surrounding innovation are taken care of. Innovation is paired up with these other signifiers as if they are some sort of natural couple, whereas in actual fact they are often, diametrically opposed. Take for example the Victorian Department of Education and Training's (DE&T) Innovation and Excellence initiative, mentioned above. At a conceptual level, excellence is a contrasting term to innovation. Excellence is predicated on incremental improvement of tried and true methods, with the aspiration to creep closer and closer to an horizon which is always just out of reach. Whereas innovation often arises from a perceived crisis or hitherto intractable problem, its methods are closer to that of experimentation, and its outcomes often include an element of the unexpected.

One of the findings from my research on innovative practices in schools, was that some schools' ability to trial and sustain their innovative practices were directly and negatively impacted by policy settings. The policy settings, on the one hand, spoke the rhetoric of innovation, risk taking and so on, whilst on the other hand, subjected these schools to things such as centralised testing procedures, which clearly belonged to the excellence side of the policy initiative. The end result for one school in particular, was

¹ From the Department of Education and Training (DE&T) fact-sheet
<http://www.det.vic.gov.au/det/resources/pdfs/fact1.pdf>.

² See the Federal government's Department of Education, Science and Training website
http://backingaus.innovation.gov.au/2001/statement/DEST_IR_backing_aust_R.pdf, 71.

³ See DE&T's 'Innovation In The Middle Years', 2003
www.sofweb.vic.edu.au/mys/docs/InnovationExcellence/SIEInnovationDiscussionPaper.doc

⁴ Typically, an understanding of innovation is drawn from either a business or even murkier, a 'science qua technology' usage, where innovation is unproblematically rendered as a 'must-have value-adding' process. Perhaps the nadir of this is the federally funded Australian 'National Council of Innovation', whose way of conceptualising innovation is a fair representation of governmental (including the agencies that deal with education) thinking on the subject. See in particular the NCI's definition of innovation at <http://www.innovation.gov.au/>.

that they had to halt their innovative teaching and learning practices, in order to instrumentally teach their students how to do the test.

And while it is a familiar lament that central educational administrators such as DE&T impede schools in various ways, my contention is that because ‘innovation’ in this policy context has been under-conceptualised, counter-productive policy settings of this kind are inevitable. In addition, not only are there more appropriate and productive ways of conceptualising innovation but to understand innovation in a more critical way is imperative if what is desired is to realise a change process based on the production of new knowledge, creative solutions, relevance and engagement.

Before turning to discuss “innovation” as a concept, however, I need to say a little by what I mean by a concept. To move away from simply thinking in terms of concepts as being synonymous with definitions, I turned to the French epistemologist, philosopher of science, and not least, former Inspector General of the French state schooling system, Georges Canguilhem, to better understand what a concept is.

For Canguilhem “a concept is the initial understanding of a phenomenon that allows us to formulate, in a scientifically useful way, the question of how to explain that phenomenon,” whereas “...theories are the ways such an explanatory question is answered.”⁵ In addition, Canguilhem also demonstrates why certain bodies of work, despite their appearance of aggregating all the necessary elements common to other explanatory theories, remain outside conceptual thought.⁶

What Canguilhem is saying is that concepts are incredibly important. They serve as a type of threshold point, around which new ways of thinking are tried. They also serve as the means of distinguishing sets of phenomenon that by other traits or criteria, look indistinguishable. By utilizing Canguilhem’s idea of a concept, it is possible to start thinking in a more rigorous fashion, what are the distinguishing sets of phenomenon that constitute an innovation.

A stronger conceptual grounding of innovation would also assist to counter the rhetoric which often passes in lieu of a concept of innovation. And this is no small matter:

⁵ G. Gutting, *Michel Foucault's Archaeology of Scientific Reason*, (Cambridge: Cambridge University Press, 1989), 34.

⁶ Canguilhem’s own, celebrated example, draws on the historical formation of the concept of bodily reflex actions, and demonstrates how the concept of the reflex maintains an integrity around its initial understanding, as it is played out across competing theories, attempting to explain its workings. Briefly, the argument runs along the lines that the concept of bodily reflexes necessarily entails the shift to an eccentric loci of response, as opposed to other understandings predicated on central seat of response, like the brain for example. See Canguilhem’s very approachable text on the reflex, *La Formation du concept de reflexe aux XVIIe et XVIIIe siecles* (Paris: Presses Universitaires de France, 1955).

Historically, innovation has long been associated with a rhetorical appeal of low expenditure, smarter, technological improvements, which neatly hook up with other familiar narratives of progress and change. Also, at a rhetoric level, innovation has also been associated with a romantic element that is largely absent from its practice. That is to say, it trades on a notion of heroic, risk taking, risk takers. Yet innovation, conceptually speaking, is not predicated on heroic, charismatic individuals. Instead, as a concept,

Innovation in education is a process of assembling and maintaining a novel alignment of ideas, practices and actors, to overcome a site-specific issue.

This is a concept that incorporates five interrelated moments:

- (1) that innovation is a *process*, i.e., not an invention, nor an object per se, even if later it acquires an ‘object-like’ status ;
- (2) that this process is both *dynamic* and *social*, involving negotiations to enrol new actors whilst maintaining existing actors within an innovation;
- (3) that the raw material of innovation are ideas, practices and actors, aligned and re-formed in novel ways;
- (4) its purpose is to overcome a perceived crisis, problem, or issue;
- (5) And because the innovation is site specific, it is strictly *relative* in its newness.

That is to say the ‘novel alignment of ideas, practices and actors’ are novel only to a specific location, context and time.

To pick up on this last point for a moment, the value of ascertaining the “innovativeness” qua newest, of a particular practice, is a question quickly and unsatisfactorily answered: The glow of being the newest, or the first to implement, especially in a schooling system, has a very limited value. A better series of questions would be:

- What was the problem, crisis or issue to be overcome?
- What and who are the actors involved?
- Who or what are the other networks that compete for these actors enrolment to the innovation?

And while there is always something forced about imposing a ‘new’ way of thinking through a particular concept, I wish to stress that this way of conceptualising innovation in education arose directly from the need to identify and delineate ‘innovation’ as part of a larger research project into sustaining innovation in Victorian

state schools.⁷ This research was tasked to identify factors that would lead to sustaining innovation, but before we could set about identifying such factors, we needed to understand what we meant by innovation. We arrived at our present understanding through not just reviewing the general literature on innovation, and innovation in education, or the relevant government policy documents but also reviewed why 300 Victorian schools⁸ were self-describing a particular practice as innovative. We also tested and retested our understanding of innovation as we co-researched with schools and other educational bodies their innovative practices. In particular we were keen to see if we could capture some of those other factors practitioners and the literature spoke of but are hard to quantify: Things such as happenstance, contingency, trust and risk-taking.

The overall impression garnered through these reviews, was one of conceptual muddle. Innovation, from these sources, tended to overly privilege the new, understood as something better, technological, and/or future driven.⁹ And accompanying these impressions of innovation being under-conceptualised, was the almost mystical qualities of transformation those in managerial positions attributed to it.

One reason perhaps why innovation generates such powerful promises of not just something that will be newer, better, and improved, but also smarter, leaner and hence less expensive, can be traced to the influence of economist Joseph Schumpeter, whose 1942 book *Capitalism, Socialism, and Democracy* argued that innovation was the essential creative/destructive force which drives the boom and bust cycles of modern capitalism.¹⁰ Those who could tap this force would be best placed to compete in the pseudo-Darwinian imperative of survival of the fittest and war against all, that, apparently passes as the modern market place. Whilst these metaphors of survival and competition are muted in the educational policy context, nevertheless the rhetorical appeal of innovation as ‘cutting-edge’ and the driver of ‘continuous improvement’ features prominently in the policy language of educational bureaucracies such as the Victorian DE&T and especially in its current major reform document ‘Blueprint for Government Schools’.¹¹

⁷ C. Smith, ‘What Sustains Innovation in Education? A Comparative Study in Victorian Government Schools’ *Beyond the Pilot: Sustaining Innovation* (forthcoming, Melbourne: DE&T).

⁸ See S. Smith, C. Smith and M. Ryan, ‘Survey Report of Innovative Projects’ (Melbourne: Victorian Schools Innovation Commission, 2004).

⁹ C. Smith, ‘What Sustains Innovation in Education?’

¹⁰ J. Schumpeter, *Capitalism, Socialism, and Democracy* (New York: Harper, 1942).

¹¹ See in particular the Victorian minister of education’s overview of the educational reform agenda (titled the Blueprint for Government Schools) as a process of continue improvement with “the

Prior to its adoption by Schumpeter, technologists, politicians and others, innovation was understood in a wider sense. Its first came into English usage through a 16th century French term, derived from the Latin *innovre*, meaning to renew or to introduce as new; and *novre* - to make new.¹² During the 18th century its meaning shifted beyond the idea of novelty to that of politics, where innovation was synonymous for revolution. For example, Edmund Burke, conservative politician and political thinker, best known for *Reflections on the Revolution in France*, insisted on the need to maintain an absolute difference of innovation to reform.¹³ You reform a system that can be fixed, and maintain age old, useful traditions – innovation qua revolution, according to Burke, torches all of this with bloody consequences. Yet confusion between innovation as reform still lingers to the concept, mostly evident in the interminable propositions of the debates regarding ‘incremental’ innovation versus ‘radical’ innovation.

Another source of confusion seems to stem from an uncritical reliance on the seminal work of E. M. Rogers’ *Diffusions of Innovation* and/or the Organization for Economic Cooperation and Development (OECD). To Rogers first:

The widespread adoption of Rogers’ work is curious and deserving of a paper in its own right. First published in 1962 (and drawing on sociological field research dating back to the 1940s involving corn plantings in the US mid-west), Rogers’ *Diffusions of Innovation* defines innovation as ‘an idea, practice, or object that is perceived to be new by an individual or other unit of adoption’.¹⁴ It is a definition so broad and inclusive (an idea, a practice or an object) that it fails to define much at all, beyond a vague sense of a subjective sense of the new that is then adopted. Nonetheless, this has not prevented its adoption by institutions ranging from DE&T, to the National Council of Innovation. What is troublesome in Rogers’ conceptualisation of innovation is not only its vagueness and widespread adoption but the uncritical acceptance of its hydraulic metaphors of communication and its essentialist categories. To comment briefly on this later aspect, Rogers claims that there are five types (qua personalities/character types) involved in an innovation. Two of these types circulate freely across the area – namely those of the ‘early adopters’ and ‘innovators’ along with ‘change agents’ and ‘opinion

introduction of new and innovative programs and reforms to the education and training system.”
<http://www.det.vic.gov.au/det/resources/blueprint.htm>

¹² *Oxford Concise Dictionary of Etymology* (Oxford University Press, 1999).

¹³ E. Burke’s *Reflections on the Revolution in France* (Oxford University Press, 1990).

¹⁴ E.M. Rogers, (2003), *Diffusion of Innovation*, New York: The Free Press.

leaders'. For example, this way of talking about innovation featured in the speech of research participants involved in school-based innovations in Victoria, mentioned above.¹⁵ The other three types, 'early majority adopters', 'late majority adopters', and the 'laggards' take up their relative positions to the innovation because of their character types – i.e., through their predisposition toward being restless, daring, solid, cautious or obstinate. According to Rogers, the type that is essential in making an innovation succeed are the earlier adopters, who in other contexts also are 'opinion leaders' (and who are, by some strange coincidence, also the managerial class), who exploit the breakthrough of the edgy (unreliable) innovators. Success of the innovation is hence attributed to the brilliance of the key character types involved, the initial idea, the ability of the opinion shapers to mobilise opinion and support for the innovation and so on. But essentially the explanation for success tends to rest on tautological accounts—innovations succeed because the early adopters et al got it right. How do we know that they got it right? Because their innovation succeeded. Why did the innovation succeed? Because of the brilliance of their ideas, implementation, leadership and so it goes...

Rogers seems to like to work in aggregates of fives—five personality types, five (mental) steps for an individual to take to adopt an innovation—but perhaps the real appeal of his work is that he makes innovation and its associated processes seem *tidy*. And while the sense of disorder, unruliness and sheer messiness is a challenge for researchers to precisely map a given innovation—when did it start, where does it stop, and so on—if innovation is a process such as I have described it, i.e., dynamic in its enrolment of actors, open-ended in regard to its outcomes and so on, then the messiness that accompanies its alignments are to be both expected and accommodated within a commensurable methodology, guided by an adequate conceptualisation.

But not all can be laid at the feet of Rogers. Françoise Cros, who has published widely in official OECD publications writes: "The notion of innovation has many meanings – it is part of a common, 'floating' language. It is the subject of intense negotiations between the various parties of a given institution. At the same time, it offers the promise of hope and a still better future; it has almost mystical qualities." Whilst these elements of innovation are undoubtedly true – the intense negotiations, the

¹⁵ C. Smith, 'What Sustains Innovation in Education?'

promise of a better future – where is the concept? Where is the initial understanding of the phenomenon that will allow us to raise it to a question?

The OECD has also published others such as David Hargreaves, who appears to enjoy a strong influence on policy makers in Australian education. Hargreaves, for example, whose name is emblazoned on the foyer walls of most Victorian DE&T offices (along with Plato, Einstein and Howard Gardner!), defines innovation “as an imaginative and responsive act to think out a different and potentially better way of doing something staled by custom and tradition.”¹⁶ It is a useful way to start thinking about innovation, involving as it does notions of change, the new, better outcomes, and the importation of successful ideas and/or practices, but it does not go far enough.

One theorist of innovation whose work extends and differentiates the concept of innovation with some success has been Bruno Latour, a philosopher of science and technology studies. Latour defines an innovation as a *quasi-object*, best understood as heterogeneous networks or assemblies of humans and non-humans that emerge as a result of negotiation, trade-off and compromises between actors. Whilst others point to the networks of innovation, the really crucial move that Latour makes involves the incorporation, influence and negotiation of ‘non-human’ actors alongside human actors in a given innovation.¹⁷ And the key here is not that Latour is anthropomorphising innate objects, rather he is flattening out both the importance of (human) actors intentions and their corresponding claims of a hierarchical of order within an innovation. That is to say, humans do not drive, control, shape innovations, nor do they mould their conditions to their innovative vision.¹⁸

So to return to an adequate way of conceptualising innovation in education which is faithful to both the origins of innovation and our experience and research of schools: Innovation is *a process of assembling and maintaining a novel alignment of ideas, practices and actors, to overcome a site-specific issue.*

¹⁶ David Hargreaves ‘Schools and the Future: the Key Role of Innovation’ in *Innovating Schools* (Paris: OECD, 1999), 45–57. For a local version of how innovation is understood, see M. Angus, R. Chadbourne and H. Olney, ‘Managing Innovation’ in P. Cuttance and the Innovation and Best Practice Consortium (2001). *School Innovation: Pathway to the Knowledge Society* (Canberra: Department of Education, Training and Youth Affairs, 2001) 207.

¹⁷ B. Latour, *Aramis* (Cambridge, Mass. : Harvard University Press, 1996), 3-15.

¹⁸ In the research conducted in Beyond the Pilot project, some participants spoke about their involvement in their innovation as visionaries, heroic in their endeavours, and occasionally misunderstood by peers, and managers. The point here is not to dismiss these accounts as fanciful but rather to also attend to the way these accounts shaped, moulded, influenced etc the other actors enrolments within the innovation. See C. Smith, ‘What Sustains Innovation in Education?’.

The way innovation has been conceptualised throughout this paper separates out claims regarding the *inherent benefits of innovation* and instead has placed an emphasis of *the process of innovation*. This is not to say innovation does not realise certain goods, such as introducing new ideas, methods and/or a new language into educational practices. Innovation enables the new to be trialled, it creates ‘facts on the ground’, exemplars for policy makers, educationalists, students and other stakeholders that are can influence their educational directions. Experimenting with innovative projects can also introduce a space in which practitioners can reflect and evaluate on their current practices

The fate of any innovation is ultimately one of migration, exhaustion or failure. That is to say, when an innovation migrates to the centre and becomes mainstream practice we can no longer speak of the innovation as being innovative. Exhaustion can be characterised as the moment when an innovation has nominally overcome the problem or issue which originally provoked its inception but fails to garner support from the centre to facilitate its “migration”. And failure, in this context, simply refers to the innovation failing due to internal reasons (e.g., wrong idea/inappropriate time).

If these three outcomes are indeed the fate of innovations (regardless of outcome, they are all transient), then it quickly becomes apparent the necessity of an educational bureaucracy to actively support and reward practitioners with appropriate processes, resources and understandings – i.e., where innovators are rewarded in accordance to their *dynamism*, for example, as opposed to measures solely fulfilling this year’s projected policy target. And while some incredibly good, innovative work is currently being undertaken by Australian schools, fostered though the initiatives of both the state and federal educational bureaucracy, a broader understanding of innovation at a policy level, would facilitate more effective ways to support and encourage innovation in education. Things like facilitating productive exchanges of knowledge concerning the form and the content of an institution’s innovation; encouraging within educational institutions innovation “zones” or “spaces”, which functional ‘differently’ to the rest of the institution; provision of advice on the process of innovation, especially in the area of appropriate measures to evaluate innovation; and lastly, the provision of appropriate interlocutors, especially for schools attempting to be innovative. By interlocutors, I refer to an actor who can play the role of the DE&T Research Project Officers, who in the research on sustaining innovation referred to earlier in the paper, enabled schools

attempting innovative practices to both link up with other relevant parties, and provided external reference points, ideas and resources, to beneficial effect.

To Conclude

Never before perhaps, is the need to understand and enact educational innovation more acute than today, driven by a need that exceeds simply responding to the hackneyed phrases of rapid change or globalisation. Rather the conceptual appeal of innovation is to address a fundamental that lies at the heart of the educational experience: Education is a wager – it wagers that educationalists will provide the student of today with the knowledge that they will need in the future, without really knowing what that future will look like. But in order to realise this potential, innovation itself is in urgent need to be renewed, re-formed, and re-conceptualised, so it can be rigorously and productively employed within the discourses of educational transformation.

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