

Futures Literacy in New Zealand

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Abstract

The FutureMakers project presented a unique opportunity to explore conditions for the acquisition "futures literacy" in New Zealand. It was a collaboration between Landcare Research; the Institute of Policy Studies, Victoria University of Wellington; and Secondary Futures, OECD Schooling for Tomorrow/Ministry of Education. The project deliberately used open processes and intentionally generated both predictive and non-predictive futuring products. By observing the experiences and reactions of participants and end-users, the project identified current levels of futures capability and "next questions" for building futures literacy in New Zealand. The learners' experience is at the centre of these questions.

Keywords: futures, education, futures education, futures literacy, futures capability, capability building, non-predictive futuring, policy, decision-making, integrated research, wicked problems

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Introduction

"One's mind, once stretched by a new idea, never regains its original dimensions." This quotation, attributed to Oliver Wendell Holmes, sits inside the front cover of the 2007 New Zealand Curriculum document (New Zealand Ministry of Education, 2007) and refers to the structure of the nautilus shell as a metaphor for intellectual and spiritual growth. The document as a whole encapsulates the ideas of the student rather than the teacher being at the center of learning and of learning as a process of transformative experiences. The curriculum principles "put students at the centre of teaching and learning, asserting that they should experience a curriculum that engages and challenges them, is forward-looking and inclusive, and affirms New Zealand's unique identity" (New Zealand Ministry of Education, 2007, p.9). In this context, the job of teaching is no longer knowledge transfer, but the task of creating contexts and experience that stretch the mind, whatever the size and particular contours of its original dimensions.

This article considers the work of FutureMakers as a particular experiment in "teaching the future" in this context. The overall outcomes sought from the project were an increase in collective futures capability, a greater understanding of the optimal conditions for futuring in the New Zealand context, and the optimal modes of futuring and capability building for New Zealand conditions.

FutureMakers

FutureMakers was a first-stage collaborative project between three New Zealand institutions: Landcare Research, a Crown Research Institute; the Institute of Policy Studies, part of the School of Government at Victoria University of Wellington; and Secondary Futures, part of the OECD "Schooling for Tomorrow" project, and an adjunct of the New Zealand Ministry of Education. The collaboration arose from the recognition that all three organizations had an overlapping interest in, and a mandate to increase distributed futures capability, and an awareness that more may be achieved by working together towards that aim than by working separately. Landcare Research had an interest in developing widespread ability to contemplate long-term decision making on the use and management of the environment and ecosystems. The Institute of Policy Studies had an interest in raising the debate across government about the public policy questions that elicit future possibilities rather than those that constrain future options because they are framed by the wrong assumptions. Secondary Futures had an interest in developing distributed futures capability within and beyond the education sector to enable people to participate in imagining schooling that would make all students successful (Pride & Meek, 2009).

The project was set up as a learning experiment on two fronts: to test the appetite and options for building capability for futures literacy in New Zealand and to test the value of a loose alliance across organizations to pursue this work. It was envisaged that the FutureMakers partnership could form, morph, and dissolve as common needs developed or receded.

The New Zealand Context for Futuring

New Zealand has both the legacy of a developed country with the advantages of the infrastructures and range of capitals that go with that heritage, and the reality of being a small player, with a limited resource base. There is a risk that on both domestic and global fronts New Zealand could be consigned to being a future-taker and constrained to paths that, given the opportunity to exert choice, the country would not have chosen.

Even though many of the long-run global issues (e.g. the move towards peak oil, global warming, the rapid change in relative economic and political influence of jurisdictions and regions, and technology-enabled shifts in values and patterns of social organization) have been on the radar in many jurisdictions for at least the last one to two decades, sustained responses have been hard to achieve. New Zealand has proved no exception to this pattern, despite a moderate level of futures activity over the last decade.

Another set of risks, perhaps more deeply rooted than these geo-econo-political ones, also constrains New Zealand's choices: as a small society, there is not – in Pakeha culture at least – a tradition of widespread, robust and critical public debate¹; more deeply rooted still is the dominance, for most of the last 150 years, of Western, empiricist modes of thought. Both conditions constrain the limits of what it is possible to call into question.

The Futures Literacy Context for FutureMakers

Frame and Pride (2010) have traced the progress of futuring in New Zealand over the last 10 years and have suggested that, while there is a general appetite for looking ahead, much of the extant futures work has adopted empirically-based, problem-oriented and predictive approaches. Even where the avowed aim has been to explore possibilities, the underlying desire has been to search for predictive proof in order to provide comfort around today's decision making (Slaughter, 2008). There has been little appetite for pluralistic and post-normal approaches and no widespread understanding of the value of the returns from working in those ways. Assessing New Zealand's current state of affairs using the concept and schematization of "futures literacy", as articulated by Miller (2006a, 2006b, 2007a, & 2007b), there is scant evidence of even first-level futures literacy. The proposition that "the quality of our decision-making... depends on our capacity to invent and tell stories" (Miller, 2006b, p.7) would be given parlance by only the very few within the New Zealand futures community and even fewer within its formal decision-making frameworks.

Applying a Futures Literacy (FL) Lens to the New Zealand context

Riel Miller proposes that futures literacy (FL) is the capacity to think about the future. It is a skill like language literacy, that must be learned, and he suggests three steps to be taken sequentially and which, "like learning the alphabet before starting to read, ... cannot be skipped". He describes Level 1 FL as largely about developing tem-

poral and situational awareness of change, which enables people to shift tacit knowledge about preferences and expectations into a more explicit form, and thus "address similarities and differences and negotiate shared meaning". Level 2 FL demands the ability to put expectations and values aside and engage in "rigorous imagining" (which includes the discipline of social science modeling, but without causal or predictive ambitions) to construct a set of framing assumptions for the creation and exploration of possibilities. Level 3 requires the skills to reintroduce values and expectations to support decision-relevant insights (Miller, 2006b, pp.15-16).

The FutureMakers partners were very clear that, for New Zealand to position itself to understand and take advantage of all the choices available to it, there was a need to build more widespread futures literacy. Acknowledging the realities of the starting point, (pre- or on the threshold of Level 1 futures literacy), they saw the need for action to build a greater and more widely shared understanding about opportunities and challenges over the next two decades and beyond, as well as the anticipatory capacity needed to engage with the possibilities revealed.

There was a need to create opportunities to engage in thoughtful and well-informed conversation that opened up the ground beyond the immediate future and beyond today's episteme. There was a need to develop the infrastructure and capability, in the first instance, for having these conversations over a wider temporal and epistemological frame.

On the one hand, achieving these aims clearly called for an experimental and theoretically based approach to "futures discovery". On the other hand, there were a strong set of expectations and needs, deriving directly from the empirical context, to be fulfilled (and, as always, with limited resources, including time).

Bridging the Gap

The project had to negotiate the territory between the two realities: to deliver in a way that was perceived useful to today's needs in today's frame (getting some quick runs on the board, in common parlance); but to leave enough space open for some different approaches that would move beyond predictive endeavors and traditional forms of reporting.

The response was, firstly, to frame the project broadly as "a series of resourced conversations" where the endeavor was as much about process as about product, and to resist definition in the overall promise:

"The project will bring together information and people in ways that illuminate the opportunities, challenges and the big questions facing New Zealand for the next 20 years, so that New Zealanders can choose to shape their future" (FutureMakers, 2008).

Secondly, we exposed the workings as we went along as a matter of principle, so that anyone had access to the project as it progressed and could engage, contribute or contemplate.

FutureMakers Process Steps

The FutureMakers project was organized in four phases and drew on expertise from the New Zealanders in academic, political, business, community and research spheres. Each step both developed increasingly nuanced pictures of what New Zealand's future could be and provided a platform for exploring futures capability (Gill, Pride, Frame & Rother, 2009).

The first phase (May-August, 2008) brought together recent futures work in the New Zealand State Sector in a standard STEEP framework and triangulated this with a recent high quality international meta-analysis of trends and drivers. This New Zealand meta-analysis (FutureMakers, 2008) in turn was tested and refined by subject matter experts in a series of conversations that probed the limits of the trend data.

The second phase (September, 2008) started to explore the crosscutting issues and to uncover a range of stories about past and current myths and future possibilities for New Zealand.

The third phase (September-October, 2008) elicited some of the questions – provoked by the stories – that would require further exploration to enable New Zealand to exercise some choice about being a future maker, or a future taker.

The fourth phase (October-November, 2008) shared the insights gained from this first-stage project about the challenges and opportunities for New Zealand's futures and captured the learnings about the capabilities New Zealand requires to sustain futures work.

A Deliberately Messy Process

Generally in futures work, people publish their polished findings; sometimes they publish their trend and input data. More often than not, they keep out of sight the part where the real work of integrating information and imagining happens iteratively. Sense-making and surfacing the crosscutting or sentinel issues is messy (Frame, 2008). The products of this phase are always incomplete and contradictory, full of gaps and raise more questions than they answer. They are unnerving and destabilizing. There is often low tolerance for this sort of product, especially in the public domain, and particularly in the policy arena.

By posting not just the raw meta-analysis, but also the raw accounts of the experts' testing conversation, on the FutureMakers website (<http://futuremakers.ning.com>), we hoped to create a new platform for discussion of both content and of modes of acquiring Level 1 capability in futures literacy.

As we moved into the exploration of connections across domains and started to unearth a rich multiplicity of stories and their underlying myths, we wanted to capture this sense-making in ways that were accessible but also maintained heterogeneity and heterarchy, and that resisted the urges either to normativity or to a simplistic set of alternatives. Neither a standard report nor a standard set of scenarios would have met these criteria. We wanted products that in their nature signalled "this is a permanently unfinished, open-ended process" (Bussey, 2009, p.23).

Our experimental solution was to devise a set of cards that explicitly emphasized the story-telling narrative nature of the activity.² Each card had a back story, now story, and next story and posed next questions rather than conclusions. Across the stories there were gaps, overlaps, and contradictions. Dominated by an image rather than their text, each card opened up space for individual engagement with elaborating or changing the story. As a set, they resisted reinscription into a contiguous, coherent whole, or the privileging of one "story" over the others. They were, in essence, a litmus test for the tolerances of the New Zealand decision-making environment for non-predictive futures products.

Learning about Futures Learning

In reviewing our learning from a futuring exercise that tried to straddle two different modes of operation, we were interested to note that both the more and the less conventional products yielded interesting insights about both futures literacy levels in New Zealand and effective tools for further building capability.

The meta-analysis, the "Trojan horse" product that made the nod to conventional expectations that futures work should start with trends, yielded unexpected value back to the endeavor of raising futures literacy. The product demonstrated a startling degree of congruence across trend data, areas of focus, and assumptions in the New Zealand futures work. Rather than providing a sense of certitude in the factual contents, producing this evidence of congruence opened up discussion across the community of futures practitioners about the environmental constraints to heterogeneous approaches and the inherent risks in this situation, and even among some, the limits to the value of trend data (Miller, 2006b). It may be part of the learning process that people have to experience the limitations of trend data to be able to let go and swim without them. This may, ironically, depend on presenting the data about data and allowing people to confront the right questions about its value in an appropriate context.

In contrast, the story cards, which were a very gentle challenge to preconceptions about futures products, caused in some quarters a sense of bafflement and in others a sense of disappointment in the lack of "answers", and in yet others were immediately working well as tools for developing temporal and situational awareness.

The project methods of laying bare the futures processes and designing products that resisted closure helped us identify the following "next" questions for futuring in the New Zealand context:

- If there are limits to the number of participants who can be directly involved in the core processes, is it possible to build capability more widely by opening up those processes through documents, websites and an online community?
- Is it a condition that everyone has to acquire the beginnings of Level 1 futures literacy by individual, personal experience or is it possible for people to observe and participate at one remove and still have increased futures capability?
- Are the prerequisites for "remote" acquisition contextual, cultural, generational, or universal?

- Is individual, personal experience a prerequisite for accepting and using the products of a futures exercise?
- What level of futures literacy is necessary to be able to grasp the value of and use the products from other futures processes without having had first-hand involvement in the discovery process?

The recent review of the last five years of futures work from the UK Department of Environment, Food and Rural Affairs (Defra, 2009), underlines the value of answering these questions. The agency charts the progress that has been made in the quality and relevance of their United Kingdom futures work (upskilled capability in the producers), but there is, essentially, a *cri de coeur* in relation to the futures literacy of the potential consumers of the futures products. If opportunity for capability acquisition remains a scarce (hard to replicate³) resource, there will continue to be a trade-off between investment in the capability of the producers and the capability of the consumers, ultimately limiting the diffusion of futures literacy and its integration into wise decision-making. Answering the questions above about the possible modes of futures capability acquisition has a crucial bearing on this, and could take us beyond today's supply and demand based second-level questions such as "how might we better prepare people to be the consumers of futures products?"

Our learning about conducting futures work across a loose alliance of organizations revealed the high-trust and social congruence - which has the potential to lead to ongoing problems in the progress of New Zealand futures work - was also a cornerstone of managing the project effectively, as tensions and challenges across the mental models of the three institutions could be negotiated in a trustful and genuinely exploratory way.

Next Steps

There is a long way to go in New Zealand before futures literacy is seen as integral to wise decision-making rather than a luxurious adjunct. If the FutureMakers project is to build on this exploration of building futures literacy, several next steps are clear. Any further work on building capacity for futures literacy must espouse practices and processes that hold true to theoretical principles of rigorous futures work and be firmly and explicitly in a learning frame. Given the current state of futures literacy in New Zealand, going forward will also require constant experimentation in ways to frame this capability-building context for decision makers and experimentation in ways to design products of futures work that are simultaneously accessible and inherently provide the challenges that stretch minds and mental frames: "learning-by-doing, experimentation, reflection, validation of knowledge, and know-why – this is process as product and means as ends. Cumulatively, over time this is the basis for wisdom" (Miller, 2006a).

If learning by doing is central to the whole endeavor, any further work on futures capability acquisition will require explicit attention to be paid to the detailed nuances of the learners' experiences

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Notes

1. Korero – conversation and searching debate holds a very different place in Maori and some Polynesian cultures. A range of commentators have noted the preference for social collusion rather than exploration of difference and disagreement in New Zealand culture (Loomis, 2000).
2. These were created in conjunction with Airplane Design Studios who were able to convert the concept of the cards into subtle and compelling artwork (<http://futuremakers.ning.com/page/page/show?id=2196846%3APage%3A105>).
3. If the inputs, e.g. skilled futures facilitators, remain finite, scarce and geographically bound.

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