

Submission on New Models of tertiary education (draft report)

Overview

In making this submission, I wish to pick up on some of the points made in Professor Gary Hawke's paper. (I commend the Commission for including Gary's paper given it has some strong criticisms of shortcomings in the draft. I view that as a reflection of the Commission's desire for free and frank feedback. My comments are given in this spirit as one wants to see the best possible outcomes for learners in NZ)

I strongly agree with Professor Hawke that the draft accepts the current system too uncritically, and in my view as a consequence does not provide a sound basis for future change management to any form of "new model".

In particular I reiterate the comments that I made in my email to Judy Kavanagh on 14 June, namely that being a managerial economics practitioner with a strong systems perspective on issues and problems, when I read the original Inquiry discussion document a number of things jumped out at me. These were:

- Sector inertia can be explained in part by the reductionist approach to systems thinking and synthesis by the relevant policy making departments. (We live in the world of quantum physics, not Newtonian)
- The system in focus, as determined by the Ministerial ToR, excludes the elephant in the room that is the likely root cause of the current situation. How has the structure and conduct of the MoE and TEC impacted on the performance of the sector?
- The deep and meaningful insights into the multiple levels of innovation occurring in a diverse sector will only be understood through grounded research where the unit of analysis is the case study
- Failure to view the system as holistic lifelong learning largely removes the most significant equity considerations from the analysis, increasing the likelihood of suboptimal social outcomes choices being made. .Decoupling the system is a reductionist approach, and in my view an inappropriate perspective to understanding long term system dynamics (especially unintended consequences).

Unfortunately I do not see these concerns being addressed in the draft. One gets the impression that one is keeping to the script as set out in the submission questions.

Accordingly there are four points I want to stress:

- Understanding system leverage points
- Other analytical approaches that would have generated meaningful insights into systemic failure
- Reinforce the point of quality monitoring and the managerial challenges inherent in implementing the requisite managerial systems underpinning and "new model".
- Supporting customer centric virtual organisation/network models

Systems Leverage Points

The paper purports to a systems approach, but nowhere does one get a sense of any intrinsic understanding of the relative impacts of different system interventions. Insights into this have come from the field of systems dynamics modelling. Donella Meadows from the Sustainability Institute in the USA presents 12 points of intervention, with the greatest impact coming from the power to transcend paradigms down to constants, parameters and numbers (e.g. taxes, subsidies, etc) which

have the lowest impact. These are shown in the link below, and all the recommendations in the draft should be able to be aligned with this table.

https://en.wikipedia.org/wiki/Twelve_leverage_points

Insights into Systemic Failure

I signalled to the Commission in my 14 June email my concerns that the review was ignoring the elephant in the room, namely the structure and conduct of MoE and TEC on the performance of the sector. That an input based approach to purchasing has been permitted to flourish when the general thrust of managing for outcomes has been in place for a number of years in itself raises questions worthy of analysis. What were the control agencies (Treasury and SSC) doing about this? What were the root causes of this situation?

I believe that the use of complexity theory and viable systems model (VSM) as analytical lenses would have helped give insights into these systemic failures.

I note with interest there is no reference to the work done by Elizabeth Eppel for her PhD ("The contribution of complexity theory to understanding and explaining policy processes : A study of tertiary education policy processes in New Zealand", VUW, 2009) Gary Hawke's input into that research is acknowledged in the thesis.

http://www.victoria.ac.nz/sog/researchcentres/egovt/research-projects/thesis/Elizabeth_Eppel_Thesis.pdf

Implications of complexity theory for education research are articulated in the link below. I do not intend summarising it. It should be read in its entirety. Rather I emphasise the point that one should be looking at other approaches/paradigms to get greater insights, consistent with Meadows's hierarchy of systems leverage points.

<http://cw.routledge.com/textbooks/9780415368780/A/ch1doc.asp>

The VSM is also an insightful diagnostic for education sector alignment issues. This is evident in the work of Britton and McCallion from the Engineering Dept. at the University of Canterbury when they evaluated the trade training network in New Zealand.

(Britton, G.A. and McCallion, H. (1989). Applications of the VSM to the trade training network in New Zealand. In R. Espejo, R. Harden (eds). The Viable Systems Model: Interpretations and Applications of Stafford Beer's VSM, pp. 145-174. John Wiley and Sons.)

In my view, the apparent absence of these systemic lenses, (which are dynamic and evolutionary in nature) in the evaluation to date constrains the utility of this exercise. (As a point of comparison I am left wondering what would McKinsey Consulting, using their structured and fact based methodologies, come up with as recommendations in this exercise. I am left with the feeling that the Commission has adopted a "boil the ocean" approach when a fact based hypothesis driven approach would have generated greater insights. I leave this on the table as food for thought).

Support evolution over revolution

Complexity theory suggests the need for as much competition as possible at local levels to increase the chances of better ways of doing things being discovered. The challenge then is to find ways to quickly disseminate that information across the sector. This is “think local, go global “stuff .

While the draft notes that most innovation appears to be that which is associated with current/routine business practices, there are examples which suggest there is a continuum. The DEV initiative would be closer to disruptive innovation. (The report would benefit from a 2x2 table showing the various definitions of innovation states. See for example, Pisano, P.G. “You need an innovation strategy”, **Harvard Business Review**, June 2015, p.51)).

New Models, Monitoring, Management Capability and Change

In moving to “ new models “the tensions between empowerment/increase autonomy and control will come into ever sharpening focus and as the Commission rightly notes, so does the issue of enhanced monitoring capability. As Barry Ogilvie and I noted in the attached paper, “the capability of those undertaking the monitoring is equally as important as the capability of those being monitored”. (The citation for this paper is Galwey, Doug and Barry Ogilvie, (2010), “An engagement framework for managing the Crown’s ownership interests in the New Zealand tertiary education sector”, *Measuring Business Excellence* , Vol. 14, No.1, pp.67-78.

It is worth noting that at the beginning of his tenure at TEC, Roy Sharp in 2009 disestablished both the stakeholder relations group and the monitoring group TAMU as he moved the organisation to a more formulaic approach to funding. The assumption being that TEI’s had the capability to manage their own stakeholder relationships and that a formulaic approach to financial monitoring could be adopted and the TEI penalised when they breached the thresholds. These assumptions led to the removal of alternative lines of sight into the sector, they further institutionalising input based funding, with no internal checks and balances in the organisation. The purchasing decisions were likely driving more risk into the system and the levels of distrust certainly increased. (The saved costs were likely swamped by future unintended consequences.) As a consequence of stripping that capability out of the organisation (TEC), it is my view that neither TEC, nor MoE, now have an appreciation for, let alone the requisite capabilities to under the sophisticated levels of monitoring required to give Ministers confidence in the sustainability of emerging business models. (It can’t be solely desk based. It involves a significant element of monitoring by walking around, observing, asking questions, triangulating etc. You need to understand the enablers that generate the outcomes. It is about being able to intervene proactively through sound relationship management. In this environment the EQ of the analyst is as important as their IQ. Unfortunately this is not well understood by the people who appoint analysts to monitoring positions.)

The draft does not set the scene for the management challenges and capabilities required in moving to a system aligned with the quantum world of complexity theory and VSM. Barry Ogilvie and I set out the attributes of moving from the current state to the future desired state. I have shown the table below. It comes from the referenced paper above (Table 1 pp.68-69). (I have also included as an appendix to this note the original table of Jeremy Hope , (cited in above reference)from which

this was derived). Understanding the managerial implications of the move to “new models” is pivotal – as stressed in Gary’s paper. From a change management perspective this has major implications for the timing and sequencing of initiatives as one builds the capability platforms and overall organisational architectures that underpin “new models”. Unfortunately the draft is silent on these matters. It needs to set the agenda for bringing these considerations to the table. If not, future initiatives run increased risks of failure.

In moving to “new models” the challenge for policy makers (at level S1 in the VSM) will be ensuring that they give the organisations (at level S5 of the VSM) the requisite variety to respond to the requisite variety of their local environments. The synthesis of VSM and Ashby’s Law of Requisite Variety brings into sharp focus the sophistication of monitoring and coordinating issues surrounding the design of “new models” as viable organisations. This is a paradigm shift in thinking about dynamic organisational design and performance management, and one does not see any appreciation of this systems thinking in the draft report.

Aspect	Current	Future
Emphasis	Risk – minimising the Crown’s residual liabilities	Optimisation- maximising the Crown’s strategic outcomes
Time Frame	Short/medium term	Medium/long term (especially given capital asset management considerations)
Success	Viability	Sustainable value creation
Managerial emphasis on TEIs	Control	Self Governance
Performance Management	KPIs, support control	Balanced Scorecards, support organisational learning & continuous planning
Risk Propensity	Low	Higher, with stronger emphasis on identification and mitigation
Culture	Low Trust, Rules based	High Trust, Self Governance
Engagement	At some distance	Partnering
Analytical focus	Historically orientated	Strategic and Agenda setting
Resource allocation	Budgets central to process, fixed resourcing	Rolling forecast central to process, dynamic resourcing
Adaptability (of ITPs)	Slow	Shifts quickly to market & policy

		changes
Sector behaviours	Compliant, observing the rules	Committed and aligned to outcomes
Benchmarking	Target setting	Catalyst for continuous improvement/organisational learning
Strategy	Is a destination	Is a direction

Social Capital

Whatever “new models” are proposed for the future, they need to be grounded in the fact that the necessary social capital is missing. By that I mean trust. The current environment would probably be described as one of distrust. (See culture in the above table). One should not underestimate the challenge in re-establishing the required social capital.

New Models - Virtual Organisations/Networked Organisations

These are not going to be bricks and mortar structures. These will be network orientated and with the internet, global in their reach. By putting the student back at the centre of the system, they should be able build degrees with papers sourced from multiple institutions, with the degrees/qualifications having their legitimacy through being within the NZQA framework, meaning the NZQA “awards” the degree.

As the draft notes, NZQA has a pivotal role in underpinning the integrity of any “new model”. How it performs can foster or inhibit the evolution of the sector.

Summary

While I am strongly supportive of the initiative, frankly I was disappointed with the draft in that it did not give any real insights into what the business models of the brave new world might look like, and the managerial implications therein. This, coupled with the absence of a comprehensive current state evaluation (say using McKinsey’s 7 S’s as a starter), means any future planned initiatives start off on shaky ground with high risks of failure. I believe more innovation needs to be shown in the thinking underpinning this exercise. Consistent with Donella Meadow’s system’s leverage points, a shift in mindset to the quantum world of complexity theory from the current reductionist perspective of systems, along with the associated management challenges would have the greatest long-term impact.

My biggest concern is that the Commission does not have the time to do this. There will be a lot of flagged future research in the final report which one might have expected to have been covered off already. The Commission should at least be able to better ground the agenda around these aspects.

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* Amongst other things, former Chief Business Advisor, TAMU, Tertiary Education Commission

Appendix

Toward the Innovation Age Management Model

Source: Hope, J. (2006), *Toward a New Model for the Innovation Age*, Beyond Budgeting Round Table, Performance Management Insights, Research Series, No 1.

Figure 5 - Toward the Innovation Age Management Model		
	Industrial Age Beliefs	Innovation Age Beliefs
LEADERSHIP MODEL		
Leadership and Governance	Success is meeting short-term targets	Success is sustainable relative improvement
	Shareholder value is a paramount	Being the best is paramount
	Leaders pander to analysts	Leaders build relationships with analysts
	Rewards based on short-term results	Rewards based on long-term results
	Control is compliance with a plan	Control is knowledge of today & tomorrow
	Leaders plan and control	Leaders inspire and challenge
Organization and management	Planning and decisions are centralized	Planning and decisions are decentralized
	Functions are key value creators	Self-managed teams are key value creators
	Mission and vision statements empower	Purpose and values empower
	Rewards are based on individuals	Rewards are based on teams
	Appraisals are annual & control-oriented	Appraisals are continuous and adaptive
PERFORMANCE MANAGEMENT MODEL		
Strategy	Strategy is a destination	Strategy is a direction
	Strategy tools and maps are focus	Learning, adaptation and renewal are focus
	KPIs support strategic control	KPIs support rapid response
	Financial capital is management focus	Intellectual capital is management focus
	Knowledge sharing is IT driven	Knowledge sharing is relationship driven
	Outsourcing is about cost reduction	Outsourcing is about flexibility
Planning and information management	Tighten compliance and control is aim	Cut detail and complexity is primary aim
	Planning is annual and fixed	Planning is continuous and adaptive
	Budgets are central to management	Rolling forecasts are central to management
	Resources are allocated annually	Resources are prioritized dynamically
	IT systems reinforce control	IT systems empower and inform
OPERATIONS MODEL		
Marketing & customer service	Product knowledge is paramount	Customer knowledge is paramount
	CRM systems drive sales	Relationships and service drive sales
	Maximizing sales is focus	Strategic and profitable customers is focus
	Customer satisfaction scores are focus	Customer loyalty is focus
	Customer service is a cost center	Customer service is a value-driven system
Operations & process improvement	Process improvement is based on tools	Process improvement is built in to the work
	Lean thinking is a toolkit	Systems thinking is a philosophy
	Information is separated from the work	Information is integrated in the work
	Managing people and budgets is focus	Managing flow and variation is focus
	Managing standard (unit) costs is aim	Managing value stream (total) costs is aim