

New models of tertiary education

Personal response by Zhivan Alach – March 2016

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Overarching Comment

It is vital that we start from the beginning, rather than jump to the end: we need to specify the goals we desire of our tertiary system and then work down to the specific techniques, tactics, and methods required to achieve those goals.

We cannot even begin to address the question of “what new models of tertiary education do we need?” until we know the purposes those new models must serve. New Zealand needs to set some crystal-clear goals for tertiary education first.

Once those goals are set, the best approach would be one that relies on the concepts of *managerial reform* and *directed opportunism*. The former can be summarised as freeing managers to manage, and the latter as focusing on results rather than methods.

Managerial reform relies on the concept that managers (such as Vice Chancellors) are not responsible unless they have freedom to act and control over the inputs they require (such as staffing, accommodation, and training). As noted by Professor Allen Schick: “central control of inputs warps managerial incentives and makes it difficult (some would say impossible) for managers to account for their own performance.” The autonomy of managers is heavily restricted if they do not have the authority to hire staff, select performance goals, and provide training as they see fit to deliver the goals they have been given by their superior (in this case, the Government via the TEC). As Doug Martin noted when reviewing the New Zealand Police, “managers need maximum leeway to deliver strategy.”

The second key concept is related to managerial reform, and was termed playful opportunism by Jack Welch of General Electric, and directed opportunism by Stephen Bungay.

Directed opportunism can be summed up as “what, not how.” It has five primary facets:

- a. Subordinates must be granted scope to demonstrate initiative;
- b. Prudent risk taking is encouraged – it is better to make an incorrect but earnest decision;
- c. The intent of the superior level (what they want achieved) is central, and can never be contradicted (although the method used to achieve it can and will change);
- d. There must be mutual trust between superiors and subordinates; and
- e. Subordinate managers must demonstrate initiative and must provide feedback.

These concepts could be introduced into the New Zealand tertiary system in the following way:

- The Government could set some clear outcome targets for tertiary education;
- The Government via TEC could then contract for the purchase of outputs (graduates, research, and community – not inputs like enrolments/EFTS) from tertiary institutions (in the same way that the Government purchases outputs from other government departments), with a clear linkage between the outputs purchased and the outcomes desired (i.e. the government pays for outputs, but expects those outputs to achieve a certain outcome at the institutional level);
 - This would primarily include *ex ante* funding for performance (i.e. paying for a specific quantity and quality) rather than *post ante* rewards for good performance;
- Institutions could then be granted greater flexibility and autonomy in achieving these output goals (i.e. some may prefer to have smaller enrolments with greater completion rates, others may prefer larger enrolments with smaller completion rates).

This would enable individual institutions to choose how much (or how little) innovation they require. It would ensure a constant focus on results, rather than methods. The government would be able to use the elegant tool of performance targets to drive behaviour, rather than involving itself at the tactical level.

Q1**What are the advantages and disadvantages of administering multiple types of post-compulsory education as a single system?****Page 3**

Advantages:

- Simplicity of administration
- Clear differentiation of voluntary and non-voluntary components
- General philosophical similarity of education types
- Reduces competitive behaviour between types of education

Disadvantages

- Difference between university / polytechnic / PTE sectors may be greater than similarities
- Mechanisms of funding may not match nature of service

Q2**Do prospective students have good enough information to enable them to make informed choices about providers and courses? What additional information should be provided? Who should provide it?****Page 8**

Students have never had enough information to make “informed choices about providers and courses”. Part of the tertiary experience is to discover oneself; to expect an 18-year old to know exactly where he/she wants to go is inherently flawed. Students should enter into tertiary education with a gap in knowledge, a gap that will be filled by their own experiences in their particular course.

Q3**Is the business model of universities published by Universities New Zealand a good characterisation? Are there aspects of the business model of universities that it does not explain?****Page 11**

As a descriptive model, yes. As a normative model – what it should be – no. The function of universities is to improve the human condition through the creation and transfer of knowledge. As such, this outcome should be at the heart of the business model. To do so requires the creation of research and also the transfer of knowledge to students, which in turn require the attraction of staff and enrolling of students. The international reputation/research profile of universities are not in and of themselves indicators of the benefits generated by the universities (except as proxies). Universities need to be seen as parts of the public sector, just like the police or foreign affairs.

Q8

How does competition for student enrolments influence provider behaviour? Over what attributes do providers compete? Do New Zealand providers compete with one another more or less than in other countries? **Page 12**

Potentially, competition for enrolments can drive improved quality of programmes and courses. However, given the information disparity between providers and students, it is also possible for providers to simply use marketing techniques to attract additional students, rather than improving the programmes and courses themselves.

The primary attributes over which providers compete appear to be the “quality” of a particular programme, as well as relevance. In the PTE field, it seems to be increasingly focused on “landing a job.”

Q9

What are the implications of fixed capital costs for the business of tertiary education? Do differences in the capital structure of different tertiary institutions have important implications for the delivery of tertiary education? **Page 13**

Tertiary institutions, like councils, are here for the duration; they can validly consider fixed capital costs simply something to pay off over a century, if not longer (Oxford having taken 800+ years).

Q10

What are the implications of the multiple activities of tertiary education for its delivery? What outputs are best produced together? What outputs are best produced separately? **Page 13**

Tertiary education has three primary output classes:

1. Research
2. Graduates / student achievement (teaching)
3. Community (critic and conscience of society)

It is vital that the three outputs be produced together, except in rare cases where pure research is required. Teaching needs to be informed by research, and teachers should research; otherwise they are parasitically feeding upon the knowledge produced by others. For the role of “critic and conscience” to be adequately performed, the people involved need to be experts in the field – this demands their involvement in teaching and research.

There are some cases where pure research will be required via bespoke centres.

Summed up:

- Teaching must always be combined with research
- Community outputs must always be combined with research and teaching
- Teaching does not have to be combined with community outputs
- Research does not have to be combined with teaching or community outputs

Q11

What are the benefits and disadvantages, in terms of students' learning outcomes, of bundling together research and teaching at universities in New Zealand?

Page 14

Benefits

- Ensures teaching is research-informed
- Avoids complex “hair splitting” of trying to separate research from teaching, reducing administrative costs
- Ensures teaching does not parasitically consume knowledge generated elsewhere
- Enables research to be tested in teaching environments

Disadvantages

- Staff may feel unable to devote themselves to one task or the other, leading to internal stress

Q12

What value is attached to excellence in teaching compared to excellence in research when universities recruit or promote staff?

Page 14

For the most part, universities focus more on research excellence when recruiting or promoting staff.

Q13

Do New Zealand TEIs cross-subsidise research with teaching income?

Page 14

“Cross-subsidisation” is an inappropriate word. It fails to take into account the fact that there is no pure separation between teaching and research, and that the teaching provided could not be provided without a base of research. Knowledge taught today comes from research conducted yesterday, and there is thus a continuum between the two tasks, not a wall.

If one visits a restaurant and pays \$50 for a meal, we do not say our “food payment” is being used to cross-subsidise other direct costs (such as the labour of the chef and waiter) or indirect costs (such as electricity bills or venue rental). We appreciate that the meal is the final product of a lengthy process, as is tertiary teaching. If anything, we should look at modifying the EFTS funding model to include both a teaching component as well as a research component, so research funding increases as student numbers increase.

Q14

What other evidence is there about what makes for effective teaching in a tertiary environment? Is it different for different types of learning or student? How can teaching effectiveness be best measured and improved?

Page 17

Teaching effectiveness is difficult to adequately measure when the measurers are the entities being evaluated; one cannot simply compare course or qualification completion, for example, because we do not know whether the standards being used are consistent. And, even when they are, there exist incentives for institutions to mark their own students more easily.

What is required is some sort of external assessment that can be applied to all tertiary enrollees and graduates – a common benchmark – that might address general conceptual and logic skills. The difference between entry and exit scores might then be used as a measure of the effectiveness of teaching effectiveness. This could be modified in a way to account for intermediating factors, such as socio-economic status.

Other alternatives might include the wholesale expansion of external marking, which might be possible for some courses and programmes.

Q17

In what ways and to what extent do employers interact with tertiary providers in New Zealand? Are there practical ways to encourage employers to have greater or more productive involvement in the tertiary education system?

Page 21

If employers are to have greater involvement, in terms of specifying the types of graduates they want, then they need to make greater investment. Tertiary education is an intriguing market where the customer (industry) does not pay for the product (the graduate) except indirectly through general company taxation.

It might be advisable, if greater industry involvement is desired, to remedy this “false market” by introducing an industry levy whereby if industry wish to shape the graduates provided, they pay. This avoids them demanding features for which they will bear absolutely no cost.

Q23

How effective is the TES instrument at giving government education agencies direction about prioritising resources and making trade-offs in carrying out their roles? What are the benefits and risks, in terms of fostering an innovative system, of a more or less directive TES?

Page 24

The TES (as it currently stands) has one major flaw – while it lists six priorities, it fails to provide clear guidance for the (very large) field of tertiary education overall and the pieces that fall outside those priorities. For example, a good strategy would contextualise success for Maori and Pacific by first setting goals for the overall population and then bringing in specific goals for those populations. It would be entirely possible for an institution to focus on these six priorities, achieve them well, and yet fail against its more general mission (as set out in the Education Act).

A directive TES that focused solely on desired outcomes and outputs would be an incredibly powerful tool; a directive TES that attempted to control inputs and processes would be incredibly damaging.

Q24

How do other instruments (eg, funding mechanisms, letters of expectation, budget initiatives) influence government agencies' behaviour? How do these align with the TES instrument?

Page 24

One of the key principles of public policy is that funding influences behaviour. We have an input-focused funding system and an outcomes-focused TES. Institutions will validly pursue funding at the expense of other goals.

Q30

What are the best measures to determine whether the tertiary education system is working well?

Page 36

First one needs to determine the goals of the tertiary system – without this, what does “well” mean? One might suggest, however, that measures might include:

- Outcomes: election participation rates; GDP; unemployment; social happiness indices
- Impacts: employment rates for graduates; income premiums for graduates, utility generated by innovations (e.g. patents)
- Outputs: number, type, and quality of graduates; number, type, and quality of research outputs; number, type, and quality of community outputs;
- Inputs: participation rate; efficiency measures i.e. cost per output; institutional reputation.

Q32

To what extent are graduates meeting employers' expectations with respect to hard or technical skills? What about soft skills and capabilities?

Page 47

Historical surveys show that employers have always been dissatisfied with graduate hard/technical skills. A quick glance back to the 19th century shows classics graduates from British universities thrown into colonial administrative roles with few relevant skills. What matters is not these specific, workplace-focused skills, but rather the “promotion of the general powers of the mind so as to produce not mere specialists but rather cultivated men and women.” (Robbins Report, 1963)

As noted earlier, if employers wish to have greater influence over the skills developed by graduates, they need to invest their own money into the system; to do so otherwise is representation without taxation.

Q35

What are the implications of new technologies that are predicted to make many currently valuable skills obsolete? Will this change the role of the tertiary education system?

Page 53

The university system has existed for approximately 800 years. In that time, the following have been invented: (1) the printing press, (2) the steam engine, steamship, and railway, (3) the telegraph, (4) the telephone, (5) the wireless radio, (6) the internal combustion engine, automobiles, and aircraft, (7) mechanical and electronic computers, (8) the internet, (9) the television and cinema, and (10) plastics.

Despite all of the above, which in their impact dwarf any near-future changes from new technologies, the university system has remained capable of adapting, adjusting, and innovating in a way that produces relevant graduates. One must also be wary of assuming that certain skills will become obsolete. Fundamental skills such as mathematics and critical reasoning are eternal – the square root of 2 does not change.

Q36

What challenges and opportunities do demographic changes present for the tertiary education system?

Page 55

Projections indicate that the number of 15-24 year olds (in Auckland at least) will remain relatively constant for approximately 20 years. This means there will be little opportunity for growth in what is usually regarded as the primary tertiary demographic. Under the current funding model, this presents a major challenge, as with stagnant levels of students, funding is also likely to remain at approximately the same level. Providers, faced with rising costs in a non-expanding market, may engage in hyper-competitive behaviour; this might have negative effects on the quality of education provided.

There may be greater opportunities to provide education to retirees, as this is a demographic band likely to expand dramatically. However, while this might be of benefit to institutions, its value to New Zealand overall might be questioned.

Q42

What specific technologies should the inquiry investigate? Why? Page 67

The inquiry should investigate those technologies that can best achieve the goals desired of tertiary education. Until these goals are set, there is no point investigating technology. If we do not know whether our job is to cut down trees or make pies, there is no point investigating new chainsaws; we need goal clarification first.

Q45

Is the “New Zealand” brand an important part of international competition for students, staff, and education products and services? What should providers and government do to manage or enhance this brand?

Page 71

The “New Zealand brand” is a side-effect of a quality tertiary system, not a goal in and of itself. If the focus is on achieving positive outcomes through high quality teaching, research, and community outputs, then a good brand will follow. This will in turn facilitate the hiring of high-quality staff and the attraction of high-potential students.

Q59

How innovative do you consider the New Zealand tertiary education system is? Do you agree that there is “considerable inertia” in the system compared to other countries? If so, in what way and why?

Page 81

The key question is not “how innovative” but rather “how effective?” For its size, the New Zealand system performs particularly well, with several of our universities ranked in the top 200 (although in 2006, the University of Auckland achieved a ranking of #46 in the THES rankings and has slipped considerably since). If the system is effective, then it is sufficiently innovative; innovation is a means to an end, not an end in itself.

Q63

How well do innovations spread in the tertiary education system? What helps or hinders their diffusion? Page 81

Innovations spread for both symbolic and instrumental reasons. Many “management fads” spread because they are fashionable, not because they actually provide much benefit. What is vital is that innovations are tested rigorously before implementation, and if they are shown to be of benefit, that their innovation is then driven in a directive fashion (hand washing for doctors and checklists for pilots being two obvious examples of the above.)

Q68

What impact has Performance-Linked Funding had on providers’ incentives to innovate? Page 86

Very little. Performance-linked funding is so small as to have little impact when compared to the much larger amounts provided via input funding (EFTS). Unless we move to a full ex ante performance regime, where institutions are funded for the quality and quantity of outputs provided, we will see little effect on behaviour.

Q72

Do New Zealand’s tertiary policy and regulatory frameworks enable or hinder innovation? What might happen if existing constraints are loosened? Page 90

The current model – close control over inputs via EFTS funding and programme-level decisions – hinders innovation.

If existing constraints were loosened, via the managerial reform/directive control recommended in the introduction to this paper, it is likely more experimentation and thus innovation would occur as different institutions would seek different and more efficient methods to achieve their goals.