

A personal response to the NZ productivity commission issues paper 'new models of tertiary education'

I am Professor of Higher Education Development at the University of Otago and have been for the past 10 years. This is a personal response to the issues paper. It does not represent the view of my employer, nor do my comments apply particularly to the University of Otago.

Summary

This response urges the Productivity Commission to recommend that 'higher education': researches its own practices, more than it does at present, so that it will in the future be in a better position to answer questions that society has of it; adopts more stringent processes to evaluate and quality-assure the impact of its activities and innovations, so as to promote and protect the New Zealand brand; and with the renewed confidence created by these enhanced abilities, explores more innovative ways of teaching and learning.

Why my perspective might be important to this enquiry

'Policy and practice in higher education' is my substantive field of enquiry and much of my teaching and research focuses on questions within the issues paper, relating to: **teaching and learning quality** (I have taught postgraduate higher education teaching programmes in the UK and in New Zealand. In the UK, I became a member of the Institute of Learning and Teaching and a Fellow of the Higher Education Academy. In New Zealand, for five years I represented the NZVCC on Ako Aotearoa's Reference Group); **use of learning technologies** (I was previously, for six years, Learning Technologies Coordinator at the University of Southampton, UK and I co-researched a national 'professional development for eLearning strategy' in New Zealand); and **graduate skills** (much of my current research explores how university students change as they experience higher education). For those who are interested, I have an H index greater than 20, based mostly on research relevant to this issues paper.

I note here that the focus of my response is on higher education, that part of tertiary education primarily responsible for degrees and higher degrees, whether as universities or within other elements of the tertiary sector.

On the nature of this review

Why is it that so many important, but fundamental, questions about tertiary and higher education need to be asked in this manner? Surely we have departments within higher education that specialise on tertiary and higher education, from which answers could be sought, in the same way that we have departments that specialise in other nationally important activities? I am confident that if Government wished to review any other major national service, such as the medical service or the legal service, it would consult academic specialists in relevant departments in our universities who have research-led, internationally-relevant, expertise in the matter at hand. And yet with respect to this important review of tertiary education, incorporating higher education, our government

has consulted the Productivity Commission rather than academic experts in this area. Although such expertise exists in New Zealand, it is remarkably thin on the ground. While we have substantial Departments of Medicine, and of Law, our equivalent academic 'departments of education' in our universities are dominated almost exclusively by school-based educational research and development. With few exceptions, centres of expertise in higher education in our universities have 'teach but don't research' roles that generally derive from past internal and external funding decisions. The questions that the Issues Paper asks relate, in New Zealand, to a data-poor and research-impooverished field of enquiry.

I suspect that the Productivity Commission will receive many responses from vice-chancellors, chief executives and directors, from planning staff within their institutions, and from a diversity of academic, political and business people. While these are no doubt valuable, and fill the space left by inadequate peer-reviewed research into higher education practices, they are different from academic input from within an internationally focused, peer-reviewed field. Responses and data from our institutions carries with it assurances based substantially on trust and reputation. Peer-reviewed research allows no such assurance. If Government wishes to be confident, for example, that the sector's increasing completion and retention statistics are not achieved by 'dumbing down' made possible by extensive self-regulation within the tertiary sector, I advise it to commission peer-reviewed published research.

In common with many other higher-education functions, funding decisions made in the past have contributed to the present situation. Ako Aotearoa, for example, says that it funds research into tertiary education; but actually it doesn't. To make its limited budget go further, it expects matched funding from the institutions in which research is undertaken and does not provide research overhead funds. The message is clear; that research into tertiary and higher education practices is not 'proper' research' and not worthy of 'proper' funding. Similarly, New Zealand's Teaching and Learning Research Initiative ostensibly funds research in the tertiary sector, but on balance assumes that higher education within this sector will look after itself and focuses its attention on other parts of the education sector. We should not simply blame lack of external funding for this situation. Overall, peer-review processes within higher education appear to be reluctant to commit limited funding towards 'researching our own practices' and certainly these processes only reluctantly subsidise such research from other funding streams.

Surely NZ's HE sector will be acutely embarrassed by this situation? Anticipating the responses from our universities and polytechnics, I suspect not.

We could extend this style of analysis to the way that higher education is managed in New Zealand in relation to externally imposed challenges. Although few would deny the importance of our university education system to NZ society, it seems to me undeniable that we, in higher education, have focused our attention far too much on researching what others do and far too little on researching our own practices. We simply do not know the answers to

fundamental questions; leading to the situation where the Productivity Commission needs to ask many questions about higher education with few in higher education able to answer them. I focus below on three areas of interest that I think my expertise supports.

On the promise of ICT

Information and communication technology (ICT) has long-promised dramatic transformation in human society. No doubt such transformations are occurring and will continue to occur. All aspects of information in higher education are managed in different ways now than they were a few years ago. The higher education sector is not blind either to these developments, or to likely further developments. But there is a sense in which a conflict is occurring; between those who wish to rapidly change the nature of higher education and those who look for a more measured, evidence-based development. It is possible to interpret within the Productivity Commission's Issues Paper (Q41-43, 49, 59) a suggestion that the latter group is losing the battle. Despite the reoccurring evidence that ICT, in the short to medium term, holds no great panacea for improvement, of learning, or of teaching, the former group repeatedly hopes and indeed proclaims that it will. And these are seductive messages. Tertiary education will become cheaper, more inclusive, more flexible, and in all ways better. Perhaps it will; but perhaps it won't. Perhaps the advantages of more distance, flexible, learner-support will be outweighed by its disadvantages. (It seems too trivial a point to make, but it is perhaps necessary: while it is clear that graduates need high levels of skill and resilience with respect to ICT, this must not be confused with its use in learning and teaching.) A great deal of evidence collected internationally not only casts doubt on the likely future benefits of increased use of ICT, in the context of learning and teaching, but also casts doubt on the effectiveness of what we have now, in that context.

Clearly we do need to experiment (Q49) and to occupy a space within the international exploration of these important developments, but we do also need to ensure that we have within our ranks sufficient academic 'research and evaluation' expertise to do this and to find the best trajectory for New Zealand through these troubled waters (Q50). The problem for Government is to decide not only who to listen to, but the extent to which traditional sources of independent, research-informed, evidence-based advice have been nurtured within our country's universities. On this issue, the country should not solely be listening to those with expertise in, and enthusiasm for, the application of ICT, but also needs to listen to those with broader expertise, and be open to the possibility that ICT does not provide a universal panacea for excellence. I am personally greatly concerned about the lack of academic evaluation in the peer-reviewed international literature, associated with some of the innovations illustrated on pages 66 and 74.

On the importance of learning in HE

The productivity commission asks reasonable questions about the nature of learning in New Zealand's degrees (Q 11 on learning outcomes, Q 14 on teaching excellence, Q 32, Q 34 on non-cognitive skills, Q 45 on the New Zealand brand). The questions point to some concern about what it is in particular that graduates

have that non-graduates might not and about how we know that graduates actually have this, rather than just assuming, or hoping, that they do (over and above, of course, the disciplinary knowledge that student examinations make us confident that graduates have). The questions also illustrate some impatience; in that these questions have been asked before without necessarily finding answers. Other questions (Q 48 and following, on new models) emphasise this impatience in making it clear that alternatives do exist to present-day higher education and that that they may be cheaper, more flexible, and in some respects better.

The logic is clear. Higher education promises all sorts of benefits to learners (in particular for employment and lifetime earnings) and to employers, essentially on the basis of the improved skills that graduates will have. But higher education has been unable or unwilling to identify what these skills are, other than in the form of elaborate wish-lists, or to employ quality-assured processes that will identify who has these skills and who does not. Rather the message that comes from higher education is “trust us and trust our reputation”. It seems likely that alternative internet-based and private providers will step up to provide services for learners that may result in graduate status, that give rise to the same level of disciplinary knowledge that higher education promises, with the same trust- and reputation-based promise of additional graduate skills, but that won't involve three or more years of institutional study. As a business model, this may be very attractive to some. (Perhaps Otago Polytechnic's Capable NZ is a step in this direction). The inability or unwillingness of higher education to engage in an evidence-based research-exploration of graduateness leads many to assume that it is scared to look under this particular carpet.

And the problem is I think more severe in New Zealand than elsewhere. The UK has a long-standing external examination system. The system is naturally constantly under fire, as insufficiently effective, and under review. But at present the emphasis is on improving it, not withdrawing it. In essence, a functional external examination system provides the country some reassurance that the degree being granted by a particular institution is worthy and will not undermine the value of other degrees being granted within the same country. Australia, like New Zealand, does not have a tradition of effective external examination, but is currently developing an external peer-review process. The USA does not, by and large, have an external examination system, but it does have an independent graduate record examination (GRE). This standardised external examination is designed to measure verbal, quantitative and analytical skills that the higher education system claims to teach undergraduates. It's not that the graduate schools doubt the quality-assurance processes of the undergraduate schools, but they do find the need to impose some form of additional quality assurance, just to be sure that the graduates that they admit to their programs actually do have the skills that they need to succeed within them. New Zealand's higher education providers have diverse and possibly ineffective external examination processes and no external program of validation like the GRE, and appear to assume that employers, national and international, will simply trust the reputation of the higher education institution, of the sector and

of New Zealand, to ensure the graduateness of its graduates. Trust and reputation will only take so far.

It seems clear to me that New Zealand's higher education providers must:

- Research their practices. It seems untenable to me for New Zealand degree providers to focus so much attention on the detailed disciplinary knowledge that we all expect and to be so disrespectful of the other aspects of graduateness that graduates, employers, and wider society, both need and expect. In response to their plea that I trust them and their reputation, I do neither. I expect them to research their practices and to convince me that they are achieving what they say they are. The 'skills debate', in particular, has been with us now for several decades. It will not go away by ignoring it.
- Use this research to develop programmes of teaching, and learning, and assessment, and evaluation, to address graduate skills. I think it inevitable that New Zealand students will need to develop their own 'skills portfolios'. The question for many years has been the extent to which teachers in higher education will be involved in this. I think that they should be, and indeed, that this is fundamentally part of their role. There are, of course, workload, and skills, implications for higher education's teachers and financial implications for the sector as a whole.
- Develop more effective external oversight in its higher education systems. I know this means 'more accountability' for many. But at present I am not as confident as I would like to be about the quality guaranteed by the New Zealand degree, with respect to aspects of learning outside, or alongside, the disciplinary curriculum. I do not doubt the excellence of top-ranking New Zealand graduates in this respect. I'm sure they are as good as any in the world. But I do at present doubt the quality of many other graduates and the processes that have led to them being granted a New Zealand degree.

On HE's position within NZ's TE sector

Throughout this contribution, my focus has been on degree-granting higher education, rather than tertiary education. I understand why the sector has been designed and maintained in its current fashion (Q1) but I don't necessarily think that it is desirable that it continues in this way (Q2, 10). I agree with the Issues Paper's assertion, on page 49, that higher- and vocational-education increasingly overlap. In my view, universities and polytechnics increasingly compete for the same students and offer similar degree programmes. With an eye on New Zealand's place in an international context, we do need to protect, promote and be proud of the integrity of the New Zealand degree and of the nature of 'graduateness'. Currently, many institutions in New Zealand are in a position to confer a degree, and even higher degrees. These institutions operate in different ways and I suspect conceptualise 'graduateness' in different ways (Q15, 26). Yet in an international context the term 'degree' is important, as are underlying assumptions about it. Perhaps New Zealand will continue to have a variety of institutions able to confer the degree, but my advice is that we need one

overarching quality assurance process to ensure that the term 'degree' meets (and hopefully surpasses) international expectations (Q45).

I do, of course, have personal answers to many of the questions posed by the Productivity Commission's Issues Paper. Many of these answers are not, however, informed by my own research and engagement within an international academic community. But some do converge around my experience-based concerns about the diversity of the New Zealand degree and both the diversity of degree-education providers and the structure of the New Zealand tertiary education system. I am, for example, greatly concerned about the role of mathematics teaching in our schools and in our higher education. This concern overlaps with my disquiet about the way in which higher education in New Zealand evaluates the quality of its teaching and of its teachers (Q14). By and large, higher education institutions in New Zealand claim to greatly value the quality of teaching, and by and large they evaluate this quality primarily based on student feedback (or 'evaluations' as it is often incorrectly referred to). Most institutions claim to incorporate diverse measures of teaching excellence but, by and large, they struggle with anything other than quantitative student feedback (Q15). By and large, higher education teachers who wish to be promoted within these systems not only have to teach well, they have to teach in ways that students approve of. And there are consequences to this. In particular teachers who are innovative, in my experience, tend to struggle (Q77). When it comes to student ratings, innovation is the first thing to go; it is simply too risky. Next to go are challenging elements within a curriculum. If students don't like what you are teaching them, they provide appropriate feedback. Innovative teachers who incorporate quantitative elements in their courses (such as mathematics and statistics) are particularly challenged in our higher education system. It is far easier to survive within New Zealand's higher education system if you keep the challenge out of the teaching. This is not necessarily a problem, for the students, or indeed for the institution. Perhaps it simply builds on developments at school. (Other professors in higher education will be better qualified than I am to explore the mathematical abilities of incoming students). It does appear to me, however, that higher education is struggling to incorporate sufficient quantitative teaching and learning in its curriculum and at least part of this issue relates to the way in which higher education evaluates the quality of its teaching. From my perspective, the situation is most obvious when New Zealand recruits university teachers from overseas. Many are surprised at the lack of mathematical ability of their new students, at the power of the students to dictate the prospects of their higher-education teachers, and power over the curriculum itself. These teachers do adapt to their new country, but in the context of this Issues Paper, I have no doubt at all that this country pays the price (Q29). I was interested to discover what skills the Productivity Commission itself values in its employees (<http://www.productivity.govt.nz/about-us/careers>). I was not able to discover if its Interns were paid or not (so if indeed they are employees) but I did note an expectation of "advanced skills in excel" and that "More advanced quantitative skills would also be an advantage." I would like to think that many graduates from New Zealand universities proficient in "data communication and visualisation, conducting desk-based research and writing up research findings in a concise and compelling manner." would also have an

appropriate range of quantitative skills; but I'm not confident that this is the case. And you ask (Q29) why it might be that New Zealand misses out on the productivity dividend that we hoped, and paid, for?

And what has this to do with higher education's position within the tertiary-education sector in New Zealand? We have a competitive system, not only between institutions in the same part of the sector, but between parts of the sector. To make progress on these important concerns, we need a single quality-assurance process for all degree, and higher degree, granting institutions in New Zealand; not, necessarily, to guarantee equivalent or even minimal standards of achievement, but to guarantee that graduates from each institution can do what individual institutions say they can do. If financial constraints limit what we can do, we should fund fewer institutions to do a better job, and be more circumspect in defining the job that each part of the sector is required to achieve.

And, yes, decisions that Government makes in compulsory education do have an impact on higher education. Tertiary education, no matter how configured, cannot overcome insurmountable obstacles left for it by an inadequate secondary education.

Much in this Issues Paper resonates with my experience. These are important questions to ask. Well Done. But I end with one expression of disappointment. As our planet faces unprecedented environmental and climatic turmoil and significant social challenges, I could find little in the Issues Paper to suggest anything more than a 'business as usual' tertiary education in future; and this in one of the world's greatest per-capita emitters of greenhouse gasses. At some stage, surely, Government will need to ask tertiary education to consider what its roles and responsibilities towards social change are in this respect. Perhaps it was unreasonable for me to hope that the Productivity Commission would convey this message. But if the Commission does not, in this particular exploration of tertiary education, some other group will need to revisit the task and to do the job properly.

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