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AUCKLAND INSTITUTE OF TECHNOLOGY FACULTY OF COMMERCE

Computing - Groups and Programmes NQF Planning Seminar - Discussion Paper

The New Zealand Qualifications Framework - A Case Of "The Emperor Has No Clothes?"

As my exposure to the New Zealand Qualifications Framework grows, observing the process of drawing up unit titles for the Computing area, and reviewing Unit Standards, my concern at the overall concept deepens. This paper makes some general points on the introduction and impact of this flawed structure.

While the overall aims of encouraging lifelong learning, seamless education, transferability of credits and recognition of lifeskills through prior learning are laudable, my cynic's eve view suggests that these are simply window dressing to a transparent scheme to commoditise and privatise education, by introducing the same funder provider split that has squeezed the health sector. The debate over ends and means will continue, in the midst of Orwellian bleatings of "public sector bad, private sector good", while the agenda of privatisation by stealth continues. It is ironic that in the Treasury jargon of "provider capture" there is little scrutiny of the capture of the political agenda by powerful business interests seeking to expand their market opportunities and returns, by cheaply buying public sector businesses. Just as their intention is to create a more "dynamic" market in health, so it is in education. While a variety of alternative providers, and healthy competition have a part to play in any system, the economic and political philosophies that may suit larger economies such as America, are idealistic not to say naive in our small oligopolistic environment. Our public education system is actually quite varied, dynamic, active and sound, with a solid body of committed and capable professionals working under increasing pressure in all

While the supposedly wilful and wasteful "providers" actually delivering the service are continually squeezed, together with continual impositions of further arbitrary, misguided and costly requirements, the centre itself grows more bloated, as the N.Z. Qualifications Authority imposes its discredited model of failed U.K. educational bureaucracy on the rest of the community. Theoretically accountable to the minister, it actually has no accountability in its structure of a few tame consultants happily accepting money for doing the nonsensical, under the direction of a

continually changing hierarchy of self-serving career managers.

My real concern is that over time this market-driven-cumbureaucratic thrust promises to radically reshape the actual purpose of the health and education systems. The undermining of the egalitarian tradition of New Zealand's society, will continue apace. The social contract which saw basic services such as health and education being available as of right, and in accordance with achievement or need, will be superseded by a crude market in which services now become rationed according to ability to pay.

Having thus nailed my colours to the mast, with a limited critique of the minimalist state economists, including such latter day worthies as Milton Friedman, I could make the point that Plato in his "Republic"1, regarded education as a vital public service, which was solely to be the prerogative of the state, since it was too important to entrust to the private sector. Mind you, Plato was a dangerous radical, who espoused such concepts as the organisation of society on the basis of "all things in common between friends". As an early writer, he had obviously not been exposed to the ideas of Adam Smith, and certainly not well inculcated with the concepts of human capital theory.

In this illustration lies my point, these are very different world views, both of which have made and continue to make a significant contribution to the development of Western society and thought. Would a Qualifications Framework allow for both of them, if Plato did not happen to make it to the working party meetings, or was too busy in the agora to comment on the latest working draft? What if Plato were to argue that his view of education was essentially an economic one, namely that it is a public investment for the community good. Would the economics unit standard, discussing this perspective ever see the light of day? Or would the argument be relegated to the unit standard for philosophy? Since the market for philosophers is limited, and their ITO would be unlikely to receive government funding, perhaps they would have to forge an alliance with the educationists and it might be discussed as a .05% proportion of a standard on the history of educational thought.

Now, how would one be deemed competent in the application of Platonic educational thought? Yes, I have it! A practical unit, based in the workplace, wherein students intending to embark upon educational careers are required to create their own utopia, acquire continued government funding for it and market the concept to a group of not more than 20 students. Toying with the idea of merit or excellence (heaven forfend!), students managing to convince not less than 3 senior treasury officers, of the merit of this mode of educational delivery, could gain the unit with three gold stars? One of the required texts for the course would of course be Joseph Heller's "Catch 22".

Turning now to some more specific criticisms, I see some major deficiencies in the scheme.

One could charitably accept the scheme as a well intentioned attempt to fairly recognise achievement of students nationally (whether their learning had been gained in educational or training institutions, or within the workforce), guarantee portability of learning, and reinforce students' case against the arrogance of certain institutions in failing to accept their knowledge gained as valid. Yet the scheme is still flawed. The model of quality underlying the Framework is simply wrong. It is at worst a bureaucratic and costly model of quality, and at best too mechanistic and inappropriate.

A distinction has been made between two forms of quality management2. The first, "Total Quality Control", based upon the work of Charles Demming and others, applies the concept of statistical quality control to the measurement and improvement of existing processes to achieve quality outputs. This has proven particularly successful in stable manufacturing environments, where the processes are known, are relatively stable and the outputs measurable.

However, as product lifecycles shorten and volatility of customer demand grows, those are less often the prevailing conditions. The outputs become more uncertain in their specification and in their demands for both quantity and quality. Far from measuring stable processes to meet predefined outputs, the problem becomes one of defining what the outputs should even be, and what processes need to be defined to achieve them. These are significant issues for the growing range of service industry businesses. The second concept of quality being applied in such contexts has been called "Total Quality Learning", which encourages experimentation, even failure in an attempt to better reach an understanding of customer and product requirements. Far from imposing a model of predefined repeatibility, with variations from set parameters indicating quality problems, this model is essentially exploratory and learningbased. It engages in a quest for a definition of purpose and needs as the first and essential step towards a quality service or product.

The N.Z. Qualifications Framework has been built upon the first concept of quality above, ensuring only that training based upon past goals and definitions of needs can be repeated reliably. Given that the very definitional process is both clumsy and haphazard, the framework may give merely the ability to produce the wrong thing to suit some past objective on a repeatable basis. Is this a recipe for quality? The very ossification inherent in this system actively works against the achievement of quality results. In the computing field for instance, the rate of change is such that today's syllabus is rapidly out of date, in some cases within six months of its original publication. This means that a sound educational and training syllabus need be carefully drafted with an eye to change, and with a level of generality which insulates it to some extent from technology shifts.

The Framework has not been designed in such a way. It is a rickety structure, the components of which may become embedded in a variety of qualifications from a diverse set of providers, and once subject to the inevitable changes arising from its poor design will cause

the whole pack of cards to come tumbling down or cause a huge political log-jam in putting any necessary changes through. Taking the Computing and I.T. Field, I seriously doubt that the centre will be funded for the level of maintenance that will be required to maintain the structure. Given that the whole thing has been designed much like a legacy system of the sixties written in Assembler, those who do understand it (if any ever did), will be long gone, and the cost of the armies of "unit standard maintenance programmers" trying to keep the ungainly edifice of the syllabus going will be prohibitive. Inevitably the speed of change will be too slow, structural decay will set in, and local training courses will spring up to meet current commercial needs, quite independent of the NQF, which over time will be discredited as the dying flailings of a dinosaur.

It seems to me ironic, that at the very time that the computing industry is moving towards object-oriented and component-based architectures, these concepts are sadly lacking from the design of the Computing and I.T. Field's Unit Standards. It seems to be a loose collection of subcomponents, of arbitrary sizes, thrown together in a large and amorphous pool intended to enable the "providers' to select a suitable collection to package and deliver in a "qualification' for yet to be determined student audiences. Certainly smorgasbords are one acceptable way of providing a meal, but most restaurateurs have the freedom to cut their brie in different sized pieces for different customers tastes, without some bureaucrat dictating that they always serve it in wedges cut to a standard 1 cm width.

The concept of assessment underlying the framework is again too restrictive and inappropriate. The idea that one mode of assessment, being the "competency based" model suits all situations is at best over-zealous. Returning to my smorgasbord above, some cultures prefer to eat with their hands, some with chopsticks, others with a mass of cutlery. None of these options are wrong, although they may be if applied to the wrong culture. I would make a simple argument for diversity in all things.

The argument that the competency based assessment model avoids the arbitrary nature of norm-referenced assessment, could be viewed with some sympathy, but does the assessment scheme do this in reality?

What is a unit standard? Is it a black and white, statement of expectation? Can it be measured by a simple yes/no, achieved/not achieved yardstick? Well, from his exalted position as a Regional Moderator, John Crawford3 has admitted that the unit standards are neither units nor standards, but rather "competency statements".

Applying my own interpretation, I would say that they are attempts to codify standards of a sort, to create by another name in effect, "norms" of performance or achievement. Now weren't we trying to escape from norms in the first place? Calling them standards instead is hardly an escape. The heart of the matter however, resides in this issue. Where do these norms exist? As expressed in the actual words of the standards? No! The standards can be written from two viewpoints. One the behaviourist, reductionist

route of overspecification, which actually fails to express the desired outcome. The other, the common sense route of somewhat more general statements available for further interpretation, through which process the standards are created and maintained.

Further interpretation by whom? By a body of educators/trainers, and practitioners (at least for vocationally related standards). To the extent that these judgements are consistent across a group of educators and practitioners, a set of standards or norms can be said to have been determined.

This is in effect why educators are recognised as a group of professionals, who exercise these judgments in determining the suitability of a given student's efforts against the criteria to be met for a pass or fail grade. The allocation of percentages is simply a refinement of this judgement. The fitting of student populations to normal distribution curves (not that I am arguing for this often suspect practice), could even be seen as a normative process, where a standard population outcome could be statistically predicted, and the smoothing processes of scaling and the like are simply technical means to maintain a desired assessment standard for the unit of learning.

Educators and trainers, usually have training into the practices of their profession which gives them common values and expectations of performance. The benefit of their regularly meeting together and working in a collegial fashion in such activities as course development, moderation and assessment, is to help reinforce the standards of their profession through reviewing the suitability of the assessments they have set and the judgements they continually make. In a vocational training context, this set of educators and trainers is extended to include a group of employers to create a broader community working towards a common set of expectations regarding learning outcomes. Such formal and informal linkages as Local Advisory Committees, friends, colleagues, professional bodies, consultancy activities, co-operative learning, work experience and project based education help maintain a community of shared values.

To its credit the NQF has incorporated some of these collegial aspects into its development processes, and will have them within its moderation umbrella. However, the very aims of the NQF militate against maintaining such a community. It attempts to set up greater competition, by encouraging a wider group of providers, and curriculum developers, Employers, Private Training Establishments, Industry Training Organisations alongside the traditional schools, Polytechnics etc. The idea that these parties will be able to even forge, let alone maintain a common norm-set is unrealistic. Even worse, why should the stronger providers collaborate in developing the course assessments, exemplars and other materials for the weaker to free-ride on their coat-tails and set themselves up as competitors. The models of collaboration common to educational institutions do not sit too easily with the open competitive model underpinning the NQF.

Professional educators are often criticised for inconsistency in their judgements, sometimes validly. Yet the task of structuring subjectivity to deliver consistent and equitable results is far from simple. Professional educators have traditionally done that through their professional training, their collegiality and the standard mechanisms of their profession. As a last resort National Examinations have been used to do so. This new tower of Babel of players busily competing amongst one another, under the stifling weight of funding bids, moderating inspections and other requirements from N.Z.Q..A. or the ITO's will be either too diverse to deliver consistent outcomes or too busy coping with the funding, quality control and change management requirements of the whole scheme to actually do justice to the educational delivery. And let's remember that these costs are largely the costs of opening the field to a number of different players, basically subsidising the new entrants by imposing the cost of the structure on the captive customers.

In a simple analysis, to achieve a given output a required resource level must be input. The definitional problems of educational outcomes make it difficult to determine how much to put in, versus how much comes out. The new scheme carries higher administrative overheads, therefore unless greater funding is made available, or extra efficiencies are gained, the effort available for actual educational delivery will be reduced. At a course level the quality of outcomes for students then falls.

The inevitable outcome of the NQF will be an enormous diversity of standards nationwide, and each qualification will only be as good as the provider it was gained from. Which rather defeats the purpose of the exercise in creating a National Framework with transferable credits. Perhaps a national exam would be a simpler and cheaper approach. While it is singular and narrow as an assessment approach, it is probably no less so than the strait-jacket imposed by the competency-based strictures.

The best strategy for providers to adopt would seem to be to offer their own qualifications while having some loose mapping to the national structure, which might keep the funding agencies happy. The added benefit of a local qualification is that it offers the provider a degree of insulation from the continual revisions that the national structure will be subject to. (The Auto Industry and the Mountain Safety Council for instance, are undergoing a major review of the unit standards they originally created, because they were created bottom up either in isolation from the end goals or in too mechanistic a fashion, so they do not produce worthwhile outcomes). In addition to a degree of insulation from random change, a locally driven qualification offers the flexibility to add new modules which suit current specific needs without either waiting for a national registration process, or arguing for a revised unit standard with a different size or specific performance criteria. It also makes it possible to offer specifically tailored integrated courses of study. Which adds up to an increased ability to meet current demands as they arise.

The main arguments I have made above are ones of rigidity, excessive overhead and cost, narrowness of assessment approach, and failure to achieve the intended outcomes anyway despite the enormous costs of development and migration. I have not addressed a range of other

issues, such as the question of the difference between vocational training and education, and the unsuitability of the NQF for the latter, not to mention the arbitrary definition of levels underpinning its design. Needless to say I am not enamoured of the N.Z. Qualifications Framework, as I see it as a rather Canutian venture against the tides of change. Perhaps I do not like it because I've always been disconcerted by zealots of whatever persuasion. A horrendous nightmare dreamed up by a coalition of economists and bureaucrats, does not map to my concept of education. Mind you, nor does our concept of schooling. I ask the question does this add value? The answer I reach is no! But it does add cost, complexity and overhead. Its narrowness worries me, and I wonder whether some of our great educators such as Sylvia Ashton Warner and Marie Clay would flower under such a regime.

However, despite its futility and inanity the NQF will probably haunt the training landscape for some years to come. In the end human ingenuity is sufficiently great that it will somehow be made to work, imperfections and all. Hopefully this will be by some pragmatic process of getting on with it, but probably it will be by a process of fudge which allows the politicians and bureaucrats in Wellington to convince others that it is working even if it is not, and everyone is doing something to quite different standards under its umbrella.

1 Plato, The Republic, translated by H.D.P. Lee, Penguin Harmondsworth Middlesex, 1955

² Sitkin, Sutcliffe and Schroeder, Jul 1994, Total Quality Control vs. Total Quality Learning, Academy of Management Review, 19;3 3 Commerce Faculty - Computing & the NQF Seminar, 27/11/95