Higher Education Research and Development Society of Australasia, Inc

Transforming Knowledge into Wisdom

Holistic Approaches to Teaching and Learning

Proceedings of the

27th HERDSA Annual Conference

4-7 July 2004

Miri, Sarawak

McKenzie, A., Morgan, C. & Watson, G. (2004) What is the best thing we can do for our undergraduate students?, in *Transforming Knowledge into Wisdom, Proceedings of the 27th HERDSA Annual Conference, Miri, Sarawak, 4-7 July 2004: pp 214.*

Published 2004 by the
Higher Education Research and Development Society of Australasia, Inc
PO Box 27, Milperra, NSW 2214, Australia
www.herdsa.org.au

ISSN: 0155-6223
ISBN: 0 90 8557 58 2

This research paper was reviewed using a double blind peer review process that meets DEEWR requirements. Two reviewers were appointed on the basis of their independence, expertise and experience and received the full paper devoid of the authors' names and institutions in order to ensure objectivity and anonymity. Where substantial differences existed between the two reviewers, a third reviewer was appointed. Papers were evaluated on the basis of originality, quality of academic merit, relevance to the conference theme and the standard of writing/presentation. Following review, this full paper was presented at the international conference.

What is the best thing we can do for our undergraduate students?

A .D. (Tony) McKenzie
The University of Sydney, Orange NSW, Australia
tmckenzi@orange.usyd.edu.au

Christopher K. Morgan
The University of Sydney, Orange NSW, Australia
cmorgan@orange.usyd.edu.au

Geoffrey K. Watson
The University of Sydney, Orange NSW, Australia
gwatson@orange.usyd.edu.au

***Abstract**: In 1996 the principal author propounded a theory of open system thinking and learning (McKenzie, 1996), which sought to refocus the art of adult education onto the emerging needs of learners in the 21st century. The authors of the present paper apply this perspective in an exploratory rethink of the evolving undergraduate curriculum within their Faculty. They ask what theoretical frameworks might be called on to steer this evolution in a way that ensures graduates will be well equipped for their various futures. The curious phenomenon of two almost rival courses in farm management offered within their faculty provides a launch-pad for some deeper conjecturing about a 'fitness for purpose test' equal to the task of evaluating their teaching programs. What emerges is not so much a well-formed evaluation tool as a number of design perspectives proposed for undergraduate professional formation curricula.*

***Keywords**: Management education; curriculum development; ontology.*

Setting the stage

If wisdom, as the conference organisers would have it, is knowledge in use, it is appropriate for us to ask, what knowledge, what theories will equip us as university teachers to prepare students adequately for their various futures? If we don't ask this question, our teaching content and processes have not been aligned with the needs of our students in their journey of realising their potential.

The real world context of this paper's focus is our Faculty's undergraduate curriculum-in-flux, and in particular we wish to table an issue we are currently pondering: the relationship between our two almost rival programs in generic farm management – the Bachelor of Farm Management and the Bachelor of Land Management (Ecological Agriculture). We say that the first has a farm/farmer-centred focus – intent on the survival of the farm unit, respecting and balancing the competing principles of financial, environmental and social sustainability – while the second offers students glimpses of an ecocentric way of thinking and relating to the land. We have already suggested (McKenzie et al., 2003) that in offering these programs side by side we are displaying our own pluralist engagement with agriculture, and that this

faithfully reflects "a very motley (read 'pluralist') world". Our purpose in this paper is to problematise what we as a Faculty are doing by flaunting this almost inner conflict, offering two different roads to professional formation in farm management. We ask: what theoretical framework(s) might be called upon to illuminate our curriculum landscape and our curriculum renewal processes? How do we evaluate the appropriateness of our curriculum? Is our curriculum adequately preparing our graduates for the futures we encourage them to create for themselves? We will engage with these questions by considering how to design a "fitness for purpose test" for our curriculum. The direction of our thought may sometimes seem to lose its focus, but colleagues are asked to stay with us regardless; this will be a layered discourse, in which we intend to advance on several planes at once.

The textured focus of our curriculum

At the 2002 HERDSA conference we proposed a nested model of human capability, which was our attempt at encapsulating afresh the many layers that characterise our undergraduate management programs (Figure 1).

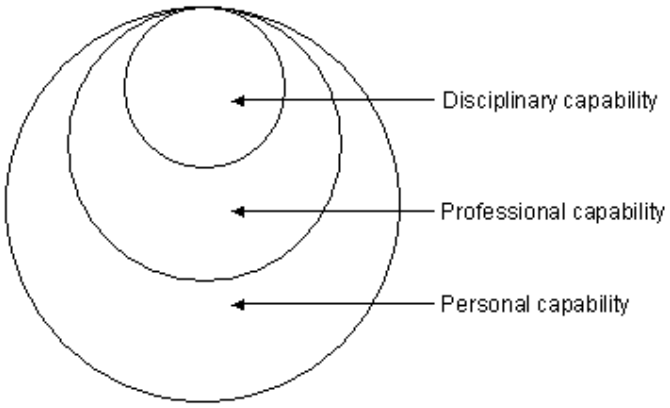

Figure 1: The nested domains of human capability (McKenzie et al., 2002)

Disciplinary capability refers to the knowledge and skills that are drawn from the particular academic disciplines relevant to a student's chosen field of management. *Professional capability* refers to those broader abilities and understandings that are required for effective performance in a professional (or industry) vocation; it is more loosely defined in order to embrace such things as university graduate attributes and qualities and knowledge deemed essential by professional bodies. *Personal capability* encompasses our deeper and wider dynamic personality qualities – our sense of humour, for example, which is governed by our accumulated attitudes across a range of issues, and our tacit value system and sense of self. Personal capability is thus a stratum of experience or perhaps "dimension of becoming" within which all our acquired capabilities are integrated into the persons we take ourselves to be (McKenzie et al., 2003). While all three domains are emergent, we think that the wider the domain, the longer it takes to flower.

A 'fitness for purpose' test for our dual-carriage agriculture programs

We are concerned here to develop an appropriate fitness for purpose test for our undergraduate programs, in particular, our two generic farm management programs. We think our fitness for purpose test needs to be framed at two levels of abstraction, or perhaps two levels of application – that pertaining to graduates' future professional performance, but also, more

loosely, in the arena where individuals accept a share of responsibility in the future of Goodship Planet Earth and all her crew (Figure 2).

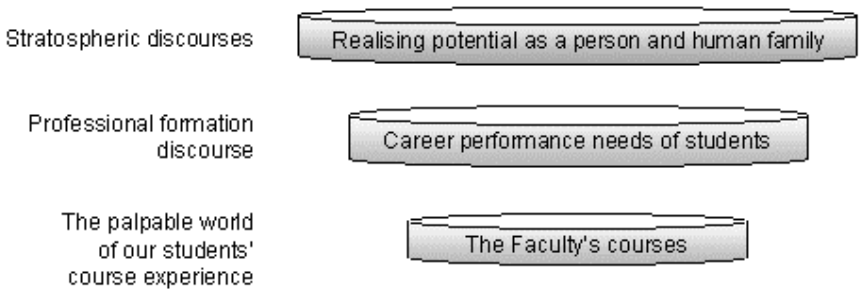

Figure 2: Tooling up for our curriculum *fitness for purpose* test

So whereas figure 1 represents the richness of human capability as an emergent holarchy (as Wilber, 2000 uses the term), in Figure 2 we identify the need for an ontological dimension to undergraduate curriculum design. This paper argues that university undergraduate courses have a role in helping students in their lifelong journey of realising potential. (We ask colleagues to note in passing: we are deliberately showing something of the emergent thinking behind this paper's development. Figure 2, and indeed all our reflecting, imagining, theorising and reasoning here, is work in progress; one thought bootstraps onto the next as we feel our way to coherence of argument. Thus Figure 2 should only be seen as a tentative step towards something that is ready for critique. At this point we simply ask colleagues to keep open the possibility of what we are tentatively calling "stratospheric discourses" as a marker for potentially important dimensions of undergraduate curricula, and to reserve judgment at this stage on how these dimensions might be agreed on. The following discussion will attempt to explore this further).

Can noble human aspiration and the sustainability ideal be incorporated in the one curriculum evaluation model?

In our initial attempt at delineating a fitness for purpose test for our curriculum (Figure 2) we spontaneously chose the human capacity for noble aspiration as having design implications for our curriculum. But as we explore this idea, we also need to challenge the ability of the model to incorporate the sustainability issue.

Our Faculty's hybrid disciplinary focus is rural management, and in keeping with the spirit of the times, it firmly embraces sustainability as a non-negotiable "standard of living" for rural managers. But how might this important standard be integrated into our evaluation model? Essentially we are seeking a framework that will serve to guide curriculum development to prepare our graduates more fulsomely for the future; yet applying a fitness for purpose test is not something that can be done with certainty because there will always be an element of conjecture over what our graduates will need in their disparate futures. (Barnett goes much further than this; see Reprise below). But this leap-frogging thinking – jumping over the black hole between our present position and our destination – seems to be just what advocates of sustainability do. Like us "realising potential" dreamers, they admit to holding to an ideal state of affairs as an appropriate goal to aim for in the present, but also like us, they admit the route to this ideal state cannot be determined with precision: both problems call on us to make a

leap of self-realisation: "on the basis of who I am, what values I stand for, I will leap to *that* foothold".

What is sustainability in rural management? From a farm-centred perspective it could be viewed as being "the business of the business to remain in business". More broadly, however, sustainability challenges practices in many proliferating domains beyond the farm gate. Now because *Homo sapiens* has imprinted itself so indelibly on the biosphere, the questions of survival of the global ecosystem, and of multicultural human civilisation as we know it, are inextricably bound together. Gross undulations in the global experience of human dignity, gross differences in the footfalls of nation states' ecological footprints, stark contrasts between the aspirations of the colonising haves and the colonised have-nots – such interpretations of our modern world (see for example, Elgin 2000; Venetoulis et al., 2004) can cast the future of planet and people in doubt. For the majority of the world's population, these features of the global political economy dominate the lived experience out of which attitudes, aspirations *and* defence mechanisms emerge. The quest for sustainability will thus inevitably draw us into the domains of international and intercultural relations.

Signing up to the ideal of sustainability requires a leap of self-realisation. It may be utopian, but we see it as a modest goal, in the sense of only wanting to achieve the conditions in future in which we may survive to do what we have decided we are here for. Of course, from the ecocentric position, that statement would be rejected on the grounds that it uncritically recycles the prevailing mindset, namely, that we (collectively) have been and still are engaged in "the biggest land-grab in planetary history" – the kind of thinking that has been propelling us ever since we started to believe it was our role "to fill the earth and conquer it" (Genesis 1:28, Jerusalem Bible) – the anthropocentric error.

However we define sustainability though (even in the modest sense stated above) we can propose in terms of Figure 2, that the notion of realising one's own potential and that of the human family will increasingly be circumscribed by sustainability values as the planetary future unfolds. This proposal is far reaching, since it suggests that the framing of personal and "human family dreams" (i.e., "noble aspirations") will necessarily embrace and even be dictated by sustainability criteria. With this in mind, we now need to explore a further question. How does this embracing concept of noble aspiration fit in with education and curriculum design? For instance, if we have all wanted at some point in our lives to do or be the best we can, we may legitimately include noble aspiration as a component of learning about becoming. In our view the human urge to realise one's potential is quintessentially what makes us human so we may reasonably look to education to facilitate students' progress in realising that potential. Furthermore, to the extent that education seeks to help us understand ourselves and the world, if we are (consciously or otherwise) on that path of becoming, an important role of education is enabling us to recognise and critically reflect on the *kind* of journey we are on. In that sense it is reasonable to theorise that:

- the defining feature of human kind is the fulfilment it gains from *growth in understanding* (McKenzie, 1996, p. 102); and that
- growth in understanding is a loose term spanning several discourses, but for [us] it connotes the progressive, continuous broadening of global understanding – the nurturing of an ever more comprehensive, ever more coherent *sense of self in the world* (McKenzie, 2002, p. 213).

At this stage we don't see a single evaluation model that incorporates noble human aspiration and the sustainability ideal. But let's push our thinking further…

Cultivating mindsets for surviving the twenty-first century

Here we now want to extend our ideas into a new layer – one that is willing to explore the dichotomous thinking that has unfortunately emerged from recent global security problems. Simultaneously, the emergence of this dichotomous thinking highlights for us the very educational challenge we are framing in this discussion, namely, the challenge of developing mindsets and approach within future leaders that can address supercomplexity in the struggle to match noble aspirations to a sustainable future.

There might be any number of ways of conceiving the nature of the individual and global survival problem, but in the context of this argument we wish to pursue the issue in terms of how people construe their experience: their *sense of self in the world* (McKenzie, 1999). Although this is a more abstract notion than, say, how folk get on with their neighbours; and although it is a hybrid construct encompassing one's sense of self and one's sense of everything, we think it will serve our purpose; we're working from our hunch that there is a significant relationship between what is variously called our mindset… worldview… or now, sense of self in the world… and the way we engage with the world; and flowing from this, the contribution we make, positive or negative, to our shared global future. Let's see where this thinking might take us if we apply it to some recent world events.

It is not surprising that after the terrorist attack on the New York World Trade Centre on September 11, 2001, the USA media's portrayal of political leaders and the people in the street gave the impression that in symbol and in actuality the greatest power on earth was being threatened in its very heartland. Increasingly, for everyone who saw the graphic TV footage and heard what was being said, reality started looking like a standoff between "us" and "them". "If you aren't for us, you're against us" was a sub-theme not far from the surface. And this same black and white, polarising thinking was fostered by governments and media beyond the USA, particularly in countries that had historical or economic ties with it; "life as we know it" was seriously at risk.

Several years on, our globalising popular media and the political leaders it feeds off continue to purvey the belief that winning "the future" is a question of "winning the fight against terror", "rogue states", "weapons of mass destruction". Ladson-Billings (2003, p.7) suggests that

> Today, we continue to grapple with a cultural logic locked in binaries. It understands dichotomy and opposition and has little room for complexity. It cannot hold two competing thoughts at once and imposes on us a 'regime of truth that makes it impossible to confer humanity on anyone outside of its system of thought and mode of behaviour.

She sees in the whole 9/11 phenomenon and the view of humanity that emerged from it a parallel with European Enlightenment thinking (p. 6). There was a tacit view in the Enlightenment that "humanity" was most truly expressed in Enlightenment values, particularly acceptance of scientifically verified knowledge. Beyond the enlightened ones were the rest;

> Those who subscribed to an epistemology that conjoined the seen and the unseen, the flesh and the spirit, this world and the next were either religious fanatics (if they were White) or primitive, unevolved, and not yet human. Yet scholars such as Ani (1994, p. 29) suggested that if you 'rob the universe of its richness, deny the significance of the

> symbolic, simplify phenomena until it [sic] becomes mere object, [then] you have a knowable quantity. Here begins and ends the European epistemological mode.

The reaction by the USA Commander-in-Chief and his advisers of embracing dualism (us versus them) to shape a response to 9/11 may or may not be good politics, but it does not evidence a very sophisticated level of cognitive development. (Perhaps looking for enemies is a survival strategy for commanders-in-chief, but does this need have to override everything else, for everyone? Dichotomies are dangerous things after all (Ackoff, 1989)).

How can the response to 9/11 by the Leader and Spokesperson of the Free World be said to score poorly on the cognitive development chart? There are a number of models used to describe the qualitatively different ways in which individuals make sense of things, for example William Perry's schema of cognitive and ethical development (Perry 1970; Perry 1988). One strand of this field concerns *ego development* which, according to Loevinger, is "not just a personality trait but a master trait, second only to intelligence in determining an individual's pattern of responses to situations" (Loevinger, 1976, cited in Weathersby 1981, p. 52). The literature generally agrees that interpreting experience in dualistic ways is a less developed mode of reasoning than the more relativistic and tolerant thinking that characterises people who have left simplistic dualities behind them. In summary, if we want to create mindsets for surviving the 21st century, our education endeavours need to be offering far richer dimensions than the binary codes developed by our Western leaders. Can we enable our students to build global perspectives that embrace the necessary diversity for sustainably operating in an immensely complex global world? Let's now explore this challenge more deeply.

Responding to the fine geopolitical mess we've gotten ourselves into (with apologies to Oliver Hardy)

On the grand scale of humankind's collective ability to survive and transform itself (we are being utopian!), an immediate and obvious handicap is our difficulty in thinking of ourselves as a human family. Instead, national allegiances have some hold over us, while cultural and civilisational ties (according to Huntington (1996)) exert an even greater command. Yet the realisation that we are one, or could be, shimmers at the periphery of consciousness like a halo from another planet. How might we fan the cold ember of that insight into radiance? One thing we could do is ask [Q.1] how educators might foster growth in understanding across the global community, not to neutralise cultural difference, but to savour it together from our various, culturally distinctive ways of knowing. The health sciences practise population-level theorising, research and practice, to complement healthcare for individuals; why not education [Q.2]? – two questions from different worlds of thought concerned about the one outcome.

What bearing does our discussion on the global threat of "us versus them" dualism have on our interest in creating an appropriate curriculum in our institution? There's no simple answer to this question. For example, in their latest paper on reflective judgment research, King and Kitchener (2004) illustrate the complexity bound up in attempts to model the developmental nature of individuals' cognitive and ethical judgments. Thus, for example, their original tool for mapping development in reflective judgment, the reflective judgment interview, was effective in locating the individuals studied at discreet levels of reflective judgment, but further modelling was needed to learn about the actual developmental processes that are integral to the reflective judgment model. While their later work is providing promising results, King and Kitchener still see their work as work in progress.

Meanwhile, at our institution, reviewing our undergraduate programs, we continue to critique the relevance of our curriculum to students' futures. Neither the reflective judgment model nor other similar schemas are designed to be used to directly derive curriculum structure. On the other hand, it seems intuitively obvious to us that measures to foster growth in understanding – the cultivation of critical self-reflection on personal epistemology, one's lifelong story of meaning making – deserve explicit attention in the design of curricula. We anticipate that as we find ways to do this students will experience personal and cognitive growth, which we see as a necessary enabling orientation for the cultivation of a *global frame of mind* and finally, a *global heart*. Perhaps that will turn out to be a secret passageway out of the fine mess we're feeling our way through.

Regrouping and recapping

At the start we set out to problematise what we as a Faculty are doing by flaunting an "almost inner conflict, offering two different roads to professional formation in farm management", in effect capturing and institutionalising the paradigmatic pluralism in agriculture today within our curriculum. Our discussion has drawn us into some fresh theorising about curriculum design according to its fitness for purpose, a perspective that we have linked to the literature on cultivating students' reflective judgment. The students enrolled in our two programs in generic farm management will, we believe, need to draw on their disciplinary, professional and personal capabilities to live and work in the world they will one day be responsible for. Who, if not university graduates, will have the mental wherewithal to address the lack of parity between communities and our other threats to survival?

What appears to be coalescing here within our thinking is a swarm of issues that vie to be taken seriously in the design of our curriculum. The buzzing may not herald a unified theory of "curriculum of becoming" – we haven't fabricated our ultimate curriculum fitness for purpose test – but at least we are getting more clarity about what we need to do to equip our students for their future lives. To serve our students well, our undergraduate programs will need to:

- actively cultivate our students' disciplinary, professional and personal capability (Figure 1)
- create congenial, imaginative, "womb temperature" spaces for their ideals to bloom in (Figure 2)… creating suitable conditions for noble aspiration to spread irresistibly, combusting spontaneously wherever the human heart hungers
- problematise the sustainability question to encompass all threats to the survival and flourishing of life and community
- goad them to realise an ever more coherent, ever more comprehensive sense of self in the world.

Is that too much to expect of ourselves?

Reprise

As a reprise of our key concerns we cite Barnett's keynote address at the 2003 HERDSA conference. Amplifying his seminal *Realizing the University in an age of supercomplexity* (Barnett 2000), Barnett sought to discern what "learning" is needed to prepare students for an unknown future. He argues that there are two major educational problems in an age of uncertainty: the knowing problem – what is it to know in such a world; and the being problem – what is it to be in such a world? He says that if we can adequately address the latter, the

former dissolves to a large degree (Barnett 2003). Barnett argues that outcomes-based and transferable skills curricula do not pass muster. This is not just because the difference between now and then may make the transfer of skill inappropriate; more crucially, there will necessarily be divergent interpretations of the conditions prevailing in that future (whatever future it is), and consequently, dissension over the best way forward.

We concur with Barnett on this, and also on his prognosis on the best way to prepare students for an unknown, constantly changing future:

> Learning in such a situation… is surely a matter of acquiring the dispositions to live amid… conceptual and practical instability. It is to acquire the ontological wherewithal to live effectively in a world that threatens continually to dissolve, cognitively speaking (Barnett 2003).

Barnett sees some hopeful signs that this challenge is being addressed (purposely or otherwise) through various pedagogical/curriculum innovations which "invoke the student not just as a knower or practitioner but also call upon the student to give of themselves as persons. Their selves as human beings are no longer held separate but are drawn into the curriculum" (Barnett 2003).

On another occasion we will return to this theme to think more about noble aspiration – the human pursuit of ideals (Emery, 1976); and also examine, in the context of this epoch's launch into ontological uncertainty, how students can be helped to find a still point within – the *still point of a turning world* (Eliot, 1968) – a locus of self-assuredness in their bumpy journey of becoming. Meanwhile we have much to discuss with colleagues in our faculty about the best thing we can do for our undergraduate students.

References

Ackoff, R. L. (1989). Dangerous dichotomies. *Systems Practice, 2*(2), 155-157.

Ani, M. (1994). *Yurugu: an African-centered critique of European cultural thought and behavior*. Trenton, NJ: Africa World Press.

Barnett, R. (2000). *Realizing the university in an age of supercomplexity* (1st ed.). Ballmoor, Bucks: The Society for Research into Higher Education and OUP.

Barnett, R. (2003). Learning for an unknown future. Paper presented at the *Annual international conference of the Higher Education and Research Society of Australasia, Research and Development in Higher Education, volume 26* (CD-ROM), Otago, New Zealand.

Elgin, D. (2000). *Promise ahead: a vision of hope and action for humanity's future*. NY: HarperCollins.

Eliot, T.S. (1968). Burnt Norton, in *Four Quartets*. London: Folio Society.

Emery, F. (1976). *In pursuit of ideals*. Canberra: Centre for Continuing Education, Australian National University.

Huntington, S. (1998). *The clash of civilization and the remaking of world order*. New York: Touchstone Books.

King, P. M., & Kitchener, K. S. (2004). Reflective judgment: theory and research on the development of epistemic assumptions. *Educational Psychologist, 39*(1), 5-18.

Ladson-Billings, G. (2003). It's your world, I'm just trying to explain it: understanding our epistemological and methodological challenges. *Qualitative Inquiry, 9*(1), 5-12.

Loevinger, J. (1976). *Ego development: conceptions and theories*. San Francisco: Jossey-Bass.

McKenzie, A.D. (1996). Improving the effectiveness of distance education for farmers. Unpublished Masters, University of Western Sydney, Hawkesbury, Richmond NSW.

McKenzie, A.D. (1999, July). A ferret tail-chase – the perpetual closed loop of open system reflecting theorising. *Issues of Rigour in Qualitative Research Conference*, Melbourne. Retrieved from http://www.orange.usyd.edu.au/staff_members/tmckenzi/downloads/1999a.htm

McKenzie, A. D., Morgan, C. K., Cochrane, K. W., Watson, G. K., & Roberts, D. W. (2002, July). Authentic learning: what is it, and what are the ideal curriculum conditions to cultivate it in? Paper presented at the *Annual international conference of the Higher Education and Research Society of Australasia, Research and Development in Higher Education, volume 25* (CD-ROM), Edith Cowan University, Perth.

McKenzie, A. D., Morgan, C. K., Watson, G. K., Cochrane, K. W., & Roberts, D. W. (2003). A left brain, right brain conversation loosely tied to the nuances of 'authentic curriculum'. *Staff and Educational Development International, 7*(2), 121-134. Retrieved from http://www.orange.usyd.edu.au/staff_members/tmckenzi/downloads/Left_brain.pdf

Perry, W. G. (1970). *Forms of intellectual and ethical development in the college years*. New York: Holt, Rinehart & Winston.

Perry, W. G. (1988). Different worlds in the same classroom. In P. Ramsden (Ed.), *Improving Learning – New Perspectives*. London: Kogan-Page.

Venetoulis, J., Chazan, D. & Gaudet, C. (2004). Ecological footprint of nations 2004. Sustainability Indicators Program. Retrieved April 26, 2004, from http://www.rprogress.org/publications/footprintnations2004.pdf

Weathersby, R. P. (1981). Ego development. In A. Chickering (Ed.), *The Modern American College* (pp. 51-75). San Fransisco: Jossey-Bass.

Wilber, K. (2000). *Sex, ecology, spirituality. The collected works of Ken Wilber (Vol. 6)*. Boston: Shambhala.