

2008 Mary MacKillop Oration

I am aware that the definition of a lecturer is someone who talks in someone else's sleep, so if you want to stay awake, feel free to stop me, ask questions or tell me to wind up.

Tonight I am mindful of the journey we all take as educators. The legacy that Blessed Mary MacKillop left to our South Australian educators is embodied in her passion for teaching, her vision for education, and her commitment to work in the poorest, most neglected part of God's vineyard. Our journey as educators is nourished and broadened by our experiences of the educational environments in which we have worked and played, but I am also mindful of the role that our primary educators – our parents have played in engendering in us a passion for education and curiosity about learning .

Tonight, I want to share with you some of my own life story, and also my current interests in education.

Home schooling

In many ways I had an ideal childhood. Growing up on Springvale homestead, 220 miles south of Darwin, I was home -schooled by my mother under the stern red pen wielded by Mr HR Bennett – from the Correspondence School, which was located at 55 Pennington Terrace, North Adelaide. My 6 brothers, my younger sister and I spent a couple of hours each day completing tasks in history and geography and challenging each other to competitions in mental arithmetic.

We read voraciously, argued interminably and memorised great gulps of Kipling, Byron, and Banjo Paterson. We recited our times tables like a race-call of the Melbourne Cup and interspersed Shakespearean soliloquies with our own names wherever the opportunity could be found... I was the outright winner in this sibling competition thanks to Hamlet!

What a piece of work is a Pam! how noble in reason!
how infinite in faculty! in form and moving how
express and admirable! in action how like an angel!
in apprehension how like a god! the beauty of the
world!

I hit the dust in the next verse, but no-one could out do this gem!

Every 2 weeks, the engorged package of ink-smudged assignments and last-minute tests would be mailed to Mr Bennett and the next set of materials would arrive at the homestead.

On any given day, two hours was the maximum limit that Mum could keep us directly engaged in schooling – and then we'd be off – hunting kangaroos, fishing for barramundi, tracking wild pigs, swimming in the Katherine River, playing or reading. Formal schooling was simply a minor aberration that created an occasional itch in the rest of our lives.

By 12 years of age I was a truly unremarkable student. I loved history, literature and science, saw little value in geography, and was more interested in playing chess than in mastering long division. I could milk goats, was a reasonably good shot with a .22 rifle; could make a loaf of bread, change a car tyre and crank-start a tractor. Charlotte Bronte was my favourite author, and Miles Franklin my role model. Like her, I was also tracking down *My Brilliant Career*.

When I reflect on my upbringing, I, like you, acquired a warehouse of skills, memories, aches and pains that have stood the test of time and served me well. Some were acquired as a result of direct, formal instruction, but many were achieved through observation, play and practice.

Knowledge and innovation

Creating and nurturing educated communities is larger than the market forces of any institution, policy position or value proposition. As educators we have a unique invitation to work with both the passion and ingenuity of my mother and Mr H R Bennett to create in our families and our communities a love of learning, a commitment to social justice and the aspiration to a spiritual intelligence that transcends place, space and race. We need to accumulate and share our individual and collective resources, position education as central to workforce development and integrate training and development into all aspects of our business and industry culture.

Indeed, when Peter Drucker coined the category of the knowledge worker, over 10 years ago, he identified the manipulation of information as both a process and a commodity.¹ This has had a profound impact on how we now package learning – not only as content – driven but also as skills-based.

¹ Drucker, Peter. (1997). 'The future that has already happened'. *Harvard Business Review*, 75, 20-24.

We have commodified education – not as a community service and a basic human right – but as a business transaction – you get what you pay for! This is, I believe tearing the family fabric in our society as we still have significantly large numbers of people of all ages not engaged in learning.

In our ICT savvy world, this is creating a class of electronic elites at the expense of an ICT illiterate underclass. Even some of my young staff who have had 3-4 years of parenting leave struggle in their return to work, as the digital dynamics of teaching have changed so much during their leave.

Yet catch up is possible, and many ICT skills can be quickly learned... Indeed, when I look at the list of attributes required of a 21st Century knowledge worker published on the *Education Futures* website, I wonder when some of these weren't essential skills for any worker of any generation:

'Passport of skills for a knowledge worker:²

1. Not restricted to a specific age.
2. Highly engaged, creative, innovative, collaborative and motivated.
3. Uses information and develops knowledge in changing workplaces (not tied to an office).
4. Inventive, intuitive, and able to know things and produce ideas.
5. **Capable of creating socially constructed meaning and contextually reinvent meanings.**
6. **Rejects the role of being an information custodian and associated rigid ways of organizing information.**
7. Network maker, always connecting people, ideas, organizations, etc.
8. Possesses an ability to use many tools to solve many different problems.
9. **High digital literacy.**
10. Competence to solve unknown problems in different contexts.
11. Learning by sharing, without geographical limitation.
12. Highly adaptable to different contexts/environments.
13. Aware of the importance to provide open access to information.
14. Interest in context and the adaptability of information to new situations.
15. Capable of unlearning quickly, and always bringing in new ideas.

² <http://www.educationfutures.com/2008/04/22/skills-for-a-knowledgemind-worker-passport-19-commandments/>

16. **Competence to create open and flat knowledge networks.**
17. Learns continuously (formally and informally) and updates knowledge.
18. **Constantly experiments new technologies (especially the collaborative ones).**
19. Not afraid of failure.

With the exception of those competencies/capabilities (in bold) that relate specifically to the digital age, many of our parents would have encouraged us to develop these attributes and attitudes. Yet there is still an absence of well-specified 21st century organisational models for education in Australia. This is partly understandable, simply because much of the innovation process is organisationally counter-intuitive. For example, innovation in education and business cannot be managed systematically because it depends on knowledge and skills being offered voluntarily rather than on command.

Moreover, the unpredictability of innovation makes it difficult to apply traditional rules for business strategy development, evaluation, and control. So, in low risk environments such as education, all too often we succumb to the ballot-box imperatives of government without standing up for the values and needs of our students, our families and our communities.

This is especially noticeable in regional areas. I did a stint working for BHP several years ago, looking at the participation of indigenous Australians in the mining industry. It became obvious that many corporations buy in their high level professionals from across the globe, their middle managers from across the nation, and their low-skilled workers from the local environment. This means there is little investment in upskilling regional communities because of the time lag between the learning input and the earning outcome – especially where global labour supplies are abundant.

In times of skills shortages such as the current situation we have an opportune moment to reconsider how we educate people for the workforce. We need to look at what we stand for as educators – and how we should act as educators. We then need to align this with the needs and values of our constituents to ensure that we are co-developers of a robust, world renowned education and training system – right here, right now in Australia.

One of the greatest challenges we all have is the fact that we often see our students as our revenue base, rather than the consumers of our educational services who are

entitled to source the learning and engagement they seek from the whole community rather than being 'owned' by one site. But it gets worse. The great divide between professional and vocational education is ludicrous. We shape our learning through our active engagement with the world...we move in and out of highly specialised learning and social networks as the need or interest exists. We source information, create networks, copy others and learn in a breathtakingly interactive ways.

Social networking

As educators we cannot ignore the value of the experience of learning that enchants children and adults alike....our identity is so sharply defined by what is counted in our educational experiences that it is essential that we ensure that **active** learning is the focus of our learning spaces – providing both breadth and depth to sustain the deep and prolonged engagement essential for higher order skill sets

How many of us have a *Facebook* or *MySpace* site? Or download podcasts to listen to at the gym? Some of us are even using Moodle or Garage Band to create podcasts for our students because we are out at meetings or professional development... It certainly beats photocopying 30 worksheets for a relief lesson!

Creating and applying knowledge can be as easy as a trip to *Bunnings* on a Sunday morning to learn how to replace the washers in the toilet cistern – or bringing home a big package from *Ikea* and assembling a whole new wardrobe for the spare bedroom. None of us need to do a VET course to manage this.

We know that our adept young learners no longer take what we say at face value. We know that they question, challenge, circumvent our instructions, ponder, imitate and create their own pathway and response. These are the very components of active learning and transformation. We know how easily our students create and produce knowledge – indeed one of our greatest dilemmas is that students are immersed in data rich environments in society, but subjected to knowledge poor school curriculum that is disjointed and decontextualised.

Indeed, recent attempts in the future SACE consultations to channel innovation into pre-specified categories, has the potential to severely constrain innovation-driven vision related to how we cater for our emerging knowledge workers. In attempts to improve the university entrance scores for our senior students, many schools are exploiting mechanisms to exclude those students from HESS general studies who may not succeed with a high TER.

Yet the cost of this active attrition is not being challenged for its flawed logic. It becomes yet another mechanism for undermining the closely linked dynamics of what Lave and Wenger calls the four 'deeply interconnected and mutually defining' components of the social aspects of learning, namely

- Community: learning as belonging
- Identity: learning as becoming
- Practice: learning as doing
- Meaning: learning as experience.³

These principles are, I believe, reflections of the spirit and intent of the future SACE, but are not changing the traditionally reductionist views of vocational education and training in our society. Indeed we need to carefully monitor whether the more the SACE changes, the more it stays the same.

Education is vocational

We need to abandon our diminished view of vocational education and focuss on a highly skilled workforce. The dichotomy between academic and vocational schooling is hampering our development as a nation and creating tensions between constructivist and direct instruction teaching methods. The evidence demonstrating what students know and can do, as well as how well they know it and can do it requires much greater critique that the current competency-based and capability-based assessments measures provide.

The widespread emergence of working mothers, casualised employment and retraining requirements, means that educational and training are far more unconventional and random than ever before. A recent report by NCVET found that 'people in trades display a distinct pattern, whereby they obtain training and enter the occupations by their mid-20's and then steadily exit the occupations over their working lives, beginning this exit soon after they qualify. This is in contrast to people in professional occupations who are trained and enter the occupations by their later 20's but who do not leave the occupations insubstantial numbers until retirement.'⁴

The report concludes that unconventional training and education pathways will be required to meet the future workforce demands in Australia. The existing emphasis on young school leavers being the only entry point for most trades training may continue

³ Lave, Jean and Wenger, Etienne (1991) *Situated learning: legitimate peripheral participation* Cambridge University Press: Cambridge p1

⁴ National Council for Vocational Education Research (2007) Skill acquisition and use across the life course: current trends, future prospects. At <http://www.ncver.edu.au/research>

to exacerbate their early departure from these trades soon after they acquire their qualifications.

An interesting study done by A.J. Cowling at the University of Sheffield, compares the aims of academic and vocational education, with Bloom's taxonomy of educational objectives. Cowling explores the teaching of generic skills versus the specialist skills required in certain aspects of the ICT industry. He concludes that the real issue is the level at which we teach generic and specific skills, not the nature of the learning itself.⁵

Evidence based learning

Teaching, nursing, medicine and law are vocations that require specific on the job training combined with theoretical studies, as do plumbing, childcare and hospitality. A popular career as such as journalism is still an emerging profession where you can succeed through the university studies pathway or via the cadetship at the local newspaper. As the global skills shortages swing the pendulum towards applied knowledge, Australians need to be world ready in educating our young people to know how to demonstrate what they know and can do in a range of contexts. Gabriel Matters talks about using 'evidence based practice' as our major focus for student learning.⁶ Bruniges points out that our interpretation of the evidence is even more complex:

' A Greek philosopher might suggest evidence is what is observed, rational and logical; a fundamentalist – what you know is true; a postmodernist – what you experience; a lawyer – material which tends to prove or disprove the existence of a fact, and that is admissible in court; a clinical scientist – information obtained from observations and /or experiments; and a teacher – what they see and hear.'⁷

Even in Australia, low-skilled or semiskilled jobs are exported to other nations or eliminated by the rapid application of advanced technologies – such as in the car industry, or through the use of automated machine systems as in dairying; or robotics in mining and forestry. We desperately need to integrate vocational and academic learning; we need to emphasise skills that students need to learn and to perform the tasks expected in the emerging occupations - as well as in many of the traditional professional and para-professional career areas. We need promote transferable higher-order thinking and problem solving skills with young students' innate passion to play, experiment, build and dis-assemble, or as Parnell (1996) described it, to combine 'an

⁵ Cowling A J (2005) A systems model for the field of informatics: Department of ComputerScience: University of Sheffield.

⁶ Matters, Gabrielle (2006) *Using data to support learning in school: students, teachers, systems* Australian Education Review: ACER Press: Victoria

⁷ Bruniges, Michele (2007) 'Generating new realities for the future' Paper presented at the International ACEL Conference : *New Imagery for Schools and Schooling* Sydney Convention Centre: 10-12th October

information-rich subject-matter content with an experience-rich context of application" (p. 19).⁸

In this way, each aspect of learning reinforces and builds upon other aspects of learning. The metacognitive and self reflective learning styles reinforced by constructivism are powerful mechanisms for connecting students' learning within classrooms with what they are really getting up to outside the school boundaries.

In rural schools we are often confronted with the value of life based learning. Young people who get up at 5.00am daily to muck out the horse stables; or take their 12 hour shift on the tractor; or participate in the led-steer competition as part of their SACE.

Nano learning

At Tenison Woods College, a case management program has been introduced to enable young people to complete their SACE without attending formal classes of instruction at the College. From 2002 to 2008 the program has grown from 2 students to over 100 students enrolled in this SACE studies program.

This has seen a shift in focus away from the mimetic approach to learning that underpins much of the content-based, teacher directed SACE subjects to a valuing of models and approaches that foster student learning through thinking, reviewing, demonstrating and providing evidence of their learning processes and products. This is a perfect paradigm within which to blend academic and vocational learning, - and in alignment with the vision and mission of Mary MacKillop, it reaches out directly to the poor in the most neglected parts of God's vineyards.

The young people who most benefit from this program are those who have dropped out of schooling and see the SACE as their passport to the rights and privileges of mainstream Australians. Common to many of our Flexible Learning students' life stories are indicators of substantial social disadvantage which excluded them from completing their senior schooling, including

- Social isolation and exclusion(depression, pregnancy, truancy and 'home-schooling')
- Long term unemployment (exacerbated by no ICT skills, lack of the relevant literacies to manage the formal data compliance and reporting requirements of government agencies such as Centrelink)

⁸ Parnell, D. 'Cerebral Context.' In *Vocational Education Journal*, 71, no. 3 (March 1996): 18-21, 50.

- Drug abuse and /or mental health issues
- Physical and sexual harassment and violence
- Dysfunctional family environments

The 90% success rate for these students in achieving their SACE has had a profound impact on the South East community. DECS have set up a similar centre called the Independent Learning Centre with sites in Mount Gambier and Naracoorte. Tenison Woods College have also set up a connecting room in Millicent to work with students in that community.

Richard Fielden claims that 21st Century learning is:

- ‘ **Flexible** at different scales and timescales, allowing for variation in use, occupancy and layout
- **Inspiring** to those working, learning and visiting, and embodying organizational aims
- **Supportive** of effective teaching and learning, accommodating a wide range of experiences and activities
- **Involving** of the users and the wider community and linking with other learning places.’⁹

The flourishing social learning networks enabled by Wikipedia, Web 2.0 tools and the like, enable learners to develop and distribute content in dynamic and constantly evolving ways... Such applications provide the bridge between creative applications of knowledge and practice-focussed discourse. Wikis are the haven of the curious, the pedantic, and adventurous who have a thirst for knowledge and a passion for sharing it.

Many Web 2.0 sites contain wiki software to support user generated content and online templates to enhance content and design presentation; and user generated tags called folksonomies to classify content and key ideas. Yet many of us are still planning lessons based around linear progressions where the teacher is the conveyor of the information and the students are passive recipients of the often decontextualised material..

Today’s young Australians want to scan, solve, innovate, influence and communicate their own authorised views and beliefs based on their assembly of knowledge and skills from a diverse range of sources. They seek to create not be controlled, they involve others in their sense-making but do not rely on traditional models and prototypes. Recent work on productive pedagogies in Queensland puts connectedness to students’ worlds as a key determinant in effective learning.

⁹ Feilden, Richard OBE (2004) *21st Century Schools: Learning Environments of the Future*; Building Futures Report, UK

‘As the paradigm shift in teaching and learning gradually moves from instrumentalist to constructivist views on teaching, learning and behaviour, and from teacher direction to student self direction, traditional managerial views of behaviour management are at risk of being seen as out of step with the direction that schools are being encouraged to head in.

Where this incompatibility exists students are sent mixed messages about the education process and the extent to which teachers really believe that the goals of self-direction of learning and self-regulation of behaviour are legitimate’¹⁰.

This creates significant tensions for our helicopter parents who want to hover over their children to protect them from all danger, as well as confronting some of the ‘command and control’ drivers in our conservative communities seeking to use punishment and fear as the controlling mechanisms for aberrant teenagers.

When I commenced Year 8 at a boarding school in North Adelaide, I loathed classroom learning and the appalling rigidity of timetabled routines *For Whom the Bell Tolls* took on an entirely different meaning – it came to be the kind of life-in-death experience that TS Eliot immortalised in *The Waste Land*. Whereas my primary schooling had been a rather random enterprise, my secondary education comprised rigid routines, segmentation of learning into disconnected disciplines and stifling hours of repetitive and seemingly unrelated tasks. I saw it as a penance that I was certain would fast track me through purgatory should I succumb to death caused by boredom.

Yet the woman who was my first teacher, gave me something very profound – an enduring quest to understand that which I do not know.... My mother, a history honours graduate from the University of Sydney at the age of 19, was an engagingly intelligent, articulate and inspiring woman. Despite the ravages of outback Australia in the 1940’ to early 1960’s she bore 10 children in 12 years. She learnt to make bread, cook and clean without electricity, suffer the horrors of floods, bushfires and the never ending threats of 3 metre long pythons, scorpions and centipedes who made life a constant challenge in a tiny rural community where a doctor was often a day’s drive away.

Ten years ago, Parnell proclaimed

‘In the future the boundaries between formal and informal learning will blur and the school as an institution will dematerialize. The focus will shift from creating the right

¹⁰ Fields, Barry A (2005) *Productive Pedagogies & Discipline: The Challenge of Aligning Teaching and Behaviour Management* Faculty of Education, University of Queensland

buildings to creating the right learning environments, interactions and conditions for learning, and these may appear in a variety of physical and non physical spaces. The quality of learning environments will appear on educational league tables and assessment structures will have been redesigned to encourage collaborative and creative work.¹¹

We have a key role as educators to act as systems integrators between traditional constructs of the basic skills approach to learning and evolving wiki entities and adaptations. This will enable educational institutions to harness the best of the centralised, mass produced command and control construct of learning frameworks with the more contemporary 'review and distil' design of learning that our young people are engaging in as they personalise the world to their own worldview.¹² Yet we are still stumbling around deep tensions between meaningful engagement in learning and workforce development, versus expedient reactions based on tribally valued education traditions.

The emergence of 'nano-learning' has arrived – that is the customised, individualised, bite sized learning interventions and support that every child and family will require to thrive.

We now need organisational approaches that facilitate this innovation; we require investments that often appear to be unjustified in current business thinking; and financial investment, which tends to be granted to the low risk, familiar scenarios, based on current models of education not future needs and aspirations.

I believe the Australian College of Education has a key role to play in providing the leadership skills and acumen needed to create the optimal climate and communal spaces for engaging education and community formation. I have gained much from my links with the College and rely strongly on its publications and issues papers for current educational thinking and debate.

But – now I had better let you all go home before it starts to cost more to fill up your car with petrol than it did to buy it.

¹¹ Parnell, D. 'Cerebral Context.' In *Vocational Education Journal*, 71, no. 3 (March 1996): 18-21, 50.

¹² Winhall, J (2004) *Design strategy and inspirational spaces* Educational Review vol 18, no 3

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