The changing contexts of vocational education: implications for institutional vocational learning

Stephen Darwin

Abstract

With the rapidly transforming nature of vocational work, it is increasingly challenging for vocational teachers in institutional environments to develop learning that is relevant and sustainable. Although it has been widely observed that new pedagogies are essential in this changing vocational environment, little guidance is emerging for both vocational teachers and teacher educators on what new approaches will enhance institutional vocational learning. This creates the clear need for focussed research to guide potential frameworks for future vocational teaching and learning practice. This paper investigates the challenges of designing effective and sustainable vocational learning environments in institutional settings. In particular, it focuses on what Chappell and Johnston (2003) have described as the 'zone of maximum disturbance': the contemporary TAFE system that increasingly has to confront conflicting expectations of its role as a public institutional provider of vocational education. It is apparent that innovative pedagogical frameworks need to emerge within these growing institutional and political constraints to enhance the ability of teachers to create meaningful learning experiences in institutionally–based vocational education.

Introduction

This paper explores the pedagogical challenges facing of vocational teachers in institutional environments and specifically the Technical and Further Education (TAFE) system and suggests there is an urgent need for research that provides guidance on models that can better inform teaching and learning practice. It finds its origins in the increasing conflicting drives confronting contemporary

vocational teachers, particularly as it has been exposed in the work of teacher-educators debating future vocational pedagogies with participant teachers in a large TAFE institution. Such conflict has emerged with the seemingly relentless imposition over the last decade of a broad neo-liberalist agenda on a TAFE system that was originally constructed around a liberal-individual discourse of vocational education. In essence, this represents a struggle between a contemporary instrumentalist labour market agenda and a foundational educational and social motive. This labour market imperative in vocational education has significantly diminished the educational autonomy of the Australian TAFE system, primarily with its progressive transfer into a broader, industry–defined vocational education and training (VET) marketplace. (Harris 2002, Clark 2003).

Yet the national TAFE system remains the overwhelmingly dominant provider of post compulsory vocational education in Australia accounting for around 80% of formal learning in 2004, with around 1.25 million students attending 84 Institutes across the States and Territories (NCVER 2005). As Schofield (1994) observed, this in practice has meant TAFE has become the site of a clash of two fundamentally competing world–views on the nature and role of vocational education and training. For teachers in the TAFE system (and arguably to a greater extent their teacher– educators) this has generated a dialectic that is by necessity framing and potentially shaping vocational pedagogies. However, debates around what forms of pedagogy in institutional environments like TAFE can most effectively mediate these forces and optimise meaningful vocational learning remains an underdeveloped area of current sectoral research.

Rise of Neo-Liberalism

Unsurprisingly, the rising hegemony of neo-liberalism is evident in other sectors of contemporary education and indeed in broader social policy. (Connell 2001; Anderson, Brown & Rushbrook 2004) As Connell and Yates (2001) observes, neo-liberalism represents a reformed conservatism, characterising it as:

> " …a movement of ideas and policies which reject(s) both the class compromises of the post–war decades and the welfare state institutions which were built on those compromises. In their place, private enterprise was to be unleashed as an engine of prosperity and allowed to operate untrammelled in all spheres of life – including education." (p.7)

Connell and Yates (2001) identify the key logic in neo-liberalist conceptions as superior efficiency and responsiveness of demand driven markets (as opposed to the assumed inefficiency of lumbering and bureaucratised supply driven public provision). This logic has been characteristic of that used to legitimise

the introduction of a 'market' in vocational education and the gradual increase in the level of control and 'commodification' of its actors and artefacts. Such dramatic re-orientation, often characterised as new vocationalism (Chappell 2001, Chappell & Johnston 2003), is firmly grounded in the ideological assumption that 'unless there is a clear market failure which governments can sensibly correct, competitive markets are better than politicians and bureaucrats at allocating and efficiently utilising productive resources' (Argy 2001, p.67).

This has led to the gradual diversion over the last decade and a half of around a quarter of government funding from the unitary public TAFE system to a fragmented combination of burgeoning private, community and enterprise (employer-based) providers. This diversion has been particularly centred on the more lucrative, low cost-high student volume areas of VET, generally leaving TAFE to carry higher cost, lower volume programs (Harris 2002). In tandem, there has been a strong endorsement both in Training Package design and in sectoral discourse of work-based learning as a legitimate alternative to conventional forms of institutional provision, with the related expansion of new forms of apprenticeships that challenge traditional conceptions of entry-level skilling (Harris 2002).

Simultaneously, the aspirations of the individual learner have been systematically subordinated to that of the labour market needs of the economy, with a funding model developed to enforce its primacy (Blom & Clayton 2002, Harris 2002). This has been achieved by highly regulating what is expected to be taught in vocational settings (at least as the intended curriculum) through the progressive introduction of national competency-based Training Packages that prescriptively mandate the required vocational outcomes across most disciplines. The design and control of such packages has been invested in Australian industry, as an act of faith to enshrine an industry-led 'training' system – with (peak) industry representatives having an essentially free rein on what should be included, what should not and how it should be measured.

The fissure between the liberal public education model of TAFE and this new neo-liberal agenda continues to widen, reaching a new zenith with the passage of the recent Skilling Australia's Workforce Act 2005 which asserts the primary objective of vocational education is 'to strengthen Australia's economic base through providing a highly skilled workforce that will meet the future needs of Australian businesses, industries, communities and individuals'. This has been further accentuated by the introduction of a Commonwealth funded network of trade based vocational colleges (cast as Australian Technical Colleges) which have been designed to be both hosted and endorsed by local industry and staffed by teachers on performance pay linked to demonstrable learner achievement of Training Package defined learning outcomes.

Therefore it is perhaps unsurprising that sectoral research undertaken in TAFE in recent years (i.e. Blom & Clayton 2002, Chappell 2001, Chappell & Johnston 2003), it has widely observed that TAFE teachers are increasingly confronting the often contradictory epistemological expectations between ascendant market driven neo-liberal VET policies of government and the resilient liberal public service orientations of TAFE. Indeed, research demonstrates that this tension is not only challenging TAFE teaching and learning practice, but the very identity of the TAFE teacher as a liberal educator (Chappell & Johnston 2003).

Foundations of Vocational Education in Australia

Until the emergence of TAFE in the late 1970's, technical education had lacked a clear identity, being primarily focussed on trade training conducted in traditional master– apprentice relationships in workplace contexts and to an extent supported by amorphous and poorly funded State technical colleges that tended to reflect the narrowness engender by local social, geographic, political and economic characteristics of their locale (Goozee 2001). These early technical colleges were largely an ad hoc response to labour demands in both post-war periods and were generally based on provincial interests and often centred on the remnants of the early Mechanic Institutes and School of Arts (Smith & Keating 2003). The Mechanics Institutes and School of Arts movement progressively emerged from English origins in Australian cities and towns from the mid 19th century, centred on a discourse of liberal education for industrial workers. The number of Institutes grew considerably in the boom times of late 19th century, but these struggled to survive social change of the early 20th century and finally the harsh economic winds of the Great Depression (Candy & Laurent 1994).

Ironically, it was this amorphous and eclectic nature of such Institutes and later idiosyncratic character of state–based technical colleges that inadvertently contributed to ongoing perceptions of technical education as largely low status and hence low priority in a time when schooling and universities were gaining credibility with direct state sponsorship (Smith & Keating 2003). Reflecting this, funding emerging from the Commonwealth for technical education to assist returned service personnel in the post Second World War era tended to fund expanded higher education (for instance, with the establishment of Colleges of Advanced Education) rather than build on the partial technical college networks of the States (Pickersgill 2004). Aside from the maintenance of relatively poor infrastructure, this national failure to invest in the capability of vocational education led to inconsistent governance arrangements, most obviously manifested in divergent and disparate curricula across states and even within them (Goozee 2001, Smith & Keating 2003).

This was to change dramatically with the progressive creation of the TAFE system across Australia from 1975 to 1980, driven by dramatically expanded

Commonwealth funding for what was intended to become a legitimate state-based public education system based on a series of unifying national agreements. The TAFE model was drawn from the recommendations of the seminal report of the Australian Committee on Technical and Further Education (referred to as the Kangan Review) that was commissioned by the Whitlam Labor Government in 1973. The new (and initially well-resourced) TAFE system for the first time located vocational education 'firmly in the Australian educational spectrum, allow(ing) it freedom to speculate, to become more creative and responsive to the demands of the community as interpreted by professional educators.' (Schofield 1994, p.4) Moreover, as McIntyre (1991) observes, this meant in practice:

> "…a move away from a historically narrow, overly specialised and restrictive model of technical education towards one characterised by more open relationships to community, the labour market and industry and other educational agencies. In short, increased access (was) accompanied by greater openness and breadth of provision in the colleges" (p.47).

Though the TAFE system has proved to be a robust and highly successful institutional provider of liberal vocational education, its future was to be abruptly changed in 1987 when the responsibility for TAFE was moved from the educationally focussed Commonwealth Tertiary Education Commission to the new economically driven Department of Employment, Education and Training (Ryan 2001). This move sparked the progressive introduction of a series of labour market focussed initiatives on TAFE broadly characterised as the National Training Reform Agenda, anticipating the sustained impositions reflecting the increasingly neo-liberalist constructions of vocational education (Clark 2003). It can be argued that under contemporary public policy approaches, TAFE increasing labours under the considerable weight of diminishing government support, expanded competitive funding and a strong re-assertion of the earlier labour market imperatives that preceded the its foundational liberal origins. Hence TAFE is confronting a forced transformation that is making more dependent on (industry driven) entrepreneurial engagement, driving down per hour delivery costs and increasing teacher casualisation (Clark 2003, Junor 2005).

This powerful emergence of neo-liberalism in the mature liberal institutional context of TAFE is forcing teachers to confront in practice a fundamental epistemological conflict, well captured by Anderson, Brown and Rushbrook (2004) who observe that in essence:

> " …vocational education and training is aligned directly to learning for work and includes training for specific job roles. 'Vocational education

and training' is also a contested concept. The 'vocational education'
dimension is emphasised by those who contend VET (or should be) about
holistic and integrated development of underpinning knowledge and
broad-based, transferable work and life skills. The 'training' dimension
tends to be emphasised by those who believe that VET should address
itself exclusively to the acquisition of a relatively narrow band of
employment related or job specific skills and competencies" (p.234).

Changing Vocational Work

These contradictory forces are further amplified by another unavoidable reality confronting vocational education: the increasingly dynamic and complex nature of contemporary work (Chappell, Solomon, Tennant & Yates 2002, Chappell 2003). The changing nature of work, of course, is creating unprecedented expectations and demands on all sectors of education. However, given the specific focus of vocational education on learning for work, the impact is potentially more disruptive. Changes in vocational work, driven by the accelerating impact of emergent technologies and globalising capitalism, is at the same time transforming both work design and conceptions of the contemporary worker (ANTA 2003a). The conceptualising of vocational work is a foundation of the design of vocational Training Packages and related curriculum development, even though this is primarily retrospective in form and manifested through the atomising of its constituent elements. Yet in TAFE (and indeed VET contexts more generally), what shapes approaches to the design and delivery of learning in practice needs to be reflexively cast around perceptions of the changing nature of work and prospective vocational expertise rather than in static or atomised characterisations of current competence (Chappell & Johnson 2003, Chappell 2004).

However, precisely what prospective skills and capabilities are needed by the 'future worker' and how this may influence contemporary learning design in contemporary vocational education remains highly contestable (Ryan 2001, Anderson et al. 2004). Though the ostensible formal artefacts of the contemporary Australian vocational education system represent a strong endorsement of a labour market driven 'efficient skilling' discourse, research in contemporary TAFE environments suggests alternative liberalist discourses are simultaneously apparent. (Chappell 2000, Blom & Clayton 2002, Harris, Simons & Clayton 2005) Yet the ideology that endorses the notion of cultivating vocational skills for the labour market is on the ascendancy, most recently articulated in Federal Government policy intent for the sector via the *Skilling Australia's Workforce Act 2005* which is according to the legislative sponsor to "provide the nation-building skilled people required by industry and business in the short term and beyond" (Hardgrave 2005).

Indeed in the Skilling Australia's Workforce Act 2005, the instrumental perception of VET (including the unmentioned, yet still dominant, TAFE sector) is undisguised, being characterised as ideally "responsive to the needs of industry and employers and in which industry drive the policies, priorities and delivery of vocational education and training" (p.6). Significantly, TAFE only is referred to in terms of changed industrial relations arrangements. As noted elsewhere, this denial of the role of TAFE in contemporary vocational education has been further reinforced in the creation of 24 Australian Technical Colleges from 2006 for Year 11 and 12 students to be funded by the Commonwealth Government and run by local industry to provide school based apprenticeships in areas of skills shortages (i.e. traditional trades).

In essence, such legislation formally enshrines this dichotomy between a transformative view of education (on which TAFE was broadly founded) and that harboured by new vocationalism, which privileges economic imperatives and the formation of appropriately (narrowly) skilled workers to meet them (Palmieri 2004). As the recent research of Chappell and Johnston (2003) demonstrates, in practice this will mean TAFE teachers are increasingly being forced to confront "new business discourses which contradict their understanding of vocational education and training as both a broad educational activity and a public good" (p.5).

Yet substantial research within the sector (Chappell 2000, Chappell & Johnston 2003, ANTA 2003a, Hager 2003) strongly suggests that in the rapidly emerging post-industrial, knowledge centred and technologically driven global economy will increasingly demand workers who instead are able to rapidly adapt to the increasingly dynamic nature of skills reformation in industry. This instead implies the need for worker-learners, who are more "flexible, autonomous, motivated, self-regulating and orientated to lifelong learning" (Chappell & Johnston 2003). Moreover, nurturing such capability will necessarily demand vocational teachers who are 'learning specialists' (rather than just vocational experts) who'll need to possess with a diverse range of pedagogical capabilities sufficient to design sustainable learning activities that build toward this self directing capability (Chappell 2000, ANTA 2003a).

Vocational Teaching and Learning

Inevitably, this contested conception of the future nature of work (and related epistemological assumptions) has profound implications for the design of contemporary vocational education. It renders similarly contestable how the vocational learner is conceived, how vocational learning is designed, appropriate pedagogies and learning environments. For the TAFE based vocational teacher, this conflict – manifested as it is within the broader and ongoing hegemonic struggle between the educational-social and the labour market-instrumental discourse of contemporary TAFE – creates significant tensions in the identification of effective pedagogies.

Other realities further conspire to complicate the cultivation of effective pedagogies in vocational settings like TAFE. Unlike other formal educational contexts, teachers are engaged primarily on the basis of their vocational expertise and with a minimal expectation of their capacity as educators. Hence, TAFE teaching tends to have potentially far more organic (or more pessimistically, weak) pedagogies than university trained school teachers, and generally adopt a more rigid, narrow and simplistic discourse than those characteristic of higher education teachers. In practice, this organic character reflects the limited guidance for TAFE teachers around vocational pedagogies, which encourages a form of 'discovery learning', centred on what proves effective and what does not in practice (Darwin 2004). Indeed, it has been persuasively argued that the contemporary TAFE system is economically sustained by the limited pedagogic expectations on vocational teachers (Thomas 2001, Blom & Clayton 2002, Junor 2005).

While expectations differ between the states on the need for vocational teachers in TAFE to have higher education teaching qualifications, such arrangements tend to apply to teachers employed long term.

Yet evidence provided by Junor (2005) suggests an increasing trend toward casually engagement of teachers in TAFE, who generally would have instrumental training provided via a relatively low level training and assessment program or no professional development in education at all. Indeed, as casual and part time teachers now arguably form the core of the contemporary TAFE teaching workforce, there are strong ambiguities emerging around levels of expected practice and commitment to the vocation of teaching beyond that mandated (i.e. the *Certificate IV in Training and Assessment)* for registration as a training organisation (Cornford 1999, Junor 2005). Ironically, this has created the need for more experienced and educationally qualified full–time TAFE teachers to increasingly occupying administrative and mentoring roles to manage this burgeoning number of 'transient' TAFE teachers. Having said this, sector wide research also suggests that the vast majority of these full time teachers are part of an aging demographic that is generally remote from recent educational changes and hence broadly inclined to traditional transmissive didactic pedagogies as opposed to those than tend to threaten their conventional identities as vocational teachers (Chappell & Johnston 2003; Anderson et al. 2004).

Therefore, it is not unreasonable to suggest this has the effect of conserving and modelling orthodox (transmissive) practice, as it must inevitably shape the pedagogical assumptions inherent in the mentoring relationships within this largely casual and part time teaching workforce. Moreover, the accountability for pedagogical decisions taken by teachers is minimal, with the assumptions of autonomy and generally self-regulatory practice, combined with the overwork of senior teachers permitting little real scrutiny or even contact with classroom practice. (Clark 2003) Significant exceptions are in TAFE systems (most notably

Victoria) where practicums are compulsory components of teacher induction (although this does not extend to casual teachers) or alternatively in a reactive form when student or employer complaints emerge.

Similarly, ageing institutional infrastructures reflecting the declining levels of investment in public education, tend to also conspire to maintain traditional forms of didactic instruction, with few resources available to inspire teaching and learning innovation (Smith & Keating 2003, Loveder 2005). Other evidence suggests vocational teachers in Australian TAFE institutions (is common with their colleagues in other 'marketising' western economies) are encountering even greater levels of work intensification, driven by rising staff/student ratios, unbounded work demands and expanding hours of work that is leading to widespread 'self-exploitation' (Loveder 2005). Such conditions clearly militate against pedagogical innovation and change, inciting replication as a survival instinct for the contemporary vocational teacher.

Ironically, research within the sector also suggests that at the same time this may also be acting to limit the potency of the excesses of neo-liberalism in TAFE (Clark 2003), while others suggest that the compliance context for TAFE teachers tends to be broader than such neo-liberalist imperatives, instead being governed by public service discourses of social equity, impartiality and consistency toward increasing public confidence and accountability of practice (Chappell & Johnston 2003).

However these realities are not at all evident in the single mandatory educational qualification expected of both vocational teachers in TAFE and well as non-TAFE trainers since 1999, the 200-hour *Certificate IV in Assessment and Workplace Training* (which has now been replaced by the modestly enhanced *Certificate IV in Training and Assessment).* This qualification, which provides a basic introduction to competency based workplace training and assessment, adopts a largely behaviourist pedagogy to facilitate the achievement of a series of atomised competencies (reflecting its shared origin in competency based system from which it is drawn).

This qualification adopts a strong political orientation, with its content and language is intentionally formed around the 'workplace' and 'training' rather that the 'classroom and' teacher'. This is despite its predominant intended role as an imposed (and somewhat clumsy) minimum benchmark for institutionally based vocational teachers (Smith & Keating 2003). As there is clear evidence of a continuing and seemingly growing differentiation between these two quite diverse constituencies (Harris et al. 2005), the imposition of an unashamedly behaviourist delivery model founded on workplace instruction of narrow 'trainer' competence has a clearly corrosive impact. Although it has been argued that a humanist interpretation of competence – centred on notions of transparency, equity and recognition – has socialised competency based

approaches for adult educators (Chappell , Gonczi and Hager 2000), little empirical evidence is apparent to support his assertion in the case of the former and seemingly the current Certificate IV qualification.

Indeed, in practice the modest competence frame of the Certificate IV more tends to subvert the emergence of alternative and more dynamic pedagogies in TAFE, inciting only a superficial and surface level engagement on practice and meaning the preservation of orthodoxy transmissive pedagogies (Darwin 2004). This reality, in tandem with the narrowing of the educational autonomy of the TAFE teacher with competency based training, is leading some to argue that TAFE teaching and learning is actually becoming ever more 'de-professionalised' (Clark 2003, Palmeiri 2004). Yet as Chappell et al (2002) has observed:

> *"In contemporary Australian VET teachers….are expected
> to develop appropriate pedagogical strategies in response
> to learners' needs, abilities and circumstances. The new
> Australian VET system…focuses on outcomes rather than
> learning processes and in many ways the journey to vocational
> competence is now regarded by many as less significant than
> the arrival, with the quality of the journey largely left to the
> professional competence of the teacher." (p.5)*

This inevitably raises the question whether in vocational environments such learning process and learning outcomes can be constructed as distinctive or dichotomous. It can be argued that given the contemporary nature of TAFE environments, the ongoing challenge is to design vocational pedagogies that are able to fulfil the expectations of both aspirations (reflecting its liberal foundations and neo-liberal impositions).

Contemporary Teaching Practice within the TAFE System

Despite the significant changes in the nature of work and education more generally as well as the liberal context established for TAFE, there remains a strong resonance of orthodox didactic pedagogies founded in behaviourism (Thomas 2001, Hager 2003). At one level, this is quite unsurprising, given the origins and nature of vocational education. Much of vocational curricula and teaching (particularly related to specialised skills development) has been traditionally based on an apprenticeship model, centred on the acquisition of definable skills by guided instruction, reproduction and independent practice.

However, although it is arguably inevitable that there will always be forms of

specialised skills learning necessary in vocational education, this is a seemingly receding reality given the changing and more complex and dynamic nature of work that is demanding broader and more sustainable capabilities (Chappell 2003). This implies the need for higher level thinking capabilities (such as that related to diagnosis, critical analysis, interpretation and metacognition) will be necessary in the transforming context of an increasingly global, knowledge–based economy. Of course, such need for continuous learning and organisational agility will be a fundamental drive for all education orientated toward future work (Pillay & Elliot 2001).

Yet there remain strong institutional barriers to changing orthodox pedagogies. These barriers manifest themselves in eclectic forms, from the epistemic sustenance provided by a behaviourist competency based training framework, through the direct recruitment of vocational experts with limited or no teaching experience beyond their own learning histories to the conventional casting of vocational teachers as knowledge 'conduits' rather than knowledge creators (Thomas 2001, Smith & Keating 2003).

Moreover, such conventional transmissive discourses are also evident in the formal artefacts of the national vocational education system, most obviously in the increasingly dominant *Training Package* system that now covers around 75% of vocational delivery (ANTA 2004a). *Training Packages* embody an essentially behaviourist pedagogy, specifying in almost pedantic detail the outcomes sought by industry in vocational graduates via micro-level competency statements, performance expectations and evidence guides. Fundamental to these packages is external scrutiny based on a rigorous compliance and auditing regime, which assesses conformity to the package design, sequencing and assessment expectations (Wheelahan 2004b).

This *Training Package* framework (and its unequivocal epistemological assumptions) has been consistently re-endorsed in official sectoral discourse (DEST 2004, ANTA 2004a, ANTA 2004b). However, what is conspicuous in such literature is the careful avoidance of confronting the actual nature of vocational competence or pedagogy (aside from forced peripheral references). In doing so, such discourse renders the vocational teacher and indeed the vocational learner as unimportant, with the former being a mere conduit and the latter seemingly an empty vessel (Cornford 1999).

Need for Future Research

The evidence presented in this paper would strongly suggest the need for focussed research into effective vocational pedagogies in contemporary institutional environments. Such research needs to consciously confront and analyse contested realities within situated vocational education practice

and specifically within the context of what has been described as the *zone of maximum disturbance* (Chappell & Johnston 2003) - the dominant TAFE system. In particular, it is critical that such research provides opportunities for what Fitzsimons (2004) has characterised as the need for the 'context to speak back' and thereby start to address the gross imbalance of external researchers researching vocational education 'from the outside'. This would allow framing within the strong cultures, experiences and related current pedagogical responses of vocational teachers in contemporary TAFE environments. Its specific inquiry needs to relate to these contesting epistemologies and exactly how they are manifested and managed in the learning design (and underpinning the pedagogies) of teaching and learning.

The guiding objective of such research should be to inform future practice: to define more sophisticated learning design models for vocational teachers (and their teacher educators) that are more robust than those currently relied upon, most of which characteristically tend to advocate the seemingly perfunctory orthodoxies of competency based learning or didactic instruction. It should explore the efficacy of alternative pedagogies, such as those drawn from emergent constructivism that are more broadly influencing other educational environments (and apparent in isolated pockets of vocational education).

Ideally such research could attempt to distil whether there are sustainable models of practice for vocational educators that are capable of dealing with the increasingly contestable and complex realities of contemporary institutional vocational education environments. A key evaluative measure of potential new learning models is how effectively they equip learners with both necessary vocational expertise as well as the capabilities to deal with the increasingly dynamic nature of future vocational work in comparison to more conventional transmissive learning models characteristic of the sector. As has been observed by Pillay and Elliot (2001), such new guiding pedagogies aligned to the learning demands of the emerging knowledge economy are subject of little real exploration, with more conventional focus on its implications for human relations and managerial discourses.

Of further significance will be strategies used by teachers to integrate innovative pedagogic practices within the apparent highly structured, regulated (and arguably contradictory) competitive vocational sector: exploring how these are sustained (or otherwise) within the conflicting constraints of seemingly increasing instrumental labour market drives and receding liberal public education traditions assumed as more characteristic of the TAFE model.

Conclusion

It is axiomatic that the changing nature of work and learning means the vocational educator is now increasingly in an essential role in cultivating the skills necessary to sustain ongoing learning beyond the immediate learning environment. Although there has been much speculation on the need for broadened vocational pedagogy in response, little tangible research is evident on the how such change may actually happen and what form it may take *in practice.*

As a result, vocational educators have little real guidance on pedagogical strategies that can facilitate this broader outcome, particularly with the reality they are inherently confined by the rigidities of the competency based training framework that strongly regulates their (overt) practice. Hence, it is necessary that situated research in vocational environments further explores the situated practice of those pedagogical innovators who have been able to successfully negotiate learning responses to these dual demands, so this can inform those teachers struggling to avoid both the potentially narrowing orthodoxies of competency based education or the ill-structured design of more expansive vocational learning.

Stephen Darwin is a teacher educator at the Canberra Institute of Technology.

References

Anderson, D, Brown, M, & Rushbrook, P 2004, *Vocational education and training, in Dimensions of Adult Learning: adult education and training in a global era,* pp. 234-250, ed G Foley, Allen and Unwin ,Crows Nest.

Australian National Training Authority 2003a, *High Level Review of Training Packages (Phase 1 Report): An analysis of the current and future context in which Training Packages need to operate*, ANTA, Melbourne.

Australian National Training Authority 2004a, *Moving On...report of the high level review of Training Packages*, ANTA: Melbourne.

Australian National Training Authority 2004b, *Shaping our Future: Australia's national strategy for VET 2004-2010*, ANTA: Melbourne.

Argy, F 2001, Liberalism and economic policy, in *Reshaping Australia's Economy: Growth with Equity and Sustainablity*, eds J Nieuwenhuysen, P Lloyd & M Mead, Cambridge University Press, Cambridge.

Billett, S 2001, 'Knowing in practice: reconceptualising vocational expertise', *Learning and Instruction,* vol 11, no.1 pp.431-452.

Billett, S 2003a, 'Individualising the social - socialising the individual: independence between social and individual agency in vocational learning', *Proceedings of 11th Annual International Conference on Post-compulsory Education and Training*, Centre for Learning and Work, Griffith University, Brisbane.

Blom, K & Clayton, B 2002. 'Re-envisioning VET practice: practitioners and the experience and implementation of change', *Proceedings of 10th Annual International Conference on Post-compulsory Education and Training*, Centre for Learning and Work, Griffith University, Brisbane.

Candy, P & Laurent, J 1994, *Pioneering Culture: Mechanics Institutes and Schools of Arts in Australia*, Auslib Press, Adelaide.

Chappell, C 2000, 'New knowledge and the construction of vocational education and training practitioners', *Proceedings of the Working Knowledge: Productive learning at work Conference,* UTS Research Centre Vocational Education & Training, University of Technology, Sydney.

Chappell, C 2001, 'Issues of teacher identity in a restructuring Australian Vocational Education and Training (VET) system', *Australian and New Zealand Journal of Vocational Education Research, vol 9, no.*1, pp.21-39.

Chappell, C. 2003, *Changing pedagogy: issues for contemporary pedagogy (Working Paper 03-14)*, UTS OVAL Research, Sydney.

Chappell, C 2004, 'Contemporary vocational learning - changing pedagogy', *Proceedings of the 7th Australian Vocational Education and Training Research Association Conference*, Canberra. Retrieved in February 2005 from http://www.avetra.org.au/Conference_Archives/2004/documents/PA013Chappell.pdf

Chappell, C, Gonczi, A & Hager, P., 2000 Competency-based education in Foley, G (ed), *Understanding Adult Education and Training 2nd edition,* Allen and Unwin, St. Leonards

Chappell, C & Johnston, R 2003, *Changing work: Changing roles for vocational education and training teachers and trainers*, National Centre for Vocational Education Research, Adelaide.

Chappell, C, Solomon, N, Tennant, M, & Yates, L., 2002, *Researching the pedagogies of the new vocationalism (Working Paper 02-13)*, RCVET/UTS, Sydney

Clarke, J 2003, *To hell in a handcart: educational realities, teachers' work and neo-liberal restructuring in TAFE NSW,* PhD Thesis, University of Sydney, Sydney. Retrieved January 2005 from Australian Digital Theses database.

Cornford, I 1999, 'Missing from the current vocational education policy equation: highly qualified teachers/trainers and quality vocational teacher education', *Proceedings of the AARE 1999 Conference*, Melbourne.

Connell, B & Yates, L 2001, 'Renovating the 'public': the future of public education', *Education Links, n.63* (Summer), pp.7-14.

Darwin, S 2004, 'The teacher as instructional designer: from standardising to customising', *Proceedings of the TAFE Queensland Beyond the Break Conference*, Brisbane.

Department of Education Science & Training 2005, *Skilling Australia: New Directions for Vocational Education and Training*, Commonwealth of Australia, Canberra.

FitzSimons, G 2004, Book Review: 'Developing Vocational Expertise, ed J Stevenson', *International Journal of Training Research,* Vol.2, no.1.

Goozee, G. 2001, *The development of TAFE in Australia*, NCVER, Adelaide.

Hager, P 2003, 'Why we need to refurbish our understanding of learning: the strange case of competence', *Proceedings of 11th Annual International Conference on Post-compulsory Education and Training*, Centre for Learning and Work, Griffith University, Brisbane.

Harris, R 2002, 'Trumpets of change: are the Jericho walls of vet standing firm, tumbling or leaning?', *Proceedings of 10th Annual International Conference on Post-compulsory Education and Training*, Centre for Learning and Work, Griffith University, Brisbane.

Hardgrave, G 2005, Second Reading Speech, *Skilling Australia's Workforce Bill 2005*, Hansard Record, House of Representatives, June 11, Canberra

Harris, R, Simons, M, & Clayton, B 2005, *Shifting Mindsets: the changing work roles of vocational education and training practitioners*, NCVER, Adelaide.

Junor, A 2005, 'Professionals, practitioners, peripheral product delivers: contested definitions of contingent TAFE teaching', *Proceedings of the AIRAANZ 19th Conference: Re-working Work*, Sydney.

Lewis, T 1997, 'Towards a liberal vocational education', *Journal of Philosophy of Education, vol 31, no. 3*, pp.477-489.

Loveder, P 2005, 'World trends in staff development: implications on the performance of technical education institutions', *Proceedings of National Seminar: The Development of Technology and Technical-Vocational Education and Training in an Era of Globalization,* Pan Pacfic KLIA: Hawaii.

McIntyre, J 1991, '*Technical and further education and adult education in Australia*', in *Adult and continuing education in Australia: issues and practices*, ed M Tennant, Routledge, London.

Madison, D 2005, *Critical Ethnography: Methods, Ethics and Performance,* Sage, Thousand Oaks.

National Centre for Vocational Education Research 2005, *Australian vocational and education statistics: students and courses 2004*, NCVER, Adelaide.

Palmieri, P 2004, 'Approaches to the 'good teacher' in vocational education and training', *Proceedings of the AARE International Education Research Conference*, Melbourne.

Pickersgill, R 2004, '*The engagement of vocational education and training and innovation in Australia: some historical perspectives, in Vocational Education and Training and Innovation: Research Readings'*, NCVER, Adelaide.

Pillay, H, & Elliot, B 2001, 'Emerging attributes of pedagogy and curriculum for the new world order', *Innovative Higher Education,* vol 26, no. 1, pp.7-22.

Ryan, R 2001, 'Master concept or defensive threat: evaluating Australian VET policy against past practice and current international principles of lifelong learning', *International Education Journal,* vol 2 no.3.

Schofield, K1994, '*The clash of the titans, in Kangan 20 years on',* eds P Kearns and W Hall, (pp. 57-75). NCVER, Adelaide.

Smith, E., & Keating, J 2003, *From training reform to training packages,* Social Science Press, Tuggerah.

Thomas, J. 2001, *The VET professional and TAFE teacher qualifications: A Discussion Paper*, Victorian TAFE Association, Melbourne.

Wheelahan, L 2004a, 'Theorising the individual in an activity system', *Proceedings of 12th Annual International Conference on Post-compulsory Education and Training*, Centre for Learning and Work, Griffith University, Brisbane.

Wheelahan, L 2004b, *What are the alternatives to Training Packages? Proceedings of the 7th Australian Vocational Education and Training Research Association Conference*, Canberra. Retrieved in February 2005 from http://www.avetra.org.au/Conference_Archives/2004/documents/ PA022Wheelahan.PDF

Legislation

Skilling Australia's Workforce Act 2005, (Cwlth)