

Productivism, VET and ecological sustainability

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Abstract

Historically, vocational education and training (VET) has fuelled the engine of economic growth and productivity in industrialised nations. As markets become increasingly global and competitive, governments are intensifying pressure on national VET systems to produce more highly skilled and employable workers. 'Jobs and growth' is now the universal mantra of policy makers and the taken-for-granted raison d'être of VET. In an era of manufactured risk and ecological crisis however, it is imperative to question the truth-claims on which VET resides. This paper argues for a fundamental re-envisioning of VET for an ecologically sustainable future. To this end, it examines the discourse of productivism and its constitutive effects on VET policy and practice. The logic and assumptions underpinning contemporary constructions of VET are critiqued in the light of research evidence. The potential role and contribution of VET in the transition from productivism to ecological sustainability are discussed, and central dilemmas and challenges are outlined.

Introduction

At the annual conference of the Technical and Further Education (TAFE) Teachers' Association in 1977, not long after the establishment of the TAFE system, McKenzie argued that 'TAFE has tended to concentrate too heavily on its role in relation to the workforce' (1979, p.80). In his view, the prevailing labour market orientation had led to neglect of the environmental impact of industrial and technological practices, and of TAFE's role in preparing an environmentally aware workforce:

In an era when the principle of growth for growth's sake is under close examination educational institutions which contribute in a very direct way to the expansion of industrial society and the assault on resources and environment have a grave responsibility to actively participate in such an examination. Such an examination must be a feature of the institutions themselves, and of the courses they offer. (McKenzie 1979, p.83)

At the United Nations 1992 *Earth Summit* in Rio de Janeiro, Australia signed *Agenda 21* and thereby agreed to promote environmental education as part of a global action plan for sustainable development. Chapter 36 of *Agenda 21* emphasised the need to 'incorporate environmental training into formal curricula for all disciplines ... emphasising the skills and knowledge required to achieve sustainable development.'

More than 25 years after McKenzie's pronouncement, and despite Australia's commitment to the principles ratified at the 1992 Rio *Earth Summit*, little appears to have changed. A study in South Australia, for instance, concluded that in view of 'increasing public awareness of the importance of environmental management and ESD (Ecologically Sustainable Development) ... the lack of training programs within the vocational education and training sector ... is a major concern' (SA Department of TAFE cited in Guthrie & Cesnich 1995, appendix 1). As the latter study is the only

one of its kind in Australia, it is difficult to make an accurate assessment of the national state of play with respect to ESD-oriented programs in VET. However the fact that ESD has been almost totally overlooked or ignored in VET suggests that both policy makers and researchers (with the few exceptions noted herein) are deeply embedded in the discourses that legitimise ecologically unsustainable growth.

In an era of manufactured risk and ecological crisis (Beck 2000, Giddens 1994), it is imperative to question the universal truth-claims on which TAFE and VET (hereafter referred to collectively as 'VET') reside. In light of a critical analysis of official VET policy texts and statistics, this paper argues for a fundamental re-envisioning of VET for an ecologically sustainable future. It examines the discourse of productivism and its constitutive effects on VET policy and practice. The logic and assumptions that underpin contemporary constructions of VET are critiqued. The potential role and contribution of VET in the transition from productivism to ecological sustainability are discussed, and central dilemmas and challenges are outlined. Given the dearth of research on the topic, the substance of this paper is more conceptual than empirical.

Sustainable development

'Sustainable development' is a relatively new and polysemous concept. According to the landmark definition in the Brundtland Report of the World Commission on Environment and Development (1987, p.43), sustainable development is 'development that meets the needs of the present without compromising the ability of future generations to meet their needs'. Although open to varying interpretations, the Brundtland definition emphasises the need to locate the goal of ecological sustainability within the social and economic context of human development. Unlike the concept of 'sustainable growth', which assumes that perpetual growth is both necessary and attainable and that improved technical efficiency and scientific innovation can overcome environmental limits to production, sustainable development rejects the primacy of economic growth and aims to integrate economic, social and ecological development. Herein production should be restricted to the equitable satisfaction of basic human needs and held in ecological equilibrium (Palmer 1998).

One of the few articulations of sustainable development and VET is contained in the 1997 *Hamburg Declaration on Adult Learning* (Articles 1 and 17):

... only human-centred development and a participatory society based on the full respect of human rights will lead to sustainable and equitable development ... Education for environmental sustainability should be a lifelong learning process which recognizes that ecological problems exist within a socio-economic, political and cultural context. A sustainable future cannot be achieved without addressing the relationship between environmental problems and current development paradigms.

Similarly, it has been argued in relation to VET in Australia that ecologically sustainable development should be promoted in conjunction with other progressive goals, including democratic participation, economic justice, social equity and cultural inclusiveness (Anderson 2001). While recognising that sustainable development is an ambiguous and contested term requiring further debate, this paper adopts the above definition and perspective but concentrates primarily on the ecological dimension.

Productivism

In his analysis of contemporary industrial society, Giddens (1994) refers to the condition of modernity as one of 'manufactured uncertainty' in which humanity is confronted with unprecedented risks: 'Living in an era of manufactured risk means confronting the fact that the "side-effects" of technological innovations are side-effects no longer.' (p.175) Giddens links the emergence of manufactured uncertainty and its attendant social, biological and ecological risks to the rise of 'productivism', which is 'an ethos in which "work", as paid employment, has been separated out in a clear-cut way from other domains of life' (p.175). Work 'expresses the primacy of "industry"', 'defines whether or not individuals feel worthwhile or socially valued', and has become compulsive in character, crowding out and negating other human values and activities (p.175). Giddens argues that productivism is a direct consequence of the capitalist imperative for perpetual economic growth, which in turn presupposes the 'continuous production and consumption of goods' (p.163).

For Giddens, the answer to the contemporary dilemma of 'how much is enough?' relates only partially to the resource limits of nature. It can only be fully addressed by calling into question the ethos of productivism and its associated life practices - the continuously expanding circuits of production and consumption. Challenging the underlying rationality of productivism undercuts the meaning of work as paid employment and creates 'pressure to realise and develop other life values' (p.163).

Productivism and vocational education and training

The ethos of productivism has been omnipresent in TAFE and its antecedents. Despite the historic attempt by the Kangan report in 1974 to break the 'unholy alliance' between TAFE and industry by prioritising educational and social over economic needs, TAFE remained 'the servant of industry, producing skilled manpower to build national wealth' (Mackie 1979, p.60). With the ascendancy of neoliberal economics and human capital theory from the mid-1980s, productivism has further tightened its grip on VET. Viewed as an instrument of economic policy and a major supplier of 'human capital', VET has been increasingly harnessed to the logic of economic growth and industrial production. Under the national training reform agenda, policy-making in VET was corporatised and competency-based training (CBT) was introduced to strengthen the connection between skills formation and economic production (Marginson 1993, Stevenson 1993).

As a consequence, VET policy and practice are now premised on two fundamental assumptions that have acquired the status of self-evident truths, and which are reproduced systematically in the structure, culture and programs of VET institutions; namely that the principal, if not sole, purposes of VET are to: promote economic growth through the development of the human resources required by industry to enhance productivity and profit; and produce skills and competencies for work, thereby enhancing the employability of individuals. It is no coincidence that both assumptions correspond with Giddens' (1994) characterisation of the defining features of productivism: the needs of 'industry' have taken precedence over all others, and 'work' (as paid employment) has displaced alternative human values and vocations.

As Giddens' analysis suggests, the first assumption stems from the truth-claim that economic growth is a permanent and necessary feature of industrialised nations and that the future well-being of countries like Australia relies on its national economy becoming increasingly competitive in global markets. The second assumption reflects the related truth-claim that work (as paid employment) is the principal, if not exclusive, source of meaning and measure of value for human beings as it enables them to contribute to, and benefit from, economic growth. Despite their profound effects on VET policy and practice, the validity of these two assumptions goes largely unquestioned and alternative norms and values are discounted or simply ignored.

Training-for-growth

Productivism and the universal truth-claim of permanent economic growth were present at the inception of the national training reform agenda, and are deeply embedded in its discourse:

Our primary objective ... must be to improve Australia's economic performance in generating the skills required for national economic development. ... (E)ducation and training policies ... will ... play an important part in ensuring that our human resources are fully and effectively used. (Dawkins and Holding 1987, pp.12-13)

This extract from *Skills for Australia*, a blueprint for training reform in Australia, demonstrates the manner in which economic growth is taken for granted as the principal rationale of training reform. Implicit is the assumption that natural resources are infinite and can be exploited at will, without any consideration of the wider consequences for the global ecosystem. The only perceived constraints on growth are deficiencies in the nation's human resources, which if developed fully through VET would increase productivity. 'Training-for-growth', or 'skills-for-productivity', is thereby legitimated as the 'primary objective' of national VET policy.

The core assumption that economic growth is a permanent feature of human existence is no longer tenable. As concluded at the 1992 Rio *Earth Summit*, the present rate of economic development is unsustainable due to its detrimental and irreversible impact on the natural environment and its resources. The key factor contributing to environmental degradation is the growing gap between 'poor' Third World and 'rich' Western industrialised nations, the consequences of which are twofold. On the one hand, developing nations are hostage to spiralling foreign debt, overpopulation, unmet basic human needs, poverty and overuse or misuse of natural resources, all of which contribute to environmental damage. On the other hand, industrialised countries maintain unsustainable patterns of production and consumption, and their economies remain in a perpetual state of development. Excessive consumption, unrestrained use of energy and mineral resources, and the generation of non-recyclable waste in industrialised nations are accelerating the rate of resource depletion and Third World degradation (Keating 1993). More recently, the typically pro-growth World Bank observed in its *World Development Report 2003* that 'some social and environmental trends associated with past development strategies in industrial and developing countries are not sustainable ... Environmental conditions have also deteriorated in many places across the planet and will worsen if present trends continue.' (p.3)

Not only are the crucial inter-relationships and interdependencies between developed and developing nations (and their ecosystems) overlooked, but so also are the counter-productive effects of continuous economic growth in developed nations like Australia:

Industrialised nations are also in a continual state of development. Problems associated with this ongoing process include serious environmental damage resulting from use of energy, resources and the generation of wastes; depletion of finite resources and unmet basic needs of significant elements of the population. (Keating 1993, p.54)

As a result of these compounding factors, the future health of the global ecosystem is in serious jeopardy. Only a fundamental reorientation of modes of development, rates of resource exhaustion, and levels and patterns of production and consumption in industrialised nations will defuse the present crisis (Keating 1993, UNDP 1996). As a major supplier of skilled labour, VET is implicated in these processes.

Given Australia's contribution to the 1992 Rio *Earth Summit* and the growing body of scientific evidence of environmental problems, the persistent reproduction of productivism in official VET policy discourse is highly problematic. For instance, Australia's national VET strategy for 1998-2003 ignores the imperative for ESD and recycles the 'training-for-growth' assumption by declaring that the primary role of VET is:

To ensure that the skills of the Australian labour force are sufficient to support internationally competitive commerce and industry' (ANTA 1998, preface)

National economic interests are valorised over global ecological concerns. The list of 'forces for change' in VET is saturated with the language of productivism: 'growth in global markets', 'intensified international competition', 'consumer expectations', and so on. At no point does ecological sustainability figure in this narrative. Instead, a sense is conveyed of ever-expanding circuits of production and consumption, in which VET fuels industry and enterprise demand for skilled labour:

New technologies are being developed and introduced across all industry sectors and most areas of work, boosting productivity and creating demands for new and different skills ... (E)nterprises are becoming increasingly dependent on the skills of their workforce to add value to raw materials and to provide high quality services and products. (ANTA 1998, pp.1-2)

The potential for VET to promote a critical awareness of the limits and consequences of productivism, and to develop the capacity to envisage and realise alternative futures oriented to ecological sustainability, falls outside this restricted vision. Moreover, the Key Performance Measures are almost exclusively concerned with steering VET providers towards the maximisation of skills-for-productivity. None are designed to measure the contribution of VET to sustainable development.

Productivism and its attendant myth of permanent economic growth, as Stevenson argues, can no longer be taken for granted as a legitimate basis for constructing VET:

It needs to be debated whether the secret to our success as a nation lies in our continued exploitation of scarce resources, adding economic value before export, in competition with other countries, all trying to do the same thing. ... We need to decide if, rather, ... the key to economic success (resides) in solutions which value conservation, sensitivity, cooperation, sharing, valuing leisure and activities which add quality to our lives, supporting small scale enterprise, and pursuing interests unable to be defined or taught as competencies. Then we need to relate such aspirations to the goals of vocational education. (1993, p.91)

A decade later, and despite the now palpable contradictions of 'growth-for-growth's sake', debate continues to be stifled by the myopic effects of productivism.

Skills-for-work

The second assumption underpinning the contemporary construction of VET is that training is preparation for paid employment and that skills are acquired for work. This assumption derives its present currency from the truth-claim that the needs of industry and individuals are converging. The most influential articulation of the convergence truth-claim was presented in a review of the national training reform agenda: 'Individual Australians have essentially the *same interest* as enterprises: whether they are now unemployed or looking for their first or for a different job, what they want from training is competitive skills which Australian enterprises want' (ACG 1994, preface, emphasis added). On this basis, current policy frames assert that VET should be primarily (if not exclusively) concerned with giving individuals the skills required in the workplace so as to enhance their 'employability' (eg. ANTA 1998, Kemp 1996). This construction of VET, supported by the technology of CBT, 'impedes the consideration of the wide range of needs and concerns of students in vocational education - in fact any needs outside of the narrow vocational goals associated with reproducing industry and relationships among workers in industry.' (Stevenson 1993, p.93) Skills for ESD are a case in point.

Productivism and the 'skills-for-work' assumption, however, are fundamentally flawed as they are based on an ideology of 'work' that is no longer economically rational or socially sustainable (UNDP 1996). National data show that 73% of VET graduates in 2001 were working in paid employment after completing their training. Over one third (34%) of these graduates held part-time positions. In all, 27% of graduates were 'not employed' (i.e. either 'unemployed' or 'not in the labour force'). In effect, while 47% of VET graduates were in full-time employment, over half (52%) were under-employed, unemployed or outside the paid workforce (NCVER 2002, p.5). The main conclusion to be drawn from this social reality is not that VET courses should reflect current industry specifications evermore closely. Rather it highlights the need to take greater account of the broad range of graduate destinations beyond paid employment, and the numerous non-economic needs of VET students. In effect, productivism has outlived its relevance to such an extent that new vocational identities and forms of socially useful human activity other than paid employment must now be recognised and valued through VET. As Gorz (1994, p.46) observes:

In actual fact, for almost half the active population, the ideology of work is a bad joke and identification with work an impossibility, since the economic

system has no need - or regular need - of their capacities. The reality disguised by extolling 'human resources' or the work of the new skilled industrial personnel is that stable, full-time, year-round employment throughout an entire lifetime is becoming the privilege of a minority, and that for almost half of the active population, work no longer takes the form of an occupation which integrates them into a productive community and defines their place in society.

While the above analysis does not negate VET's role in preparing students for work, it does underscore the need to closely scrutinise the normative assumption of 'skills-for-work'. It also throws into question the logic behind the associated claim that 'the interests of individuals cannot be well serviced *unless* the training they receive meets the skill formation needs of enterprises' (ACG 1994, p.133). In an increasingly jobless society, the concept of 'employability' is becoming redundant for many and should no longer be the principal focus of VET policy and programs. The unemployed and under-employed require skills to survive on limited income, the confidence to cope with adversity, and the personal resources to develop meaningful vocations other than those connected to employment. Many VET graduates will move in and out of work and through different occupations, often in industries for which they have no training. They need the capacity to adapt to new work contexts, deal with economic insecurity, and reconfigure their identities as producers and consumers in an era of ecological risk. As Beck (2000, p.65) notes, 'only a focus on the nature-destroying aspect of work could change the foundations of the work society in a meaningful direction that was up to the tasks of the future.' VET could, but does not yet, perform such a role.

Vocational education and training for sustainable development

Despite its all-pervasiveness in VET, the logic of productivism has not eluded criticism altogether. In 1986, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) argued that VET should be actively involved in environmental education (EE). From the perspective of UNESCO (cited in Hardy & Salasoo 1987, p.60), VET institutions have both an ethical responsibility and the practical means to address the environmental consequences of economic production:

Technical and vocational education has provided the skilled manpower (sic) for agricultural and industrial development, which has been one of the main sources of environmental degradation. Technical and vocational education should therefore play an active role in helping to deal with these problems through its programs. The institutions concerned already have many of the resources, both physical and human, to offer appropriate EE.

UNESCO argued that both a reactive and pro-active approach to EE should be adopted to equip learners to address existing problems and anticipate emerging issues.

Current practice in Australia is far removed from this conception. With the exception of courses designed for the 'environment industry', learners in VET are rarely if ever exposed to the concept of ESD and its relevance to their future roles in industry and the community. Although there are no audits of the environmental content of VET provision in the public domain, a national workshop on *Educating for a Sustainable Future* found that 'the absence of sustainability is all too clear' in training packages (Barrow & Condon 2002, p.4). A few relevant competencies were identified in some

training packages, for instance agriculture, horticulture and construction. But the delivery of such competencies was frequently ineffective as CBT 'is skills based and often lacks sufficient knowledge/understanding of how (E)SD practices fit in' (Barrow & Condon 2002, p.8). In other words, ESD is marginalised in, if not entirely excluded from, the relatively narrow band of work skills deemed to be legitimate and worthy of inclusion in training packages. When they are included, their relationships to other workplace competencies are poorly articulated and VET teachers/trainers (themselves graduates of productivism) generally lack the awareness and skills to deliver them in an integrated manner. In consequence, the discourse and practices of productivism tend to constitute and reinforce each other in such a way that ESD knowledge and skills are systematically fragmented, decontextualised and devalued.

As institutions implicated directly in processes of economic production and lifelong learning, VET providers are strategically positioned to facilitate the paradigmatic shift from productivism to ecological sustainability. Learners in VET are involved in activities that have a crucial impact on the natural environment. As managers, workers and consumers, adults are active participants in processes of economic production and consumption which are the root of productivism and cause of environmental damage. An ESD-oriented approach to VET has the potential to cultivate an understanding of the links between economic activity and environmental change, and to develop skills for promoting ESD in workplaces and communities. The use of integrated and holistic approaches to VET - such as real problem-based, 'learning by doing' strategies - would help to bridge the gap between work-related competencies and ESD skills.

An exemplar of good practice is the Renewable Energy Centre at Brisbane Institute of TAFE, which follows a set of principles that: defines sustainability as 'the core of engineering studies'; examines technology in its social, environmental and economic contexts; promotes an holistic and inter/multi-disciplinary systems approach; focuses on real problems in the local/regional/global community; and develops, implements and reviews its courses in collaboration with industry and community stakeholders (Berrill & Giffard 2001). ESD principles also inform the Centre's internal operations. Such initiatives show how VET can be redesigned to enable learners to develop the production skills required by industry within an integrated ESD-oriented framework.

Challenges and strategies

Given the powerful discursive effects of the 'training-for-growth' and 'skills-for-work' assumptions underlying VET policy and practice, in conjunction with vested interests in their systematic reproduction, the shift to ESD is likely to be complex and highly contested. The current framework of an industry-driven training market poses significant problems as it places VET providers largely under the sway of private enterprises whose interests lie in perpetuating productivism. As Ferrier (2001, p.223) observes, the creation of an industry-driven system 'has had the effect of consolidating the links between VET and existing industries or traditional industries, such as Agriculture, Mining and Manufacturing', the bastions of productivism. Required to be increasingly 'client-focused' and reactive to short-term market demand, VET providers presently have little scope or incentive to develop programs *in anticipation* of new and emerging needs, including those of 'green' industries, or to integrate ESD competencies into existing curricula. Yet it is only through pro-active educational strategies over the longer term that industry and the wider community will

recognise the need to reorient VET programs towards ESD. Moreover as User Choice and training packages give employers even greater influence over the content and delivery of VET programs, non-economic forms of competence seem likely to be further marginalised by productivity and profit-maximisation imperatives.

As Manion and Bowlby (1992 cited in Palmer 1998, p.85) contend, the central dilemma of sustainable development is ‘what is the best way to confront and overcome the massively powerful vested interests that would feel threatened by structural changes to the status quo?’ As key agents of change, adult educators and trainers will need to raise public awareness of the contradictions and irrationality of productivism. Concurrently, the concept of ‘sustainable development’ and its relationship to, and implications for, VET will require critical reflection and discussion. Policy, management and curriculum frameworks will need to reflect the interests of a wider range of stakeholders beyond industry and enterprises. Debate will also be required on whether the transition to ESD can be achieved within the context of a demand-driven training market. Such issues and strategies require much more detailed consideration than is possible in this paper (see Anderson 2003 in press).

Above all a new paradigm for adult learning is required in the VET sector, based on an ethos of ecologism that gives primacy to the interdependence of the human race and the natural environment. The principles of ecologically sustainable development should inform and reshape the formation of production-oriented competencies. VET curriculum should assist students to acquire a deeper and more holistic understanding of the environmental consequences of their roles as producers and consumers. Accordingly environmental education for adults should be viewed as an integral part of a lifetime continuum of learning for ESD. A key challenge for VET teachers and trainers therefore is to build on the broad foundations laid in schooling by empowering learners with the specific knowledge and skills to initiate and participate in the shift from productivist to ESD-oriented workplaces and communities.

Conclusion

In 1979, McKenzie articulated a vision for TAFE that rejected ‘growth for growth’s sake’. Regrettably his message was ignored as productivism has since strengthened its grip on TAFE and VET. Despite commitments made at the Rio *Earth Summit* over a decade ago, the VET system seems no closer to adopting the principles of ecologically sustainable development. Productivism remains a ubiquitous and persistent feature of official VET policy discourse despite mounting evidence of its unsustainability. The associated ‘training-for-growth’ and ‘skills-for-work’ assumptions are reproduced systematically through VET, even though they no longer provide a rational or meaningful basis for human development in a post-industrial era.

In consequence, current constructions of VET remain constrained by productivist assumptions about the necessity of permanent economic growth. VET is locked into a blinkered race for ‘global economic competitiveness’ which ignores the ecological costs of training for a growth-oriented industrial system and the increasing irrelevance of skills-for-work. As the human species confronts a risky future marked by environmental degradation and ecological crisis, it is imperative to consider the role of VET in promoting ecological sustainability and global citizenship. The development of skills, industry and employment opportunities for all remain

important social and economic objectives. However they should be balanced with the even greater challenge of becoming more skilful and innovative at conserving and renewing our scarce natural resources and shaping our collective ecological destiny.

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