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From your business to our business:
Industry and vocational education in Australia

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Abstract
Over the last 20 years, the voice of business and its impact upon Australian vocational education have transformed. These changes range from enterprise reluctance to be involved through to industry determining what is taught and assessed, and how, as well as the principles for administering vocational education, and attempts to use vocational education to reform the schooling system. These transformations and government complicity in them are enmeshed in the restructuring of the Australian economy allegedly in response to an increasingly competitive and globalised economy. They were also facilitated by vocational education continuing to be misunderstood and having low status. However, the expanded leadership role afforded Australian business has not been matched by its purchase on the complexity of educational issues and practice, including the need to encompass other interests (e.g. small business and students). While vocational education has become the business of business, it seems it is business not understood. Even in addressing its own purposes (i.e. work readiness), business has demonstrated a preference for ideological and naive imperatives that have proved inadequate. Along the way, the goals for vocational education and standing of its institutions, practitioners and students have all been transformed, probably to their detriment.

Bio statement
Through part of the period referred to in this article, Stephen Billett worked in vocational education as a teacher, administrator, teacher educator and in policy formation. He now works in higher education researching work and work-related learning from social and cultural psychological perspectives.

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Introduction

This special edition of the *Oxford Review of Education* focuses on the engagement of business in and its impact upon policy and practice within vocational education. Yet what constitutes 'business' is a slippery concept in the Australian context. Therefore, initially some issues of definition need to be addressed. These also serve to introduce the changing policy and practice context of Australian vocational education and training over the last two decades. 'Business' can constitute private sector enterprises that assert their voices either individually or collectively through peak bodies. However, such a conception requires qualification. The influence on policy exerted by business has not been broadly representative. Small businesses complain that the policies and provisions of vocational education fail to serve their interests (Roffey et al., 1996), claiming that large enterprises' needs predominate. Viewing business as only private sector enterprises also excludes large public utilities (e.g. railway, power generating, public works departments) that have traditionally sponsored apprentices, yet whose practices changed upon being corporatised. Moreover, in the decade leading up to the late 1990s, business (as the voice of large private sector enterprises) engaged with organised labour in collaborative bi-partite decision-making processes that ordered policy and practice within vocational education. Through this period, the term 'industry' became the key organising concept reflecting the bi-partisanship of both labour and capital. Industry in this form was granted leadership over the national vocational education system by government, albeit within the constraints of prescribed policy frameworks. Given that this period of industry leadership was marked by an unprecedented level of external intervention on the vocational education and training system, which had significant long-term impact, it is essential to evaluate this manifestation of businesses' impact. These bipartite industry arrangements have gradually withered under a conservative government with peak employer associations now increasingly shaping policy. For instance, these peak bodies are using vocational education in schools to reform schooling for their purposes. So, there have been changes in the form of the business voice, its engagement in and impact upon vocational education in Australia.

This paper proposes that, in the last two decades, business in its changing forms has been granted a significant leadership role by government. However, this leadership has been exercised in the interests of large enterprises, rather than the broader national interest. In that time, although there have been increases in participation in vocational education, and across all age groups, and some growth in the scope of offerings, overall the leadership of business has failed to select and enact policies and practices to advance vocational education in ways commensurate with the significant public resources that it has commanded. Instead, this leadership has largely rendered reactive an emerging educational sector that is deserving of higher status and a greater understanding and acceptance of its purposes and processes. This judgment is premised on the failure to improve the quality and acceptability of vocational education, including its learning processes and outcomes as well as being inclusive of the broad range of constituent interests. It is acknowledged that this leadership has been enacted in times more economically difficult than those of an earlier era and that, ultimately, government is responsible for affording industry and business this leadership. However, there is strong and consistent evidence of a lack of consideration of salient educational processes and outcomes under business leadership. Business might counter such claims by highlighting the wider and growing participation in vocational education and also by pointing to their inability to secure the kinds of changes and outcomes they desired from a reluctant system. However, the former says little about the quality of this provision. The latter assertion is a feature of its leadership. Those directed to implement what business and government together mandated -- i.e. teachers and administrators -- were not effectively engaged or included (Baverstock, 1996; Smith & Nagle, 1995), nor were those who were to be subjected to it -- i.e. students --(Anderson, 1998). Instead, business capitalised on government's highly mandated and top-down approach to curriculum development, assessment practices and ordering of vocational education provisions for its own purposes. The

It is therefore proposed that business in Australia failed to exercise its leadership role responsibly in the broader national interest or with the breadth of considerations required of a national educational sector. Rather than being guided by sound advice, research and good practice, ideological imperatives appear to have predominated. While not questioning the legitimacy of business as one interested party, the concern here is about the degree of the exercise of business leadership and its outcomes. The case is structured as follows. The changing conceptions of business advice, their focus

and impact is discussed first. To assist make judgments about their worth, the purposes of vocational education are briefly overviewed. Then, some examples of the impact of business decision-making on vocational education are examined. In concluding, the consequences for the relatively nascent vocational education system and the broader set of interests that it serves are reviewed.

Changing conceptions, focus and impact of business advice
Over the last twenty years, the character of the advice of business and its role in the formation of educational policy and practice have changed, as have their impact. In overview, this section identifies and discusses the changing conception and impact of the voice of business upon Australian vocational education under the headings of: enterprise reluctance; industry bipartitism; and the voice of business.

Enterprise reluctance
In the 1970s and early 1980s, it seems, Australian enterprises were largely uninterested in vocational education except in its capacity to supply enough skilled employees during a period of high economic activity and buoyant employment. Enterprises were reluctant to engage with vocational education systems, and were uncritical of their provisions or graduates (White, 1985). These were matters for educators. Enterprise priorities were to employ, produce and profit, not engage with or be critical of the vocational education system. By the mid-1970s, technical education had almost 100 years of history in Australia, commencing with the Mechanics Institutes and Schools of Mines. However, the Technical and Further Education (TAFE) system was only recently formed and had a far broader charter than these earlier institutions. It was largely a product of public expenditure on social infrastructure by a reforming Labor government in the early 1970s. TAFE emerged not as just another tier in the Australian educational system, but as a sector with a unique focus on lifelong learning. A founding premise was the recognition that life demanded continuous learning and adaptation. Completing one's initial education was seen as a starting point rather than an educational endpoint (Byrne & Kirby, 1989; Kangan, 1974). By intent, TAFE was to be distinct from other educational sectors that focused on educating young people at particular discrete stages or levels in their development. Both broad educational goals associated with individuals' development and the creation of specific skills encompassed TAFE's original purposes. These purposes were central to what Kangan (1974) proposed for the rapidly growing TAFE sector. In doing so, the TAFE provisions, which largely constituted what was taken as adult and vocational education, were focused on 'learning to live' (Byrne & Kirby, 1989). These included accounting educationally for individuals' life experience and a respect for and acknowledgement of learning that occurred outside of educational institutions (something only taken up recently in the other sectors). However, despite attempts to be inclusive and enact a broad and novel charter, throughout the late 1970s and 80s, most TAFE participation was by young people pursuing initial vocational qualifications. There was only limited participation by recurrent or late entry education students (Byrne & Kirby, 1989). This low level of interest and participation by adult Australians may have been a product of the same buoyant labour market that was shaping enterprises' lack of interest. There was less competition for jobs and employers were less selective, and the need for ongoing development was not as pressing as in contemporary times.

The period between the mid-1970s and mid-1980s was wholly important for the establishment of vocational education in Australia. It was a time of rapid development and search for a clearly defined and particular purpose. Although never fully enacted, the key focus on 'learning to live' was soon to be transformed into a concern for learning to work. Moreover, the relations between business and the vocational education system also changed.

Industry bipartitism
The deterioration of the labour market and stresses on its economic base in the 1980s, led to the restructuring of parts of the Australian economy and as a consequence, vocational education policy focussed on becoming more export orientated and import competing (Dawkins, 1988; Dawkins & Holding, 1987). In particular, the manufacturing sector, with its long association with vocational education through trade training, sought to improve its prospects for survival and development through micro economic reforms that included vocational education. At this time, both the role of business and its engagement with vocational education changed. These changes transformed the goals of the nascent vocational education system, reshaped its purposes and established an orthodoxy of practice

that was quite distinct from the intentions of the 1970s and which, in many ways, continues to the present.

Under a series of changes advanced by another reforming Labor government, bi-partite processes were initiated and enacted. Selectively deploying some aspects of consensus models of governance from northern Europe, the voices of labour (i.e. unions) and capital (i.e. employer organisations) were engaged and, arguably, co-opted by government to provide collaborative leadership for vocational education (Dawkins & Holding, 1987). Through their collaboration, they shaped much of the vocational education policy and practice over the next decade and half. Vocational education became embedded in the nation's industrial relations processes and was subject to what collaboration between these parties secured. Unions and peak employer groups, organised under categories of industry sectors, were given the key role in policy decision-making, albeit within governmentally determined parameters (Dawkins, 1988). Government actively supported this industry leadership through the provision of administrative infrastructure. This included the formation of national industry competency standards and a body to enact them (the National Training Board), as well as industry's direct control over the development of national curriculum documents associated with the particular industry standards (National Training Board, 1992). Moreover, a national training authority was established and supported in partnership by both the federal and state governments. The newly formed Australian National Training Authority (ANTA) legitimised and facilitated industry leadership through organising and maintaining its involvement in all levels of decision-making. This included the courses to be taught, their content and the means by which they are the taught and assessed (Australian National Training Authority, 1993a). Uniform processes were implemented across Australian states and territories for the accreditation of courses and their certification. Industry-based vocational education policies included the mandated use of nationally endorsed curriculum documents, adherence to competency standards which were prosecuted by mandatory administrative measures that extended to the offering of vocational courses, legal prescriptions about certification and regulations of the qualifications of individuals who were to teach in industry developed programs. In all, a key concern was to shift the emphasis from 'supply-side' considerations to 'demand-side' needs (Lundberg, 1994), albeit in mandated and regulated ways. This process of reform was facilitated by the strength of the centralised model of governance which allowed the federal government to act in ways unthinkable in the US and without the extensive and broad consultations required many Western European countries, including those from which the bi-partite processes were borrowed.

This reform process, referred to the 'national training reform agenda', was closely linked to changes in national industrial awards. These included linking remuneration and career progression with skill development. Progression through pay levels based on annual increments was to be changed to a requirement to secure more skills and have those skills certified. Through this period, the voice of business was constrained by arrangements that demanded bipartisanship. Decisions about what had to be taught, on what basis it would be assessed and how the vocational education system would be administered were all subject to consensual bipartite processes. However, it would be misleading to suggest that these industry processes were broadly inclusive. Teachers, students and small businesses were respectively silenced, ignored or unable to be heard. Despite both unions and employer organisations purportedly being responsive to their constituents, they were also directed to their own corporate interests. For instance, with support from key industry groups, government pushed ahead with the implementation of non-graded competency based assessment (Employment and Skills Formation Council, 1988). This was against the wishes of many individual employers. They wanted graded assessment of their employees (e.g. apprentices) and to assist select employees on the basis of relative performance in the future (Australian National Training Authority, 1993b; Rumsey & Associates, 1997). Yet their concerns were apparently subordinated to corporate bi-partite interests. Also, industry supported government micro-economic reforms aimed at enhancing the scope and potential of workers' discretion and practice were conveniently ignored in the de-professionalisation and reduced discretion to be afforded vocational educators, who were also largely unionists (Billett, 1995). After all, decision making and curriculum development were too important to be left to educators (Dawkins, 1988).

Under arrangements that sought to reform and make efficient publicly owned institutions, business principles were applied to the administration of vocational education, with the marketisation and the opening up of a field of vocational education providers (Anderson, 1998; Anderson, 1997). In

each State and Territory, any provider of training could now tender for funds previously reserved for the TAFE system. This precipitated a rise of entrepreneurialism and competitive behaviour resulting in the restructuring of TAFE institutions and their administration, and often provoked competitive relations between institutions. It also transformed the vocational education sector from being something largely provided through TAFE colleges or institutes, to a broader field of providers, dubbed the 'training market' (Anderson, 1998). These providers included private vocational colleges, industry training centres, trade training centres, high schools, enterprises, charities, and even individuals in leased properties.

A salient and associated impact has been the transformation of the discourse used to conceptualise, discuss and value vocational education. Although the vocational education discourse has a long tradition of pragmatism (e.g. the common use of training, concerned to meet the requirements of vocational practice), the last decade and a half has seen the dominance of an economic discourse. The term 'providers' is used to describe the range of agencies, institutions and businesses accredited to teach certified national modules. The connotation of 'providers' denies them a role in doing anything other than teaching courses prepared elsewhere. There is little room in that concept for curriculum development and addressing localised need. Pre-determined curriculum packages are to be delivered with fidelity by providers. During this time, job titles within vocational education institutions also changed to reflect commercial imperatives. Leadership roles in vocational colleges are no longer titled principals, education officers, senior teachers or curriculum heads. Instead, Chief Executive Officer or Director are now common titles used in senior (executive) positions, with titles such as program directors being adopted. Students have also become commodified and valued by the kinds of funds they attract (e.g. international full fee-paying students, disadvantaged groups who attract government subsidies) and in the quantum of students for achieving economies of scale in their teaching (Anderson, 1998) - mass lectures, in preference to practical sessions. Terms such as 'competence', 'training packages' and 'competency standards' have been granted legitimacy through mandated arrangements that marginalise and displace other curriculum concepts, such as learning processes. The power of discourse is its capacity to legitimise some ideas and de-legitimises others (Ball, 1990). Law (1994) claims that institutions pattern behaviour through both conscious and unconscious choices of those who engaged in them. To object to these reforms and to speak outside the dominant and accepted discourse was to act irrationally and position the speaker as being incompetent within the dominant discourse and the practices that it reflects. Hence, it is easy to marginalise individuals who hold alternate views as lacking savvy and not understanding the 'main game'. When working in the vocational education system in the early 1990s, to refer to the social and community obligations of TAFE could lead to derogatory accusations such as 'wearing Kangan's caftan' or as being 'an educationalist'.

The impact of industry was not confined to reforming mainstream vocational education. Schools were encouraged to assist their students' transition from school to work. Key competencies required for the workplace were identified (Mayer, 1992) and schools asked to teach these to ensure that students were 'employment-ready' on leaving school. This policy initiative coincided with a period of high youth unemployment and claims that schools were not preparing students adequately for the world of work. Teachers were held to be complicit in youth disillusionment, and apparently even their suicide (Wiltshire, 1999). The industry partners supported the idea that both schools and vocational education institutions should be 'producing' job ready graduates. Indeed, in some instances, business representatives were promoting the provision of vocational education and training in schools not only to secure a vocational focus, but also to place additional competitive pressure on TAFE institutes (Billett, 1998, 2000).

In summarising the impact of industry through this period (Chappell, Hawke, & Schofield, 2002) the following points are identified. Firstly, the universal implementation of competency-based training was a device used largely to enable industry to secure a major influence on the content of vocational education programs. Secondly, industry representative bodies have established themselves at national levels to ensure that the interests of industry were engaged in most levels of decision-making processes associated with courses to be offered, their content and how they would be taught and assessed. Thirdly, the vocational education sector was marketised to provide industry with greater choice and to lead the change from a supply-side to a demand-side driven vocational education system. Fourthly, the spokes people for industry, including those of business, had assumed a range of

roles within the vocational education system that embedded their influence in the process of policy formation and direction, as well as the means by which the vocational education provision would be enacted. Chappell, Hawke and Schofield (2002) claim benefits for industry arising from these arrangements, including: (i) a greater range of providers of vocational education; (ii) greater choice of training providers; (iii) the fashioning a more responsive TAFE system; (iv) an increase in the quantum of those holding vocational qualifications; and (v) the establishment of mechanisms by which the interests of industry can be perpetuated. The degree to which these were constituted as benefits, and for whom, is discussed later in the paper. However, it is noteworthy that these benefits are highly sectoral and specific. It should be noted that Australian business collectively resisted and eventually overturned the Training Guarantee Scheme that was introduced to systematically augment the national funding of vocational education and provide a common basis for enterprise contributions to building the national skill base. Moreover, although there have been industry generated initiatives to fund vocational education provisions and these differ across sectors, such as those in place for the construction industry in South Australia and the brick and block laying sector in Victoria, these are derived from identified and quite specific needs (e.g. concerns about the skill shortages and ageing workforce), these remain isolated examples.

Despite all the input from business and industry, their choice of the uniform provision of competency standards, competency-based training, modularised curriculum units, generic competencies and national certification has failed to generate the intended kinds of responses by enterprises. Enterprise participation in apprenticeships declined markedly from the mid-1970s (State Training Board of Victoria, 1995, NCVER 2000), a trend which continued through the period of leadership by business. In this way, the voice of industry seems not to have been reflecting the sentiments of the enterprises for whom it purported to speak. Also, the national uniform provisions of vocational education were identified as being unable to address specific enterprise needs. This concern was accentuated by change in the focus of industrial processes from national awards to enterprise bargaining. Both unions and employers were interested to move away from national industrial agreement. Unions, who had watched their memberships decline through the years of these agreements, were keen to embrace enterprise bargaining because it offered a mechanism through which members would see union delegates and officials negotiate in their workplaces on their behalf. Employers looked to enterprise agreements to tailor conditions of work and remuneration to the particular requirements of workplaces. However, these enterprise based negotiations often led to the exclusion of provisions for vocational education and training (Guthrie & Barnett, 1996; Misko, 1996). Government was keen to reduce industrial agreements to a limited number of key conditions, often excluding issues associated with equity and vocational training that were seen to clutter these agreements. Gone were the stipulations that linked employment to training. Instead, greater flexibility of training was demanded. Here, a key weakness of placing vocational education directly into industrial processes became apparent. That is, vocational education was not a core concern of the industrial parties.

The voice of business
Since the re-election of the conservative Liberal and National coalition government in 1996, the bipartite industry-led structures have slowly withered. A gradual downgrading and withdrawal of resources for bipartite industry training advisory committees have occurred at both the national and state level. Increasingly, the voice of key employer bodies (i.e. the Business Council of Australia and the Australian Industry Group) is heard and referred to in policy initiatives.

Throughout this period there has been an increased emphasis on addressing enterprise needs. In particular, businesses want curriculum solutions that are flexible and address particular enterprise needs (e.g. Billett, 1998). Training Packages have now been permitted to include 'non-endorsed' components tailored to meet the needs of particular enterprises, while still maintaining an adherence to national competency standards as reflected in their endorsed components and which comprise the basis for national certification. The reintroduction of graded assessments in vocational education has been trialled in all states (Rumsey & Associates, 1997). Throughout, there have been refinements to the national regulatory frameworks that continue to shape vocational education. The marketisation of vocational education continues. Yet, enterprises remain reluctant to sponsor employees' participation in ongoing vocational education and at levels comparable to many other Western countries (Hall,

Buchanan, & Considine, 2002). Moreover, the participation by enterprise in entry-level vocational education continues to decline, particularly in apprenticeships (NCVER 2000). While government claims high levels of new apprenticeship intakes, these figures are achieved through including shorter-term traineeships and also through government sponsored Group Apprenticeship Schemes, rather than those sponsored by individual employers. Moreover, the level of attrition in the shorter traineeship model of entry-level training stands as high as 45 percent of participants (NCVER 2000). Significantly, the need for learning throughout working life has emerged, transforming the concept of lifelong learning for economic purposes, yet making the original purposes of TAFE now seem quite prescient. Vocational education has significant participation across all age groups (NCVER 2002). However, these students inhabit a different system and perhaps for quite different purposes: learning for working life.

A current focus of business is to make schools more responsive business needs. There is a "worrying level of discontent among employers about the readiness for work of some young people exiting post-compulsory education" (Spring & Syramas, 2002: 5). Here, the focus has been on attempts to the vocationalise the general curriculum (e.g. through the application of employment related competencies to all areas of the schooling curriculum) and also for a greater emphasis on specific vocational preparation. High school students can now participate in apprenticeships and traineeships part-time. So, for some students there has been a broadening of the curriculum options in schooling. The integration of vocational and more general educational goals is being sought in many Australian schools. However, this objective is hindered by the relatively low status and misunderstanding about vocational education that is further impeded by measures in schools that position it as a less attractive option than the pathway to university entrance.

Indeed, school teachers are regularly accused of not understanding the needs of business, thereby justifying interventions. Employers have recently identified a new set of work competencies and schools challenged to make it work this time (Ghost, 2002). Yet to what degree does business have competence to confidently inform education policy and practice? So far an account has been provided of the transforming role and impact of business upon vocational education. Prior to evaluating the leadership of business and industry it is worth briefly considering the purposes to which vocational education could be directed. This reflection assists in assigning merit to the impact of decision-making by business and industry.

Purposes of vocational education
In evaluating the impact of business on vocational education, it is useful to rehearse the purposes to which vocational education might be directed. Such purposes are subject to different values and perspectives. Different values emphasise the need to distinguish between goals and processes that are merely reproducing existing practice (e.g. specific vocational skills) from those seeking to change individuals and assist them to become critical participants in their society and play a role in its transformation (e.g. the development of critical capacities). The former set of values is often described as utilitarian or technicist, the latter are referred to as socially critical or emancipatory. The former are about developing capacities to engage in socially ordained practices, such as particular kinds of paid work. The latter is more about education for participation in a democratic community. However, despite commonly held views about being utilitarian, vocational education cannot be so simply categorised. For instance, a course that develops individuals' techniques and skills can be highly emancipatory. It may assist in overcoming some kind of disadvantage (e.g. ethnicity, educational success, language, class) to the individual's participation in social and economic life. Equally, achieving specific emancipatory goals is likely to require the development of proven techniques and practices. The initial purposes for TAFE in the 1970s privileged consideration of both sets of values, whereas the influence of industry and business in the 1990s came to privilege a more utilitarian and technicist focus on vocational education. For instance, in the 1980s, most TAFE programs for young people had components of general studies embedded within them. These were intended to provide for a continuing general education, mindful that many young people in TAFE had not enjoyed success in compulsory education. However, industry questioned the relevance of this content to vocational practice and it was largely removed. Since that time, business and industry have advanced other sets of more general educational goals in the form of key or core employment competencies.

So particular kinds of educational values can be used to evaluate vocational education. These values range from participation in a specific vocational activity, the world of work generally or the social and cultural context that individuals participate within and to which they seek to contribute. However, given the current focus is on specific enterprises, the goals for vocational education are now being cast in terms of securing job readiness.

There are also differences in perspectives. Dewey (1916) saw vocational education as being about identifying and assisting individuals secure their true course in life: their vocation. Here, the central concern was individuals and their capacity to exercise their interests and talents to the full. Other perspectives include a focus on developing adaptable knowledge: preparing students to be flexible and skilled. This perspective enjoys wide support as it is seen to serve both individuals and workplaces. In the changing and uncertain world of vocational activities, a reliance on routine is not sufficient (Carnevale, 1995; Gott, 1989). That is, through developing robust or adaptable knowledge in individuals, they can perform work effectively now and (possibly) in the future, thereby securing important personal goals. That adaptability includes capacities for strategic thinking and acting that are akin to more broadly based educational outcomes, albeit within the domain of vocational activity. Employers and government view workers who possess this robust knowledge as an asset to their enterprise and nation because they can use their knowledge flexibly and adaptability within a particular domain of vocational practice. Such capacities, however, are not easily generated. They are premised on processes of thinking and acting that require honed specific and strategic procedures and rich understandings associated with the particular vocational practice. Moreover, in order to be adaptable rather than reliant on skilfulness or cleverness alone, the individual must know something of the diversity of practices that constitute enactment of their chosen vocation in different circumstances and settings (Billett 2003). Instead of having a unitary conception of what constitutes good practice, a sense of what constitutes variation of practice may best assist adaptability over time and circumstance. Yet, a broader perspective of vocational contributions to the community might also be considered. This includes securing the reproduction of cultural practices that are central to communities' existence and continuity. Addressing problems in the community has been long associated with vocational education. The urgency of Dewey's work almost 100 years ago was associated with assisting disaffected and unemployed young people (men) in American cities.

In different ways, vocational education can be seen as being either narrowly or broadly educative, and having a focus on individual needs or on the capacity to perform socially and culturally generated practices in sustaining communities. So when evaluating the worth of the impact of business on vocational education, it is necessary to account for its potential contribution to the needs of individuals, employers and communities. These comprise some of the key interests to whom its purposes might be directed.

Educational practices of business
When considering the quality of the focus and the impact of business on the Australian vocational education system, a brief evaluation of two significant initiatives (i.e. CBT and Key Competencies) and also how the broader national interests have been addressed is instructive (i.e. small business and individuals). The two initiatives are illustrative of key decision making by business. Industry supported the imposition of competency-based training (CBT) on all vocational education courses, claiming its capacity to develop a skilled and adaptable workforce. In time, CBT came to distinguish vocational education from other educational sectors (Moran, 1997). When vocational courses are enacted in schools (or elsewhere) the adoption of CBT is mandatory. Similarly, business has identified schemes of key competencies -- work skills that are claimed to transcend different workplaces --- and represent them as important educational goals, for instance when extending vocational education into schooling.

Competency-based training
The widespread introduction of CBT is illustrative of the enactment of policies and practices that are uninformed by and indeed detrimental to the very educational goals that business partners support. As previewed, government mandated the implementation of CBT. It comprised national industry competency standards that were behavioural in design and used to shape the intents (i.e. aims, goals and objectives) of vocational education courses, and the assessment of what was learnt. Graded

assessment was replaced by non-graded assessment for all levels of courses. National agreements led to these arrangements being mandated. It is not possible to offer a certified course that uses titles as proper nouns (e.g. Certificate, Diploma) without adhering to these measures. Both employers and trade unions supported the behavioural approach to education. However, focusing on observable behaviour as a basis for instruction and assessment denies the very thinking and acting processes that underpin the competent vocational practice they were seeking to generate. Two decades of research in the field of cognitive psychology – the cognitive revolution - on what constitutes expertise, much of it based on vocational activities, was either ignored or dismissed by both parties. Among the research findings are the importance of the capacities to understand the task, select the most appropriate strategy to successfully complete the task, monitoring progress and evaluating achievement of the task's goals (Glaser, 1989). However, these kinds of qualities are remote from where CBT focuses. The behavioural principle that continues to be applied here is that, if you cannot observe and measure something, you cannot be sure it is occurring (Bijou, 1990). The promise of measurable performances was uncritically accepted by business and by trade unions as a means to secure desired of workplace performance. However, this may well have reflected a greater and more important imperative for industry: making teachers accountable through administrative devices that could be used to control teachers and afford judgements about their performance (Jackson, 1993). That is, teachers were to be subject to the very educational measures they were asked to implement.

In an evaluation of the processes and outcomes of the first decade of CBT in Australia, which involved engaging industry representatives, curriculum developers, teachers and students in two industry sectors (Hospitality and Clerical) across two states (Victoria and Queensland), it was found that CBT and its regulatory regime played a limited role in developing adaptable skills (Billett et al 1999). The key contributions were arrangements that mandated recent industry experience by teachers and secured greater industry input into the intents and content of courses, thereby aiding their relevance, as noted by Chappell, Hawke and Schofield (2002). Overall, the study found that it was the kind of experiences provided for students, the teachers' vocational experience and their capacity to generate an 'effective curriculum' that most likely secured adaptable knowledge. There was little evidence that the measures put in place by government at the behest of industry materially assisted the development of adaptable knowledge. Often, it seems that vocational teachers had to work around the prescribed industry processes to secure the very outcomes that were claimed for CBT (Baverstock, 1996). Rather than the curriculum being 'teacher proof', teachers had to subvert or augment the intended curriculum (i.e. syllabus documents) to achieve the goal shared by both teachers and industry: to assist students develop robust vocational knowledge. For instance, the move to self-paced modularised curriculum units had to be mediated by teachers. While some (high performing) students were able to work independently on self-paced modules, many students were neither prepared for nor possessed the capacities to study independently in a domain of knowledge within which they were still novices. Mealyea (1985) reported similar findings more than decade earlier. Graduate destination surveys (NCVER 1997) have endorsed the significance of teachers in learning the kinds of knowledge that have permitted TAFE graduates to secure employment and career advancement. So, more than the 'intended curriculum' (e.g. the documents, behavioural objectives, mandated content), what students actually experienced and learnt from was the 'enacted curriculum': the experiences provided by the teachers and their abilities to develop capacities that allow students to adapt what they have learned outside the educational institution. Attempts by business and others to make the curriculum 'teacher proof' stand hollow before such evidence.

Key competencies
Business has repeatedly proposed the generic competency route as a means to develop capacities that are common to all workplaces and to address the constantly changing demands of workplace requirements. Ghost (2002: 63) exhorts educators to "recognise the constantly changing skill requirements of industry. What may be relevant today to enterprise's skill needs may have no bearing on the same enterprise's skill needs in five years time." The latest generic competencies currently being proposed by business are called employability skills. They build upon the Mayer Key Competencies (Mayer, 1992) that were derived through discussions with employers about work-related skills. Similarly, these new sets of generic competencies are a product of consultation with employers. According to Ghost (2002), these competencies were informed by recent international

research, through focus groups and interviews with 40 small and medium sized enterprises and 13 detailed case studies in large enterprises. These competencies predictably include communication, teamwork, problem solving, planning organisation, technology, learning, self-management, and initiative and enterprise skills. Ghost (2002) proposes that schools have to make young people 'job ready'. This of course is a difficult task, when the occupational choice of the young person is still nascent and the particular requirements of enterprises are often quite unique and need to be understood before job readiness can be secured. The strategy adopted in Australia, the United States and Britain is to identify and teach a set of generic skills that are optimistically held to be common to and applicable across workplaces. These skills are assumed to be enduring, thereby permitting an individual to maintain the currency of their vocational practice. Interest in identifying generic skills is one of the few instances where research conducted during the 'cognitive revolution' – a period of intense scrutiny of human performance by cognitive psychologists -- has seriously influenced policy. However, it was an inept choice. A key goal of some cognitive psychologists (e.g. Ericsson & Smith, 1991) was to identify general problem-solving strategies: heuristics that can be applied generally regardless of circumstance, context or discipline. However, these have not been found to be successful (Beven, 1997; Stevenson, 2002), except at the broadest level (e.g. think before you act) (Evans, 1993). Indeed, a key outcome of the 'cognitive revolution' is that individuals' memory, rather than their processing capacity underpins competent performance or expertise (Glaser, 1989). The knowledge individuals need to learn is referred to as being domain specific: related to a particular area of activity (i.e. particular paid vocation), which is in contrast to the generic skills approach. It is a profound understanding of a particular set of activities distinguishes competent workers from less competent workers (Glaser, 1984). Moreover, an understanding of the situatedness of performance is emphasised in recent accounts of competent performance (Billett, 2001; Engestrom & Middleton, 1996).

All of this is in stark contrast to the generic approach proposed by business. What comprises competent communication, teamwork, problem solving, planning etc in one circumstance may be quite different across workplaces, even when the same vocational practice is being enacted. The capacities to communicate, work with others, solve problems, plan and so on need to be understood in a particular workplace context. The competencies to communicate in a retail organisation might be quite different from those in a medical practice, or across medical practices. In essence, generic competencies are inadequate because they are twice disembedded from practice. Firstly, these kinds of competencies have to be understood in terms of particular vocational practice. That is, what these competencies mean in terms of nursing, retail work, metal fabrication, beauty therapy, professional cookery and so on. Secondly, because vocational practice is far from uniform in its application, competent performance in the same vocational practice might require quite different approaches to teamwork, communication, planning etc. For instance, compare the requirements of nurses working in a major city hospital with counterparts in a small country hospital, or health worker in an indigenous community or in a remote mine site. In each circumstance there will be requirements to work with others, to communicate, to plan and organise, but in different ways. Therefore, understanding and practising effective performance in one nursing situation cannot be guaranteed to provide effective performance in another. This suggests that a more bottom-up or localised approach to curriculum development is required to understand the diverse nature of vocational practice and to prepare students and workers by illuminating something of the diversity of potential applications.

There will always be aspects of occupational performance that will be robust: adaptable to other circumstances. The exercise of specific procedures (e.g. use of the keyboard, electrical power points, using scissors to cut hair) will probably transfer across workplaces. However, adaptability is less likely to occur when there is a need to account for diverse requirements for performance. Accordingly, the most problematic generic competency is problem solving. As a generic skill, it proposes that if individuals can learn problem solving heuristics they can solve problems across different or changing work environments. Yet, such is the breadth of the problem solving process that it defies commonsense to be proposed as a generalisable skill. Problem-solving requires a consideration of the domains of activity and the context in which the problem exists and is to be solved. What might be an elegant solution in one setting might be wholly inappropriate in another. Moreover, the concept of generic competencies is founded within a view of human performance based on adaptability as cleverness: a capacity to manipulate cognitive processes. However, as noted, this is a limited conception and not borne out in the evidence. To be effective requires knowledge of the

domain of activities and circumstances in which the performance is to occur (Stevenson, 2002). These often go beyond that which constitutes technical tasks and the kind of competencies outlined above, and comes from engaging in and knowing about vocational practice. For instance, in one hairdressing salon to be an expert hairdresser required knowing the names of relatives and their relationships to the elderly clientele who came to the salon, as much for social contact as to have their hair dressed (Billett, 2001). Cleverness, or the capacity to manipulate knowledge, alone is insufficient to secure these capacities, because participating and learning in the particular practice was required.

Therein perhaps lies the key to understanding the kinds of goals that Ghost (2002) claims industry wants. Instead of identifying and seeking to learn generic competencies, quite the opposite approach might be more generative of robust capacities. That is, to understand first what constitutes instances of practice and their requirements for performance, then, try to assist students understand what constitutes 'working with others', 'communication', 'planning and organising and so on in the context of the particular practice. From there, students might come to understand something of the variations of these attributes across a range of vocational practices thereby facilitating adaptable knowledge; through an understanding of a range of instances of practice. These can assist their adaptation to other situations and circumstances. In another context and for other purposes, such a practice-based approach to rich learning might also be helpful in assisting school students learn about the 'world of work'. Their part-time work experiences could be used as an effective resource in classrooms to understand the requirements for participating in working life. The diverse experiences and instances of apprentices' practices could also be shared in classrooms to intentionally illuminate and assist an understanding of the diverse applications of the apprentices' chosen vocational practice.

So, through advocating for CBT and generic skills, business seems to believe that highly specific content guided by statements of observable behaviour and generic processes can sit happily side-by-side in facilitating adaptive learning, despite evidence to the contrtary. Perhaps the confusion underpinning such beliefs arise from a degraded understanding of vocational practice. Vocational education has long suffered from low status that is arguably a product of misunderstanding about the complexity and demands of vocational practice, ignorance of its purposes and sectoral interests that are well served by suppressing its standing. Certainly, the uncritical acceptance of CBT and Key Competencies do little to present a convincing case of businesses' competence as an educational decision-maker. Instead, their actions reinforce perceptions of vocational education as being narrow and utilitarian. It might be expected that industry organisations and enterprises, whose well-being and continuity are based on their workers' vocational knowledge and practice, would be better informed and directed to enhance the status of vocational practice and its preparation. Unfortunately, business has failed to champion the significance, richness and complexity of vocational knowledge or vocational education as a worthwhile endeavour. Instead, vocational education has been promoted as highly utilitarian and focused on needs other than those whom invest time in and participate in its programs. It also denies the importance and complexity of vocational practice. The voice of business will probably always be reluctant to acknowledge the complexity and demands of vocational practice, as it may prompt and legitimate requests for higher levels of remuneration. This reluctance exposes a structural limitation of an industry led vocational education system. That is, a key source of national leadership and advice has contradictory goals of constraining the standing of vocational skills as much as their development. In all, the narrow view of education goals and provisions advanced by business has done little to elevate the standing of vocational education, attract interest in it by enterprises and students (whose preference is for higher educations) or secure adequate level of government funding to avoid the marketisation of vocational education.

Vocational education: everyone's business
However, it is not only in the important fields of determining what should be taught and assessed, and how, where business has had a major impact. Business leadership has only addressed certain sectional interests. Others, including much of the business sector, have remained neglected. Standing out in terms of those whose needs seem not to the addressed include small business and individuals who participate in vocational education programs.

Small business needs

The leadership of vocational education by business appears to have been antithetical to the interests of small enterprises, which employs about half the private sector workforce (Australian Bureau of Statistics, 2000). Although often chided for having relatively low levels of expenditure on vocational education, small businesses consistently report that the kind of provisions on offer are often inappropriate, ill focused and inaccessible (Roffey et al., 1996). Small business consistently reported to consultancy companies hired by government (Coopers and Lybrand, 1994, 1995) and independent researchers that their needs are not being met by national modularised curriculum delivered through taught courses. These reflect the needs of large enterprises. Small business operators repeatedly state that they are not to be merely small large businesses, instead, they have different needs and requirements (Field, 1998). The standard, nationally generated modules and courses, even when flexibly delivered, fail to address small businesses' needs for pertinence and context-related learning (Roffey et al 1996). What small businesses want are courses tailored to their needs, available locally, as a well as instructional processes that are pertinent to the issues they are facing and the context in which they operate, and offered in ways that support rather than disrupt the small business operation (Coopers and Lybrand, 1994). These kinds of requests are antithetical to the orthodox practice of taught courses based on national competency standards. Moreover, the market-based provision of vocational education works against small businesses, particularly those distributed widely and with small staff (Billett, 1998). Small businesses are relatively unattractive to a marketised provision of vocational education and training where economies of scale are principal concerns. While achieving an effective vocational education provision for small business is inherently difficult, the marketisation of vocational education has assisted in rendering it more so. Therefore, it seems that the very educational processes and practices promoted by business are antithetical to the needs of a significant sector of the Australian economy.

Students in vocational education

Students' interests have been overlooked by a focus on (big) business interests. This client group was almost wholly ignored in all the reforms and restructuring of courses in which they were to participate. Anderson (1998) claims that in 1200 consultations about the training reform agenda, only one identified instance of consultation with students, in this case a student body. This omission illuminates the narrow focus taken by business and industry (and governments). This practice even seems counter to what might be considered good business practices by ignoring the needs of a principal client group. It also contradicts the very principle that underpinned the training reform: being responsive to the demand side, which comprises more than just large business and union interests. Students are key consumers and increasingly sponsors of vocational education programs also constitute the demand side, as do small business workers and operators. Yet, these interests are rarely consulted.

Since the early 1990s there has been significant reduction in government funding support for education (already lower in Australia than most OECD countries), (Burke 1998) and also growing evidence of a lessening commitment by the private sector institutions (e.g. decreases in number of apprentices actually employed by enterprises). In contrast, the private investment by individuals in all sectors of education in Australia grew. Burke (1998) notes that through the 1990s the private outlay on the education rose, while the government expenditure as a percentage of GNP declined. Furthermore, this period was one of growth in participation in education and training within Australia. This means, less public funds were being expended through a period of increased participation, with the augmentation of the sponsorship coming more from the individuals than the public or private sector sources. For students and workers, prescriptions for vocational education that arise only from surveys of employers are unlikely to fully capture their needs (e.g. Billett 1998), and how they can best be met. For the long-term unemployed, educational goals other than the development of specific skills might be important. For these individuals, developing a more confidence sense of self and purpose may be more valuable. Similarly, for young indigenous students there may be goals and needs than those that business might identify. Schwab (1998) questions the assumptions that all students make decisions about maximising the private rate of return. He claims the cost benefit analysis for education may be different for indigenous than other Australians. "There are significant social costs to educational investment for indigenous people that influence their decisions to participate. Some of these costs result from social disadvantage, others are derived from cultural difference. For example, many of the

most indigenous people have lacked the opportunity for the whole suite education until relatively recently and it is still common, for individuals to be the first generation to undertake study in their communities."(1998: 94) So, it seems curious that a reform process based on addressing demand-side needs is so immune to interests that increasingly represent the demand side: students, their families and communities.

Business has also actively militated against workers' learning of vocational knowledge. The Australian workforce is becoming more contingent: part-time, casualised and contracted (Chappell et al 2002). Some claim the overall relationship between employers and employees is being transformed through these kinds of employment practices. Certainly, the international evidence (Brunello, 2001) suggests contingent employees are less likely to receive employer expenditure or sponsorship for their skill development. The point here is that assuming national leadership for an educational sector brings with it responsibilities beyond those of a select set of sectoral interests. It needs to be extended to those whose who are actually committing time and effort to this endeavour.

Making education businesses' business
If business (and their governmental partners) want to make education their business, then they might be well served by developing a more informed view about the richness and complexity of vocational knowledge, and the kinds of educational goals likely to secure this knowledge and, of course, advocating for the sector and securing a more adequate base of educational funding. They also will have to be more inclusive of the broader national interest. The consensus approach to vocational education and training policy practised in northern Europe seems a more mature approach than the Australian model. A criticism of the European approach is that the consensus-based processes can be quite slow. It requires groups of interest to be consulted and concurred with about proposals before they are implemented. This involves engagement with and securing consensus among a range of interest groups. By involving those who speak for teachers, workers and employers, implications for policy implementation as well as their goals are discussed and elaborated. However, it is claimed that ultimately what is implemented enjoys broad and enduring support, therefore less likely to be resisted by those who have implement it or be subject to constant change and modification. The model adopted in Australia is for the administration of change by governmental fiat (Seddon, 1998). Klee (2002) lists as a virtue the number of governmental reports and major policy changes that underpin the Australian training reform agenda. She views these as evidence of governmental interest in vocational education and training. However, behind each of these reports is mandated change that comes as a prescription for practice rather than something to be negotiated with those whom it affects. So, instead of a more measured and consensual approach to policy formation, that aims to assist with continuity and broad commitment to change, the Australian vocational education system is pressed by governmental fiat to deal with unilaterally conceived changes. Yet, this approach defines what we know about human action and behaviour: how people construct their views and act. When pressed into activities in which they have no belief, individuals' engagement is likely to, at best, reflect superficial compliance (e.g. Wertsch, 1998).

Moreover, each new fiat often displaces something only recently implemented, thereby dissipating interest and commitment. Over time, this may well generate residual weariness in those who are supposed to energise the sector. For instance, Ghost (2002) as a spokesperson for business, in proposing a new set of generic competencies - employability skills - details the inadequacies of another recent innovation: training packages. He points to the inadequacy of the intents of these packages (i.e. the current competency standards) and their organisation (i.e. the need to utilise more than one training package within schools) in securing these generic skills. Yet, it was only recently that government introduced these packages on request from business to ensure greater pertinence of training to enterprise needs. Businesses' easy condemnation of training packages suggests the waste of significant investment in funds, effort and goodwill by those who have to administer, implemented or engage with them. Would individual businesses tolerate such profligate behaviour with its funds, resources and clients?

Conclusion
In conclusion, vocational education needs to address the requirements of the workplace; otherwise it would be quite pointless (White 1985). Yet, it seems that few, if any, interests are being served by

vocational education being a supplicant to the voice of business and industry, and in ways that permit these interests to be exercised without close and critical scrutiny by other interests. The evidence suggests that, at an important point in the development of the vocational education system, despite its legitimation and authorisation by government, the confidence of business in its capacity is not matched by its competence in decision-making. Unlike counterparts in other countries who have sought more mature and balanced relations, the voice of Australian business has become increasingly shrill and directed. In its attempts to render vocational education responsive to merely one set of needs, while being oblivious to the complexity of this task or the existence of other interests, and an understanding of the very processes that it seeks to control, the voice of business is failing an important educational sector. Yet, this is the sector that increasingly Australians of all ages and backgrounds are now looking to in order to assist sustaining their learning throughout their working, community and cultural lives. Rather than seeking to collaborate with those who represent diverse interests and expertise and those who will have to implement what is proposed, the voice of business has stood as critical and detached, unwilling or unable to engage with other parties. However, its authorisation by government ultimately is not the test of the quality of its advice and direction. Rather it is the health of the sector and addressing those whose interests it serves.

Complicit how been successive governments who have legitimised and authorised the voice of industry (Seddon, 1998) and directed its purposes. Before delegating their role, government should be confident that the benefits to the nation's economic and social goals outweigh the cost of this delegation. While the voice of business has been given front stage by government, through its peak bodies and surveys of their needs, backstage enterprises have been reducing their commitment to vocational education and training, with small businesses remaining disenchanted with vocational education and individuals increasingly being asked to contribute to their lifelong education remain excluded. Moreover, there is little evidence to suggest that, after a decade in half of leadership by business, the vocational education system is an improvement in terms of: (1) participation and sponsorship by business; (2) the quality of learning experiences; or (3) its inclusiveness. It is difficult to make comparisons given that the times have changed, the system had been transformed and new needs have emerged. When compared with the kinds of policy processes in countries such as Germany in Switzerland, the Australian systems seems hostage now to a single voice. Ironically, at this time a focus on lifelong learning (of a particular kind) is back in vogue. Yet, the education sector best placed to respond broadly to this need seems to be increasingly reflecting narrow sectional needs, and driven by the language and practices of the market, not of building national capacity. To those who less than thirty years ago set out to establish technical and further education as a responsive, but independent, educational sector focused on addressing both broad and narrow vocational goals ('learning to live'), the impact of business must seem slick, superficial and grotesque. More than readdressing the balance between the interests of the vocation and vocational education, there is a need to engage with the those whom the system seeks to react to, while working to achieve commonly shared goals of developing vocational knowledge that is important to individuals, the communities they live in and the workplaces that employ them.

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