Two faces have I - knowledge in the "mixed sector" vocational curriculum

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Abstract

This paper examines the role of knowledge in the vocational curriculum of higher education courses in tertiary institutions, with a particular focus on "mixed sector" (Moodie et al. 2009) TAFE institutes in Australia. The paper begins by outlining the reasons why the "voice" (Young 2009) of emergent disciplinary knowledge is missing in curriculum debate in general. It presents a social realist position that provides a principled argument for a central curriculum role for emergent disciplinary knowledge. The position of disciplinary knowledge is particularly complex in the vocational curriculum, especially in contexts such as Australia's VET sector with its industry-developed, competency-based curriculum. The vocational curriculum has a Janus-like quality. It is the 'skills' face, as opposed to the face of knowledge, which is dominant in the vocational curriculum in the VET sector in Australia. This paper argues, however, that the emerging mixed sector in Australia provides an opportunity to begin to bring the voice, and the face, of knowledge back into the vocational curriculum.

Knowledge and education

Over the past decade a social realist position has emerged in the sociology of education which provides a principled argument for abstract theoretical knowledge to regain a central role in curriculum. It may seem strange that such an endeavor is necessary, given the emphasis on the requirements of the 'knowledge economy' in government policy worldwide. Yet somehow the "voice" (Young 2009) of knowledge is missing in the curriculum in general, and in the vocational curriculum in particular. Social realist scholars[1] are therefore seeking to "bring knowledge back in" (Young 2008a). Before considering the social realist position itself, we will consider the social realist critique of the established approaches to knowledge in the curriculum.

Dominant views of knowledge in education

Two distinct approaches to knowledge in education, the instrumentalist and the social constructivist, are identified in social realist critiques. The instrumentalist approach is aligned strongly with the broad set of perspectives on education underlying the concept of a 'knowledge economy', in which education, or more commonly nowadays, training, is a reflection of economic needs. It has within it two streams[2]. One, the traditionalist, looks to the past: the other, the modernist, looks to the future. Yet both are "declinists" (Moore 2000:22) in that they see the present-day world as having departed from (in the case of traditionalists) or fallen short of (in the case of modernists) a better world.

Both share a "technical-functionalist" (Moore 2000:19) view of knowledge and education as having value in what 'outcomes' they can produce, rather than seeing knowledge as having inherent value in its own right. They reflect what Moore (2007a:117) calls the "vocationalist challenge"[3] to the previously well-established liberal-humanist view of education. Both are 'externalist' regarding knowledge: they "begin and end outside knowledge itself" (Moore 2007b: 26).

There is no epistemological theory underlying the instrumentalist view. The danger with instrumentalism is that it is reductionist. Education is reduced to training, with its standardised, commodified content and outcomes. This is not deliberate. In the absence of epistemology it is reductionism by neglect, but the results are the same.

The other influential approach, social constructivism, has reductionism at its core. Knowledge is seen as nothing more than the interests and perspectives of those who produce it. The power of knowledge derives from the group, not the knowledge itself, which can never be objective, since it is fully socially constructed. This view of the social is different from the instrumentalist view, which, while acknowledging a social setting, is apparently neutral with regards to its influence. Yet, like the instrumentalist approach, social constructivism is externalist regarding knowledge, arguably even anti-epistemological in its insistence that all knowledge is relative (Moore 2007b: xvi).

Like the traditionalists described above, social constructivists position themselves in relation to a fixed disciplinary authority, which is seen to be based on positivist, absolutist and infallible knowledge. For the traditionalists, such authority was the key to the golden past. The social constructivists, however, are strongly opposed to it (Moore 2007a), denying its supposed objective validity. For the traditionalists it is the solution to the curriculum: for the social constructivists it's the problem.

Social constructivism is often seen as progressive, yet with its strong social grounding it is distinct from the a-social, essentialist, child-centered perspective of socio-culturalism. Both social constructivism and socio-culturalism have in common their opposition to the knowledge-based, subject-focused curriculum, though for different reasons. Social constructivism is opposed to its valorizing of the knowledge of the powerful: socio-culturalism is opposed to a focus on any knowledge other than that derived from the experience of the child. Social constructivist progressivism seeks to raise the profile of alternative standpoints or voices, and it sees itself as thereby being socially empowering for minorities. However the reduction of all knowledge to the knower leads to an extreme relativism that, ironically, undermines its potential for empowerment (Moore 2007a).

Social Realism

For social realists social empowerment requires access to "powerful knowledge", which is more than merely the "knowledge of the powerful" (Young 2008b: 14). "*Powerful knowledge* refers to what the knowledge can do or what intellectual power it gives to those who have access to it. Such knowledge provides more reliable explanations and new ways of thinking about the world than localised experiential knowledge, and acquiring it can provide learners with a language for engaging in political, moral and other kinds of debates" (Young 2008b:ibid). This knowledge provides "the necessary means to participate in 'society's conversation'" (Wheelahan 2010:1).

Social realism shares with social constructivism its social perspective, its concern for social empowerment, and its opposition to instrumentalist tendencies. Its key point of difference is in relation to knowledge. Unlike social constructivism and instrumentalism it is 'internalist' – it starts from an acceptance that knowledge is both social *and* objective. "Social realist approaches to knowledge stress that, although all knowledge is historical and social in origins, it is its particular social origin that gives it its objectivity." (Young 2006:115)

Social realism recognises that knowledge production no longer resembles the strongly positivist approach accepted by the traditionalists and criticised by the social constructivists. Rather, it builds on the critical realist perspective in science which provides a post-positivist, naturalised[4] view of fallibalist knowledge production. "Knowledge claims are always provisional and are essentially open to challenge – but not any kind of challenge…challenge itself requires disciplined thinking based on relevant knowledge ... based on epistemic values." (Morrow 2009:36). Such knowledge is socially-based, yet the characteristics of its production enable it to have objectivity. Such knowledge is *emergent (*Moore 2000:32; Wheelahan 2010:55), in that it transcends the conditions of its production. It is greater than the sum of its parts, and hence powerful. It is the "epistemic values … the grammar of the practices of disinterested enquiry" (Morrow 2009:37) that are potentially empowering, as opposed to the knowledge implicit in the discourse of the knowledge economy.

Social realists are concerned with the absence of discussion about knowledge from key policy initiatives such as "the introduction of national quality frameworks, the shift to learning outcomes, (and) the move from subject-specific to generic curriculum criteria" (Young 2010:1). Young rejects the suggestion that this concern represents a conservative return to elitism, arguing instead that "by reducing education to choices between outcomes, (policies) neglect or disregard debates about the terms on which such choices are made" (2010:6). Young and Muller make a distinction between social and structural conservatism, supporting the latter as "a condition for progress and innovation and the acquisition of knowledge" (Young and Muller 2010:15).

Knowledge in the curriculum

The work of Basil Bernstein lies at the heart of the social realist curriculum analysis. Bernstein's 'pedagogic device' (Bernstein 2000), based on his concepts of classification, framing and evaluation, has been central to the application of the sociology of knowledge to the sociology of education and the curriculum. It provides "…a model for analysing the processes by which discipline or domain specific expert knowledge is converted or pedagogised to constitute school knowledge… (Singh 2002:1). Bernstein's pedagogic device comprises three fields within which agencies or institutions may "…contest, maintain, and/or challenge the ordering/disordering principles of the pedagogic device" (Singh 2002:2). Each of the fields of production, recontextualisation and reproduction is hierarchically dependent on its predecessor. The recontextualisation field comprises two sub-fields, the Official Recontextualising Field (ORF) and the Pedagogic Recontextualising Field (PRF), the latter having further sub-fields. Fields are the site of internal and external conflict. "Agents within the Pedagogic Recontextualising Field struggle to control the set of rules or procedures for constructing pedagogic texts and

practices" (Singh 2002:5). As we have already seen, instrumentalism is particularly influential within the ORF of policy-making and government. Social constructivism is particularly powerful within the PRF in areas such as curriculum studies and teacher training.

Young and Muller (2010) foresee three possible futures for the curriculum in general in the face of the strength of social constructivist view of knowledge and socio-cultural views of learning, together with instrumentalist and technology-focused educational policy. In the first, boundaries are fixed and given. The elite system is maintained, and mass schooling is increasingly 'vocationalised', that is, seen as preparation for employment through establishment of generic skills. In the second possible future, boundaries have been removed. However this 'de-differentiation' simply hides the boundaries, making them harder to negotiate. In the third, boundaries are maintained prior to crossing. These boundaries define "domain-specific but increasingly global specialist communities as a basis for the acquisition and production of new knowledge and human progress more generally" (Young and Muller 2010:20). For the social realists boundaries need to be kept visible in order to be challenged.

Knowledge in the vocational curriculum

How does a vocational curriculum differ from other curriculums? Moodie (2008) concludes that the most useful approach "… is to define vocational education by … four general characteristics - … epistemological, teleological, hierarchical and pragmatic. Thus we may deem vocational education to be the development and application of knowledge and skills for middle-level occupations needed by society from time to time" (Moodie 2008:43). This definition draws attention to the significance of its applied nature, its relevance to occupational levels, and its contingency, that is, its changeability over time in response to external economic forces. It is not defined by educational sector. How then does knowledge fit into the vocational curriculum?

Approaches to knowledge in the vocational curriculum

Young (2008a:138-143) identifies three approaches to vocational knowledge in his overview of the history in the vocational education and training curriculum. A *knowledge-based* approach emerged in the late nineteenth century. It focused on the application of emerging scientific knowledge, based on the natural sciences, to supplement on the job learning across a wide range of fields in order to increase national competitiveness. By the late 1970s it was under challenge due to the decline of relevance of direct scientific knowledge in many occupations, a concern about the lack of vocational qualifications in the workforce, doubt about the capacity of emerging student cohorts to engage with the curriculum, and concern among government and employer bodies about the influence of educational providers rather than industry (Young 2008a:139).

The response was a *standards* approach, which identified "…curriculum outcomes in terms of competences, or what an employee would be expected to do, not what he or she needed to know. Knowledge came second and was only important as far as … it underpinned performance" (Young 2008a:141). Certain types of performance became

increasingly applicable to a wider range or workplaces, an example of the broader trends in education Young (2008a:155) calls 'genericism'. The standards approach thus rejected knowledge as exemplified in the form either of subjects based on academic disciplines, or related to broad occupational fields, in favour of broad national performance levels identified not by a community of researchers, professionals and educator specialists, but by industry bodies (Young 2008a:141-142). The key issue about knowledge has thus become not the nature of knowledge, but who controls it (Young 2008:143).

In Australia, at least, some efforts have been made to address the role of knowledge in the Vocational Education and Training (VET) sector, where "… a core issue in VET debates for perhaps two decades (has been) how to retain the benefits of the competency movement, represented by training packages, while recognising the concerns of many that there is a need for a more curriculum-focused, knowledge-based approach." (Ryan 2010:10). Priest (2009), for example, examines "…how 'traditional' knowledge and theory associated with higher-level qualifications can be accommodated within the framework of competency-based training…" (Priest 2009:3).

However, where knowledge does appear in discussion of the VET vocational curriculum, it is rarely analysed in any depth. It has increasingly become part of the undifferentiated term "skills and knowledge", as, for example, in one of the terms of reference for the National Quality Council's review of training packages (2009:3). The position of abstract, disciplinary knowledge is further weakened by the emphasis in some training systems on workplace-based learning and recognition of prior learning, both of which valorise the contextualised knowledge that comes from personal experience over the decontextualised knowledge presented by a vocational college.

The vocational curriculum requires a richer concept of knowledge than is offered in the current competency-based approach offered within vocational colleges. Gamble (2006) argues for a model of vocational knowledge which is based on a differentiation between knowledge that is context dependent and context independent, but has, within each of these, a further distinction between principled 'wholes' and procedural 'parts'. Gamble uses this model to distinguish between common Further Education pathways of general academic, general vocational and occupational. The model demonstrates the detail missing from the discussion of knowledge in standards-based approaches.

In the typical standards-based formulation…"knowledge is viewed as 'embedded in' or 'supporting' performance, rather than as a distinctive component of curriculum" (Gamble 2006: 87), a status from which it needs to be "retrieved" (Gamble 2006: 88). This is the case in Australia, where 'underlying' knowledge forms part of the vocational curriculum. Wheelahan (2008) provides a detailed analysis of the place of knowledge in a typical nationally-accredited VET training package (the term used to describe the main entities in the vocational curriculum in Australia) and concludes that they do not distinguish adequately between abstract, applied, contextual and situated knowledge" (Wheelahan 2008:10). They are thus unable to provide access to powerful disciplinary knowledge as opposed to localised knowledge and skills.

Finally, Young (2008a) sees in some recently emerging proposals, such as technical certificates in England, a third, *connective,* approach to the vocational curriculum. This approach attempts to make more explicit links between on the job and off the job

learning. However these unified models fail to make a distinction between the different types of knowledge that characterise these two settings, and so, from the social realist perspective, are inadequate. Wheelahan (2010) argues that as a result of such blurring knowledge becomes inevitably tied to the contextual. "Students do not have the access to the criteria they need to select knowledge and use it in new and creative ways, and knowledge is not under their control" (Wheelahan 2010:144).

Facing both ways

The social realist argument is that all curriculum needs to maintain the fundamental differentiation between two types of knowledge, the mundane and the esoteric. Through a contested process of official and pedagogic recontextualisation, disciplinary and localised knowledge is framed for learning. Curriculum and pedagogy must ensure the widest access as possible to emergent disciplinary knowledge.

In the case of the vocational curriculum, as opposed to a general academic curriculum, however, these processes have additional complexities. The curriculum has a dual purpose. "The vocational curriculum always has (or should have) two purposes: providing access to the disciplinary knowledge that is transforming work, and acquiring job-specific skills and knowledge" (Young 2008a:170)". Each of these directions has an additional level of complexity in relation to the nature of knowledge itself and the recontextualisation process. Gamble (2006) suggests: "The vocational curriculum must face in two directions… It must prepare for employability as well as for further study. It must therefore contain both the general (theory) and the particular (practice)" (Gamble 2006:94). Both Barnett and Wheelahan echo this theme. In order to ensure a strong basis for progression within the curriculum, the vocational curriculum needs to "face both ways" (Barnett 2006:152, Wheelahan 2010:157).

In addition to this challenge, the recontextualisation process has further complexity in the vocational curriculum. Rather than a single pedagogic recontextualisation from disciplinary knowledge into academic subjects, Barnett (2006) describes how the disciplinary knowledge is subject to two distinct processes in the form of "reclassificatory recontextualisation". This involves the additional "consideration of the operational demands of workplace activities" which generate "generic problems" typical to the field (Barnett 2006:146). The result is "disciplinary knowledge reorganized for vocational purposes" (Barnett 2006:148). This is then subject to pedagogic recontextualisation to make it teachable and learnable. At the same time it must take into account the "situated knowledge that is usually closely associated with particular job tasks" (Barnett 2006:146), which must also undergo pedagogic recontextualisation. These processes are further influenced by whether the curriculum relates to traditional or newer fields of practice, with their stronger and weaker classification and framing respectively (Wheelahan 2010:157). The problem with the standards approach described above is that it only faces one way, towards jobs. The traditional knowledge-based approach looks only one way as well - towards an outdated understanding of the sociology of knowledge. The connective approach averts its gaze altogether.

The vocational curriculum in the "mixed sector"

What then are the possibilities of bringing knowledge back into the vocational curriculum? In which sector is it likely to happen? Wheelahan (2010:158) notes that "vocational qualifications can be…differentiated by whether they are offered within further education/VET or within higher education". Higher education is usually associated with universities, many of which are becoming increasingly employment focused, to the point at which there is convergence with the Further Education curriculum. "Credit-based modular curricula are now widely used within UK higher education and this has led to a greater focus on outcome-based curriculum models" (Garrod and Warr 2009:188). This is, in effect, a movement towards standards, which as we have seen, is more likely to marginalize disciplinary knowledge. However, it is uncertain whether universities, as the homes of disciplinary knowledge, will be inclined or able to undertake the extensive recontextualisation of knowledge required for a vocational curriculum.

If this is the case, is emergent disciplinary knowledge likely to achieve prominence in the Further Education or Vocational Education and Training sectors? A recent analysis of the knowledge and skills mix in high level vocational education and training in Australia (Priest 2009) proposes "...VET high level qualifications as a strong alternative to university graduate qualifications, focusing on the high level of applied and complex knowledge for the new workplace" (Priest 2009:17). However, "underpinning knowledge" in this report, as in most of the VET curriculum literature, remains untheorised from a social realist perspective, thus limiting the likelihood of change.

There is another possibility. There has been a worldwide policy push in the last decade for what might be called 'higher education in tertiary colleges'[5] (HETC) to support the knowledge economy through increased access to higher education. This has resulted in a new type of tertiary provider which challenges sectoral boundaries, and is potentially able to build on elements of both further and higher qualifications in its vocational curriculum, exemplified by new types of vocational degrees. The "mixed-sector" TAFE institutes in Australia (Moodie et al. 2009), "mixed economy" Further Education colleges in England (Parry 2009), and "comprehensive" community colleges in the United States (Floyd and Walker 2009) are seeking to meet the challenge of expanded access in ways that universities are unable to match. The very policy initiatives that have silenced the voice of knowledge may have provided the opportunity for it to be heard!

I suggest that it will not be the single sector providers but rather these cross-sectoral vocational providers who have the incentive and the potential to base curriculum on a differentiated view of knowledge, informed by but not restricted to a competency-based framework, combining abstract disciplinary knowledge with a strong vocational orientation. The reasons for this can be found in the research by Wheelahan et al. (2009). Firstly, HETC providers want to escape the limitation of the strong version of the standards curriculum approach to which they are subjected as VET providers. Secondly, they want to maintain their vocational heritage, unlike dual sector universities. Thirdly, they are seeking a distinct position in the market.

Yet these three factors still face relentlessly towards employment. One final factor looks the other way, towards knowledge. In Australia, non-self-accrediting institutes (NSAI) are required to demonstrate their connections to disciplinary knowledge as part of their curriculum accreditation. The first line of the AQF description of the characteristics of a

bachelor degree is "The acquisitions of a systematic and coherent body of knowledge, the underlying principles and concepts, and the associated communication and problem-solving skills" (Australian Qualifications Advisory Board 2007: 9). This description, with its reference to "underlying principles and concepts and associated communication skills" can be seen as potentially addressing abstract disciplinary knowledge. In the development and accreditation of higher education courses, mixed-sector TAFEs are required to address knowledge directly by explaining how this requirement will be met. This requirement sets them apart from both stand-alone and dual-sector university courses, which are not required to make such a formal statement in AQF terms, although presumably some may do so in practice. This is because, for the present at least, universities appear to regard the Australian Qualifications Framework descriptors as optional reference points rather than formal statements against which their course may be judged.

There are many forces militating against a focus on knowledge in HETC courses, in particular the focus on skills, both generic and work-specific. So is it in fact happening? Although the position of knowledge in the vocational curriculum in VET, universities and schools is being researched, so far nothing is known about access to knowledge in the vocational curriculum of the new types of "vocational" degrees in England, the United States and Australia. Research on higher education in tertiary colleges in these countries has focused on issues such as policy, funding, governance, mission, identity, and organisational arrangements, especially in relation to student transitions and organisational change (for example, Bathmaker et al 2008, Hrabak 2009, Wheelahan et al 2009), but not their curriculums.

Research could be done on a range of issues. The issue of primary interest in this paper is the types of knowledge they include. Young (2006, 2008b) suggests that new types of awards such as the Foundation degree in England fail to distinguish between types of knowledge, but is this actually the case? Is it also the case with bachelor and associate degrees developed by Australian TAFE institutes or community colleges in the United States? Another issue is the nature of recontextualisation and the tensions that are emerging within the ORF and the PRF in the face of new types of higher education providers and awards, as shown in quality audits and newspaper commentary in Australia, England and the United States. A third issue is pedagogy: social realism itself would benefit from further research into practice in addition to its declaration of principles (Wheelahan 2010:162).

We need to ask questions about access, both for whom and to what? How is disciplinary knowledge manifested in the curriculum and teaching? How does it appear in the documents of the ORF, the policies, templates and guidelines for the accreditation of courses? How does it appear in the texts produced in the reproduction field, such as subject guides produced by teachers? How does it appear in the texts generated in classroom interaction? Access alone does not ensure engagement. If it is indeed present, then what is the effect of its presence? What impact does it have on the students? How different is that from the vocational curriculum provided by other programs?

Higher education in tertiary colleges provide a new space for investigating the role of knowledge in the vocational curriculum, just as the changes in South African education did during the past decade (Young and Gamble 2006). What do the faces of the

vocational curriculum in higher education courses in tertiary colleges, such as mixed-sector TAFEs in Australia, look like? Which way are they facing? The social realist perspective presented here suggests that, as a minimum, the higher education curriculum in tertiary colleges must acknowledge both knowledge and employment by 'facing both ways'. Janus-like, the curriculum must look to the future as well as the past, but as the song warns us, there are inherent tensions in this endeavor, and there may be tears[6].

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[1] These include Young and Moore in England, Muller and Gamble in South Africa and Wheelahan in Australia.

[2] Wheelahan (2010) treats these two as being on an equal footing with constructivism, but the analysis is the same.

[3] See Grubb and Lazerson (2004) for a similar analysis of vocationalism in the United States.

[4] "A basic distinction can be made between 'normative' and naturalized' epistemologies. The first is concerned with the *formal conditions* for holding certain beliefs to be true…, and the second with the *social conditions* under which true beliefs come to be produced and accepted as such" (Moore 2004:157)

[5] Grubb (2003) uses *tertiary college* as a general descriptor for institutions such as community colleges in the United States, further education colleges in England, and TAFEs in Australia. These colleges are typically well-established and have multiple, often contested, roles. They are publicly-owned institutions with varying degrees of autonomy and varying degrees of dependence on funding by governments. As such they are amenable to policy influences and may be responsive to opportunities for change. They are primarily being called upon to enable more people to undertake study in more flexible ways, to a higher level, and over a longer period than ever before.

[6] Lou Christie, *Two Face Have I* (1963). Bruce Springsteen's *Two Faces* (1987) provides a darker take on the same theme.

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