

Making students and teachers the heart of VET policy

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Abstract

This paper considers the implications of students' needs and teachers' roles for vocational education and training policy.

Introduction

Governments do not fund vocational education and training just to satisfy students' needs and correspondingly they don't base their vocational education and training policies on students' needs alone. But what if they did? What would a vocational education and training policy look like if it were founded on this conference's theme – student and teacher: the heart of the matter? This considers the implications of students' needs and teachers' roles for vocational education and training policy. It starts by rehearsing theories of learning which posit that learning is most effective if it starts with each student's current knowledge and interests and reflects students' different learning preferences. It then reviews what is known of Australian vocational education and training students' educational backgrounds and interests to consider how learning may be organised and supported to best meet students' needs. Since teachers are central to constructing students' learning the paper considers how teachers may be best supported to meet students' needs.

Learning preferences

The simplest conception of learning is that it is the absorption of information or imprinting of action so that it can be reproduced at will. But learning of this type isn't very useful or valued highly, often described pejoratively as 'rote learning' or mere imitation. To be useful learning must be applied, so a second understanding of learning is that it is the acquisition of the ability to apply knowledge or skill. While this is commonly accepted as learning in tertiary education, it encounters difficulties when students are expected to apply their learning in different contexts. The most valuable learning enables students to act differently in different contexts. This kind of learning – 'deep learning' (Marton & Säljö, 1976) – changes students' concept or understanding of and interaction with the world (Ramsden, 1992: 4; Biggs, 1999: 13).

A student-centred vocational education and training policy would therefore seek to encourage, develop and support students' deep learning. Students' learning is affected by their cultural background, prior knowledge and skills including literacy and numeracy, the different ways in which they prefer to learn (Misko, 1994), and the ways in which they interact with other students and with teachers (Crump *et al*, 1997, cited in Anderson, 2000:7). Josie Misko (2000: 31) argues that because students have different learning preferences it is difficult to determine which one strategy will always provide the best outcomes for all students. For example, Misko (2000: 33) found that flexible delivery students were far more likely than traditional campus or workplace-based students to say that they learnt best when studying individually with texts and study guides to help them and doing their own research and interacting on-line with a computer. Flexible delivery students were also less likely than place-based

delivery students to say that they learnt best from a lecturer in a traditional classroom, practising skills in practical workshops, working on a problem with other members in a group, and looking at pictures or diagrams which help explain concepts and processes. This suggests that a student-centred vocational education and training policy would support different learning-teaching modes.

Students' educational backgrounds

Learning is also most effective when it builds on students' existing knowledge (Biggs, 1999: 73). The basic unit of learning-teaching is the subject or module. An ideal policy would therefore start with each student's existing knowledge in each module and their reason for studying it and devise learning experiences that connected previously developed understandings with the new capacities needed to pursue new goals (Stevenson, 2003: 27). This data isn't collected nationally, but we do know that in 2002 some 11.5% of all publicly funded vocational education and training students had completed a tertiary qualification of certificate IV or higher before starting their current study; just over 16% had completed another tertiary qualification, mostly VET; 18% had completed year 12; and 21.2% had completed year 10 or lower.

TABLE 1: AUSTRALIAN PUBLICLY FUNDED VOCATIONAL EDUCATION AND TRAINING STUDENTS BY HIGHEST PRIOR EDUCATIONAL LEVEL COMPLETED, 2002

Highest prior education	% of total
Certificate IV and above	11.5%
Other tertiary	16.4%
Year 12	18.0%
Year 11	7.3%
Year 10	14.7%
Year 9 or lower	6.5%
Not known	25.6%
TOTAL	100%

Source: National Centre for Vocational Education Research, (2003), table 12.

In summary, about 10% of VET students have accomplished a high level of tertiary education and thus have some expertise in tertiary education learning, 40% have accomplished senior secondary and lower tertiary and thus are well prepared for tertiary learning, and 20% had completed year 10 or lower and thus are unproven tertiary learners. Unfortunately the schooling status is unknown for a very large 34% of publicly funded vocational education and training students. However, of the balance 10.8% were still at school or left recently and a large 55.5% left school more than 2 years ago.

TABLE 2: AUSTRALIAN PUBLICLY FUNDED VOCATIONAL EDUCATION AND TRAINING STUDENTS BY SCHOOLING STATUS, 2002

Schooling status	% of total
Still at school	5.1%
Left school within the last 2 years	5.7%
Left school 2 or more years ago	55.5%
Not known	33.7%
TOTAL	100%

Source: NCVET (2003) table 13

From these two tables we may infer that publicly funded VET students fall into at least 2 groups: students who are well prepared and are currently or were recently engaged in advanced learning, and students who are returning to advanced study after a break and whose learning skills are unproven. This has important implications for VET policy since inexperienced and inexpert learners need quite different support from experienced and accomplished learners. The ‘same’ module and program is experienced quite differently for experienced and inexperienced learners and should accordingly be presented differently.

Students’ motives

To learn students must first engage with the task, which they do because of its expectancy-value (Feather, 1982, cited in Biggs, 1999: 56). That is, students must value the outcome sought and expect to achieve it. Learning has expectancy-value when it is related to students’ motives for studying. It is therefore important to know students motives for knowing more. Australian vocational education and training is unusually fortunate in having good data on students’ reason for studying modules. This is collected nationally in the student outcomes survey. This is a structured sample survey of students who completed a module or a program in the previous year. For convenience the module and program level data will be considered together.

Some 28% of students who completed a module in 2001 did so to enter a vocation – ‘to get a job’, ‘to start my own business’, or ‘to try for a different career’. Somewhat more – 33% – completed a module to develop their current vocation: to ‘develop my existing business, ‘to get a better job or promotion’, ‘requirement of job’, or ‘to get extra skills for my job’. The remaining 30% of students completed a module for non vocational reasons, or at least for reasons that weren’t directly vocational – ‘to get into another course study’, ‘interest or personal development’ or ‘other reasons’. Females were underrepresented amongst students who completed a module to develop their current vocation but were proportionately represented amongst students who completed a module for other reasons.

As would be expected, a minority of students who completed a module to develop their current vocation had no post school qualification – most already had some qualification. But the proportions of students without a post school qualification increased markedly for students studying to enter a vocation (to about 50%) and markedly again for students completing a module for non vocational reasons (to about 58%). Unfortunately students’ age isn’t collected for module completers, but the students who completed a program for non vocational reasons were on average much older than students who completed a program for other reasons – only 25% were under 25. These comparisons are shown in the following table.

TABLE 3: CHARACTERISTICS OF AUSTRALIAN PUBLICLY FUNDED VOCATIONAL EDUCATION AND TRAINING STUDENTS WHO COMPLETED A MODULE OR PROGRAM IN 2001

Characteristic	To enter a vocation		To develop current vocation		Non vocational reason	
	Module	Program	Module	Program	Module	Program
Percent of total	28%	36%	33%	35%	32%	23%
Female	51%	57%	48%	50%	51%	57%
No post school qual	50%	50%	30%	47%	58%	51%
Age < 25		50%		50%		25%

Source: NCVET (2002) tables 16 & 48.

It will be seen from even this rudimentary data that there are at least two different types of students completing publicly funded vocational education and training modules. About two-thirds of students complete a module or a program for vocational reasons, and almost 60% of students have a post school educational qualification. These students are likely to be experienced and accomplished learners. But almost one third complete a module for non vocational reasons, of whom most had no post school qualification and we may infer were much older than students who completed a module for vocational reasons. Only 23% of students completed a program for non vocational reasons, suggesting that completing a program was either not a desirable or not an achievable outcome for students who completed a module for non vocational reasons. Students completing modules and programs for non vocational reasons are likely to be inexperienced and inexpert learners and thus need more developmental and supportive learning-teaching methods.

Learning for employment

Since two-thirds of vocational education and training students complete a module or program for vocational reasons learning for employment is clearly of considerable importance. While learning and particularly assessment based exclusively in and for the workplace has been criticised for failing to develop underpinning skills (Wheelahan & Carter, 2001), a strong body of learning theory argues that learning should be 'situated in authentic practice' (Stasz *et al*, 1995: xxii and Hawke, 1995, cited in Anderson, 2000: 12, 15), that students need to engage directly in the work they are learning and seek to make sense of that experience by connecting it with understandings of previous experience (Stevenson, 2003: 31). Learning in the workplace is therefore exemplary educational practice for fostering deep learning of functioning knowledge for employment. The debate is really whether it is appropriate for all vocational education and training learning (Ryan & Watson, 2003: 6).

Learning for interest or personal development

We have observed that one third of Australian vocational education and training students who completed a module did so for non vocational reasons. This group has typically been overlooked in Australian vocational education and training policy since the early 1990s when the policy concentrated explicitly and almost exclusively on employment outcomes (Anderson, 2002: 65). Even more marginal to Australian vocational education and training policy have been the 13% of vocational education and training students who complete a program out of interest or personal development. But this seems to be a role served by VET systems throughout the world.

Voorhees & Zhou (2000) report that 12% of students who enrol in US 2-year or community colleges do so out of personal interest. Cohen and Brawer (1996) suggest that students attend 2-year colleges for numerous reasons: to better themselves financially, to obtain job entry skills, to upgrade job skills, to fulfil a personal interest, or to transfer to senior institutions. In the UK only 12% of students 19 years or older studying further education funded by councils were enrolled in the outcomes-based national vocational qualifications (Learning and Skills Council, 2003: table 7). The UK Government's skills strategy white paper *21st century skills – realising our potential: individuals, employers, nation* (Secretary of State for Education and Skills, 2003) preserves a non vocational role for the learning and skills sector

notwithstanding its strong commitment to training for employment and its language heavily reminiscent of the language of ANTA's 1998 and 2004 strategies in its commitment to 'Give employers greater choice and control over the publicly-funded training they receive and how it is delivered' (page 13), 'Putting employers' needs centre stage' (page 21) and establishing a "demand-led" system' (page 21). The Government (Secretary of State for Education and Skills, 2003: 24) says that for individual students it will –

'Safeguard the provision in each local area of a wide range of learning for adults, for culture, leisure, community and personal fulfilment purposes. While giving priority to better work-related skills training, each local Learning and Skills Council will have a defined budget to work with others to support that range of learning, including learning for pensioners.'

Personal development seems to be a consistent and enduring motive for engaging in vocational education and training.

Further study

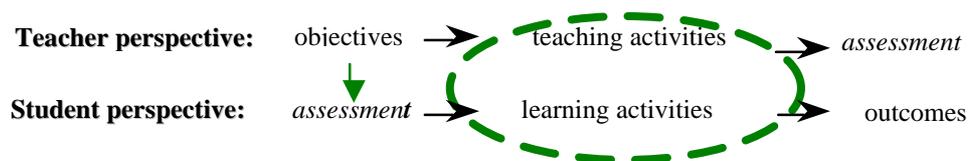
Only 7% of students who completed a program did so to get into another course of study, which suggests that VET's role in providing opportunities to transfer to higher education is not important to many students. However, Maxwell, Cooper & Biggs (2000: 42) found that students who study for vocational reasons nevertheless aspire to further study, perhaps to advance further in their vocation. Some 40% of students in their structured sample of vocational education and training students aspired to complete a diploma. But 37% of health and community welfare students aspired to complete a bachelor degree, 27% of business students aspired to complete a degree, 23% of tourism and hospitality students aspired to complete a degree and 16% of engineering students aspired to complete a degree. Unsurprisingly, aspiration to complete a degree is related to the level of a student's current enrolment. 40% of students currently enrolled in a diploma aspired to complete a degree, 30% of those enrolled in a certificate 4 and 18% of students enrolled in a certificate 3 aspired to study for a degree (Maxwell, Cooper & Biggs, 2000: 43).

Maxwell, Cooper & Biggs (2000: 42) observe that 'overall, these figures indicate a remarkable degree of aspiration for further qualifications. . . The other remarkable aspect of these figures is the high degree of aspiration for university undergraduate studies leading to a bachelor degree'. Students who proceed to further study clearly need different or at least additional learning to those who proceed directly to employment. They would benefit from developing study skills and at least rudimentary skills in surveying and applying the literature, interpreting and presenting quantitative data, and in scholarly writing, none of which are particularly relevant to most employment.

Assessment

As Biggs (1999: 141) points out, for teachers assessment is at the end of the teaching-learning process, whereas for students it is the beginning. Assessment drives learning, or as Ramsden (1992: 187) says, 'From our students' point of view, assessment always defines the actual curriculum'. This is illustrated in Biggs' figure of the teacher's and student's perspective on assessment.

FIGURE 1: TEACHER'S AND STUDENT'S PERSPECTIVES ON ASSESSMENT



Source: Biggs (1999), figure 8.1, page 142.

Since assessment defines the curriculum and drives learning ‘the context of assessment should genuinely reflect the goals of learning’ (Biggs, 1999: 151). And since the aim of deep learning is to affect the way students relate to and perform in the world, ‘assessment tasks should at some point require *an active demonstration* of the knowledge in question’ (Biggs, 1999: 151; emphasis in original). On this argument assessment should be ‘authentic’ (Wiggins, 1989) or performative rather than declaratory. Assessment in an actual or simulated workplace is therefore highly appropriate to the two-thirds of vocational education and training students who study for vocational reasons, but is inappropriate for the third of students who study for non vocational reasons.

Constructive alignment

Biggs (1999: 25) argues that learning is most effective when there is alignment of students’ prior knowledge and motivation, the curriculum, the learning-teaching process and assessment. Non-alignment or inconsistencies between any of these elements leads to poor teaching and surface learning. This is why designing all vocational education and training for experienced learners studying for vocational reasons is flawed: about one third of vocational education and training students study for non vocational reasons, and about one third of students who study for vocational reasons are inexperienced learners. So for two-thirds of students their characteristics, the curriculum, the learning-teaching process and assessment are not aligned and therefore the learning system breaks down.

Teachers are critical

Teachers’ central and sophisticated roles in stimulating, structuring and assessing students’ learning are well understood (Crump *et al* (1997) cited in Anderson, 2000: 7; Fallon, 2003: 3). Teachers develop students’ learning best by reflecting on and learning from their practice as teachers (Biggs, 1989: 6; Ramsden, 1992: 102). The U.S. National Center for Research in Vocational Education (1998, cited in Malley *et al*, 2000: 83) found that a ‘learning staff’ is best fostered, amongst other things, by setting high expectations that staff should continue learning and by organising staff development in a wide variety of ways including job exchange horizontally and vertically within the organisation and within the wider community. NCRVE (1998) emphasises that staff should learn in teams rather than individually, and this is reflected in Ramsden’s (1992: 7) view that while the individual teacher ‘is an important point of influence’ they are not the only one. He argues (1992: 7) that learning and teaching is improved by examining the environment in which the teacher works and the system of ideas which that environment represents. He therefore

proposes an emphasis on programs and teaching departments as well as subjects or modules and individual teachers.

In view of the central importance of teachers – as the major item of resource if not as a major shaper of student learning – it is extraordinary that no data on vocational education and training teachers is routinely collected nationally (Cully, 2003) and that so little data is available within States and Territories or even routinely reported within institutions (Malley *et al*, 2000: 4). Chappell & Johnston (2003: 14) report career biographies of 28 vocational education and training teachers. They report that most VET teachers did not begin their working life in vocational education and training but came to the sector from other careers. They note that this second career status distinguishes VET teachers in many ways from school teachers and university lecturers whose initial careers are often in education. As is readily observable anecdotally, Chappell & Johnston (2003: 18) report that ‘many TAFE [teachers] continue to identify with their trade or occupational area. Their knowledge of this occupation brought them into TAFE as vocational teachers and they see the purpose of their role in vocational education and training as assisting learners to develop broad occupational competence’.

Once teachers join the sector they seem to remain attached to it. Chappell & Johnston (2003: 15) note the Australian Bureau of Statistics *Labour Force Australia 1997* (6203.0) which report that almost 24% of VET teachers have worked in the sector for at least 5 years and that 40% of VET teachers have had 10 years or more working in the sector. But long employment in the sector does not necessarily mean that teachers have secure or stable employment. Malley and colleagues (2000: 3) report that in 1998 some 53% of full time equivalent teaching staff in Victoria were in continuing positions, 33% were in fixed-term contract positions and 14% were in sessional teaching positions. On average, teachers with fixed-term contracts have spent 5 years employed with their current institute. Significantly, though, Malley and colleagues observe (2000: 57) 12% of staff have been on a fixed-term contract for 10 or more years with their current Institute. This suggests that a fair proportion of teachers have a succession of fixed-term contracts.

Teaching staff had fallen as a proportion of all staff in Victorian publicly funded vocational education and training by 4% since 1993, full time equivalent teachers with continuing appointments fell by 18% and full time equivalent sessional teaching staff increased in by 22% since 1993. There had also been an increase in part time appointments which increased by 94% from 1993 to 1998 while full time appointments correspondingly fell by 23% (Malley *et al*, 2000: 38). It is therefore not surprising, contrary to Chappell & Johnston’s expectation (2003: 15), that the majority of TAFE teachers they interviewed had worked or continued to work across a number of VET sites.

If the Victorian figures are any guide to the national VET teaching workforce, VET seems to follow Handy’s (1998; cited in Malley *et al*, 2000: 84) observation that ‘today’s organisation is the totality of a diverse network of dedicated, career oriented core workers; fringe dwelling casuals, part-timers and consultants; business partners as well as customers themselves’. Malley and colleagues (2000: 84) surmise that –

‘The modern organisation therefore is seen to comprises three different workforces, which together achieve the organisation’s objectives:

- ?? a core of ‘full-time, hard working, highly paid professionals, technicians and executives’ who own the organisational knowledge;
- ?? a ‘contractual fringe of individuals or organisations’ who provide services and materials; and
- ?? a flexible workforce of part-time or temporary individuals who assist in peak times.’

It would seem to be essential for teachers to have systematic knowledge of students’ different learning styles, the principles for constructing a curriculum, pedagogy and techniques for assessing students, yet only around 13% of VET teachers have a qualification in education or training (Cully, 2003). Furthermore, since VET providers prefer to recruit their teachers from industry (Harris et al, 2001: 9) it seems that many VET teachers are unlikely to have even anecdotal knowledge of learning-teaching principles beyond their own experience as students. Since apparently many VET teachers, particularly the majority of those employed in non continuing positions, do not receive staff development on current VET educational issues such as training packages (Harris et al, 2001: 63), it seems that many VET teachers never acquire systematic knowledge in learning-teaching.

Malley and colleagues (2000: 15) also observe ‘an emerging redesign of the teaching function with more ongoing teachers also taking on administrative and support roles, often associated with maintaining part-time and sessional teachers’. This suggests that staff development and other organisational support needs to be differentiated for each of the VET teaching workforces.

Conclusion

A student-centred vocational education and training policy would seek to encourage, develop and support students’ deep learning. To do this it would take account of students’ different interests and it would seek to build on their different prior knowledge. The one third of students who study for non vocational reasons are quite different in age, educational background and orientation from other students and accordingly need different types of learning support and encouragement. Even students studying for vocational reasons arguably fall into at least 2 distinct groups, those who seek to enter a vocation and those who wish to develop their current vocation. A student-centred policy would structure different learning experiences for different student groups. While learning and assessment in the workplace can be exemplary educational practice for fostering some deep learning of some students, it is not appropriate for all learning and assessment for all students.

A student-centred policy would also routinely collect data on that most important (and expensive) learning resource, teachers. It would set high expectations for staff to continue learning in different settings and contexts, but in teams rather than individually. It would establish strategies to deal with teachers’ different engagement in employment and different roles in providing, managing and supporting teaching.

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