COPYRIGHT NOTICE

UB ResearchOnline
<http://researchonline.ballarat.edu.au>

This is the published version of the following article:

Hodge, S., Harris, R. (2012), Discipline, governmentality and 25 years of competency-based training, *Studies in the Education of Adults*, 44(2):155-170

Which has been published in final form at:

<http://www.ingentaconnect.com/content/niace/stea/2012/00000044/00000002/art00003;jsessionid=28k70l5g4toi4.alice#expand/collapse>

Copyright © 2012 NIACE.

This is the published version of the work. It is posted here with permission of the publisher for your personal use. No further distribution is permitted.

Discipline, governmentality and 25 years of competency-based training

STEVEN HODGE AND ROGER HARRIS

Deakin University, Australia and University of South Australia, Australia

Abstract

Among the many critiques of competency-based approaches to education and training (CBT) is a strain which draws on Foucault's analysis of 'disciplinary' power and knowledge. Foucault offered an interpretation of modern institutions, such as prisons, armies and schools, which revealed subtle mechanisms of surveillance and systems of knowledge that shaped the self-understanding and activity of participants. Robinson (1993) and Edwards and Usher (1994) were among the first researchers to call attention to the disciplinary potential of CBT. But Foucault went on to argue that discipline is a component in an overarching system he called 'governmentality'. The analysis of governmentality augments the analysis of discipline by foregrounding the effects of knowledge of populations and modes of power that operate at a distance. In this article, the disciplinary critique of competency-based systems is extended by demonstrating the relevance of Foucault's analysis of governmentality to a contemporary national system of CBT. The authors use a case of 25 years of CBT in an Australian vocational education institution as a scaffold for the argument. This case is germane because it presents a succession of practices of CBT which allows us to trace and scrutinise a shift from a disciplinary to a governmental framework.

Introduction

Competency-based approaches to education and training have been debated and critiqued since their beginnings in the 'Performance-Based Teacher Education' movement in America during the 1960s and 70s. Performance- or competency-based approaches to teaching and learning require explicit statements of what a curriculum is intended to achieve, and employ these statements in a systematic way to prime learners for their role in the learning process, guide curriculum design, structure pedagogy and furnish assessment criteria. The appeal of competency-based training (CBT) for politicians, bureaucrats and administrators is evident: the approach answers the call for accountability in a way that traditional

systems cannot. But CBT can appeal also to educators who recognise the potential to facilitate a shift from traditional teacher-centred education to a student-centred approach by giving learners the tools to understand the goals of curriculum and gauge their own progress. Notwithstanding these attractions, critics representing a wide range of theoretical perspectives have identified, analysed and catalogued difficulties with CBT (e.g. Ashworth and Saxton, 1990; Hyland, 1997; Wheelahan, 2008). Among these critiques is a strain which draws on Foucault's (1991) analysis of disciplinary power and knowledge. His analyses of modern institutions such as prisons, armies and schools revealed subtle mechanisms of surveillance and systems of knowledge that shaped the self-understanding and activity of inmates, soldiers and students. Commentators such as Robinson (1993) and Edwards and Usher (1994) showed that Foucault's theory of disciplinary power could be employed to illuminate the effects of CBT.

We build our argument on three pieces of existing work. First, we introduce the work of the first wave of Foucault-inspired critics of CBT who applied his theory of disciplinary power and knowledge to the theory and practice of CBT, chiefly during the 1990s. Second, we further develop the suggestion of Hodge (2009) that Foucault's theory of governmentality offers a distinct way to analyse contemporary forms of CBT. Third, we re-examine a study of 25 years of CBT in a public vocational education institute in South Australia (Harris and Hodge, 2009). CBT was introduced in this institution in 1983 as a trial programme which persisted through to the advent of Australia's 'training reform agenda' of the 1990s, when CBT became mandated as the foundation of a new national system. The interpretation we offer of this history is that at the local level of the programme we have the unique opportunity to monitor a switch from one mode of CBT to another which we suggest maps to a point when a governmental analysis of CBT is demanded. In the light of the evidence implicit in the history, we argue that Foucault's analysis of governmental power offers an effective way to examine CBT in an era when it has become the foundation of a national system.

Discipline and CBT

Among the first attempts to apply Foucault's analysis of disciplinary power and knowledge to CBT were those of Robinson (1993) and Edwards and Usher (1994). These researchers were writing in the early flushes of the competency movement in Britain and Australia when the competency-based model was making deep inroads into vocational education and training (VET). In both countries, forms of CBT became a system-wide mandate in VET. Policy makers and educational reformers drew on models of CBT that had emerged and evolved in the American context. Tuxworth (1989: 14), for example, counselled British institutions to apply Elam's (1971: 6–7) principles to implement CBT contained in a report to the American Association of Colleges for Teacher Education. The essential elements were:

1. Competencies to be demonstrated by the student are:
 - derived from explicit conceptions of roles;
 - stated so as to make possible assessment of a student's behaviour in relation to specific competencies; and
 - made public in advance.

2. Criteria to be employed in assessing competencies are:
 - based upon, and in harmony with, specified competencies;
 - explicit in stating expected levels of mastery under specified conditions; and
 - made public in advance.
3. Assessment of the student's competency:
 - uses performance as the primary source of evidence;
 - takes into account evidence of the student's knowledge relevant to planning, analyzing, interpreting, or evaluating situations or behaviour; and
 - strives for objectivity
4. The student's rate of progress through the programme is determined by demonstrated competency rather than by time or course completion.
5. The instructional programme is intended to facilitate the development and evaluation of the student's achievement of competencies specified.

Elam's model establishes a link between a behavioural approach to curriculum and pedagogy and the principles of transparency and accountability. For those whose interests lay in controlling and measuring the performance of publicly funded vocational education CBT promised a quantum improvement over a system coordinated by educators whose allegiance to policy agendas could not be assumed. Many educational reformers, for their part, embraced CBT as ushering in a new era of curriculum relevance and learner-centred education.

Robinson (1993) observed an anxiety in Australian VET teachers involved in the implementation of CBT and described how teachers began to feel subject to indeterminate scrutiny which undermined the extent to which they could apply their expertise in teaching. Robinson proposed that Foucault's analysis of disciplinary power and knowledge, especially his account of surveillance, throws light on the behaviour and feelings of the VET teachers. The substitution of externally generated criteria of competence for professional judgement produced a dislocation of their identity as educators. She notes that they also acquired a new language. Through the power of the training reform discourse, the VET teachers adopted tenets such as 'the lack of a skilled workforce is the major reason for our current economic problems', thus circulating truths that reinforced the discourse. Robinson explained how a disciplinary analysis extends also to the behaviour of students. She speculated that students could be isolated and individually managed in a CBT system and that the record keeping, a prominent part of the system, would serve to render them more individually visible. The docility that Foucault saw as the effect of disciplinary mechanisms thus spreads to teachers and learners alike in a CBT system.

In the UK, Edwards and Usher (1994) likewise employed the categories of disciplinary power and knowledge to analyse CBT. But their argument extended Robinson's analysis in showing how CBT's power to a large degree stems from its appropriation of liberal humanist principles. They explained that the prevailing critique of CBT was misplaced. From earliest days the approach had been decried as behavioural (e.g. Moss, 1981; Bull, 1985). By the time Edwards and Usher (1994) were constructing their arguments, the behaviourism thesis was well-established (e.g. Ashworth and Saxton, 1990; Field, 1990). Edwards and Usher (1994) claim, however, that although a behavioural analysis does apply to the form taken by

competency statements, the discourse of CBT as a whole was dominated rather by a liberal humanist theory of learning. Their case centred on student-centred learning within CBT. In contrast with behaviourism, a view of learning that minimises the role of subjectivity and focuses on observable, measurable performance, student-centred learning emphasises the contribution to learning of the individual learner's active engagement with and interpretation of experience. In CBT, this principle manifests in the expectation that learners take responsibility for their own learning by grasping the opportunity afforded by publicly proclaimed curriculum objectives to manage and appraise their own progress.

According to Edwards and Usher's argument, CBT owed much of its appeal to the appearance that it overcame behaviourism. The new system became 'seductive' through presenting humanist credentials in the shape of student-centred learning. But for Edwards and Usher, it is precisely because CBT appropriated a learner-centred model that its disciplinary efficacy is exceptional. This effectiveness derives from a confluence of behaviourism and the principle of student-centred learning. The practice of student-centred learning had traditionally been animated by a doctrine of 'open' curriculum, whereby learner activity, though guided by underlying curriculum intentions, was not constrained by them. This approach to educational objectives is consistent with the philosophy of humanism, which seeks to nurture growth and diversity. But in the context of CBT, the behavioural form of competency statements contrasts sharply with the notion of open objectives.

In the light of Robinson's (1993) and Edwards and Usher's (1994) analyses, CBT emerges as an exemplary disciplinary apparatus. CBT has the power to embrace educators and students alike in a surveillance system which establishes norms and through the techniques of (competency-based) assessment and quality audits allows individuals to be comprehended and inscribed in documentary form. By appropriating humanist language and methods, CBT demonstrates that it is a progressive form of student-centred education. At the same time, by melding the behavioural form of competency statements to the principle of self-managed learning, CBT accomplishes the shift in responsibility for achieving institutional outcomes to the learner which marks it as a disciplinary strategy.

Twenty-five years of CBT

A decade prior to the analyses of Robinson (1993) and Edwards and Usher (1994), and six years before the Australian Government's mandate for CBT as the paradigm for the VET sector, a competency-based automotive programme began in 1983 in a South Australian VET institution. This programme (the 'Croydon Program'), initiated by one of the authors with the assistance of a research grant, was modelled on contemporary conceptualisations of CBT (Blank, 1982; Norton, Harrington and Fardig, 1980) which closely followed the principles of Elam (1971). The Croydon Program was thus based on competency standards derived from functional analysis of the panel-beating occupation, which were 'identified and made public in advance'. A 'Competency Profile Chart' was publicly displayed at all times, used as a guide for learning material development, as a learner progress record and for employer notification. Criteria for assessment were derived from an analysis of the competencies and expressed in behavioural terms. Potentially the most

challenging and yet the cornerstone characteristic was that the programme gave responsibility to the learners to pursue and monitor their own learning. Learners progressed through the programme at their own rate. As each competency was achieved, teacher and learner decided through consultation which competency would be tackled next. Learning was almost entirely individualised through the use of learning packages and audio-visual resources.

Formal evaluations over three years (Harris, Barnes, Haines and Hobart, 1985; Harris, Barnes, Haines, Hobart and Candy, 1987) indicated that learners enjoyed the method of learning, found the approach interesting and considered that it would help them retain most of what they had learned. Teachers favoured the approach not only because of its effects on learner attitudes and performance, but also because it fostered more personal satisfaction with teaching. Teachers and employers gauged the programme as more effective than previous traditional programmes.

Twenty-five years on, the two present authors tracked down four of the original staff, including the leader of the panel-beating section. Semi-structured, in-depth interviews were conducted based on a list of themes – competency standards, learning materials, assessment and pedagogy – which guided participant reflections to promote comparable accounts. Analysis involved searching for statements that portrayed changes to the Croydon Program model of CBT that may have been influenced by the wave of reforms that followed national implementation of CBT from 1990 under the National Training Reform Agenda.

The conclusions of the formal evaluations of the original trial were echoed in the responses of the staff interviewed 25 years later. They were uniformly positive about the principles and practice of CBT in the Croydon Program, singling out self-paced learning as its defining feature. But as the interviews moved to the period of training reform – from the early 1990s – it became clear that the trainers perceived a disjunction between the competency-based approach of the trial and the approach associated with training reform. Two changes in particular were emphasised across the interviews. First, the training reform version of CBT brought with it a shift in responsibility for competency formulation from educators to ‘industry’ representatives. The training reform agenda dictated that industry was best placed to understand its own needs and should accept responsibility for defining its skill requirements in the form of competency standards. For the interviewees, this shift brought a number of unwelcome results. It emasculated their identity as educators: the formulation of learning aims was viewed as integral to their work, and they therefore saw themselves being reduced to mere interpreters of others’ endeavours. It also undermined their (self-appointed) role as guardians of the values of the panel beating trade. Interviewees stressed that, in industry, apprentices might be exposed to substandard practices, and that the definition of competency standards offered a way to enshrine ideals of quality workmanship. According to the interviewees, the new competency standards threatened the integrity of the trade.

The second change concerned self-paced learning. This approach was seen by interviewees as central to the practice of CBT. A major factor in this change was the ‘marketisation’ of VET, an element of national training reform introduced at the same time as CBT (Billett and Hayes, 1999). Funding mechanisms were implemented to cement the principle of demand-driven provision, encourage

competition and hence responsiveness among training providers and drive down VET costs. At the level of the Croydon Program, financial pressure on the institution threatened the programme itself for two reasons. Self-paced learning requires more learning resources than teacher-centred education. By the time of training reform, hundreds of thousands of dollars had been spent developing infrastructure and materials to support self-paced learning in the programme. The costs involved in sustaining self-paced learning represented a burden which increasingly cash-strapped institutions found difficult to support. This is despite persistent rhetoric about the student-centred nature of CBT. Another way in which the Croydon Program became undermined by marketisation was the policy of disbursing funds on the basis of individual completions. Interviewees revealed that although the progress of some learners was accelerated through self-pacing, others fell behind. For institutions surviving on funding by completion rates, any learning model that spread completions out for a given cohort would be inconvenient at best and a liability at worst. Rather, the ideal would be a model in which all or most learners in a given cohort could be signed off around the same time.

Interviewees each expressed disappointment about the way CBT had turned out. In their view, by 2008 the principles of the trial had been betrayed. The removal of educators from the process of specifying competencies had, in the minds of the interviewees, created lax and ambiguously formulated standards. One declared: 'I don't call Competency Standards standards any more. You could drive a truck through the damned things.' Funding pressures on the institution eventually necessitated a carefully managed phase-out of self-paced learning which was accomplished by 2000. This move was poorly received by the interviewees. As one lamented, 'You've still got people who think you can run a competency-based programme that's not self-paced ... Why was that done? It's all about funding; they don't care about anything else.'

This history is amenable to a disciplinary analysis at two levels. The trial programme exposed the apprentices to a system of continuous surveillance in which their skills, knowledge and learning needs were rendered visible through performances and documentation. Their activity fell under the gaze of the educators who had determined in painstaking detail the required performances and standards. Within the programme, learners were allowed to progress at their own pace and were obliged to participate in monitoring and projecting their learning trajectories. The analyses of Robinson (1993) and Edwards and Usher (1994) apply to the apprentices within the Croydon trial. Both analyses describe the disciplinary effects of surveillance and examination and identify the techniques of CBT as particularly suited to producing these effects. The combination of humanist and behaviourist principles observed by Edwards and Usher (1994) in CBT was likewise a prominent characteristic of the Croydon Program, with learners encouraged to participate in the management of their learning.

A second level of disciplinary effect is evident in the experiences of the educators after the shift from the trial to the training reform version of CBT. The educators were dismayed by the form of CBT which progressively displaced that of the trial, with many of their concerns arising from changes which forced them to adopt new ways of working as educators. Like Robinson's (1993) teachers, the Croydon staff were compelled to reconstruct their practice and in both cases a degree of disorientation and resentment accompanied identity remaking. The

effects of close specification of desired behaviour which mark the disciplinary system of power-knowledge can be detected in the reform era educators. But in our view a disciplinary analysis of this history is unable to illuminate the key ways in which CBT functions as a power-knowledge apparatus once the practice of CBT in the trial is overtaken by the practice introduced with training reform. In the next section we examine a conceptualisation of knowledge and power which offers us the tools to fashion a more complete analysis of 25 years of CBT.

Governmentality and discipline

A key element in our argument was foreshadowed by Hodge (2009), who suggested that Foucault's theory of 'governmentality' could be employed to supplement the disciplinary analysis of CBT. This proposal was made in the light of both the analytic horizons opened by Foucault's (2007) investigations into the power and knowledge formations implicated in the operation of modern states, and his arguments about how these 'arts of government' relate to the techniques of disciplinary power and knowledge. In the later 1970s, Foucault began to grapple with the kind of rationality which characterises modern governments, and he became clear that a disciplinary analysis was not sufficient to plot a kind of power which instead of facilitating the production of docile bodies, seeks to render its effects by indirect means, and a form of knowledge which rather than concerning itself with the minutiae of individual behaviour takes as its field populations and the principles of their health and prosperity. And just as he emphasised earlier that disciplinary power should not be understood as displacing sovereign forms, Foucault stressed that 'security' (one of his terms for this third modality of power-knowledge) overlays and meshes with the others. He offered a schematisation of the way the three kinds of power-knowledge nexus operate: the sovereign or 'juridical' form works through the declaration of what is to be prevented, the disciplinary form through the specification of what must be done, while with security,

what is involved is precisely not either the point of view of what is prevented or the point of view of what is obligatory, but standing back sufficiently so that one can grasp the point at which things are taking place, whether or not they are desirable. This means trying to grasp them at the level of their nature, or...grasping them at the level of their effective reality. The mechanism of security works on the basis of this reality, by trying to use it as a support and make it function, make its components function in relation to each other (Foucault, 2007: 46–47).

The fact that the population is the focus of governmental rationality does not mean that the individual disappears from the horizon of its calculations. Foucault explains that,

The final objective is the population. The population is pertinent as the objective, and individuals, the series of individuals, are no longer pertinent as the objective, but simply as the instrument, relay, or condition for obtaining something at the level of population (Foucault, 2007: 42).

Yet this account of the instrumental 'pertinence' of the individual in governmental thinking is not to position discipline as the modality of power-knowledge proper

to government at this level. Rather, security entails a distinct set of knowledges and techniques concerning the individual in which the instrumental role of individuals is, in an apparent paradox, comprehended in terms of 'freedom':

The idea of a government of men that would think first of all and fundamentally of the nature of things and no longer of man's evil nature, the idea of an administration of things that would think before all else of men's freedom, of what they want to do, of what they have an interest in doing, and of what they think about doing, are all correlative elements. A physics of power, or a power thought of as physical action in the element of nature, and a power thought of as regulation that can only be carried out through and reliance on the freedom of each, is, I think, something absolutely fundamental (Foucault, 2007: 49).

Freedom continues to be a central theme in the most advanced forms of governmentality studied by Foucault, and the techniques appropriate to eliciting and regulating this freedom have become informed by more and more sophisticated knowledge of the factors conducive to a healthy, productive population. Although Foucault indicated that education and training constitute techniques of neoliberal governmentality (e.g. 2007: 321), he did not analyse them in detail. However, contemporary scholars of governmentality have studied the way learning and education have been appropriated by neoliberal discourse as governmental technologies (e.g. Edwards, 2003). This discourse has progressively engaged with all areas of education (see Peters, Besley, Olssen, Maurer and Weber, 2009), but the field of post-compulsory education, with its traditionally strong vocational dimension and potential for extension into the decades of working life beyond formal learning, has been the object of sustained attention by policy makers. This branch of discourse centres on the notion of 'lifelong learning' and under this banner it has been elaborated and incorporated into economic and social policy in many 'post industrial' countries. According to Nicoll and Fejes (2008: 1), 'Lifelong learning is promulgated within contemporary national and international policies as a truth, as a required response to an increasing pace of change, the economic and social pressures of globalisation and uncertainty over the future.'

We suggest that the governmentalisation of CBT during training reform in Australia constitutes an example of the deployment of this discourse. The key premise of our argument is that CBT in Australia from the early 1990s can be understood as a central element in the exercise of neoliberal government, deployed on the basis of specific knowledge of the population and its problems, and positing a certain kind of active subject. Australian agents of government borrowed freely from other neoliberal governments in both formulation of problems and projection of solutions. It will be seen that the training reform version of CBT encodes a global discourse of economic security and mobilises the knowledge and techniques of lifelong learning already evident in other parts of the world.

Governmentality and CBT

Our argument assumes that at some point CBT became enmeshed in the problems and rationality of government. It is possible to trace this transposition of CBT with some accuracy, and this elevation (from the mid-1980s) corresponds with a major problematisation of VET in Australia. According to Dean (2010: 38)

problematisations constitute a 'key starting point of an analytics of government'; they are 'the moments and the situations in which government becomes a problem...[an] action of calling into question some aspect of the "conduct of conduct"'. One of these 'situations' occurred in Australia in the 1980s when changing international economic conditions disrupted the decades of prosperity created by the 'post-war boom' during which there was high demand for its major exports: wool, wheat and coal. During this period manufacturing thrived as well, but the sector was protected by tariffs and sought only to supply local markets. By the early 1980s international commodity prices were in decline and prices for manufactured goods and services were on the rise. This trend worked against the Australian economy in a number of ways, leading eventually to high unemployment, inflation and national debt. By 1986 the situation was such that the prime minister publicly declared that the nation was in danger of becoming a 'banana republic' (Smith and Keating, 2003: 16).

White papers and reports during these years (e.g., ACTU/TDC, 1987; Clark and Associates, 1986; DOLAC, 1988; Kirby, 1985) reveal a convergence of opinion about what the problems were and how to address them. One of these reports, *Australia Reconstructed* (ACTU/TDC 1987), offers a comprehensive perspective on the situation facing the country and government thinking about solutions. The document reports on a 'tripartite [government, business and union] Mission' to the UK, Sweden, Norway, West Germany and Austria to investigate ways other countries were coping with economic challenges. According to the Mission, Sweden and Austria had the most successful interventions and the UK the least.

The report discusses these policies and their implications for Australia in some detail. It argues that 'active' labour market policies characterise the government interventions Australia should emulate, and that '[t]he most striking aspect...is the emphasis placed on skill formation, skill enhancement, skill flexibility and overall training' (1987: 107). The model was Sweden, which committed considerable public funds to training, while also mandating employer investment in training. Training in Sweden was depicted as follows:

The AMU [Sweden's National Employment Training Board] training is modular. Differing combinations of previous training and experience can be accommodated easily, and adapted to the needs of companies and industry. The AMU syllabuses are developed in consultation with employers' organisations and trade unions (ACTU/TDC 1987: 108).

Swedish vocational education was also noted for making a shift away from classroom-based training, embracing the workplace as the primary site for learning, while vocational education and training was 'not seen as a one-off exercise but as a process of life-time learning, contributing to both personal and career development' (1987: 109).

Considering the situation at home and the nature of the policy successes observed in other countries, the Mission concluded that '*Australia is not producing the right skills* as well as not producing enough skilled people' (1987: 118). The Mission's analysis points to three main causes: the education system, management practices and workforce attitudes. Education and business are offered a blunt appraisal of their performance and clear guidance for improvement. According to the report,

Australian firms spend very little on training and therefore depend on the tertiary education system as the main provider of skills... it is clear that the tertiary education system has to lift its game if Australia's skill base is to be improved. The most effective way of doing this is through forging closer links between education authorities and industry (ACTU/TDC, 1987: 119).

Blame is not directly levelled at workers or the broader community, but there are suggestions that attitudes needed to change:

Maximum available productivity and adaptation can only be achieved through a workforce that willingly and constantly commits itself to responsibility for production, quality control, innovation, growth, inventory control, reliability of delivery, responsiveness to consumer requirements, flexibility and to a life-time of upgrading and broadening their skills (ACTU/TDC, 1987: 136).

From the mid-1980s government and other stakeholders were considering 'standards-based' or 'competency-based' approaches for various reasons, such as the promotion of consistency of vocational qualifications between states. This was the main benefit of CBT identified by the Departments of Labour Advisory Committee (DOLAC, 1988) discussion paper. But the paper also notes that 'the frequent consultation between industry, TAFE and state training authorities which is central to a competency-based system ensures an apprentice training programme more directly relevant to industry needs' (1988: 7). In addition,

Competency-based trade training lends itself to the introduction of modularised training, which is particularly appropriate to industries undergoing rapid technological change. Modular courses based on specified skills and standards provide valuable flexibility in such situations; first, workers who need only certain skills can learn by doing only the relevant training modules, and secondly, there is a better opportunity to upgrade skills by doing additional modules beyond the basic trade level (DOLAC, 1988: 7-8).

Although this discussion paper confines itself to detailing a model of CBT for the trades, the Committee endorsed the Mission's recommendation that a competency-based approach be extended to all skilled occupations. This view of the scope of CBT was entrenched when Australian ministers of training finally mandated the competency approach in 1989.

Our argument that a governmental rather than a disciplinary analysis offers a more complete account of the effects of CBT over the two decades following this decision rests on an analysis of two transformations in Australian VET. These transformations – of the relationship between education and industry and of the relationship of the workforce to itself – can be understood as the eventual response to the situation facing the nation. In other words, to produce the right skills and in the right quantities, the education system and industry needed to be placed in a new relationship, with education made responsive to industry skill needs and flexible in provision, and industry made to articulate its skill needs and play an active role in satisfying them. For its part, the workforce needed to discover that its interests lay in developing itself, through committing to a life-time of skill upgrading and broadening. CBT proves to be the apparatus through which these transformations could be effected.

One of the ways CBT appeared on the horizon of government thinking was as a means to govern VET. The competency-based approach allows education and industry to be coupled in such a way as to ensure that development of the right skills necessarily becomes the focus of the system as a whole. CBT is uniquely suited to such a role because it can serve both as an indefinitely scalable register of skills *and* a form of curriculum. In the aspect of skills register, industry can articulate content of skills and standard of performance. In the aspect of curriculum form, VET institutions can readily convert values in the register into learning objectives and thus develop skills to the specification required by industry. For government, the mechanism of competency standards renders visible the knowledge which had circulated covertly in the practices of educators and businesses. With this new level of access to the knowledge required for national skill formation, the work of the educational and industrial components of the vocational education system could be studied directly without recourse to the self-serving mediation of business people and educators. Visibility of the knowledge and techniques of skill formation afforded by CBT gives government, with its repertoire of policy levers, an opportunity to regulate how many people with what skills are produced.

The second transformation relates to the goal of eliciting commitment to continuous skill development. In this part of our analysis we dwell on training reform as, among other things, Australia's attempt to mobilise the neo-liberal discourse and techniques of 'lifelong learning.' The need for a workforce that 'willingly and constantly commits itself to responsibility for production, quality control, innovation, growth, inventory control, reliability of delivery, responsiveness to consumer requirements, flexibility and to a life-time of upgrading and broadening their skills' (ACTU/TDC, 1987: 136) is a familiar refrain in the language of policy across neo-liberal nations in this period, and is one of the messages transmitted by the Mission and woven into the rationale for training reform in Australia. As indicated above, lifelong learning is also seen by some writers on governmentality as a powerful technology which coordinates self-government with the imperatives of the government of populations. Edwards (2003: 8), for example, views lifelong learning as 'part of a range of techniques for governing, part of the way in which conduct is conducted and subjectivity mobilised and ordered.' He adds that

Lifelong learning can be argued to play an influential role in catering for active selves and subjecting them to practices that attempt to instil flexibility and enterprise as desirable and desired ways of being. In developing lifelong learning, an aim is to fashion more flexible learners and workers, who themselves are more enterprising (Edwards, 2003: 8).

We suggest that CBT facilitates the penetration of this discourse into the Australian population in two basic ways: first, by developing and structuring knowledges which both make the flexible, enterprising subject visible and provide coordinates for a life of continuous skill development; and second, by furnishing techniques through which individuals recognise themselves as flexible, enterprising subjects and locate their place and possible trajectories with reference to the positions that became visible as industry increasingly articulated its needs in terms of competency standards.

Knowledge of the flexible, enterprising, lifelong learner was coded as a set of generic skills first called 'key competencies' and then 'employability skills'. These

competencies, such as 'planning and organising activities' and 'solving problems' (key competencies), 'initiative and enterprise' and 'self-management' (employability skills), are justified as useful for workers at all levels of skill and expertise and a foundation for moving 'flexibly' from one job role to another. The way these generic competencies are operationalised is by mandating that vocational competency standards should 'embed' generic competencies to the level appropriate to the particular competency and role. By threading the generic competencies through competency standards, it was expected that learners and workers would necessarily develop a profile consistent with the new kind of worker demanded by the future economic environment. Because these competencies articulate the worker-subject in its 'ethical substance' (Fejes, 2006: 18), their incorporation into competency standards constitutes a direct attempt to shape a particular subject, and this subject is precisely the flexible, enterprising individual constructed in the neoliberal discourse of lifelong learning.

The other way CBT deploys the knowledge of the lifelong learner is through the national system of competency standards. Competencies in Australian CBT neither stand alone nor are confined to interrelation only within sets aligned to particular occupations, but are coordinated in a vast matrix of skills potentially covering all skilled occupations and storied according to the sophistication of the skills and knowledge represented within them. This laterally and hierarchically structured matrix, which Hoeckel, Field, Justesen and Kim (2008) estimated extended to about 80 per cent of occupations in Australia, presents the flexible, enterprising lifelong learner with a way to determine the position they have already attained and a detailed catalogue of goals to inform the visualisation and projection of learning trajectories. The great skills matrix and its structuring principles guarantee that the motivation and freedom of the learner in the neoliberal state can be applied in a relevant and productive way.

It is the technique of 'recognition of prior learning' (RPL) which provides the means by which all Australian adult learners and workers can come to see themselves as lifelong learners of a particular kind (flexible, enterprising...), as already in possession of desirable skills, and as situated in a wealth of options for building upon them. RPL is central to the training reform version of CBT, and a morally powerful figure of thought that challenges the domination of institutionalised, formal vocational education. RPL is also a technique which has been subject to governmental analysis. For example, Andersson and Fejes (2005) analyse RPL in Sweden as a technique for the fabrication of the adult learner, identifying different types of subject constructed within different phases of policy discourse. In contemporary Swedish thinking about RPL,

The subject is constructed as being aware of the wide range of experience gathered in his/her lifetime. It is up to the subject to seek adult education guidance so that he/she can be measured and made aware of his/her knowledge and competencies....By opening up our inner desires in conversations with experts such as study counsellors, psychiatrists, doctors, etc., we get advice on which paths we can choose in our lives....In all this we have to choose, and in this way we are created as autonomous subjects. In the process of validation [RPL] you are also made aware of the fact that everything you do counts and can be subject to assessment/evaluation. This is a way of governing at a distance where no one tells you what to do. Instead, you make the decisions yourselves (Andersson and Fejes, 2005: 609).

The message in the Australian VET context is almost identical, although some of the arrangements are different. In Australia vocational educators are trained to assess against national competency standards, given responsibility for the validation of prior learning and dispense advice on further skill development. The virtue of the Australian incarnation of RPL is that advice about investing in further development is guaranteed to be aligned to industry needs.

As noted above, the CBT ushered in with training reform in Australia prioritises RPL over formal training. Indeed, formal training in whole qualifications is regarded as a costly last resort for those already in work, and is mainly the province of those entering or re-entering the workforce. For the bulk of Australian workers and learners, the RPL process tends to confirm and credential current competency, or reveal 'gaps' which are expected to be addressed through 'gap training' in which one or a few competency standards form the basis of instruction.

Our argument that CBT was governmentalised during training reform and that its operation as an apparatus of knowledge and power exceeds the conceptual scope of a disciplinary analysis is founded on the nature of these transformations. The modality of power and knowledge which Foucault identified in the mentalities circulating in modern states was not, as he pointed out, intent on the specification of individual behaviour. Rather, this modality was concerned with the 'conduct of conduct', and sought to render its effects at a distance. Knowledge of things 'at the level of their nature ... at the level of their effective reality' and the implementation of strategies which work 'on the basis of this reality, by trying to use it as a support and make it function, make its components function in relation to each other' (Foucault, 2007: 46–47) characterise governmentality. The transformations we have analysed deploy such knowledge and techniques. The rationale for the transformation of the relationship between education and industry is that the system of vocational education can only function effectively if educators know what industry needs are and if industry can represent them in a way that facilitates their satisfaction. CBT works here as a registration and translation mechanism, enabling the flow of information and services between the system components and placing in government hands the knowledge required to make the fine adjustments necessary to keep the system in tune with other systems in society. The rationale for the transformation of the workforce's relationship with itself is that the capacities and energies of learners and workers can be activated in a way that makes it more likely that individuals will understand themselves as potent contributors to their own prosperity. CBT works here as the vector for a particular knowledge of the self and by packaging the register of industry skill needs as a coordinate system allowing self-monitoring and visualisation of productive futures. By foregrounding RPL and assessment in the repertoire of competency-based educational techniques, the autonomy and responsibility of the subject is both heightened and reliably informed.

Conclusion

Dean (2010: 26) explains that 'the same activity can be regarded as a different form of practice depending on the mentalities that invest it' and we suggest that our case of 25 years of CBT chronicles such a transubstantiation of practices. The kind of practice analysed by Robinson (1993) and Edwards and Usher (1994) is

one invested by the disciplinary mentality. Close specification of skilled behaviour and its systematic development was the goal of the Croydon educators. The regime of assessment in the programme rendered the being of the apprentices visible to themselves and their trainers and helped to channel their behaviour into paths which led in a clearly defined manner to the portal of a trade to which they were consigned for a lifetime of routine practice. The freedom of the self-paced learning environment was a liberty, as Edwards and Usher (1994) point out, that is powerfully constrained. CBT at Croydon was a practice inspired by a pedagogical humanism but bound to a relatively rigid conception of the trajectory of the subject in the world of work. This hermetic practice was governed by educators who saw it as their duty to cultivate certain standards of workmanship despite industry with its uneven expectations and occasionally dubious practices.

At Croydon we witness the reinvestment of the 'activity' of CBT with different mentalities. Educators are asked to relinquish curriculum leadership and industry representatives are obliged to accept it. The educators see the vocational specificity of competency standards diluted as their formulation is taken over by agents allied to industry. They look on as economic imperatives encroach on their ideals of CBT, eventually undermining the principle of self-directed learning. What is less obvious perhaps is that this principle has been reinscribed at the level of the learner's lifelong learning project. The apprentices are no longer inserted in a tightly bound system with a limited yet certain pathway to employment, but rather are poised at the start of a journey during which they will be expected to take increasing interest in and control of its direction. CBT is less the form of an institutional experience watched over by the benign gaze of educators than the background order and methodology of a new kind of working life for which they are made responsible. For educators and learners alike, CBT becomes the harbinger of the governmentalisation of existence.

But the governmentalisation of CBT does not mean that the new practice is necessarily devoid of disciplinary effects. We saw that at a theoretical level, the knowledge and techniques of security (which are the primary concern of the arts of government) do not displace disciplinary systems, but rather that disciplinary form coexists and relates in various ways within the system of governmentality. We suggest that the educators in the new practice of CBT experience residual disciplinary effects. For example, a secondary effect of CBT which serves to stabilise the transformation of relationships between businesses and training providers can be seen in the institution of competency-based qualifications for educators and managers. These qualifications, for example the *Certificate IV in Assessment and Workplace Training* and the *Certificate IV in Frontline Management*, portray roles in the new order which reinforce the propriety of businesses and educators working together to promote national skill formation, and promulgate messages such as the need for training reform to raise skill levels and the need to conceptualise workplaces as sites of learning. For educators and managers, the vocational competency standards within these qualifications exert the disciplinary effect analysed by Edwards and Usher (1994), and help to account for the experiences of the educators described by Robinson (1993). At the same time, these qualifications position VET educators themselves as flexible, enterprising workers, casting them as subjects with the same substance as those they educate.

References

- Andersson, P. and Fejes, A. (2005) 'Recognition of prior learning as a technique for fabricating the adult learner: a genealogical analysis on Swedish adult education policy', *Journal of Education Policy*, 20(5), 595–613.
- ACTU/TDU (Australian Council of Trade Unions and Trade Development Council) (1987) *Australia reconstructed: ACTU/TDU Mission to Western Europe*. Canberra: Australian Government Printing Service.
- Ashworth, P. D. and Saxton, J. (1990) 'On "competence"', *Journal of Further and Higher Education*, 14(2), 3–25.
- Billett, S. and Hayes, S. (1999) 'Reform, changes and transformation: a commentary on the implementation and evolution of CBT', in S. Billett, et al. (eds.) *The CBT decade: Teaching for flexibility and adaptability*. Adelaide: National Centre for Vocational Education Research.
- Blank, W. E. (1982) *The competency-based approach to education and training*. Engelwood Cliffs, NJ: Prentice-Hall.
- Bull, H. (1985) 'The use of behavioural objectives – a moral issue?' *Journal of Further and Higher Education*, 9(3), 74–80.
- Clark, N. and Associates. (1986) *Standards-based trades training – a discussion paper*. Canberra: National Training Council.
- Dean, M. (2010) *Governmentality* (2nd edn). Los Angeles: SAGE.
- DOLAC (Departments of Labour Advisory Committee) (1988) *A discussion paper on competency-based trade training*. Canberra: Australian Government Publishing Service.
- Edwards, R. (2003) 'Ordering subjects: actor-networks and intellectual technologies in lifelong learning', *Studies in the Education of Adults*, 35(1), 54–69.
- Edwards, R. and Usher, R. (1994) 'Disciplining the subject: the power of competence', *Studies in the Education of Adults*, 26(1), 1–14.
- Elam, S. (1971) *Performance-based teacher education: what is the state of the art?* Washington D.C.: American Association of Colleges for Teacher Education.
- Fejes, A. (2006) *Constructing the adult learner – a governmentality analysis*. Linköping: LiU-tryck.
- Field, J. (1990) 'Competency and the pedagogy of labour', *Studies in the Education of Adults*, 23(1), 41–52.
- Foucault, M. (1991) *Discipline and punish*. Harmondsworth: Penguin Books.
- Foucault, M. (2007) *Security, territory, population*. Houndsmills: Palgrave Macmillan.
- Harris, R., Barnes, G., Haines, B. and Hobart, R. B. (1985) *CBVE or not to be? The design, implementation and evaluation of a competency based vocational education program in panelbeating at Croydon Park College of TAFE*. Adelaide: TAFE National Centre for Research and Development.
- Harris, R., Barnes, G., Haines, B., Hobart, R. B. and Candy, P. (1987) *Competency-based vocational education: a continuing evaluation*. Adelaide: TAFE National Centre for Research and Development.
- Harris, R. and Hodge, S. (2009) 'A quarter of a century of CBT: the vicissitudes of an idea', *International Journal of Training Research*, 7(2), 122–133.
- Hodge, S. (2009) 'A Foucauldian strategy in vocational education and training research', *Proceedings of the Foucault: 25 Years On Conference*. Adelaide: University of South Australia.
- Hoeckel, K., Field, S., Justesen, T.R. and Kim, M. (2008) *Learning for jobs*. Paris: OECD.
- Hyland, T. (1997) 'Reconsidering competence', *Journal of Philosophy of Education*, 31(3), 491–503.
- Kirby, P. (1985) *Report of the committee of inquiry into labour market programs*. Canberra: Australian Government Publishing Service.
- Moss, J., Jr. (1981) 'LCBE: limiting competency-based education (or) let's curb behavioural excesses', *Journal of Industrial Teacher Education*, 91(1), 14–18.
- Nicoll, K. and Fejes, A. (2008) 'Mobilizing Foucault in studies of lifelong learning', in A. Fejes and K. Nicoll (eds.) *Foucault and lifelong learning*. London: Routledge.

- Norton, R.E., Harrington, L.G. and Fardig, G.E. (1980) *Develop and implement a competency-based program*. Columbus, OH: National Center for Research in Vocational Education.
- Peters, M.A., Besley, A.C., Olssen, M., Maurer, S. and Weber, S. (eds.) (2009) *Governmentality studies in education*. Rotterdam: Sense Publishers.
- Robinson, P. (1993) 'The strange case of the béchamel sauce', in *Proceedings of the 1st International Conference on Post-compulsory Education and Training*. Brisbane: Griffith University.
- Smith, E. and Keating, J. (2003) *From training reform to training packages*. Tuggerah: Social Science Press.
- Tuxworth, E. (1989) 'Competence based education and training: background and origins', in J. W. Burke (ed.) *Competency based education and training*. London: RoutledgeFalmer.
- Wheelahan, L. (2008) 'Can learning outcomes be divorced from the process of learning? Or why training packages make very bad curriculum', in *Proceedings of the 11th Australian Vocational Education and Training Research Association (AVETRA) Conference*. Adelaide: AVETRA.

Copyright of Studies in the Education of Adults is the property of National Institute of Adult Continuing Education and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.