

Upskilling VET practitioners: technical currency or professional obsolescence?

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Abstract

Under the Federal Government's productivity agenda, there is a requirement for the VET sector to deliver up to 1.15 million VET course completions nationally over the next three years. A key factor in achieving this target is the capability of the VET workforce to deliver high quality teaching and learning. Keeping practitioner competencies current and avoiding professional obsolescence is therefore a key imperative for VET training providers and the industries they serve. Management of professional obsolescence, defined as the 'degree to which professionals lack the up-to-date knowledge and skills necessary to maintain effective performance in either their current or future work role', is the focus of this paper. The first of a three part NCVET-funded research project into the upskilling of VET practitioners and approaches to managing professional obsolescence, it investigates what professional obsolescence means in a VET context, the policy drivers and imperatives that make managing this important, current approaches and barriers to addressing the maintenance of vocational competency in the sector and the implications of this for policy and practice. Six case studies, or models, for addressing professional obsolescence in both knowledge-based organisations and professional associations across the fields of engineering, allied health and human resource management are also provided.

Introduction

Keeping VET practitioner competencies up-to-date is a key imperative for registered training organisations as they continue to be active agents in meeting the objectives of government, industry and individuals. Currently, Australian VET practitioners are confronted by a number of drivers to maintain their vocational competence. These include the Commonwealth Government's productivity agenda and push for higher skill levels, the Bradley Review's recommendations for a continuum between VET and higher education provision, workforce challenges associated with an ageing and increasingly casualised skills base, increasing demands for quality teaching, and preceding all of this, the regulatory requirements of the Australian Qualification Training Framework (AQTF). It has been argued for example, that the federal government's targets for increased employment, training and higher skill levels, and seamless and increased transitions between VET and university, cannot be achieved without attention and effort allocated to the capacity and skill level of the VET sector itself (Moodie 2010, Kelly et al 2009). In addition to this, VET practitioners are being asked to become more flexible, innovative and responsive in delivering customised and relevant training in increasingly competitive markets and to provide more work-based training and use new technologies. Going a step beyond explicit requirements for VET practitioner currency, as set out in the AQTF, such demands for quality teaching and industry

currency are impacted upon by the workforce challenges of an ageing and increasingly casualised VET workforce.

Although industry currency has been identified as the most significant requirement for VET practitioners, there is limited research in Australia that focuses explicitly on industry currency and how to maintain it (Productivity Commission 2010b, Toze & Tierney 2010, University of Ballarat 2009). There appears to be an implicit assumption that VET stakeholders understand what industry currency is and how it should be maintained, however research demonstrates that there is a variation of understanding about what constitutes industry currency, how to plan an industry currency strategy and how to measure and benchmark the strategy (Toze & Tierney, 2010). A growing body of research into the importance of industry currency and quality of the VET teaching workforce, together with the above government, sectoral and organisational drivers, clearly signal a need to look at models of developmental and regulatory processes for the maintenance of industry currency and up-skilling of VET practitioners.

Research purpose

The purpose of this study is to investigate professional obsolescence in the professions with a particular focus on nursing, human resources and civil engineering. These vocations were selected because they have strong connections to the VET sector, and professionals including delivering in VET within these areas are confronted by constant change and technological innovation in their working lives. The aim of the research is to examine the way that professional bodies and knowledge-based organisations actively manage obsolescence within their membership and workforce respectively. The objective is to identify and describe models of effective practice with potential applicability for practitioners in VET.

Research methods

A qualitative study, the first phase reported in this paper, included a review of the literature to explore issues with maintaining vocational currency. This review drew upon the extensive research into obsolescence in the professions, literature on organisational development and management practices around Continuing Professional Development and current drivers that make addressing this challenge critical.

An environmental scan of professional body websites was also undertaken to determine the role and strategies of professional bodies in developing and implementing professional standards and in supporting the career development of their members. While CPD in the broad fields of management, engineering and health were examined, a major focus was placed upon the approaches put in place for professionals working in the fields of nursing, human resources and engineering. Two professional bodies from each of the three industry areas (a total of six websites) were examined and the data obtained was collated under specific headings to provide a basis for comparative analysis.

Professional obsolescence: what the literature says

In a knowledge society, professionals are not operating in a constant environment, nor can they simply make use of what Jensen (2007, p.489) terms 'once obtain[ed] competence'. By its very nature, the work of professionals entails engaging with ideas and materials which are subject to ongoing change (Chaudhary & Agrawal, 1978). They are also required to 'keep up with dramatically changing networks and to engage in continuous learning and relearning' (Jensen, 2007, p.489). As a consequence, obsolescence is a constant issue in professional life.

The term *professional obsolescence* first appears in the literature in the 1960s (Ferdinand, 1966) and a range of research has been undertaken involving a range of professional domains since that period. Chauhan and Chauhan (2009, p.1) assert that most commonly obsolescence is seen to be about job performance in which there is a 'discrepancy between job performance and an expected level of competence which incorporates new knowledge being introduced into a profession'. It is described as an end product of a professional's inability to maintain effective performance due to a lack of current knowledge and skills (Kaufman 1974) or the gradual erosion of knowledge and skills overtime (Fossum, Arvey, Paradise & Robins, 1986). A more detailed definition is provided by Ferdinand (1966) who describes three forms of obsolescence, namely:

- professional obsolescence - which refers to professionals whose scope of technical competence does not encompass the furthest reaches of knowledge and technique that inform their discipline
- areal obsolescence – which refers to professionals' inadequate knowledge of their own speciality
- ex-officio obsolescence – which refers to a situation in which the individual's knowledge is inadequate as compared with the general body of knowledge that is relevant to the specific tasks he or she is required to perform (Ferdinand cited in Laufer 1987, p.10).

Causes of obsolescence

A series of interrelated factors contribute to the erosion of professional competence. First and foremost amongst these is technological innovation. Rapid advancements in technology make previously acquired knowledge and skills outmoded and ineffective. For example IT professionals are confronted by what has been variously described as *constant technical skill depletion* (Tsai, Compeau & Haggerty, 2007) and never-ending *competence-destroying innovation* (Ang & Slaughter, 2000). Obsolescence occurs when an individual does not have the aptitude or the ability to undertake the continuous learning needed to 'keep up to speed' with changes in the workplace. Alternatively it can be an outcome of individual denial of obsolescence, a lack of awareness of the presence of change or complacency about the need to develop new skills in an area of specialisation (Chauhan & Chauhan, 2009). In addition, a lack of confidence and/or resistance to change can influence an individual's approach to maintaining professional currency as can the fear of obsolescence itself (Tsai et al., 2007).

Job-related, relationship-oriented and systems-related factors can also impact on obsolescence (Chauhan & Chauhan, 2009). The first of these arises out of a disjuncture between the individual and the job that the professional is required to undertake. It may result from an individual's exclusion from decision-making processes or limited autonomy in determining how work might be undertaken. In the second case, a lack of support from a supervisor may discourage an individual from updating. Finally, obsolescence can be an outcome of ineffective organisational policies and practices that deter individuals from seeking to keep current. Poor performance appraisal processes, or lack of a system of rewards and recognition or structural barriers to promotion are a case in point.

The impact of obsolescence on the workplace can be quite significant. Individuals may demonstrate a reluctance to engage in technical problem-solving and their capacity to take up new ways of working becomes limited (Chauhan & Chauhan, 2009). Either unable to change or actively resisting change, these individuals are no longer sought out for their technical expertise and advice. This engenders a loss of self-esteem in the individual which has the potential to diminish not only the productivity of the work team but also that of the organisation.

Strategies for addressing obsolescence

A continued commitment to lifelong learning is critical in combating professional obsolescence. Inevitably, post-graduate qualifications and formal updating courses through professional bodies are presented as a major mechanism for maintaining currency. However, within the literature it is noted that the rapidity with which technology changes occur and new knowledge emerges means that learning cycles for some professionals have become shorter and shorter (Guttel, Konlechner, Kohlbacher & Haltmeyer, 2009). Emphasis therefore must not only be placed on the individual to accept responsibility for updating their skills, organisations must also work more actively to create environments which enable informal and incidental learning to flourish in the workplace (Guttel et al., 2009).

The literature suggests that there are a number of factors which are critical if updating activities are to be successful. These include getting the climate right for updating; adopting a strategic approach; encouraging collaborative learning; learning about practice, through practice, in practice; and updating for the here and now. A brief outline of each of these follows.

- *Getting the climate:* Updating requires an organisational climate in which management policies and practices are clearly supportive of and endorse continuous professional development, actively promote upskilling activities and reward those who engage in such activities (Pazy, 1996; Guttel et.al., 2009).
- *Adopting a strategic approach:* To combat obsolescence, organisations need to undertake a structured and ongoing evaluation of organisational capability to determine what expertise is critical to the maintenance of their competitive edge. Those professionals most likely to be impacted by the rapid emergence of new

knowledge are those on whom the updating emphasis must be placed (Harel & Conen, 1982).

- *Encouraging collaborative learning:* This involves the creation of a social environment within the organisation which not only actively encourages and supports updating but emphasises it as an obligatory activity that most likely will require individuals to engage in collaborative learning. Communities of practice, mentoring, coaching, peer review, peer consultation and the simple act of ‘rubbing shoulders with professionals who are truly immersed in their practice’ are seen to be effective mechanisms for stimulating further learning among individuals and groups (Kreiner, 2006, p.228).
- *Learning about practice, through practice, in practice:* The nature of work is influential in motivating individuals to update, particularly if the work that they are engaged in continues to be intellectually challenging (Trimmer, Blanton & Schambach, 1998). Work that stretches the individual, ie. project work and complex job assignments together with work that represents a distinct shift from the day-to-day routine, can be an effective mechanism for keeping individuals current and motivated to remain that way. This is a factor that needs to be taken into account with the allocation of work tasks and also requires individuals to be willing to take up increased responsibilities and challenges and associated learning that attaches to such tasks (Chauhan & Chauhan 2009).
- *Updating for the here and now:* Research undertaken by Pazy (1996, p.72), one of the leading researchers in the area, found that the current job being undertaken by an individual was ‘both a primary means and primary motive for updating’. Where learning strategies are specifically tailored to meet the needs of the current job role and are capable of being immediately applied in the workplace, the motivation and outcomes of the updating process were found to be most likely positive. CPD activities designed to counter obsolescence therefore need to be highly practical, relevant and designed to meet job-specific short-term objectives.

Challenges in addressing obsolescence

In their 2009 study of trainers in Queensland, Toze and Tierney provided an extensive list of structural or system barriers - barriers associated with industry and barriers that largely relate to the individual. The key impediments to VET practitioners maintaining their vocational currency are in many respects very similar to those identified in the literature on obsolescence in the professions.

Challenges that are not addressed in the Toze and Tierney (2009) study are career stage differentiation and dual professionalism, both of which have been covered extensively in the literature on obsolescence. With regard to the first of these challenges, Pazy (1990) in her study of professionals in Israel found that perceptions about updating vary markedly according to the stage at which professionals are in their careers. Those who were newly

graduated are still considered to be learning and therefore it is an appropriate and expected activity for them to be working on developing their expertise in an ongoing way. For those professionals more advanced in their careers, and more likely to have moved into management, however, the opportunities for updating tend to become markedly reduced. Underpinning this is the assumption that 'one was now expected to know more than to learn' (Pazy 1990, p.262).

Chauhan and Chauhan (2009) agree that the demands of management can often take professionals away from updating their technical knowledge and skills and suggest that professionals in management positions are most likely to be victims of professional obsolescence. As a consequence, their potential to provide technical advice and mentoring to others is likely to be considerably lessened, distancing them from discussions about and engagement with emerging innovations in the field. Given these findings, it is clear that dealing with obsolescence requires organisations to be much more aware of where people are in their careers when expecting them to keep abreast of new technologies or new ways of working.

Analysis of the environmental scan

Professional bodies and regulatory bodies in Australia and across the developed world aim to protect the public and advance professional practice by developing and maintaining professional standards and codes of behaviour that ensure continuing competent practice by industry professionals. These expectations and obligations are usually governed by some form of legislation (at a national or state/provincial level) and supported by a raft of professional standards, codes of behaviour and various by-laws of designated professional organisations.

The data considered for this analysis was obtained from the websites of six professional organisations that function at state/provincial, national and international level. The websites consulted were those directly relevant to the vocational areas identified as the focus of this research. They included:

- Australian Health Practitioner Regulation Agency (with reference to the Australian Nursing and Midwifery Council)
- College of Registered Nurses of British Columbia
- Australian Human Resources Institute
- Human Resources Professional Association (Canada)
- Engineers Australia
- Institution of Civil Engineers (UK)

The data was collated under specific headings designed to provide an overview of the role and purpose of professional bodies in regard to the development and maintenance of appropriate standards, policies and procedures to ensure *continuing currency* and ethical practice at all levels.

The aims and objectives stated by the various organisations were broadly similar and included: to advance professional practice in their specific discipline and promote the contribution of their profession in society; to champion professional and ethical conduct and encourage a culture of lifelong learning. In addition, all of these organisations sought to play a significant role in developing and maintaining competency standards and codes of practice and to develop ways to achieve *continuing competence* in the interests of the profession and the public.

The strategies employed to meet organisational objectives had many common elements. Most organisations provided access to ongoing education by facilitating a range of relevant accredited courses and training and providing members with detailed information about the requirements for professional registration within their discipline. Online information stipulates the requirements of the continuing professional development (CPD) policies at each level of practice and provides members with the ability to record their CPD online or direct members to the documents that will assist members to keep appropriate records for verifying requirements for continuing competence/registration.

The measures applied to verify continuing competence of professional members were also similar across the disciplines. All professional groups determined the minimum requirement for membership as the relevant accredited undergraduate degree or the equivalent knowledge and experience as assessed by the professional body. Various organisational policies determine the amount and types of professional development, CPD and other continuing education that is mandated for new graduates and for each level of experienced practitioner or specialist practitioners. All the evidence of compliance to the CPD policies must be documented and submitted for assessment or audit by the appropriate assessing body. Depending on the particular discipline, there is also an obligation to verify a minimum number of hours or months of practice over the previous three or five year period. In addition, nursing requires an ongoing process of self assessment, peer feedback and identification of areas for learning and skill development which are to be recorded and included in a personal learning plan.

For nursing, outputs are determined in terms of individuals achieving identified learning needs from reflective and peer-reviewed practice, formulating a learning plan based on those needs, completing the designated learning activities relevant to the area of practice and contributing to the development of others. This approach aligns well with the critical factors for updating previously outlined. Human resource management outputs are seen in terms of regulatory oversight but also in terms of building the profession's credibility, emphasising career development of members and increasing effective services for members. Engineering outputs tend to focus on career advancement for members via formal qualifications, experience, PD and CPD encouraging members to achieve Chartered Status, which indicates leadership in their field of practice and is the highest endorsement of professional engineering practice.

Desired outcomes across the groups include ensuring the highest possible standards of practice with a competent workforce, safe practice, increased numbers of practitioners

progressing their careers with consistent standards of ethical practice, commitment to lifelong learning and improvement of practice. The professions of nursing and engineering have official legislation that drive mandatory compliance to designated standards and codes of behaviour, however all professional bodies strive to achieve and maintain high standards of competence and continuing competence for practitioners to protect the public and also reputation of their profession.

Professional obsolescence or technical currency in VET?

What is clear from the literature on obsolescence in the professions, and analysis of the requirements set out by professional bodies, is that there are a range of approaches that could be adopted to maintain the vocational currency of practitioners in the VET sector. Access to industry is vital for practitioners and for individuals who are, or should be, members of professional bodies, CPD opportunities are readily accessible. More importantly, as Toze and Tierney (2009) suggest, many of the barriers that impede the maintenance of vocational currency can be overcome by careful planning and adoption of innovative approaches which offer informal and incidental learning opportunities within every practitioner's working environment. This entails organisations getting the climate right, adopting a strategic approach to maintaining currency; encouraging collaborative learning; learning about practice, through practice, in practice and facilitating updating for the here and now. It also requires individuals to accept responsibility for maintaining vocational currency. To actively facilitate this, there is a need to bring updating to the fore in performance management discussions and to entrench the concept of continuous learning in every initial teacher education program. This is where we can learn from the professions.

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