

Continuing education and training: Learning preferences of worker-learners to remain competent in their current jobs

Choy, S., Billett, S. & Kelly, A.

Griffith University, Brisbane

Abstract

Workers, world-wide, increasingly need to engage in continuing education and training to respond to changing workplace requirements, maintain and increase productivity, remain workplace competent (employable), and participate in longer work lives. Australian workers are no exception here. Yet, given that most of the current Australian tertiary education and training provisions largely focus on initial occupational preparation (i.e. entry-level training), these provisions may not adequately meet the kinds of learning needs of existing workers who need to build upon their initial occupational education and training, or transfer what they know to a new occupation. Therefore, the current focus may need broadening or transformation to better meet the learning needs of Australian workers who face continual change in the requirements for performance in their lengthening working lives.

A team of researchers from Griffith University is conducting a three year project, funded by the National Centre for Vocational Education Research, to review and appraise current provisions of tertiary education and training and to identify models of tertiary education and training provisions and related pedagogic practices that will be effective in responding to the growing educational project that comprises continuing

education and training. This paper reports how some worker-learners from the aged care industry prefer these provisions to be organised for their work and workplaces. As an example of a much larger corpus of data, it specifically draws on recently gathered data from semi-structured interviews and written responses from twenty-nine such workers in South East Queensland.

The tentative findings advanced here indicate a high preference for everyday learning through work individually, and assisted by other experienced workers and mentors or supervisors in the workplace. These early findings point to demands for a larger component of courses offered by tertiary education and training providers to be delivered at the work site, and for increased levels of on-site support for learning. The findings have implications for changes to policies and provisions for models of continuing education and training.

Conference theme: VET research and its relationship to policy formulation

Exigency for Continuing Education and Training

To remain globally competitive, Australian workplaces will constantly need to transform their processes, approaches and ways of working, requiring workers to respond appropriately to the changing demands in work practices. To support meeting such requirements, it then becomes necessary for workers to participate in continuing education and training (CET) provisions. This situation contrasts with past, and even some current, assumptions, that initial occupational training, such as learning in colleges or universities, on the job from an experienced worker or, more formally, such as through an apprenticeship, with occasional training of a short duration being used as a supplement, is sufficient for most workers' skill development over their working lifetime. The impetus for considering transformations to how CET might be organised and provided can be traced to a number of factors, including the changing pattern of need for occupations, requirements of those occupations, the changing character of workplace practices and engagement and the composition of workplaces (Billett, 2006). Certainly the expectations are that greater efficiencies and higher productivity and effective use will arise from individual workers regularly updating their knowledge and skills. Examples of new requirements are emerging technologies such as the sophisticated engine systems and tracking devices in the trucks that are used within the transport industry. It is imperative for the drivers of these vehicles to learn how to operate these features in an optimal manner. Another example is the need for workers to engage in CET in response to legislative stipulations such as those that apply in the aged care industry as well as the transport sector. Because such legislation is increasingly being addressed in response to the ageing of the Australian population, workers in this sector are required to participate regularly in CET to

maintain their knowledge and skill currency and obtain accreditation to conduct their work. These factors, which are particularly pertinent in the two industries that were the focus of the Griffith University study in 2011 (transport and aged care), exemplify the importance of the role of tertiary education and training (TET) providers in ensuring Australian workers constitute a viable, accredited and productive workforce. While both transport and aged care were being investigated, this paper reports findings from the aged care industry.

However, it is critical that provisions are appropriately designed for CET learners. Given that most of the current Australian tertiary education and training provisions largely focus on initial occupational preparation (i.e. entry-level training) and that much of the training not only occurs in educational institutions but is founded on what is suited to these institutions, as opposed to what might support learning in the workplace, it is possible that these current offerings are limited in adequately meeting the needs of Australians who are predominantly worker-learners. Hence, current TET provisions need to be appraised and, if they are shown to be inadequate, then additional models for, and approaches to, supporting a national provision of CET to better meet the needs of worker-learners need to be developed. This goal is the focus of the study on which this paper is based.

CET participants' diverse needs

Continuing education and training provisions serve a range of participants, including those who need to learn in response to changes at and for work. For instance, there are individuals who already have vocational qualifications, but are unemployed and need to update current skills or learn new ones to secure employment in an industry in which they have worked previously or in a totally new area. Then, there are those who

are employed but wish to progress in their career within the same field and, to effect this, they need to upgrade their knowledge, skills and qualifications. Other workers may need to become competent in their use of new technologies or meet legislative requirements for jobs through CET courses or programs. All these groups of learners might variously need to obtain a new qualification, complete a refresher course or training program, upskill their technical skills through self-directed learning, or engage in ‘over the shoulder learning’ (Kalantzis & Cope, 2008) with other workers. What is common among them is that many will likely already have varying levels of existing occupational knowledge and work experience and these serve as invaluable resources for their ongoing learning and that of co-workers. They and their co-workers also provide rich sources of expertise that is readily at hand within a workplace. So, to sustain their employability, Australian workers will have diverse educational needs that are required to be addressed by a national CET system.

CET provisions in prospect

Considering that existing workers’ intentions for CET are to advance current knowledge and competencies, and they are engaged daily in occupational practice, it is worth considering how that learning might be progressed within the context of their current work practices as well as being based and supported within educational institutions. That is, rather than assuming a course-based approach is both desirable and the most efficacious, to consider how they might also be embedded and intermingled (embodied with work activities as well as training in educational institutions), with a stronger emphasis on individuals’ learning than on their being taught. One reason for this position is that the interests of CET participants in learning may be less in the transmission of knowledge that others say they should learn, such as is common in entry level training, than in meeting more immediate, situated or

contextual goals (for example, when workers need to learn and know just enough to perform a task or respond to a problem at a particular time. Further, quite often they will engage more in social learning such as through observation and interaction with others around them (Merriam & Caffarella, 1991) than through the didactic presentation of information as provided by a teacher in a classroom-based setting in an educational institution. The workplace environment can potentially facilitate this learning very well. What they learn socially in the workplace is contextualised to the task being performed at the time rather than what is theoretically possible as may be the case in initial vocational training. Essentially, learning in the workplace becomes a process as well as a product and meanings are derived by the practice of the work community (Gheradhi, 2009) within the worksite. In this way learners construct their understandings to a level of sophistication that is influenced by the circumstances of practice (Jordan, 1989) and is appropriated to their particular workplace context. Workers may also participate in reflexive pedagogy where they elect to engage in dialogue until there is collective meaning making. Such reflexive pedagogy is not limited in learning based in educational institutions, as it arises through individuals' critical engagement in all kinds of circumstances. Kalantzis and Cope (2008, p. 211) describe the causal nature of learning in the workplace as 'endogenous' (intrinsic and arising from within) and sometimes termed 'informal learning'. However, this privileging of activities in educational institutions and their pedagogic worth stand contradicted by the evidence available of robust knowledge arising in diverse circumstances and the problem of the lack of transfer of knowledge secured in educational institutions which, by most measures, is held to be of a very low order. So, the considerations of how best to support rich (i.e. robust) learning should not be

constrained by informed and erroneous precepts advanced to promote experiences in educational settings over others.

Billett (2001) lists some ways that workers engage in learning in the workplace, guided by more experienced co-workers, which offers a different perspective on, and consideration of, provisions aligned with the circumstances of work. These are through modelling, coaching, scaffolding and fading. Mentors offer expert guidance which is recognised as a developmental tool (Vygotsky, 1978). Because these rich sources of learning are available in the workplace and learning there is authentic and can result in meaningful outcomes, it makes sense to draw on these and situate more of the CET within the workplace than in the educational institutions. Furthermore, as CET has a purpose in assisting individuals with their vocation— an important learning factor for individuals and their workplaces— it can best serve this purpose if what is learnt is embedded and embodied (Choy & Delahaye, 2009) into the work context. To achieve these goals, then, CET arrangements will need considerations of broader curriculum and pedagogies (support for learning) than those that are currently operating for entry level training. Therefore, there is a need to carefully and critically evaluate the alignment between the existing approaches to CET provisions within the Australian TET system and current and emerging workplace environments, workforce, and worker requirements. One approach to such evaluation is to seek learners' preferences for CET. This is important because, as Billett (2011a) argues, “it is students who make decisions about how they engage with what they are provided through educational programmes and experiences. This decision-making includes the degree of effort that they exercise when engaging with what they experience” (p. 221).

Learning preferences of aged care workers

The focus in this paper, then, is on worker-learners' preferences for CET provisions, to highlight factors that determine their preferences so that current arrangements could be modified to enhance success in their learning. The data presented are part of a wider set collected to systematically appraise how CET provisions might be best ordered, organised and enacted in both education and workplace settings. The project's objective is to identify how best the TET system (i.e. VET, ACE, higher education, learning in the workplace, as defined by NCVER) can sustain Australian workers' employability across lengthening working lives, and maximise their contributions to the settings in which they work, and, collectively, to the nation's productivity.

Participants

Twenty-nine aged care workers participated in face-to-face semi-structured interviews and responded to written questions containing tick boxes with items relating to how they learnt for their current job; current ways of learning to remain competent; their preferences for learning; and how they would prefer to be assisted for future learning. They were asked to tick more than one box to indicate the different ways they were learning or preferred to learn. The interviews were transcribed and then analysed using the NVivo software. The responses to tick boxes were analysed for frequencies using the SPSS software. Table 1 shows the locations of the workers, their gender, age, and modes of employment.

About two-thirds of the sample came from the Brisbane metropolitan area and the rest from regional areas in South East Queensland. A higher number of female workers reflect a normal trend in gender distribution in the aged care industry. Most workers (17) were aged between 20 and 50 years with either 5 or 6 interviewees in each of the

three groups of ten. Almost an equal number were employed in full-time and part-time modes. Their experiences in the sector ranged between 1 – 25 years.

Table 1 Workers’ region, gender, aged and modes of employment. (n=29)

		(n/%)
Region	Brisbane	19 (65.5)
	Qld regional	10 (34.5)
Gender	Male	4 (13.8)
	Female	25 (86.2)
Age	20-29	6 (20.7)
	30-39	5 (17.2)
	40-49	6 (20.7)
	50-59	5 (17.2)
	60-69	3 (10.3)
Full time		13 (44.5)
Part time		12 (41.4)
Casual		2 (6.9)

Over half had worked in their current jobs for between 1 – 5 years and rest had worked for between 6 – 40 years. The size of the workplaces where the workers were placed varied between 6 to over 200 employees. The most common qualifications held by the participants were a Vocational Certificate, Diploma or Advanced Diploma. Only a small number of workers (3) held an undergraduate or postgraduate qualification. A high percentage (69.9%) of participants indicated that courses and formal qualifications were essential or very important for developing their ability to do their job and obtain advancement or gain other jobs. This is not surprising because legislation for the aged care industry requires certain groups of workers to have formal qualifications for licensing purposes. While 72.4 % of the workers said that the decision to obtain a qualification was a personal choice, about a third (34.4%) stated

that their employers requested and supported training towards a qualification. Although all the workers participated in mandatory learning specifically designed to meet compliance and licensing requirements and often funded by the employer, not all learning necessarily led to a qualification.

Aged care workers' ways of learning and their preferences for CET

The sample indicated how they were currently learning and their preferred ways to learn to remain competent from a list of eleven choices provided by the research team. However, there was provision for them to add other ways that were not on the list. Their responses are presented in Figure 1.

There was a close alignment between how the workers were currently learning and how they preferred to learn. Three of these findings are noteworthy. First, the respondents indicated a strong preference for learning at work as opposed to going off-site for training. Second, they regularly learnt from other workers. Third, they showed preferences for learning in groups and for their learning to be facilitated by experienced workers in the workplace or by external facilitators. Provisions, such as individual training at work that is supported by an external provider, block release training off the worksite, apprenticeship type learning and all training done in external training organisations were less frequently used and less preferred ways of learning. Yet, these provisions are most common among what is offered by educational institutions whose main student base is enrolled for entry level training as opposed to CET.

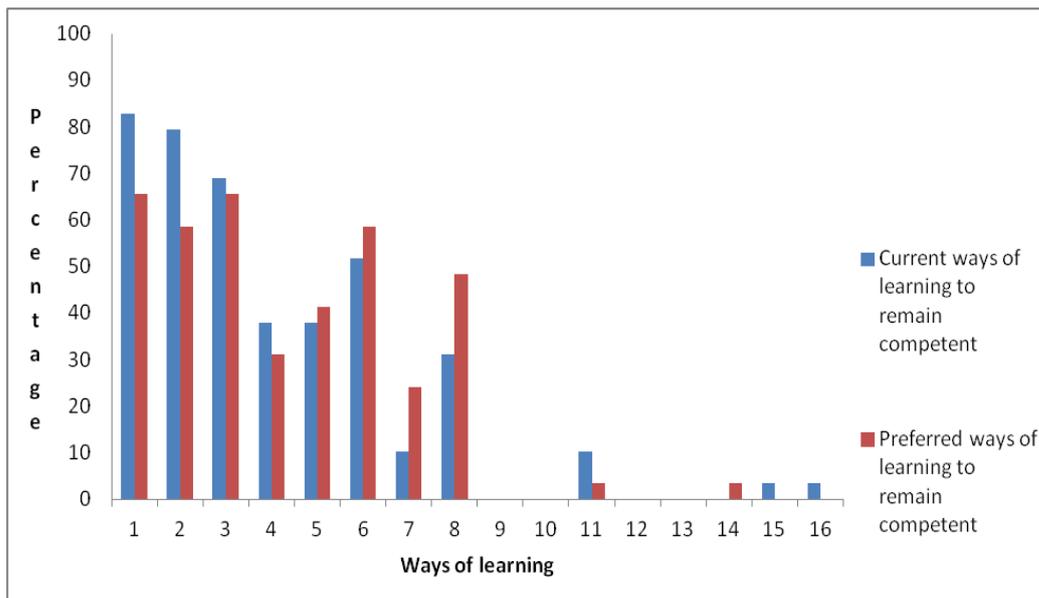


Figure 1 Frequencies on how the sample of aged care workers is currently learning to remain competent and their preferences for future learning. [1 = Everyday learning through work – individually; 2 = Everyday learning through work individually - assisted by other workers; 3 = Everyday learning + group training courses at work from employer; 4 = Everyday learning + training courses away from work (off-site); 5 = On-site learning with individual mentoring: one-to-one; 6 = Small group training at work – external provider; 7 = Individual training at work – external provider; 8 = Training at work + training away from work; 9 = Block release training off work-site; 10 = Apprenticeship-type learning; 11 = All training done in external training organisation; 12 = Conference, industry events, projects, workshops training by ATAA; 13 = Internal small groups; 14 = On-line learning; 15 = Personal involvement with people in need; 16 = TAFE]

According to the participants, there was something new to learn on a regular basis and, as explained by Brianna, the optimal way to acquire such learning was ‘on-the-job’

For this particular job, everything changes every day so, it – unless you're doing it on the job, there's no way of learning this position.

Her statement exemplifies the nature of everyday learning in the workplace and highlights two important points: the need to engage in on-going learning to maintain competencies that enable appropriate responses to constant changes; and the necessity for this learning to involve hands-on experiences. Brianna’s comment also reflects the situational nature of the job tasks that anticipate uncertain events. It highlights the

demand for constant learning in order to respond to changes. Therefore it is important to recognise such aspects of the workplace curriculum and to make available the types of pedagogical support that will facilitate and sustain continued learning. Importantly, learning provisions need to be embodied and embedded into the workplace curriculum (Choy & Delahaye, 2009) to benefit the learners as well as their workplaces and thereby serve as a balance between the types of learning that concentrate on meeting the outcomes of the workplace, and those that contribute to individual developmental needs and augment workers' career portfolios.

Because many of the job tasks of aged care workers are skill based, they need hands-on experience to learn and extend their repertoire of techniques. The preference for learning on the job is premised on accessibility to more experienced co-workers for guidance and support. Conveniently, the work arrangements and workplace cultures within the aged care industry facilitate accessibility. For instance since team work and rotations in different areas in aged care facilities are common practices and offer essential opportunities for workers to learn all aspects of service provisions, they are used to working alongside the other workers, including those with more experience who are useful agents for learning. The following quotation exemplifies this practice.

I have a buddy shift, somebody else teaching me and how to do things well
(Noela).

You learn from others' perspectives and experiences (Queenie).

Working in teams presents occasions for just-in-time and just-what-is-needed learning, often in the form of social learning as described by Merriam and Caffarella (1991). Workers interact with others and adopt better techniques that they observe others using and this makes learning a process as well as a product. They learn within

their circumstances of practice and make sense of what is learnt to suit ‘the way things are done in the worksite’ and within the context of their work. Meanings are negotiated through mutual engagement and participation by sharing a common language, familiar stories, symbols, jargons and concepts.

One other reason for the sample favouring learning in the workplace is to minimise, even avoid, time away from the worksite. For many, such absences from work may have financial implications unless they are paid to complete the training when away from work.

Developmental opportunities through modelling, coaching and mentoring are widely used (Billett, 2001) to provide guidance and practice to achieve strategic as well as task-specific outcomes. These ways of learning are often intentionally arranged for less experienced workers, for instance through a buddy system, as noted specifically by Noela in the quotation above. One of the other participants, Ivy, mentioned the important role that mentors play in extending novice workers’ ability to organise and conduct work to suit the organisational and cultural practices of particular workplaces. So, guided learning is not only valued, but is also common.

While the sample in this study did not discount learning that is organised through educational institutions, but preferred these to be fully funded by their employers, be delivered to small groups mainly at the worksite, and, importantly, facilitated by experts. They were also often associated with career progression, using certification to secure advancement. Moreover, there is strong preference for practice-based experiences with educational interventions. The workers’ key interests in learning

from educational institutions were in ‘new’, ‘best’, and ‘proper’ practices - things they could not easily learn through everyday work activities or from co-workers, and things that appraise current practices. Interestingly, they acknowledged that some of these interests were also met by learning from their industry suppliers. Elaborating on the provisions by educational institutions, the workers stipulated 2-4 hour workshops or 2 to 3 day sessions are best suited to minimise time away from work. They also noted that most of the learning from education institutions is embedded within certificate level courses, several forming the mandatory requirements for the job. With respect to on-line and computer based learning provisions by educational providers the sample did not show a preference for these forms of delivery. Traditional learning experiences with educational institutions such as *block release training off work-site, apprenticeship type learning, and all training done in external training organisations* were the least preferred options by the sample of aged care workers.

These findings place two specific demands for alternate arrangements to current provisions offered by education providers: first, provisions that are different from those organised for entry into employment (e.g. *Individual training at work that is supported by an external provider; block release training off the worksite; apprenticeship type learning; and all training done in external training organisations*) and, second, the more training that is situated in the workplace as opposed to campus-based training for existing workers engaged in continuing education and training. These two demands could easily be achieved through *Practice-based experiences with educational interventions*.

In addition to investigating aged care workers' preferences for ways of learning, the CET study also focused on the participants' preferred pedagogical practices for CET. These are discussed in the following section.

Pedagogical practices for CET

The workers were asked to indicate how they were being assisted in their learning for their current job and how they preferred to be assisted. Figure 2 shows the frequencies of responses to these questions.

The three most frequently reported pedagogical preferences were for *Working and sharing with another person on the job* (72.4%), *Group activities in a classroom, guided by a training or facilitator* (65.5%), and *Direct teaching by a workplace expert* (62.1%). The frequencies for the first two preferences support social learning that is based in the workplace and allows interactions with fellow workers. Interestingly, the workers participate in direct teaching in a group based in a classroom which is more teacher focused (item 1), but this is not highly preferred. They prefer group activities that are learner-focused and allow them to interact with each other, yet allow them to have access to a trainer or facilitator (Item 5). Current traditional pedagogical practices such as self-directed learning individually *-online, books, etc. (item 8) and learning in a classroom or online + applying the new learning in the workplace* (Item 9)—are common practices, but not necessarily preferred by many.

The responses on preferences for pedagogical practices are consistent with those for ways of learning. The preferences here emphasise learning from others, in groups and with guidance from more experienced co-workers. These findings have implications

for ways in which CET provisions need to be organised, both by workplaces as well as educational providers.

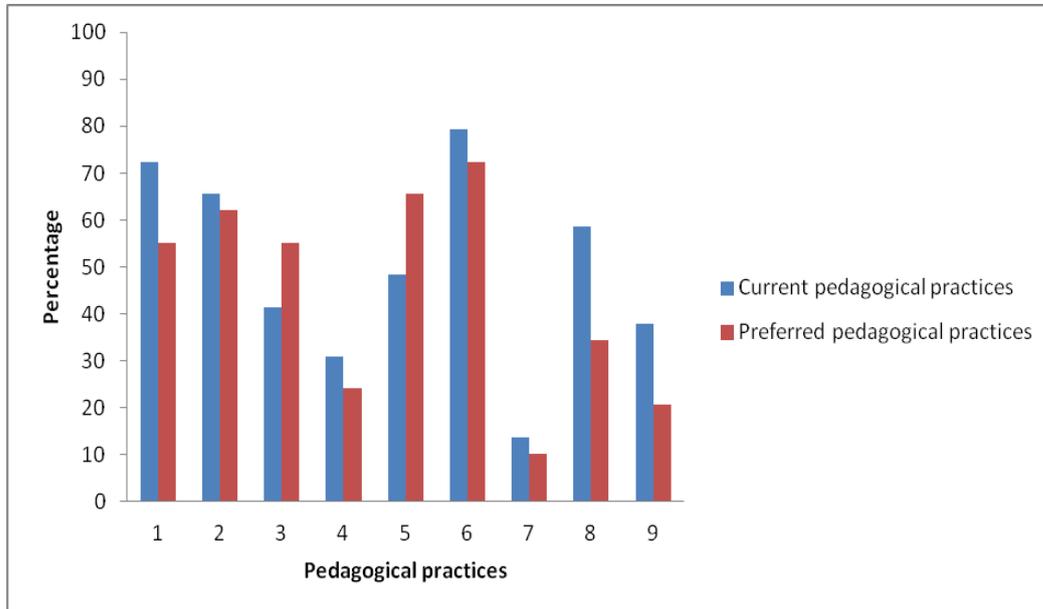


Figure 2 Frequencies for how aged care workers were being assisted in their learning for the current job and how they preferred to be assisted. [1 = Direct teaching in a group (e.g. a trainer in a classroom); 2 = Direct teaching by a workplace expert; 3 = Learning in a self-managed group in the workplace with a facilitator; 4 = Learning in a group in workplace without a facilitator; 5 = Group activities in a classroom, guided by a trainer or facilitator; 6 = Working and sharing with another person on the job; 7 = Learning totally online individually with trainer; 8 = Self-directed learning individually – online, books, etc.; 9 = Learning in a classroom or online + applying the new learning in the workplace.]

Implications for CET provisions

The initial findings of this project hint at preferences and practices that are quite different from those that comprise the orthodox provisions of tertiary educations. The main issues emerging from the expressed preferences of this initial and small sample are summarised in the following points which might be considered when appraising current models of CET:

- i) These workers seem to engage with CET to advance their existing knowledge and competencies; therefore CET provisions need to meet contemporary skills

and occupational needs for effective workplace and industry practices (i.e. to get and keep a job). For these reasons, maintaining the currency of industry knowledge and expertise is important for those providing CET as well as for workers who need to engage in learning to meet work and personal career aspirations. At the same time, these provisions will need to align with current and emerging legislative requirements and, where possible, offer opportunities for accreditation within the Australian Qualification Framework.

- ii) The initial findings point to the need for an extension and affordance of learning opportunities in the informants' workplaces. This will necessitate embedding and embodying learning experiences in the context of particular occupations and workplaces so that offerings by educational institutions are well integrated. It demands new ways of harnessing authentic learning provisions available in the workplace that require different forms of partnerships between employers and educational institutions. This change would be characterised by more purposeful workplace pedagogies that utilise the existing sets of internal expertise of co-workers as well as external experts.
- iii) CET participants already have some experience in learning and work, so it is imperative that the provisions concentrate more on their learning and less on their being taught. Therefore it is important that what is organised for them is inviting, engaging and purposeful. This is because worker learners are time jealous (Billett, 2011b) and they constantly assess the outcomes they will achieve for the effort and time they invest in learning. Moreover, it is they who often decide how they will respond to what is provided (Billett, 2011b). Hence, it becomes necessary to consider their preferences for ways CET is organised and the types of pedagogical support that is afforded.

- iv) Finally, it is imperative for workers to actively engage in CET to meet changing workplace requirements and transformations in the workforce. Therefore, it is important to foster their agency as learners to both develop their competencies and also facilitate learning for co-workers.

The findings presented in this paper offer opportunities for CET providers to recognise and utilise, first, the contributions that workplaces offer and, second, those of experienced workers who can assist fellow workers with learning, and cultivate and sustain an on-going learning culture within the workplace. The expressed preferences of aged care workers in this study call for an extension of current educational provisions that are primarily for entry level training and are inadequate for those engaging in continuing education and training.

References

- Billett, S. (2001). *Learning in the workplace: Strategies for effective practice*. Crows Nest, NSW: Allen & Unwin.
- Billett, S. (2006) *Work, change and workers*. Springer, Dordrecht, The Netherlands 1-4020-4643-x
- Billett, S. (2011a). *Vocational education. Purposes, traditions and prospects*. Dordrecht: Springer.
- Billett, S. (2011b). *Curriculum and pedagogic bases for effectively integrating practice-based experiences*. Sydney: Australian Learning and Teaching Council.
- Billett, S., Harteis, C., Etelapelto, A. [Eds] (2008). *Emerging perspectives of*

- workplace learning. Rotterdam: Sense Publishers.
- Choy, S. & Delahaye, B.L. (2009). *A sustainable model for university-industry learning partnership : Issues for universities*. In: Book of Abstracts for the ANZAM 2009 Conference, 1-4 December 2009, Southbank, Melbourne.
- Gherardi, S. (2009). Community of Practice or Practices of a Community? In S. Armstrong & C. Fukami (Eds.), *The Sage Handbook of Management Learning, Education, and Development*, (pp. 514-530). London: Sage.
- Jordan, B. (1989). Cosmopolitan obstetrics: Some insights from the training of traditional midwives. *Social Science and Medicine*, 28(9), 925-944.
- Kalatzis, M. And Cope, B. (2008). *New Learning. Elements of a science of education*. New York: Cambridge University Press.
- Merriam, S. and Cafarella, R. (1991). *Learning in Adulthood*. San Francisco: Jossey-Bass.
- Raelin, J.A. (2007). Toward an epistemology of practice. *Academy of Management Learning & Education*, 6(4), 495-519.
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.