

# Towards more effective continuing education and training for Australian workers

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This document should be attributed as Billett, S, Choy, S, Dymock, D, Smith, R, Henderson, A, Tyler, M & Kelly, A 2015, *Towards more effective continuing education and training for Australian workers*, NCVER, Adelaide.

COVER IMAGE: GETTY IMAGES/iStock

ISBN 978 1 925173 40 6

TD/TNC 122.15

Published by NCVER, ABN 87 007 967 311

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# About the research

## *Towards more effective continuing education and training for Australian workers*

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This report is the final report of a three-year program of research that aimed to investigate what might constitute an effective continuing education and training system. The premise behind the project is that the entry-level focus of the current education and training system may not address the ongoing needs of Australian workers. During the three-year program, the researchers proposed four models of continuing education and training with the potential to form the basis of an effective national system. These models are: wholly work-based; work-based with direct guidance; work-based with educational interventions; and wholly education institution-based. This final stage of the research, involving consultations with VET professionals and personnel from key agencies in the VET sector, sought to assess the suitability and sustainability of these four models.

## Key messages

- VET practitioners and managers saw value in the four models. However, they recognised that their success depended upon the models being: enacted in authentic work practices; directly benefiting the workplaces in which they are enacted; supporting improved teaching and learning practices; and enabling consistency around compliance and accreditation requirements.
- Senior personnel from three key agencies (one government and two peak bodies) acknowledged an increasing trend towards work-based learning and highlighted emerging issues. These include a tension between training for immediate skills versus obtaining accredited qualifications, a lack of flexibility by registered training organisations (RTOs) to undertake more training in workplaces due to cultural and cost factors, the need for accredited training to be an integral part of workforce development, and the influence of existing funding models in determining how training is provided rather than supporting what may be more effective.
- While some administrative and regulatory changes may be required, it was evident that a widespread learning culture is a key component in enabling effective continuing education and training. Changes across the training system that would support this focus include: support at the national policy level; greater involvement of employers; willingness on the part of training providers to develop and deliver training in new ways; support from managers and supervisors for different ways of learning; and positive worker engagement.

The authors argue that the overall findings of the project suggest that a broader concept of a national continuing education and training system is required, one that shifts the focus away from education organised by and through education institutions towards one that better encompasses workers' needs and workplace requirements. Acknowledgment, support and recognition of the value of work-based learning are fundamental to achieving this more holistic continuing education and training system.

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# Executive summary

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**A national approach to continuing education and training is emerging as a priority for the nation's vocational education and training (VET) system.**

This is the final report of a three-year research project that aimed to identify and evaluate the potential models and practices of learning support that might constitute a national approach to workers' continuing education and training. The identification of a national approach to continuing education and training is emerging as a priority for the nation's vocational education and training (VET) system because of changing work requirements, an ageing workforce and lengthening working lives. This research was motivated by a concern that entry-level training models may not best address workers' continuing education and training needs (see Billett et al. 2012a).

Previous reports on the project (Billett et al. 2012a, 2014) describe how a range of models and practices of continuing education and training were appraised and refined through interviews and surveys undertaken with 137 workers and 60 managers in five industries across four Australian states. This process led to the identification of four models of continuing education as being the most effective and which were preferred by workers and supervisors involved in learning within workplaces. These four models are: wholly work-based; work-based with direct guidance; work-based with educational interventions; and wholly education institution-based.

The final phase of the project involved a series of roundtable discussions, in which a total of 62 VET professionals (practitioners and managers) were asked to appraise the suitability and sustainability of the four proposed models of education and training from their perspectives. Consultations were also held with a number of senior representatives of three key national agencies concerned with training and workforce development: a central agency in the Australian Government department providing advice on the vocational education system and its contributions to workforce skills and productivity, and two peak national agencies for both the public and private provision of vocational education.

The purpose of this report is twofold: to report on the outcomes of the final consultations; and to present conclusions about continuing education and training models and practices that support workers' ongoing employability and workforce development. The report's conclusions also draw on the earlier phases of the project.

## VET professionals

The VET professionals' considerations of the four models focused on their potential effectiveness and sustainability, and the extent to which they:

- are enacted in authentic work practices

There was consensus about the necessity of the work-based experiences being part of continuing education and training provision. However, this consensus was qualified by a number of caveats, such as the size of the workplace (for example, larger workplaces providing better support), opportunities for learning (for example, effective organisation of learning experiences) and workplace capacity to assist workers' learning (for example, presence of experienced mentors, coaches etc.).

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**VET professionals also identified the means by which a workplace-oriented continuing education and training system would be effective and sustainable.**

- directly benefit the workplaces in which they are enacted

The benefits to enterprises from workplace-oriented continuing education and training provision were identified as comprising: less downtime and need to ‘backfill’ staff; better utilisation of existing staff through mentoring and other forms of local support; and the ability to prioritise, target and customise training specific to immediate enterprise needs.

- support improved teaching and learning practices

All models were held to offer a means of ‘modernising’ VET practices, which could improve both workers’ skills development and also extend VET practitioners’ pedagogic skills.

- enable VET system needs such as compliance and accreditation requirements

The VET professionals’ proposal that ensuring compliance and accreditation requirements are met is central to the effectiveness of continuing education and training. They suggested that the education institution-based models (that is, work-based with educational interventions and wholly education institution-based) were most aligned with meeting compliance and accreditation requirements, with the wholly work-based model being least aligned with these requirements. Although the work-based with educational interventions model was preferred and the one that is most closely aligned with their current practice, this choice does not always accord with the preferences of workers and managers, whose preferred model of training depended on the desired outcomes (as reported in Billett et al. 2014).

VET professionals also identified the means by which a workplace-oriented continuing education and training system would be effective and sustainable. They proposed that workplace personnel needed to: develop a learning culture in which learning is valued; plan and finance continuing education and training as part of their business plans; and generate capacities that will avoid their reliance on registered training organisations (RTOs) for advice about continuing education and training, and its implementation. These informants also suggested that VET professionals need to further develop their understanding of, and skills for enacting, continuing education and training in workplaces and support workplaces with their provision of continuing education and training. These dual goals could be realised through building and sustaining effective partnerships between training organisations and workplaces (Billett & Seddon 2004).

## Key agencies

Consultations with the three key national agencies identified four issues: a tension between training for immediate skill needs and obtaining accredited qualifications; a lack of flexibility in registered training organisations to implement continuing education and training provision in workplaces due to RTOs’ established cultures and cost factors; the need for continuing education and training (through RTOs) to be an integral part of workforce and organisational development; and the influence of existing funding models in determining how training is provided rather than taking account of what is educationally effective.

Although holding diverse views about whether funding was the key barrier to more flexible continuing education and training provision, the agencies generally agreed that

inflexibility in the practices of registered training organisations contributes to their lack of responsiveness to changing requirements. Nevertheless, the challenges were recognised as being very demanding for registered training organisations that tailor continuing education and training provision for specific purposes and workplaces while accommodating the requirements for nationally accredited training.

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**The development of an effective continuing education and training system may require cultural change across the training system.**

## Conclusions: effective provision of continuing education and training

A broad conclusion from all phases of the study is that an effective model of national continuing education and training provision needs to include and accommodate learning experiences in both work and educational settings. Yet, depending upon whether individuals are learning a new occupation or developing a specialisation, engaged in responding to workplace-specific requirements or seeking to change occupations, these needs will be met through distinct models. Developing new occupational capacities, for example, may require structured arrangements across the two settings. Ongoing occupational development, however, may be best addressed in and through work activities. Nevertheless, employees seeking to enter a new occupation or gain advancement in ways not accommodated by their workplaces may need an education institution-based option; hence, while work-based options remain a preferred feature, the other models offer necessary continuing education and training pathways.

Given the emphasis on initial occupational preparation in the nation's vocational education system, the development of an effective continuing education and training system may require cultural change across the training system. Moreover, developing a widespread, well understood and accepted 'learning culture' in Australian workplaces, with the aim of progressing effective continuing education and training, will also require changes.

## Key findings from the three-year project

The four models identified and appraised through this research offer a platform for stakeholders to design, implement and evaluate the provision of continuing education and training. Continuing education and training is a key component of the national vocational education system, one that addresses individual, workplace and workforce development goals. However, its potential and purposes need to be clearly understood, and its provision supported appropriately to achieve these goals across a range of educational and work settings.

### *Implications for government*

- To bring about cultural change associated with continuing education, governments at national and state levels need to promote its importance, highlight the breadth of its provision and adopt policy and educational procedures that are amenable to circumstances whereby individuals learn across their working lives. Most notably, accreditation and regulatory arrangements that can accommodate, support and certify learning in and through work are necessary.
- Regulatory, administrative and financing processes need to be flexible enough to accommodate the range of purposes for continuing education and training and the circumstances in which learning is enacted (for example, in workplaces).

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**Workplaces are identified as sites with great potential for maintaining and enhancing workforce skills.**

### *Implications for educational systems and educators*

- The flexibility of registered training organisations' systems and processes and the ability of their staff to implement approaches for delivering continuing education and training influence the extent to which continuing education and training can be effectively enacted to meet worker–learners' and employers' needs.
- Educators in registered training organisations need to adapt their curriculum and instructional capacities to the conditions and requirements of Australian workplaces.

### *Implications for workplaces*

- Workplaces are identified as sites with great potential for maintaining and enhancing workforce skills. In most instances, this ongoing learning is best supported and guided through engagement in work tasks, given that their context and activities involve authentic activities and subsequent monitoring of what is learned.
- Workers, their managers and supervisors all have key roles in enhancing the effectiveness of continuing education and training provision in work settings, and these individuals need to be supported and guided accordingly.

Key areas for further development include the implementation of the four models in ways that address particular workplace goals and circumstances while meeting individuals' readiness and goals for continued learning across their working lives.

### How to enable more effective continuing education and training

The findings of the research provide an opportunity to reassess how the ongoing learning and training needs of Australian workers are currently met, with a view to making continuing education and training a more integral part of the nation's workforce development strategy. Suggestions for the future include:

- encouraging and supporting workers to recognise, value and participate optimally in work-based learning experiences
- developing mature partnerships between registered training organisations and workplaces that support workforce development and workplace-based activities for ongoing work-related learning
- preparing and supporting workplace managers and supervisors to be effective in their roles as training managers, mentors and coaches, and in negotiating appropriate training and certification
- assisting VET practitioners to develop the capacities to promote, guide, assess and certify learning in workplace settings
- developing national policies and regulations to accommodate the diverse purposes, practices and settings of continuing education and training
- implementing administrative and funding models that are sympathetic to and supportive of a broad-based and encompassing continuing education and training system.



# Background

This is the final report of a three-year research project whose aim was to identify and evaluate potential models and processes of learning support that might constitute a national approach to continuing education and training. Continuing education and training is an emerging priority for the nation's vocational education and training system in the light of such changes as new work requirements and practices, an ageing workforce and lengthening working lives. This research was motivated by a concern that the existing models of delivery for entry-level training may not be wholly appropriate for achieving the aims of continuing education and training (see Billett et al. 2012a). This concern is shared by global agencies (OECD 2012) and governments across many countries, where concerns extend to considerations of how VET systems might change to offer more effective experiences (CEDEFOP 2009). Included in discussions of the provision of continuing education and training are the VET programs offered through registered training organisations and other education institutions, as well as deliberate workplace learning experiences and individuals' learning through their work independently or with others. In addressing these issues, the project was shaped by the following research question:

- What models and practices of continuing tertiary education and training can best meet workplace demands and sustain Australian workers' ongoing occupational competence and employability across their working lives?

It was further informed by two sub-questions:

- What models and practices can support on-the-job learning and allow workers to acquire the kinds of experiences and expertise that are valued by industry?
- How best can workers be prepared as active learners to engage in productive learning in the workplace and meet the skill demands of industry?

For the purpose of this project, the different sets of experiences that comprise the various types of continuing education and training provision termed 'models'. These models include wholly work-based, work-based with direct guidance, work-based with educational interventions, wholly education institution-based. They follow conceptions used in appraisals of entry-level provision of vocational education (Choy et al. 2008). The models, along with practices supporting learning across individuals' working lives, are the central focus here. It was also anticipated that an emphasis on individuals directing their own learning in ways that meet their needs is likely to be central to effective provision of continuing education and training.

During the first two phases of the project, in 2011 and 2012, data were collected from a total of almost 200 workers and managers in six different industries across four states through interviews and questionnaires. For details of the processes, findings and conclusions from these two phases, see Billett et al. (2012a, 2014).

From the data obtained in Phases 1 and 2, four models were identified as the bases of an effective platform for continuing education and training. In Phase 3 of the project, the efficacy of these four models was evaluated through consultations with education and training providers and policy-makers in vocational education and training.

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**Emphasis on individuals directing their own learning in ways that meet their needs is likely to be central to effective provision of continuing education and training.**

The two sub-sections below provide summaries of how the continuing education and training models were generated, evaluated and refined in Phases 1 and 2 of the project. These summaries are followed by a section entitled ‘Appraisal of models and scenarios’, on the consultations and findings from Phase 3, which was undertaken in 2013. The final section, ‘Making continuing education and training in Australia more effective’, proposes that these models contain foundational elements of a national continuing education and training system and offers key messages, suggesting ways forward for sustaining workers’ competence and employability throughout their working lives.

## Phase 1: Generation of models and practices

In Phase 1 of the project, 51 workers and 26 managers from the transport and logistics, and health and community services industries in Queensland were asked to detail their continuing education and training experiences, and preferences through interview and survey (see Billett et al. 2012a). Models of continuing education and training across these sectors were identified. Initially, nine broad curriculum models were identified. They represented variations of three kinds of support for learning and comprised those wholly in the workplace; a combination of work and educational intervention; and wholly in education/training institutions, as shown below:

- wholly work-based experiences (individually)
- work-based structured experiences (for example, acting up, rotational)
- work-based experiences with direct guidance (for example, shadowing, mentoring)
- opportunity-based experiences (that is, as work commitments permit)
- work-based experiences with educational interventions (for example, action research, project work)
- sandwich/block release experiences (for example, significant period of time spent in the workplace midway through or at the end of an educational program)
- structured dual experiences (for example, cadetship, apprenticeships)
- structured experiences in educational programs
- wholly education institution-based experiences.

A set of eight specific practices for supporting continuing education were identified through the curriculum models as securing the kinds of learning required for sustaining employability. These practices are:

- individuals learning independently (for example, engaging in work, individual projects, tertiary/higher education studies)
- taught and guided processes in workplace (for example, expert–novice mentoring, coaching, guided workplace learning)
- self-managed and directed group processes (for example, peer learning, coursework provision, learning circles)
- facilitated/expert-guided group processes (for example, group-facilitated discussion, learning circles)

- integration of experiences in practice and education settings (that is, before, during, after)
- facilitated collaborative processes in educational programs (for example, group work, projects, inter-professional working)
- tutorial processes (for example, face-to-face, distance)
- didactic teaching (for example, lecture, webcast)

Full descriptions of each model and practice can be found in tables 1 and 2 of the support document.

A consideration of these models of curriculum and support practices also enabled the worker informants to make judgments about the relative effectiveness of their continuing education and training experiences.

Overall, the findings of Phase 1, conducted across 2011, identified a strong reliance on and preference for the kinds of learning experiences that were enacted in workplaces and during work, and which enabled informants to work alone, with colleagues and be supported by experts (as judged by the workers), who both facilitated and guided their ongoing learning. Of the nine curriculum models and eight practices that supported learning, three curriculum models were most frequently reported as being effective: work-based experiences with direct guidance (for example, shadowing, mentoring); opportunity-based learning experiences (that is, as work events permit); and work-based experiences with educational interventions (for example, work-based practice and training). The most common ways of supporting learning were: allowing individuals to work and learn alone; one-on-one guidance (for example, expert–novice; peer sharing); facilitated/expert-guided group processes; and integrating experiences delivered in practice and education settings. These models and practices are shown in table 3 of the support document.

The findings from Phase 1 led to the initial conclusion that supporting learning for the sustained competence and employability development of Australian workers is perceived as most effective when accomplished through models of continuing education and training that include workplace experiences and which are directly supported by experienced others. Also integral to this process is individualised support that acknowledges, encourages and values workers' engagement as effective interdependent learners (that is, their ability to engage with others and to learn work tasks).

## Phase 2: Refining models and strategies

The project's second phase, undertaken in 2012, verified and extended the earlier findings by engaging with a larger and wider informant base (see Billett et al. 2014). Data were gathered through on-site semi-structured interviews and a short survey of 86 workers and 34 managers from: mining, services/hospitality, and financial services, and again from health and community services from another state. The sites for these interviews were metropolitan and regional locations in Western Australia, Victoria, New South Wales and Queensland. Each group of informants reported similar preferences, but there were differences in their purposes for continuing education and training, which emphasised particular preferences for models and practices for supporting learning. For instance, managers were primarily concerned with achieving workplace goals and were

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**Managers were primarily concerned with achieving workplace goals and were more likely to see training programs as a means of achieving them.**

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**An effective national provision of continuing education and training needs to be premised on experiences in workplaces and education institutions, and through learning individually.**

more likely to see training programs as a means of achieving them. On the other hand, workers' preferences were more typically directed to workplace experiences, except when their goals for continuing education and training could not be realised through workplace-based models.

Utilising refined research instruments, this phase of the project identified four models that might constitute foundational provision for a system of continuing education and training for the purposes of sustaining workers' ongoing development and employability. These are:

- *work-based experiences with direct guidance*: 'hands-on' practice-based learning experiences under direct one-on-one guidance and instructions by experts and other co-workers
- *work-based experiences with 'educational' interventions*: 'interventions' refer to both in-house and external trainers from registered training organisations offering accredited qualifications if needed
- *wholly work-based experiences*: being able to work individually and learn further by applying skills to new and ongoing tasks
- *wholly education institution-based experiences*: essential for learning and certification that cannot be realised through workplace-based experiences.

Within these four models, workers' learning was found to be best supported in three ways:

- taught and guided processes in workplaces: expert-directed instruction and guidance, but hands-on, and preferably in workplaces
- facilitated/expert-guided group processes: small groups that support information sharing, learning and working together
- individuals working alone: individuals need to be supported when working and learning alone through access to expertise and necessary information when clarification is required.

The analysis of the Phase 2 data suggests an effective national provision of continuing education and training needs to be premised on experiences in workplaces and education institutions, and through learning individually from peers, supervisors and other 'experts'. For the third and final phase, these elements were combined into a typology of the four predominant models of continuing education and training (see table 1). The three support practices are closely related to how the four models operate, so have been incorporated into the models. In table 1, the models have been reordered to provide what might be seen as a continuum of provision. A brief explanation is added to each. (Fuller descriptions are provided in the support document.)

**Table 1 Models of continuing education and training**

Model	Summary description
Wholly work-based experiences (i.e. on-the-job)	Learning across working life through on-the-job experiences, in the course of everyday work activities and interactions, learning on one's own or indirectly, and/or supported by more experienced co-workers.
Work-based experiences with direct guidance (e.g. mentoring, demonstrating)	Individuals' learning at work supported by the direct guidance, or mentoring of more experienced co-workers or supervisors through joint work activities and engaging in supported activities for learning that cannot be acquired without the assistance and demonstration of more experienced workers.
Work-based experiences with educational interventions (e.g. applying classroom-taught theory to workplace activities; action learning, project work)	A process of learning which combines learning undertaken through workplace activities and interactions supported by expert input from trainers either on or off site, or using projects, such as in action learning, to extend this learning and enhance practice aspects of work. The learning is often accredited and leads to certification.
Wholly education institution-based experiences	Some continuing education and training is through programs based in education institutions or offered online by those institutions. The experiences provide the kinds of learning individuals require for specific goals, such as changing occupations or developing new skills, which cannot be learnt through current work.

Together, these four models offer a platform of ways by which learning experiences can be provided to support the ongoing employability of workers and workforce development in enterprises. For example, the workplace wanting to introduce a new practice might opt for a training course, while individuals seeking new careers or advancement in their occupational hierarchy might enrol in an education course. Yet, much of workers' learning to sustain their employability will probably be enacted in and through their work, sometimes working alone, sometimes supported by other workers, supervisors and trainers. There are also instances when educators from registered training organisations will deliver training and conduct assessments directly in the workplace. Each model has its own particular use for sustaining workers' employability, depending upon the kinds of outcomes to be achieved, and the circumstances through which they are to be achieved and at particular occasions in their working lives.

To further explore the circumstances in which these models collectively and individually might be most effective, a series of consultations was undertaken in Phase 3 of the project with a range of VET practitioners and representatives of key national agencies. This process and the outcomes are described in the next section.



# Appraisal of models and scenarios

The purpose of Phase 3 of the research, undertaken in 2013, was to appraise the efficacy of the four continuing education and training models in supporting and sustaining employability across working lives. Four questions guided the data collection, analysis and reporting for this phase:

- What is the place and role of tertiary education and training in effectively engaging Australian workers in learning throughout their working lives?
- What are the curriculum and pedagogic implications for tertiary education and training providers from these models and approaches to continuing tertiary education and training, including in workplaces and considering industry and employer expectations about workforce development?
- What learner support is needed and in what different ways across working life and how will it affect external and workplace trainers?
- What policy and practice issues need to be dealt with in any development of a partnership between tertiary education and training providers, and industry in securing the effective implementation of these models and approaches?

To address these questions, two sets of consultations were undertaken. Firstly, roundtable discussions were conducted with a range of VET professionals, using scenarios developed for this purpose. Secondly, selected executive personnel from key workforce development and training agencies were interviewed. A summary of the responses to the consultations and interviews are presented below, followed by a discussion of the implications for continuing education and training. (The respective responses from these two cohorts of informants were de-identified to preserve confidentiality.)

## Consultations with VET professionals

In the roundtable discussions, the VET professionals were asked to review the four models in the light of their experiences as managers and practitioners of continuing education and training programs. To ground the four models in practice and to stimulate discussion, a scenario was developed for each model, based on its key features. Four tentative scenarios were pilot-tested with two groups of VET teachers and administrators: one in Brisbane and one in the Gold Coast, totalling 39 participants. After consequent refinement of the scenarios, consultations were conducted with VET professionals at five locations: three in the capital cities of Melbourne, Adelaide and Brisbane, and two in regional centres of Kyabram in Victoria, and Gladstone in Queensland. At each location, a locally-based continuing education and training professional facilitated access to prospective participants by either sending invitations directly or providing contact details of potential participants. In all, 62 VET professionals participated in the roundtable discussions across the five sites. The majority comprised those in a training or training management role in both private and public registered training organisations; there were also representatives from industry, as well as from the adult and community education sector. Each participant received a brochure outlining

the project and briefly describing the four models, together with a leaflet detailing the scenarios (see support document). These roundtable discussions usually lasted about three hours and included structured opportunities for presenting and discussing responses.

For each scenario, participants were asked to respond to the same three questions:

- In what ways is this an effective and sustainable model of continuing education and training for your industry or discipline (for example, hospitality, finance, construction)?
- What do different stakeholders need to do to make this model effective in continuing education and training provisions?
- What changes are required to the broader education and training system to more effectively support this model?

The analyses of the responses to those questions in relation to the four models are summarised below.

## Effectiveness and sustainability

Four criteria were evident in the VET professionals' considerations of the models' effectiveness and sustainability. These were the extent to which the models: are enacted in authentic work practices; directly benefit the workplaces in which they are enacted; support improved teaching and learning practices; and enable systemic consistency by addressing compliance and accreditation requirements. First, although the practice of continuing education and training in workplaces or authentic work activities was considered to be important, interpretations of what constitutes authentic work activities ranged from simulation (for Model 4), through to fully learning on the job (for Model 1). General agreement on the importance of work experiences being utilised and integrated into continuing education and training was also qualified by a range of conditions, including workplace size, task sequencing for learning, and worker capacities to assist others to learn.

Second, all four models were supported as potentially securing workplace benefits that ranged from training being more cost-effective through to ensuring staff loyalty and greater capacity to plan and advance business development. The cost efficiencies identified by these practitioners included: less downtime and a reduced need to 'backfill' staff; better utilisation of existing staff through mentoring and other support approaches; the ability to prioritise, target and customise training specific to immediate needs; securing more qualified trainers; and supporting succession planning. The broader benefits included sharing the demands made of industry through sharing the responsibility for training, promoting learning cultures at individual and organisational levels, and improving responses to industry needs.

Third, all four models were considered strong bases for improving teaching practices that could bolster both the skills development of workers, and the pedagogic and management skills development of VET practitioners. These dual outcomes were expressed in terms of VET practitioners' considering their contributions as professionals working within the models to enhance learners' outcomes.

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**Interpretations of what constitutes authentic work activities ranged from simulation through to fully learning on the job.**

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**Work-based with educational interventions was generally accepted by the VET practitioners as the preferred model.**

Finally, enabling compliance and accreditation requirements to be met were proposed by the VET professionals as being central to the effectiveness of continuing education and training. Models 3 and 4 were considered to be most effective in securing the kinds of learning experiences that could lead to and satisfy the regulatory requirements of national industry skills councils and workplace compliance. These requirements ranged from licensing individual workers through to broadly supporting industry skills pathways and national workforce development agenda.

The four themes identified by the VET professionals indicate an acceptance and understanding of all four models as being potentially effective and with the capacity to augment the kinds of teaching and learning practices and priorities the models bring to continuing education and training. This desire for enhancing existing practices was summed up by one regional group: 'We all agree that improvement is needed across the board'.

Some reservations specific to the sustainability of particular models were also expressed. For example, Model 1 (that is, wholly practice-based experiences) generally prompted caution by some VET practitioners who perceived it to be ineffective on its own, as exemplified by the comment from a metropolitan group:

It's effective because it passes on the knowledge required to do the job and that's what VET training is all about. But, if you were looking at it from more of a structured learning perspective it lacks a lot of the benefits of a formal or structured learning pathway.

Nevertheless, another metropolitan group stated that: 'it could be sustainable if it's done in-house and, therefore, requires some sort of licensing, so if it's ongoing, perhaps in that case it is sustainable'. The practices of mentoring and buddying, specific to Model 2 (that is, practice-based with direct guidance), were prominent in examples quoted by the VET professionals, and this direct guidance was held to be most effective when trained and willing experts acted in mentor roles that were supported by workplaces. In this regard, one metropolitan group offered the caveat that for Model 2 to be effective and sustainable there is a need for 'expertise, accessibility, capacity to train, time, and transferable skills'. Model 3 (that is, work-based with educational interventions) was generally accepted by the VET practitioners as the preferred model, which is not surprising given it is the model that most closely aligns with their current educational practice. Model 4 (that is, wholly education institution-based experiences) was noted as enabling individual workers to identify and pursue their own interests and aspirations and so was seen as requiring individuals to become more proactive and take more responsibility for their learning. However, this model was also viewed by one regional group, as 'not suited to other courses that need to be (at least partly) in the workplace, for example, childcare practical placement; nursing'.

In all, the VET professional informants recognised value in the four models and acknowledged the significance of learning from work-based experience, but assessed the effectiveness of the models according to their alignment with the kinds of teaching practices adopted in VET institutions.

## Stakeholder responsibilities

Participants addressed the question of what different stakeholders need to do to make a particular model effective by viewing the four models in terms of four nominated stakeholders: workplace personnel (employers, managers); VET educators (workplace and classroom-based trainers, and assessors); learners (workers, employees); registered training organisations (recognised education and training organisations providing accredited courses).

Some VET professionals proposed that workplace personnel need to develop a learning culture, whereby learning is valued, staff are supported financially and professionally in their learning, and training is regarded as important and credible. Providing accessible learning pathways and sufficient opportunities for workers to learn were seen as essential for promoting learning. Specific suggestions included: 'Have embedded continuous improvement/quality assurance processes' (regional group), and 'develop a workplace culture where it is ok to ask questions' (metropolitan group).

Further, some informants suggested workplaces need to plan and finance training as part of their broader business plans, an idea perceived to be more readily adopted by enterprise registered training organisations. It was also suggested that workplaces should contribute to the development of the national training system, rather than relying solely on the involvement of registered training organisations, and that, whatever the training model, workplaces need to engage more fully with VET professionals and registered training organisations.

It was proposed that VET professionals need to develop their practitioner skills and knowledge and strengthen support of, and involvement with, workplaces. This proposal was illustrated by the comment of a regional group when suggesting that trainers 'need to understand the environment and context of workplace and learners in that workplace'. Further, the VET professionals proposed that developing teaching and learning practices includes modifying their views about the undoubted value of work-based learning; building expertise and qualifications; providing flexible learning experiences and having the skills to work with diverse cohorts; developing coaching and mentoring skills to support workplace learning; facilitating project-based learning and promoting action learning; and organising authentic work environments or simulations. Currency in training skills and techniques, technical knowledge as well as industry-specific knowledge, and knowledge about regulations were also held to be crucial to realising these outcomes.

To develop a closer relationship with workplaces, it was suggested that VET professionals needed broader skill sets, including understanding workplace environments and industrial relations arrangements, promoting learning in workplaces, identifying how training can directly address enterprise needs, and customising training and assessment to workplace requirements. Such suggestions bring training and enterprise together more efficiently to support effective learning.

The informants in these group consultations suggested that for workers to gain the maximum benefit from the four models, they, as learners, need to be self-directed and aware, as well as understand the value of the available opportunities. It follows that the

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**Workplaces need to engage more fully with VET professionals and registered training organisations.**

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**Clearer and more focused aims would assist responsiveness to particular learner and workplace needs.**

desirable qualities of learners include self-motivation, self-confidence, and a commitment and openness to learning. Learners also need to develop capacities of active enquiry, which include valuing work as learning, appreciating the contributions of others and also themselves, contributing to others' learning, and investigating practices outside their immediate experience. However, it was proposed that few of these processes and outcomes can be accomplished without support. The informants suggested that learners need access to information, know their responsibilities and be able to enjoy the benefits of learning in terms of employment, pay and career advancements. A comment from a regional group was that: 'Learners need a commitment to learning within and outside workplaces'.

Under the proposed four models, the VET professionals claimed that registered training organisations would need to develop further their internal capacities to manage operations efficiently and improve the quality of teaching they provide, while developing external capacities to better support their client organisations. Training organisations would also need to acknowledge and accommodate the fact that learning takes place in many ways and places, also recognising the role of work-based learning in building expertise, and introduce processes for continuous improvement for their staff and assist them to maintain industry currency.

In relation to client organisations, it was suggested that registered training organisations need to be responsive to and collaborate with enterprises to build strategic goals based on seeking feedback from all stakeholders. The focus here was on providing clear value for money through customised assessment and the provision of support services that assist clients to identify and address their training needs.

## System changes

Two kinds of changes were proposed for the VET system. The first was a clarification of its focus and purpose in relation to the overall intentions of continuing education and training. It was suggested that clearer and more focused aims would assist responsiveness to particular learner and workplace needs. These aims should encapsulate the constituent parts of an effective learning and education provision, rather than focus on administrative requirements; they should also acknowledge a greater acceptance that important and worthwhile learning occurs outside accredited programs.

Second, the VET professionals suggested that system changes should extend to improvements in funding and distribution models through increased support for workplaces and workplace managers to enhance their roles. It was also suggested that greater enterprise involvement in the national tertiary education system be encouraged. One metropolitan group suggested that such funding should extend to providing 'more funding to VET educators for industry currency and release time'.

These appraisals by VET professionals emphasise the need to replicate much of what occurs in registered training organisations operating within workplaces but also concede that both the practices of training organisations and those who teach in them need to embrace the constraints and requirements of workplaces as sites for learning, and workers as learners.

## Consultations with key agency representatives

Consultations were held with a number of senior representatives from three key national agencies concerned with training and workforce development: a central agency within the Australian Government department providing advice on the vocational education system and its contribution to workforce skills and productivity, and two peak national agencies for both the public and private provision of vocational education. The consultations with the former comprised a group of senior executives in that agency. One of the other groups was represented by their chief executive officer and the other by a policy officer.

The consultations focused on a range of issues about making work and workplaces central to effective continuing education and training provision. Three questions guided these discussions:

- Given the findings about a shift in focus towards workplaces as sites for continuing education and training, what are the implications for the administration and governance of the VET system?
- What are the implications for the workplace orientation and enactment of continuing education and training for the VET system?
- What are the implications for a shift from learning provision based within education institutions to one which is perhaps located elsewhere?

The informants broadly acknowledged an increasing trend towards work-based training: they were aware that employers want it and, in some instances, it forms a requirement of training packages. They also noted four particular issues arising from this development: a tension between training for immediate skill needs and obtaining accredited qualifications; a lack of flexibility on the part of registered training organisations to undertake more training in the workplace because of established cultures and cost factors; the need for accredited training to be an integral part of workforce and organisational development; existing funding models tend to influence the way training is provided rather than supporting what is educationally effective.

### Training tensions

It was noted that, unlike for entry-level VET, continuing education and training is more concerned with specialisation and skill sets for particular work sites, jobs or industries rather than for occupational qualifications. Hence, there may be a case for having two levels of training packages: entry-level and continuing. It was suggested that, in some instances (for example, in telecommunications), specialised training goes beyond training packages and that enterprises are exploring other ways of recognising learning. Employers generally report the quality of training as being quite high, but their respect for vocational qualifications per se is falling. These views were countered by others who argued that employer emphasis on skill sets for specific purposes may limit the desirable development of broader (that is, sector-wide) knowledge and skills. One respondent proposed that training packages need holistic components and should provide opportunities for articulation and pathways into further learning and more responsible work. This informant also suggested that, if learning experiences are primarily in workplaces, then not all educational issues are being addressed. An example was given

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**Continuing education and training is more concerned with specialisation and skill sets for particular work sites, jobs or industries.**

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**Registered training organisations are most effective when they cooperate with enterprises to take a workforce development approach.**

of a coal-mining company in the Hunter Valley that has created a separate academy near, but not in, the workplace, in efforts to secure more effective and focused training.

### Registered training organisation flexibility

Engaging in workplaces represents a significant challenge for some VET practitioners because of their limited industry currency and lack of specific skill competence. This was seen during the interviews as a significant issue for the VET sector, especially in TAFE (technical and further education institutes), where the average age of trainers is quite high and experience in the TAFE system extensive. One of these senior agency representatives explained this: 'We increasingly see the deficit in the educational institution ... in the sense that we've lowered the qualifications and [the] background and experience ... to teach in an educational institution'. It was also suggested that strategies such as using simulated environments off site are not always appropriate and that assessment of workplace competence is a major issue for registered training organisations. One respondent described workplace training as a 'loss leader' for these organisations. Another stated that, for public or private training organisations, the biggest driver of cost is class size: 'If you can get 30 people in a room, it's the cheapest way of delivery, rather than sending out'. Nevertheless, another interviewee commented:

There's already strong requirements for strong industry engagement. Not all registered training organisations do that very well. Many registered training organisations actually don't have a problem with it, because they go, 'Well, we're embedded in industry. If we weren't we wouldn't exist'.

Such comments indicate the range of factors contributing to training organisation inflexibility, but also demonstrate an awareness among providers of the need for greater flexibility in their provision and responsiveness to workplaces.

### Integration of training and workforce and organisational development

It was claimed by a representative from one agency that human resource development in Australia concentrates too much on industrial relations at the expense of organisational development. It was suggested that registered training organisations are most effective when they cooperate with enterprises to take a workforce development approach. Achieving enhanced productivity, it was argued, requires bringing together efforts associated with increasing the skill levels of the workforce to meet workplace requirements and a commitment to innovation at government, workplace and individual practice levels. A similar case was made by some of the VET professionals in their consultation responses, where they proposed that if work-based practice was to be more widespread, registered training organisations would need to work more closely with employers, and trainers would need to engage more consistently with workers at their place of work.

### Constraints of current funding model

The current funding regime was reported to constrain the maintenance of a regulatory framework for high-quality training provision. According to one interviewee: 'The funding mechanisms are driving the system at the moment. That's not sustainable both in terms of quality and material'. Continuing education and training provision that are

quality-, not price-led, were strongly recommended. One respondent stated that there should be differential funding for registered training organisations, such that the wider purpose of public providers is recognised, despite some state governments narrowing that purpose. This informant also suggested that there should be funding differentiation among registered training organisations on the basis of their capabilities. Another argued against governments funding individuals only to undertake their first vocational certificate, because this policy fails to recognise the need for retraining across working lives. It was noted by another interviewee that employers who receive funding for training are often careful about their choices of registered training organisation leading to more successful outcomes. The fact that such training tends to be for groups of employees may be a factor in its success.

These informants suggest that some administrative and regulatory changes were required, observing that these changes were extensions of changes already underway. The required changes, they suggest, need to be implemented incrementally as opposed to being wholesale change. Perhaps central to all of these suggestions is the importance of changing the system 'mindset' about continuing education and training: from its being the provision of education largely organised for, through and by education institutions to one which is more centred on workers' needs and those of workplaces and work practices.

## Discussion

An analysis of the Phase 3 findings presented above identified a number of key messages in relation to the future effectiveness of continuing education and training in Australia.

The messages from VET professionals consulted through roundtable discussions refer mainly to employers and workplaces, education and training providers, VET practitioners' abilities and attitudes, and worker-learners' capacities, as well as to the wider continuing education and training system. They broadly agreed that all four models were valid representations of and potentially constituted effective continuing education and training provision. Perhaps not surprisingly, they identified the 'work-based with educational interventions' model as their favoured approach to continuing education and training and displayed most reservations about wholly work-based learning, mainly because the latter was seen to be largely unregulated. Nevertheless, they generally recognised the need for a more flexible approach to continuing education and training by registered training organisations and VET professionals and also in the current administrative and regulatory processes that shape and fund VET provision. In doing so, they agree with the conclusions of global agencies (OECD 2012) and governments across many European countries that the provision of and approaches to VET are in need of 'modernisation'; that is, implementing practices that are commensurate with contemporary circumstances, needs and imperatives (CEDEFOP 2009).

This conclusion and the responses to it also highlight another key issue for the current continuing education and training system arising from this part of the research: strict adherence to the regulatory framework and the consequent focus on compliance are sometimes inconsistent with providing effective and responsive continuing education and meeting workers' learning needs and preferred learning approaches. In particular, the potential value of workplaces as sites for learning appears to be considerably

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**These models were also perceived to be more likely to promote worker engagement in learning and foster loyalty towards the workplace.**

underestimated because such settings and the related learning processes cannot be comfortably encompassed by the administrative and regulatory requirements for training organisations. The significance of such learning for continuing education and training has, however, been consistently identified by the workers and enterprise managers in Phases 1 and 2 of the project.

Representatives of the key agencies, while holding diverse views on whether funding is the key impediment to making continuing education and training provision more flexible, did generally concur that inflexibility in registered training organisations contributes to the problem. Yet, they also acknowledged challenges for training organisations in trying to tailor training for specific purposes, in particular workplaces, while accommodating the requirements for accredited training, an issue also raised by Harris and Simons (2012). In all, a key message here is that there should be a wider consideration of what constitutes effective learning experiences as part of workforce development.

The Phase 3 consultations provided further stakeholder perspectives on Australian continuing education and training provision. They confirmed the recognition, if not always the acceptance, of the increasing significance of work and the workplace as bases for the provision of continuing education and training and learning support, as well as the issues facing training organisations operating in the current regulatory and funding environment. The significant and pervasive role for educational providers in continuing education and training is undeniable and not questioned here. The question that arises, however, is the extent to which that role might be enhanced or changed, in conjunction with other stakeholders, to make necessary ongoing learning more effective. This important question is considered in the next section and leads to a set of propositions for making continuing education and training in Australia more effective.

### Phase 3: Key findings

In summary, the VET practitioners and administrators identified value in each of the four models and the specific contributions each could make to the provision of continuing education and training. These are:

- Beyond skills development, these models (particularly those with workplace components) could contribute to effective workplace performance and fit well within workplace operations and needs.
- These models were also perceived to be more likely to promote worker engagement in learning and foster loyalty towards the workplace.
- The scope of these models suggests that the orthodoxy of existing VET provision needs to be extended to embrace work-related learning wherever it occurs and not just privileged classroom-based experiences.
- Given the administrative and regulatory arrangements that shape the existing VET provision, refinements and changes to these arrangements will be required for the full potential of continuing education and training to be realised.
- Each of these models is most suited to particular purposes and has strengths and limitations which need to be considered, and none on its own offers a holistic response to effective continuing education and training.

A shift in emphasis for continuing education and training from courses to a broader range of experiences, mainly in workplaces, would mean that a wider range of actors would be expected to play central roles in ensuring its effective provision. Particular roles were identified for workplace managers, supervisors and for the learners themselves, and a need for registered training organisations and their practitioners to support learning in workplaces, or wherever it occurs.

The consultations with key agencies added further nuance to the findings, as follows:

- Continuing education and training is often more concerned with very specific forms of skill development than with securing occupational qualifications for workforce entrants.
- There are concerns that enterprise-specific experiences may fail to adequately prepare learners for industry-wide or supra-industry capacities.
- The adaptability of registered training organisations to meet such requirements can be constrained by a lack of flexibility in their organisational practices and structures.
- The conjunction of individual workplace skill development, strategic workforce development and goals such as achieving productivity gains through innovation likely warrants the intervention of government in targeted and strategic ways.

The key agencies acknowledged that applicability and flexibility of funding and regulatory models will influence any attempts to promote effective continuing education and training.

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**There are concerns that enterprise-specific experiences may fail to adequately prepare learners for industry-wide or supra-industry capacities.**

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Continuing education and training can serve a number of distinct educational purposes.



# Making continuing education and training in Australia more effective

This research project had its origins in the growing need for vocational education with the capacity to respond to the needs of the rapidly changing requirements and circumstances of Australian workplaces; that is, sustaining the employability and developing further the capacities of the Australian workforce. Those changes have been wrought by influences such as: globalisation; technological change; the changing nature of work; the need to respond to climate change impacts and issues of sustainability; more regulatory frameworks; changes in workplace organisation, practice and culture; and changing levels of consumer demand (Australian Workforce and Productivity Agency 2013; Misko 2010). For workplaces, the impact of those changes is felt at two levels: at the enterprise level, where managers interpret the significance of those broader influences for the organisation's operations and productivity; and at the worker level, where individuals and teams are responsible for implementing organisational policies and strategies. The other key player in these processes are training providers and their practitioners, who act as teachers and assessors at the enterprise–worker interface, and also have a role at the point of connection between government policy and industry requirements.

As outlined earlier, the data compiled over the three years of the project were collected across four states from interviews and short surveys with managers and workers, consultations with representatives of registered training organisations and industry and skills bodies, and discussions with senior members of national agencies in the field of VET and workforce development. An analysis of those data led to a number of key messages and proposals for ways of improving the continuing education and training provision in Australia. As noted, what comprises continuing education and training includes VET programs offered through registered training organisations and other education institutions, but also extends to deliberate workplace learning experiences and individuals' learning through their work independently or with others (for example, co-workers, supervisors, experts). Continuing education and training can serve a number of distinct educational purposes, including helping individuals to: secure employment; remain current and employable; advance careers; change occupations/careers; bring about workplace change/innovation; and realise national economic and societal goals (Billett et al. 2012b).

The summary of the findings and proposals in this section are shaped by the project's primary research question: What models and practices of continuing tertiary education and training can best meet workplace demands and sustain Australian workers' ongoing occupational competence and employability across their working lives?

## Current context of continuing education and training

During the data collection process, five key elements of the current context of continuing education and training in Australia were identified:

- an increasing acceptance of the need for ongoing learning across working lives, both for occupational compliance and to remain competent, now and in the future
- a pattern of workers generally, but not universally, being active learners, motivated mostly by personal goals for employability and advancement, and less so by certification requirements
- a critical role in support for learning by those regarded as occupational experts, from within and external to workplaces
- both manager and worker ambivalence about the necessity of certification, but general acceptance of its pervasiveness as part of a national provision
- a VET system that does not yet have the flexibility needed to effectively meet workers' and enterprise learning needs and preferences in a rapidly changing work environment.

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**Workers' personal efforts and intentions associated with their learning are key elements of continuing education and training.**

In this context, in relation to their individual continuing education and training needs, workers consistently reported that effective ongoing learning was through a combination of: engagement in the work tasks about which they were learning; guidance by more knowledgeable and locally informed partners; and training interventions related to their immediate work and future work life plans. It was also clear that workers' personal efforts and intentions associated with their learning are key elements of continuing education and training.

While workers' learning needs were mainly focused on immediate work tasks, managers tended to emphasise that workplace or enterprise-specific factors were driving their preference for and approaches to continuing education and training provision, principally the use of training programs to meet enterprise goals. Managers and workers generally agreed, however, on the need for learning experiences to be focused on workplace issues and goals.

On the basis of this broad, but not universal, consensus, it was concluded that an effective national continuing education and training system needs to be premised on both work-based and educational learning experiences.

It is proposed that the four models (as described earlier in this report; see table 1) in combination comprise a platform for continuing education and training provision that both collectively and individually offers a means to achieve the kinds of goals that workers, workplaces, industry and governments have for ongoing learning across working lives. Moreover, there was general agreement from a sample of VET professionals that each of these four models for securing ongoing employability was valid and had a specific role, and made necessary contributions to the overall provision of continuing education and training. Yet, while acknowledging the important role of work-based experiences in workers' ongoing learning, there was some divergence in how a responsive continuing education and training system might be advanced. Elements of these differences were associated with the regulatory approach and the funding framework in which the national VET system operates. There were also concerns that, without the development of managers' and supervisors' capacities and guidance for their training roles, a model of workplace-based provision of continuing education and training would result in restricted support for learning and lead to weak outcomes.

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**For those who are not employed or wish to seek changes in occupations or advance to a higher level in their occupations, a course offered by a tertiary education institution may be necessary.**

## Models and practices that enable learning

Collectively, the four models of continuing education and training provision are designed to respond to the changes that are increasingly common in contemporary work and to meet the kinds of educational purposes that the various stakeholders hope to achieve. The four-model framework has been established through the lived experiences of workers, managers and trainers, and captures what these stakeholders perceive as the most effective ways to secure their work and learning futures in changing times. For those already employed, learning in and for work have become inseparable, in that work has increasingly become synonymous with continuing education and training. However, for those who are not employed or wish to seek changes in occupations or advance to a higher level in their occupations, a course offered by a tertiary education institution may be necessary, albeit with some workplace experience. However, there is much to suggest that a continuing education and training system needs to go beyond the provision of accredited and certified taught courses offered through the auspices of registered training organisations.

The work and learning circumstances of one young female participant, an employee in a regional services organisation, illustrate how her continuing education and training provision is built upon all four models. She mostly learned her community liaison job through ‘just doing it’; that is, getting out into the community and finding ways her organisation could support and encourage the many events and activities that strengthened and united the community as the cultural and services hub of its region. She was guided in this work by her boss (the manager of the organisation), who worked, in part, to ensure her success and thereby the standing of the organisation as a valuable contributor to the community. She was supported by her employer to attend and thus take advantage of the learning opportunities available through seminars by a professional organisation and professional development through conferences conducted in her state capital city (a day’s travel away). She was also undertaking part-time undergraduate study as an external student with a regional university. Her work and learning experience, as it addressed her immediate work needs, professional development requirements and personal aspirations, are evidence of her effective engagement in all four models.

In another example, a young male working as a security guard for a large mining company was, as part of his job, required to inspect vehicles as they entered and exited the mining site. In addition to making sure all documentation was complete and accurate, he was required to check vehicles thoroughly to ensure they had been cleaned fully and correctly to avoid the transfer of soil and plant matter from one site to another. The range of vehicles was broad and constantly changed, so he learned through conducting the inspections where and how such matter could be accidentally concealed. He was part of a team rostered on different shifts, and members commonly shared their work and learning experiences over coffee and meal breaks. Training, conducted in-house by enterprise trainers, on the protocols and policies that directed his work (both company and regulatory) was a common feature of his work. He was also engaged in self-funded study through online courses that would lead to his securing the workplace health and safety qualifications he intended to use for moving from security work to compliance assessment work in the company, a move guaranteed by his supervisor.

Both these instances of work and learning experience are evidence of individuals' engagement with each of the four models either simultaneously or sequentially. Such undertakings are not uncommon and each, with its different methods and emphases, is indicative of the complex integrations that characterise effective continuing education and training provision in contemporary work circumstances. Not all of these options are immediately available to all participants and their organisations; nor is ongoing learning for employment always dependent upon taught courses, for instance.

What is suggested here, and encompassed by the four-model platform, is that curriculum provision and the means of supporting ongoing learning across working lives need to be conceptualised and supported in ways that move beyond singular understandings of training provision (that is, taught courses). Instead, they need to include a broader range of learning experiences and circumstances, with workplaces featuring prominently in these models. Importantly, consideration of learning experiences for promoting employability needs to focus on workers as learners, because ultimately it is they who are the key agents in the learning process.

The extent to which workers, individually or otherwise, respond to occupational or organisational change, are motivated to undertake new learning, mandatory or otherwise, and engage with the learning process is a vital component in maintaining and improving workplace productivity.

Effective learner assistance is in some ways specific to workers and workplaces and cannot be prescribed and predefined. It arises by addressing learners' needs to respond to either workplace changes or their work-life learning outside their particular workplace (for example, to get a different kind of job). Worker-specific support appears to be most effective when 'on-site and hands-on' training is conducted by experts and when supervisors work individually with workers. On the other hand, learning with others enables other kinds of outcomes, such as understanding goals and processes outside the immediate practice (that is, seeing the 'big picture'), working autonomously, and learning how to secure informed assistance and guidance. In other words, formalised structured training is not necessarily either sufficient or the preferred means of learning for maintaining workplace competence and employability. Structured accredited training may, however, play particular and important roles for those wishing to obtain a new job or change occupations.

## Implementing the models

As has become increasingly clear over the three phases of the project, placing the worker at the centre of continuing education and training has considerable implications for the key stakeholders, including the workers themselves. Achieving that goal in continuing education and training requires an understanding of the ability of each of the four models identified across the project to enhance and support workers' learning and the pedagogical strategies that might be employed. The bases for these abilities are illustrated in table 2.

Work-based experiences are appropriate for immediate learning needs and build on previous learning.

**Table 2 Effective models for continuing education and training**

	<b>Wholly work-based experiences</b>	<b>Work-based with direct guidance</b>	<b>Work-based with educational interventions</b>	<b>Wholly education institution-based experiences</b>
The medium for learning is through:	individuals' everyday work activities and interdependent interactions	engagement with more experienced others (e.g. expert peers, supervisor, trainers)	structured training and often assessment by e.g. accredited trainers, workplace supervisors, vendor trainers	classes in RTOs or online, taught and assessed for accreditation
This model is effective for continuing education and training because it:	is work-relevant, addresses immediate needs, is accessible, practical and builds on previous learning	provides new skills, information or understandings that workers cannot achieve without guidance	draws on trainers with industry expertise, links training and work, provides a basis for accreditation and certification	enables access to structured training not available through work
Learning and teaching strategies include:	observing and reproducing observed skills, active independent and interdependent learning	mentoring; coaching; demonstration; direct one-to-one instruction and feedback, related directly to work needs	one-to-one and group instruction, teaching on or off site, simulated and actual work-related training	face-to-face classroom teaching and structured online courses
Workers mostly employ this model when:	enacting their everyday activities and interactions through their work and with co-workers.	the learning they require is beyond their current level of skill or understanding to be advanced independently.	learning is workplace-specific, to meet workplace or occupational requirements, and needs to be assessed and certified.	learning and certification is for future purposes, and cannot be learnt through work.

The findings summarised in table 2 show that, to maintain worker-focused learning, different models and approaches should be employed and different strategies utilised to accommodate the different purposes of continuing education and training.

As shown in the first row, workers learn in a number of ways: through their own work (but not necessarily in isolation); through their own work but with direct help from others regarded as experts, including their peers; through work-based practice accompanied by structured training; and through taught courses. The second row illustrates the means by which the different models are effective for different kinds of learning. In summary, work-based experiences are appropriate for immediate learning needs and build on previous learning; direct guidance on the job provides learning that workers cannot achieve by themselves; trainers provide teaching and industry expertise, along with the option of accreditation; and the fourth model offers educational opportunities beyond those available in the workplace.

The learning and teaching strategies in the third row reflect different types of interactions between those guiding and assisting the learners. These strategies range from the proactivity of learners in the first model through to the more structured approach of the fourth model, where work-based practice in the worker's current job is not part of the training. The bottom row in table 2 indicates how workers themselves explicitly or implicitly utilise each of the models in undertaking new learning for work purposes.

The successful application of each model requires particular actions and attitudes from all of those directly engaged in learning and training: workers, supervisors, in-line managers, and training providers, as shown in table 3.

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**Supervisors potentially have a direct influence on workers.**

**Table 3 Stakeholder actions and attitudes to enhance continuing education and training**

	<b>Wholly work-based experiences</b>	<b>Work-based with direct guidance</b>	<b>Work-based with educational interventions</b>	<b>Wholly education institution-based experiences</b>
<b>This model is effective when:</b>				
<b>Workers</b>	acknowledge a need to learn, have access to learning-related work activities, are self-directed, curious and proactive	regard the source of direct guidance as credible, can immediately apply and practise what they have learned	regard the source of accredited training as credible, see value in certification or accept the need for it, have sufficient literacy and numeracy skills	can fit the learning in with their work and family commitments; identify relevance of the training for future work
<b>Supervisors</b>	are supportive of workers' learning, provide opportunities for new activities and learning	are available, are experts in the work area, are competent as trainers, mentors, guides, and can provide feedback and follow-up support	support employees' learning by organising and/or supporting educational interventions, and value assessment and certification	support employees' educational goals through organising support, time off for study, and access to workplace expertise
<b>Managers</b>	encourage support for learning through work-based activities and build on them	recognise and support supervisors' roles as guides, trainers or mentors, and can provide opportunities for new learning	organise training and require assessment & certification, through partnerships with RTOs, and focus on workforce development	sponsor employees' educational goals through financial support, time off for study commitments
<b>Training providers</b>	assist workplaces to structure workers' experiences and learning, advise about workplace curriculum and pedagogies.	assist workplaces to structure workers experiences and learning, and assist in building capacities for training one to one.	are flexible about training times and locations; ensure staff are well trained; make training relevant to enterprise needs, and provide follow-up.	offer flexibility in educational provision to meet workers' circumstances, recognise workers' prior experience and provide follow-up support.

The first row of table 3 indicates that wholly work-based experiences require literacy and learning skills and a proactive approach to learning (Model 1); the efficacy of direct guidance depends upon the workers' perception of it as credible (Model 2); whereas the third model also requires worker acceptance of the value and/or need for certification; and workers will usually have a commitment to wholly institution-based courses (Model 4) because they see them as relevant to their career development needs.

Supervisors potentially have a direct influence on workers, as shown in the second row. Under the first model, supervisors can show how learning is personally valued, and under Model 2 can follow that through with training, mentoring and coaching. With accredited training, under the third model, supervisors have a role in facilitating the training support and encouraging certification, and under Model 4 they might give tacit and actual support for workers choosing to undertake training outside immediate work needs.

At the next level in the hierarchy, managers can have a similar role to that of supervisors, especially in smaller organisations, but they can also have a general

facilitative role, such as ensuring work-based learning opportunities are maximised under the first model. For the second model, managers can support the training of supervisors as coaches and mentors, as well as take on the direct training role themselves. In accredited training, the managers' role is typically identifying appropriate training providers, negotiating with them and relating training to workforce development. If the training is for career development, as in Model 4, managers can provide time off or financial support.

Table 3 shows that training organisations operating under the fourth model may need to be flexible in how, where and when they offer courses, while under Model 3 they need to ensure the training they provide is integrated with workforce development and that their staff are equally capable of working across classrooms and workplaces. While the training provider role is less under Model 2, registered training organisations can provide coaching and mentoring training, and under that and Model 1 can also advise managers about structuring workplace experiences and encourage the role of work-based learning.

Even though the focus of table 3 is on how all stakeholders can support learning, the learner is still at the centre. That table also shows that flexibility and responsiveness are paramount, in terms of how, when and where ongoing learning for work-related purposes is best encouraged and supported.

### Implications of models for administrative and regulatory requirements

In Australia, the kinds of flexibility and responsiveness proposed above is mediated by the regulatory and administrative frameworks in which the VET system operates. If each of the four models is to be implemented most effectively for continuing education and training, the stakeholders need support from those who make policy and set administrative and funding guidelines for the national training framework, as shown in table 4.

At the moment, the focus of that framework is largely on accredited training. If it were to encompass the full extent of learning that occurs as part of continuing education and training, it would need to at least acknowledge that significant learning takes place through wholly work-based experiences (Model 1) and through work-based practice with direct guidance (Model 2), none of which is formally acknowledged or recorded for certification purposes. Such learning may of course come to the fore in a process of recognition of prior learning (RPL), another reason for workers, supervisors, managers, trainers and assessors to value such learning.

Even in the two models with a strong accredited training focus, there are complexities that regulations and funding requirements need to encompass. For example, there may be differing opinions between employers and training providers about whether the training should meet only immediate skill needs or fulfil qualification requirements. In addition, there may need to be incentives for trainers to upskill in order to provide and facilitate more work-based learning, and to provide follow-up support after initial training, especially if a course is online, as it can be within Model 4.

**Table 4 Implications of models for administrative and regulatory requirements**

<b>Models</b>	<b>How administrative and regulatory requirements can best support models</b>	<b>Comments</b>
Wholly work-based experiences	Acknowledge that not all learning is, can, or needs to be accredited through regulatory arrangements.	Formal recognition of such learning would need systematic ways of reporting and recording outcomes for workers.
Work based with direct guidance	Acknowledge the role of other workers and supervisors in supporting workers' continuing education and training outside of accredited training.	Additional training may be necessary for supervisors and managers as coaches and mentors. Formal recognition of such learning would need systematic ways of reporting and recording outcomes for workers.
Work based with educational interventions	Recognise the tension between training for immediate skill needs and obtaining accredited qualifications. Support partnerships between RTOs, enterprises and workers which enhance workforce and organisational development. Provide professional development of accredited trainers to enhance their capacity to operate in workplaces as well as classrooms.	Caters for flexibility regarding workplace, individual, and education institution. Requires significant negotiation about the necessary training that is required – brokering role for RTO.
Wholly education institution-based experiences	Recognise that ongoing support is important for learning, especially for online learners and other forms of mainly self-directed learning in this model of accredited training.	Responsibility for supporting the learner is likely to be mostly with the educational provider rather than the employer.
Overall	Acknowledge that workers as learners are at the centre of continuing education and training provision. Make arrangements for acknowledging, supporting, assessing and certifying learning more fully. Support continuing education and training models and practices that permit RTOs to be flexible in meeting workers' and employers' needs.	In rural areas, worker numbers are often smaller and it is more difficult to backfill if staff take time off for training, so funding models need to allow for this.

**Some informants did not appear to appreciate the value of learning through work-based activities.**

Regulatory bodies can best help to develop a more effective system of continuing education and training by considering workers' learning as being their prime consideration; that is, placing workers' learning, rather than educational arrangements, as the central focus. This can be achieved by introducing policies and guidelines which recognise and accommodate the fact that maintaining and developing occupational competence after initial training is undertaken in a variety of ways, to suit the needs of different industries, different workplaces, and different workers, and that in all situations, work-based learning is a key contributor.

## Constraints and caveats

Tables 2, 3 and 4 present the circumstances and arrangements required for an effective system of continuing education and training. Nevertheless, the findings also indicate a number of limiting factors, which may need to be addressed before that goal is attainable for every workplace and industry. Among workers, for example, there were instances where poor literacy and/or numeracy skills and a lack of confidence in their ability to learn affected their attitudes towards training. Other workers reported a lack of opportunities or of employer support for learning in the workplace, or to undertake off-site training. Some informants, both managers and workers, did not appear to appreciate the value of learning through work-based activities. Constraints in the form of individuals' capacities and motivations at all levels (that is, workers, supervisors,

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**Much of the learning arising through wholly work-based experiences across working lives remains unrecognised.**

managers), as well as perceived or real limits of workplace support, can inhibit ongoing productive learning across working life.

As noted above, constraints also arise through mismatches between those employers who emphasise acquiring specific skill sets over full qualifications or who view training only in terms of meeting immediate skill needs, and training providers who promote certification and uniform and complete programs as a training goal. It was found in many workplaces that there was lack of recognition by managers and supervisors of the extent and importance of their decision-making about employees' training. Moreover, across the manager informants there was little, if any, acknowledgment of their limited mentoring and coaching skills and their limited understanding of how best to develop the learning that the companies required of their workforces. There were clear constraints in both the very specific and immediate focus on training and the degree by which workplace managers' actions were adequately informed.

The findings also identified system constraints. Firstly, a range of criticisms were levelled at training providers, sometimes from within the sector itself. These covered limitations such as a lack of the flexibility needed to undertake more training in workplaces, the result of established cultures, cost factors, and, on occasions, a lack of industry currency in teaching staff or their inability to provide effective support for learning in workplace settings.

Secondly, in the sphere of government administration and regulation, the existing funding models were often identified as being too limiting to accommodate the scope of current and potential models of continuing education and training, as well as its demands. The current arrangements were reported as being best aligned with entry-level training in tertiary education institutions, rather than enabling provision for geographical isolation or for continuing education and training in workplaces. The existing funding models were also criticised for influencing how training is provided, with an emphasis on costs rather than on the issues informants held to be educationally effective.

There are constraints associated with the focus on workplaces as key sites for continuing education and training and there is a lack of recognition and certification for learning occurring outside endorsed educational programs. It was found that much of the learning arising through wholly work-based experiences across working lives remains unrecognised, particularly in a continuing education and training system dominated by taught courses in registered training organisations. A systematic means of assessing, reporting and certifying outcomes for workers is required for the recognition of individual learning through workplace activities to occur. The continuing use of recognition of prior learning demonstrates that such a process could be made to work.

Moreover, effective work-based learning depends not only on workers engaging in activities and interactions, but also on the capacity of supervisors and managers to act as learning guides, coaches and mentors. As noted, the development of workplace managers' capacities in workplaces may be necessary. There is also the task of reconciling the conflicts between employers' training needs, for example, for skill sets, and the training providers' (often funding-driven) requirements for workers to complete full qualifications. Such conflicts are likely to be particularly exacerbated in times of

skills shortages, when employers understandably want to fill immediate gaps in their workforces.

In addition, the learning needs and workforce development requirements of workers are influenced by such factors as the nature of the industry and the size of the workplace. Consequently, from the process of gathering data across enterprises of different sizes with distinct kinds of work activities, and workers and in diverse locations, it became obvious that there is no single solution to how, where and when continuing education and training can best be enacted, even within the same industry sector. For example, on-site training means less time away from workplaces, whereas respondents also reported that off-site training sometimes means fewer distractions and the opportunity to learn from peers from other organisations.

Another 'location' issue arises in relation to workers in rural areas, where numbers are often smaller and it is more difficult to backfill if staff are granted time off work for training. Furthermore, under the present funding requirements, it may not be financially attractive to training providers to offer courses in these locations; or they may be pressed to offer continuing education and training that is shaped and constrained by cost considerations rather than by the needs of those individuals learning in such locations. If cost-effectiveness is the key consideration, the likelihood of the inappropriateness of these provisions increases.

A second caveat in applying the models relates to the type of industry or work for which learning is required. Differences in emphasis arise because of the distinct purposes and practices of industry sectors. For example, in the transport and logistics industry, employees work alone and the kind of model that would be effective for this sector is likely to be different from, for instance, the health and community services sector, where the norm is teamwork and locations where many workers practise. The size of the enterprise will also shape what constitutes a plausible model of learning support. Many of the key messages and proposed future directions in this report are particularly applicable to organisations sufficiently large to provide peer interaction and learning support in the workplace. Although some of the data were collected from small businesses (for example, a not-for-profit community club, a fast food franchise outlet, and a family trucking company), much of the data were gathered in large workplaces. Nevertheless, even for small businesses, there are key messages here. The significance of the workplace as a site for ongoing learning in response to change, and the importance of the role of the supervisor or other expert in coaching and mentoring or otherwise working individually with workers are key factors in continuing education and training.

## Enabling factors

Just as the research identified a number of constraints that would need to be addressed in implementing a more effective system of continuing education and training, it also identified enabling factors that could be enhanced to achieve that end. As already noted, the data suggest that continuing education and training can be better enabled through developing further the capacities of those directly responsible for it – workplace managers, VET professionals, training organisations, and workers as learners. It can also be more effectively implemented by enhancing the administrative and policy

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**Managers preferred training courses because these offered an organised means of securing the identified skill development.**

environment in which continuing education and training takes place (that is, at the workplace and national policy levels).

## Developing further the capacities for effective provision

A key premise of this project is that the provision and capacity that characterise the entry-level training focus of the current VET system may not always be well suited for an effective continuing education and training system. From the data gathered in the first two phases and through the focus groups and interviews in this third phase, it is possible to identify enabling qualities that need to be further developed by those making decisions about, and enacting, continuing education and training provision. These qualities can be developed and implemented by workplace managers, VET professionals, registered training organisations and worker–learners.

### *Workplace managers' capacities*

From the interviews with managers across the five industry sectors, it became clear that they had important enabling roles in identifying the needs for ongoing skill development for workers in their enterprises and also in selecting the means by which that development would progress. These roles and the responsibilities associated with them appeared to have increased with the growing number of regulated and legislative workplace requirements (Misko 2008). As noted in the report for Phase 2 (Billett et al. 2014), typically managers preferred training courses because these offered an organised means of securing the identified skill development, as Misko (2008) found. Given the increasing role of workplace-sponsored and organised continuing education and training, these managers need a greater understanding of educational purposes, the means available to achieve these purposes, and the ways by which to evaluate the effectiveness of the learning experiences and educational provision in meeting their requirements. Consequently, developing an accessible and relevant educational program to inform such managers would be a highly beneficial approach. Such an approach would need to model the relevant practices and roles in the workplace. In this way they would be supported and assisted to learn about the organisation of learning experiences, including what kind of models or strategies would be most appropriate for the issues they are confronting.

### *VET professionals' capacities*

The skill sets of some existing VET professionals also require further attention, the aim being for professionals to enable and support the enactment of the proposed four-model continuing education and training system effectively. Part of this process is to assist VET professionals who largely work in education institutions to better understand, prepare and implement educational interventions in workplaces in support of continuing education and training outcomes. This includes enabling enterprises to promote learning through work activities and interactions. As indicated in the Phase 1 and 2 data, this approach is already being undertaken by some VET practitioners. These capacities will be developed through: dedicated orientation to supporting learning in workplace settings, which can be provided by experienced colleagues; engagement with workplaces; and understanding how the needs of particular workplaces and their workers can be addressed. This would be complemented by opportunities for guided participation in these activities in workplaces.

### *Processes and capacities of registered training organisations*

All three phases of the data gathering indicated that there are specific processes undertaken by registered training organisations when engaging with particular workplaces and delivering programs on site that enable effective continuing education. Work-based practice combined with educational intervention (Model 3) is the standard model of delivery for many private registered training organisations. Some of the requirements that may need to be adopted by more registered training organisations for the effective delivery of workplace-based continuing education and training provision include processes for building productive and long-standing working relationships with workplaces and understanding their workforce development needs and modes of working. Such localised engagement and responsiveness to their needs requires flexibility in approach and an enhanced capacity to implement continuing education and training provision in workplaces.

Moreover, administrative processes permitting, a key focus for registered training organisations in responding to and promoting the enactment of Model 1 – wholly work-based experiences – is by assisting workplaces to understand how these activities and interactions can be optimised to fully exploit their learning potential. This kind of role is distinct from teaching students in classrooms. However, it sits broadly within the kinds of enabling curriculum-related skills that educators require and registered training organisations want of the educators they employ. Again, the processes for developing both sets of capacities might be modelled on practices which demonstrate and engage VET professionals in using those skills, reflecting what has been proposed for modernising and advancing VET provision more broadly (CEDEFOP 2009; Hillier 2009).

### *Worker—learners' capacities*

Proposing that workers need to develop a more focused and proactive approach to learning is straightforward. Yet, it may be necessary for workers to develop more effective strategies to advance, direct and engage in deliberate learning experiences and be assisted in that endeavour. This becomes important, particularly if they have become accustomed to being taught and participating in training programs when the goals for learning are stated, and achieving those goals is through following a particular course of action. Finding ways of engaging workers in tasks which are important and worthwhile for them, as well as enabling their learning through guidance, modelling and opportunities to practise seems to be the most practical way for developing these capacities in contemporary busy work environments.

From the workers' and managers' data relating to the particular modes of experience and kinds of support that had assisted their ongoing learning, along with VET professionals' accounts of how learning for work-related purposes can be enabled, the ways of improving continuing education and training provision have been identified. Yet, to be enacted effectively, the further development of enabling capacities may be required in many workplaces. Moreover, the very processes of learning support that the worker informants identified might well be appropriate for the continuing education and training of workplace managers, VET professionals and workers.

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**It may be necessary for workers to develop more effective strategies to advance, direct and engage in deliberate learning experiences.**

## Enhancing workplace and policy environment

Achieving the ideal in continuing education and training also requires enabling those making decisions about the circumstances in which the learning and training takes place: employers, on the one hand, and government regulators, on the other.

It is evident from the research and from proposals made during the data collection that implementation of the four identified models would be significantly enhanced by workplaces developing what has been called a 'culture of learning', whereby learning is valued, staff are supported professionally and financially in their learning, and training is regarded as important and credible. Such an approach would also see employers planning and financing training as part of their business plans, and working with training organisations to make training an integral part of workforce and organisational development. Ideally, employers who foster a culture of learning would also see value in contributing to the development of national training policy, alongside the registered training organisations with whom they partner.

At the national policy level, enabling factors include enacting policies and regulations that recognise that continuing education and training requires greater flexibility of provision and therefore of funding arrangements. There may also need to be greater provision to support training of workplace managers to fulfil their various training roles, and for registered training organisations and trainers to develop their capacities for work-based learning and training. There appears to be a need at the national level to change the perception that continuing education and training is largely organised for, through and by education institutions, to one that is more centred on workers' needs and those of workplaces and work practices.



# Key messages and ways forward

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**Learning is strongly valued by all stakeholders in continuing education and training in these times of ongoing change.**

The findings of this project suggest the need for a more holistic and inclusive conceptualisation, and the subsequent implementation, of a national continuing education and training system, one that focuses on workers' learning to develop the knowledge and skills that best support the kinds of work–learning experiences and circumstances required for their continuing employability. Such a system will be better placed to respond to national, industrial, organisational and personal goals and aspirations. Acknowledging, supporting and recognising work-based learning and the contexts of its enactment are fundamental to achieving such goals.

The importance of addressing learning and training needs across working lives is of global significance; for example, a recent report on a survey of adult skills by the Organisation for Economic Co-operation and Development noted that: 'There is growing interest among policy makers not only in creating the right incentives for firms and individuals to invest in developing skills, but also in ensuring that economies fully use the skills available to them' (OECD 2013, p.46). To that end, the OECD Skills Strategy emphasised three pillars: developing relevant skills, activating skills supply, and putting skills to effective use (OECD 2012). Commenting on the report, the General Secretary of the Trades Union Advisory Committee (TUAC, 2013) to the OECD asserted that improving skills in the workplace meant more than boosting the supply of skills; it required strengthening the link between education and training policies and innovation policy. The four models for continuing education and training proposed in this report present a framework for achieving the types of economies and strategies suggested by the OECD (2012, 2013).

In the Australian context, the value and specific contributions of the four models for continuing education and training provision arise from the views and understandings of participants in this project. Their accounts of actual and preferred work–learning experiences and insights into the nature of work, learning and change (be they workers, trainers, managers or senior executives) have consistently depicted what comprises effective ongoing learning in and for work, following entry-level training. In summary, learning in and for work is most effective when enacted and supported in the immediate circumstances of work and workers' learning preferences. There are potential limitations with such learning, however, such as whether the required knowledge is accurate and appropriate and the extent to which those who assist that learning are capable of and interested in sharing what they know and can do.

The research found that learning is strongly valued by all stakeholders in continuing education and training in these times of ongoing change across and within industries, in addition to increased labour market competition, strong workforce mobility and mandatory requirements. Promoting and supporting work–learning in ways that appropriately address the fundamental premises of successful learning is therefore vital to effective continuing education and training provision. The final section sets out the key messages arising from the research and proposes some future directions to achieve more effective provision.

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**Workplaces are identified as sites with great potential for maintaining and enhancing workforce skills.**

## Key findings

- The four models identified and appraised through this research offer a platform for stakeholders to design, implement and evaluate effective provision of continuing education and training.
- Continuing education and training is a key component of the national vocational education provision, in that it addresses individual, workplace and workforce development goals. However, its purposes and potential need to be clearly understood and its provision supported appropriately to achieve these goals across a range of educational and work settings.

## Implications for government

- To bring about cultural change associated with continuing education, governments at national and state levels need to promote its importance, highlight the breadth of its provision and adopt policy and educational procedures that are amenable to circumstances where individuals learn across their working lives. Most notably, accreditation and regulatory arrangements that can accommodate, support and certify learning in and through work are necessary.
- Regulatory, administrative and financing processes need to be flexible enough to accommodate the range of purposes for continuing education and training and the circumstances in which learning is enacted (for example, in workplaces).

## Implications for educational systems and educators

- The flexibility of registered training organisations' systems and processes and the ability of their staff to implement approaches for delivering continuing education and training influence the extent to which continuing education and training can be effectively enacted to meet worker–learners' and employers' needs.
- Educators in registered training organisations need to adapt their curriculum and instructional capacities to the conditions and requirements of Australian workplaces.

## Implications for workplaces

- Workplaces are identified as sites with great potential for maintaining and enhancing workforce skills. For most purposes, this ongoing learning is best supported and guided through engagement in work tasks, as their context and activities comprise authentic deployment and monitoring of what is learned.
- Workers, their managers and supervisors all have key roles in enhancing the effectiveness of continuing education and training provision in work settings, and these individuals need to be supported and guided accordingly.

Key areas for further development include the implementation of the four models in ways that address particular workplace goals and circumstances while meeting individuals' readiness and goals for continued learning across their working lives.

## Enabling more effective continuing education and training

A more effective continuing education and training system, realised through the four models proposed here, is likely to best achieved through:

- encouraging and supporting workers to recognise, value and participate optimally in work-based learning experiences
- developing mature partnerships between registered training organisations and workplaces that support workforce development and workplace-based activities as key premises for ongoing work-related learning
- preparing and supporting workplace managers and supervisors to be effective in their roles as training managers, mentors and coaches, and in negotiating appropriate training and certification
- assisting VET practitioners to develop the capacities to promote, guide, assess and certify learning in workplace settings
- developing national policies and regulations to accommodate the diverse purposes, practices and settings of continuing education and training
- implementing administrative and funding models that are sympathetic to and supportive of a broad-based and encompassing continuing education and training system.



## Conclusion

Given the need to equip the Australian workforce with the capacity to cope with the constant change brought about by external and internal forces, it is imperative that any platform for providing and undertaking continuing education and training be based on models that combine relevant curriculum with effective learning and teaching, as proposed by supra-national agencies (CEDEFOP 2008; OECD 2012). Not only do the four models advanced in this report collectively meet that criterion, but the key messages and proposed future directions offer an opportunity to reassess the ways by which continuing education and training is currently provided in Australia, the aim being to make such provision a more integral part of the nation's workforce development strategy and hence a more significant contributor to national productivity.

Nevertheless, it is recognised that accepting the key messages and implementing the proposed ways forward requires cultural change across all components of the training system. Developing a widely understood and accepted 'learning culture' will not come quickly or easily. It requires support at the national policy level, greater involvement of employers, willingness from training providers to develop and deliver training in new ways, support from managers and supervisors for different ways of learning, and positive worker engagement. However, if there is a general commitment to such change, and policies and procedures are established at all levels to achieve it, the likely resulting increase in effectiveness of continuing education and training should not only strengthen the employability of workers across their working lives, but also bring long-term benefits for industry and the nation.



## References

- Australian Workforce and Productivity Agency 2013, *Future focus: 2013 National Workforce Development Strategy*, AWP, Canberra.
- Billett, S & Seddon, T 2004, 'Building community through social partnerships around vocational education and training', *Journal of Vocational Education and Training*, vol.56, no.1, pp.51–67.
- Billett, S, Henderson, A, Choy, S, Dymock, D, Kelly, A, Smith, R, James, I, Beven, F & Lewis, J 2012a, *Continuing education and training models and strategies: an initial appraisal*, NCVER, Adelaide.
- 2012b, *Change, work and learning: aligning continuing education and training – working paper*, NCVER, Adelaide.
- 2014, *Refining models and approaches in continuing education and training*, NCVER, Adelaide.
- CEDEFOP (European Centre for the Development of Vocational Training) 2008, *Establishing and developing national lifelong guidance policy forums*, Publications Office. (Cedefop Panorama series; 153), Luxembourg.
- 2009, *Modernising vocational education and training*, CEDEFOP, Thessaloniki, Greece.
- Choy, S, Bowman, K, Billett, S, Wignall, L & Haukka, S 2008, *Effective models of employment-based training*, NCVER, Adelaide.
- Harris, R & Simons, M 2012, *Two sides of the same coin: leaders in private providers juggling educational and business imperatives*, NCVER, Adelaide.
- Hillier, Y, 2009, *Innovation in teaching and learning in vocational education and training: international perspectives*, NCVER, Adelaide.
- Misko, J 2008, *Combining formal, non-formal and informal learning for workforce skill development*, NCVER, Adelaide.
- 2010, *Responding to changing skill demands: training packages and accredited courses*, NCVER, Adelaide.
- OECD (Organisation for Economic Co-operation and Development) 2012, *Skills beyond School: the OECD review of postsecondary vocational education and training*, viewed 27 March 2014  
<<http://www.oecd.org/education/educationeconomyandsociety/SkillsBeyondSchoolflyer>>.
- 2013, *OECD skills outlook 2013*, OECD, viewed 27 March 2014  
<<http://skills.oecd.org/skillsoutlook.html>>.
- Trade Union Advisory Committee (TUAC) 2013, *A wake-up call to boost lifelong learning: the OECD skills outlook 2013*, Trade Union Advisory Committee, viewed 27 March 2014  
<[http://www.tuac.org/en/public/e-docs/00/00/0D/7C/document\\_news.phtml](http://www.tuac.org/en/public/e-docs/00/00/0D/7C/document_news.phtml)>.

## NVETR Program funding

The National Vocational Education and Training Research (NVETR) Program is coordinated and managed by NCVET on behalf of the Australian Government and state and territory governments. Funding is provided through the Department of Education and Training.

The NVETR Program is based on national research priorities and aims to improve policy and practice in the VET sector. The research effort itself is collaborative and requires strong relationships with the research community in Australia's universities and beyond. NCVET may also involve various stakeholders, including state and territory governments, industry and practitioners, to inform the commissioned research, and use a variety of mechanisms such as project roundtables and forums.

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From 2012 some of the NVETR Program funding was made available for research and policy advice to National Senior Officials of the then Standing Council for Tertiary Education, Skills and Employment (SCOTESE) Principal Committees. They were responsible for determining suitable and relevant research projects aligned to the immediate priority needs in support of the national VET reform agenda.

For further information about the program go to the NCVET Portal <<http://www.ncvet.edu.au>>.





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