Chapter 12
Workers' Perspectives and Preferences for Learning Across Working Life

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12.1 Workers' On-going Learning Needs and Practices

As elaborated in the first chapter of Sect. 1.3 of this book, continuing education and training (CET) refers to the provision and enactment of learning experiences undertaken by those who have left the compulsory education system (i.e., school) and are now pursuing or seeking to pursue their livelihoods in work and the world of adult endeavour. In this chapter, and further advancing the focus on a national model of CET within the Australian context, a case is made that CET is about workers' engagement in a broad range of work-learning activities and the need to more fully understand and value their contribution to the provision and enactment of CET. Such a case is important, not because their contributions are weak or limited, but because, unfortunately, workers contributions can be overlooked in the culture of institutional and regulatory control that dominates the tertiary vocational education and training industry and its practices in Australia (see previous chapters).

Workers have more than a vested interest in CET. As well as an educational vehicle for developing the essential skills sets that future work will require (given the nature of occupational and workplace change), and a means of sustaining employability through those developing skill sets (holding a job in times of increasing uncertainty), CET is based in the ongoing daily enactment of working. That is, CET is the regular practice of workers as they engage in the learning that enables and constitutes their work. For those currently employed, CET is learning in and for work and this kind of learning is not something done separately from work or additionally to work; in effect it is work. Working is a form of learning (Billett, 2006, 2008a; Engestrom, 2001, 2008) and the fact of its continuity through being employed makes work a form of on-going learning. Hence, examining and understanding how

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workers engage in work is necessary to improving and supporting a national CET provision and its enactment.

This chapter reports research that was conducted in workplaces and enabled workers to discuss their work-learning experiences, how those experiences supported their occupational trajectories in and through the changes they have encountered and how they would prefer their learning to proceed in order to address foreseeable changing requirements of work. These perspectives and preferences offer significant insight into the ways workers feel they learn best and how best that learning can be supported. Three key emphases emerged. First, learning in and for work is best enacted at work and through work as opposed to off-site and out of context. Second, it needs to be supported by circumstances that enable individuals' personal and agentic engagement in shared work-learning activities as opposed to treating workers as homogenous and or isolated learners and so deny their differences and need of support. Third, these circumstances need to include convenient access to assistance and expertise, ranging from more experienced co-workers and workplace mentors to external sources as opposed to rationing and quarantining learning guidance and support. Importantly, this support needs to come from those who are fully knowledgeable about the contexts in which their expertise is deployed.

These three emphases suggest a focus for effective CET being based on addressing the work and learning needs of workers in the authentic circumstances of their actual work practices. Such perspectives are central to and advocated by much of the workplace learning literature where tenets of learning as a social practice accomplished through immersion in activity are common (e.g., Billett, 2006, 2008a, 2008b; Engestrom, 2001, 2008; Gherardi, 2006; Hager, Lee, & Reich, 2012; Smith, 2012). This body of literature helps to illuminate work-learning as most robust and innovative when it is learning centred as opposed to teaching or instruction centred (e.g., Bell & Kozlowski, 2009), when it affords rich and diverse opportunity to engage in activity as opposed to constricting engagement (e.g., Fuller & Unwin, 2003) and when it is future and developmentally focused as opposed to maintenance and compliance driven (e.g., Toner, 2010).

This chapter supports these proposed CET bases. It goes on to briefly outline some of the social participation and practice literature that can serve as the conceptual foundation of these proposals. It then presents and illustrates some of the key findings from the research noted and concludes by discussing and further justifying how both the literature and the research conducted can support and advance the need of greater and clearer appreciation of workers' contributions to CET provision and practice.

12.2 Learning in and for Work: Some Conceptual Foundations

Work and the learning by which occupational and organisational practice is sustained and developed are socio-personal practices. That is, work and learning in and for work are both the processes and outcomes of collective activity whereby

individuals, engaged in the tasks and relationships that constitute the participative requirements of their particular contexts, develop and contribute to the knowings, doings and sayings (Dewey & Bentley, 1975; Schatzki, 1996) that comprise their enactment of those practices. These knowings, doings and sayings are, contemporaneously, the known bases or historical artefacts from and on which learning and development will progress to generate the new and emergent knowings, doings and sayings that evidence the (re)making of social and occupational practice. Throughout the work-learning literature, a broad range of concepts and understandings are deployed in efforts to illuminate the nature of these practices and how their transformation is enacted and accomplished. Taken together, these various concepts and understandings may be seen as comprising a participation and practice paradigm of work and learning. What is common within the different perspectives of the paradigm is the emphasis on a unifying principle of inseparability. That is, all the resources (social, historical, personal, contextual, material, ideational, etc.) necessary to collective activity are brought together in and through that activity and are inseparable from it. In effect, they are mutually inscriptive, mutually derivative. The resources generate the activity and the activity is the regeneration of the resources.

To illustrate, Engestrom (2008), from a cultural-historic-activity-theory perspective describes the inseparability or mutuality in action as "knot-working". Knot-working is the collaborative activity that brings together the resources necessary to the generation and or transformation of a learning object. So, for example, knot-working may be the coming together of a group of health professionals whose combined resources (e.g., their occupational skills, hospital equipment, capacities to share information, etc.) enable the generation of a treatment regime (i.e., learning object) for a particular patient. Such a scenario is viewed as an activity system and the emergent learning objects become the new resources that the system can now bring to the inevitable and subsequent activity that will follow. Knot-working emphasises the immediacy and significance of the learning object and the combination of resources by which it is generated. Such learning is collectively enacted and the system members and the skill sets they bring are dynamic as they draw on and depend on each other in the construction of the solutions to problems, more efficient processes and the creation of new resources that constitute collaborative and expansive learning at work. When the learning object, the focus of learning activity, is continued learning for work (i.e., CET), the concept of knotworking emphasises that it can only be accomplished by the shared and often unpredictable effort of working together. For healthcare workers, Bleakley (2013) notes this effort requires high levels of both personal and collective tolerance of ambiguity and improvisation.

From a different cultural psychology perspective, Billett (2008a) describes and defines the unifying inseparability and mutuality that underpins work-learning as "relational interdependence". From this perspective, the emergence of workers' learning through engagement in their work is based on the degree to which workers choose and are able to take up the invitational qualities of participation in practice that their work extends them. Where workers are willing and capable, and workplaces afford opportunity for workers to exercise their willingness and capacity (i.e., their agency), then learning proceeds to the degree that it is supported and satisfies

the goals of those who will enact it. To work is to enact learning. However, the nature of that enactment is enhanced or limited by the qualities of the relational interdependence between the personal agency of the worker and the social agency of the work. Hence, to engage in CET is to realise and enact the relational qualities of situated learning and participation opportunity and personal learning capacity and intention. Workers cannot do more than their work allows and enables. Equally, workplaces cannot do more than that in which their workers are prepared to engage. So, effective CET provision and enactment are likely to be secured through workers and their workplaces seeking to identify and satisfy their mutual goals simultaneously. When this is successfully accomplished, workers' learning encompasses both their effective utilisation of the resources available for personal and professional development and employers' securing necessary workforce training and development (Etelapelto & Saarinen, 2006; Harteis & Goller, 2014).

From another perspective, Smith (2014) describes the unified enactment of work-learning as "negotiation". Negotiation is the purposeful bringing together of what is required for action. Workers are the locus of learning and without their engagement and investment in the energies and priorities that comprise their personal goals and purposes, the kinds of changes that mark work-learning could not be witnessed or examined. Further, negotiation emphasises that mutual goals are established in the juxtaposition of purposes enacted and the outcomes accomplished. Workers' purposes are both brought to work (e.g., through prior learning based in histories of years of social engagement) and developed through work as enactments of their personal preferences and priorities. So, for individual workers, what is important either is so or becomes so as they exercise their agency in pursuing their preferences and priorities. Effective learning emerges as the personal energy and effort invested in participative practice approaches outcomes desired or resolves to outcomes secured. However, such secured outcomes need not be favourable (although they are preferred). Rather, outcomes secure the new positions from which subsequent negotiations will proceed. Hence, on-going work-learning (i.e., CET, as both instructional intervention and as emergent through routine participation) can be rewarding, frustrating, intentional, incidental, hidden and continuous. For workers, it is a highly subjective experience, enacted and secured as negotiated engagement in collective activity. It can be formal, planned and targeted, as when known objectives such as specific qualifications or experiences are pursued and secured (e.g., Kyndt, Govaerts, Kuenen, & Dochy, 2013). Similarly, it can be protracted, discontinuous and imperceptible as when conflicting perceptions of self-value and the expected behaviour that defines organisational-value complicate workers' engagement in work-learning experience (e.g., Claxton, 2014).

Differently again, practice theory perspectives (e.g., Gherardi, 2006; Nicolini, 2012; Schatzki, 2002) describe the unifying quality of social activity as "connectedness". Practices are the social manifestation of connectedness in action and as such offer a means to examine and interpret how aspects of the constant flux of social experience and the resources from which it is formed, for example learning and working, can be generative of the altered practices that confirm newly emergent knowings and, hence, new and additional resources. Learning in and for work is

learning in practice with the acknowledgement that social practices are both constraining and liberating because they capture and define our current knowings, and therefore, can be indicative of our knowing needs. What we know and do can be suggestive of what else we need to be knowing and doing. Hence, negotiations proceed in efforts to secure the new outcomes required and desired.

Negotiation is a form of social practice. It is characterised, in part, by sets of posturing, information seeking and sharing, decision making and other interactive practices. So, to improve on-going learning negotiations is to secure more accurate information, to make more informed and inclusive decisions, and so on. However, from a practice theory perspective, to improve practice is to engage in the comprehensive transformation of current practice rather than simply devote greater energies to make existing practices more efficient (Kemmis et al., 2014). Current CET practice identifies, describes, positions and evaluates the resources by which it is constituted in ways that are familiar and accommodative of the accepted. For example, instruction is delivered, structured programs are required, qualifications are earned, skills are developed and training must be cost effective, industry focused and contribute to the national economy (see e.g., Department of Education Training and Employment (DETE), 2014; Department of Industry, 2014). These are some of the regulatory knowings, doings and sayings that coalesce to generate the connectedness of understandings and activities that mark contemporary CET.

This connectedness is, of course, further complicated by the additional stakeholders who, through their different enactments of related practices, contribute to what Gherardi (2006) describes as the texture of practices. Along with regulators and legislators, workers, training providers, workplace systems and cultures and other vested interests create the fabric of diverse textures that is CET practice. For some it is formal and proscriptive, as might be defined by institutional program, a kind of contextually determined work-learning practice. For others it is unstructured yet bounded, as might be defined by acting in the opportunities to vary practice that arise when colleagues are absent or necessity demands – a kind of emergent learning practice. For others, it is engagement in social or relationship building activities, as might be defined by getting to know people in contexts outside of the usual work and learning settings, that is, through practices that bring strangers together and enable their friendship to develop – a kind of embodied learning. Hager and Reich (2014) elaborate these and other qualities of learning in and via practice through a framework that identifies six threads for theorising professional and work learning practice. The six threads: knowing in practice, socio-materiality, embodiment, relationality, context dependence and emergence, provide a means by which the textures of practice can be examined and interpreted. To improve CET practice is about altering the textures by which it is generated, thus altering the connections and the perception bases that hold those connections together. This is about bringing resources together in different ways, transforming relationships, adopting different perspectives and realigning imperatives. Through these kinds of actions, CET practices may be transformed to become new and emergent practices rather than remain existing practices that are simply made more profitable and or less costly for those who invest in them, no matter what their stake.

The four perspectives on work-learning noted above and the different vantage points they create for viewing CET cannot be conflated beyond a common recognition of the inseparability of the people (plural), purposes (multiple) and practices (current and unfolding future) necessary to the enactment of work. That enactment is the conduct and transformation of work irrespective of how the bringing together of the resources by which it is constituted is conceptualised. That acknowledged, the significance of workers as primary resources cannot be underestimated in efforts to account for and elaborate the diversity and complexity of all the resources enacted as mediating factors in work and work-learning. It is, unsurprisingly, people who learn. In and through work, it is people as workers who learn and thereby secure the conduct and transformation of work. As is evidenced by industrial disputes, accidents, holidays and all manner of disruption and delay, when workers stop working, work and learning in and for work ceases. To examine and understand CET (in all its guises) requires understanding and valuing workers' perspectives and preferences for learning through their immediate experience and across their working lives. To effect this means researching what Lave and Wenger (1991, p. 50) described as, "the interested, concerned character of the thought and action of persons-in-activity". How and what workers think and action as their learning, their motivations, intentions and preferences and so on, is fundamental to the effective provision of CET. Seeking to advance or enhance CET without such understanding reflects a failure to appreciate the nature of work-learning and the opportunities workers generate through their enactment of work-learning.

12.3 Examining Workers' CET Learning Experiences and Preferences

In order to gain an insight into the types of learning experienced and preferred by workers for the purposes of retaining their current employability and meeting future economic and structural challenges (resulting from factors such as globalisation, technological developments and the demise and creation of new industry sectors), the perspectives of 136 employees in four states in Australia were canvassed. The data collection was organised in two phases. In Phase 1, semi-structured interview schedules, along with a number of written questions containing tick boxes and scales, were used to elicit the views of workers employed in the two industry sectors of (a) aged and disabled care within community services and health and (b) transport and logistics. The interviews were of between 30 and 40 min' duration and were usually conducted in a face-to-face format between a study researcher and the participants, although a few group interviews were also held. In Phase 2, the larger study, while opinions from additional participants in aged care and disability were sought, the range of industry sectors sampled was extended to the mining, financial and services industries (e.g., hospitality and tourism).

Table 12.1 Workers' experienced and preferred forms of CET

Kinds of learning and support experiences	Preference percentage[a]	Actual percentage[a]
Working and sharing with another experienced worker on the job	57.0 %	76.0 %
Individual mentoring by a workplace expert (e.g. supervisor)	55.5 %	56.0 %
Group activities on site guided by a trainer or other facilitator	49.0 %	67.5 %

[a]More than one response was encouraged

The workers, who are the focus of this chapter, were asked to rank different types of continuing education and training (CET) provision according to their experiences and preferences and then provide a rationale for their choices with respect to the latter category. The particular forms of CET selected derived from earlier research findings (Billett et al., 2012). Table 12.1 above shows percentages of the three most common learning and support experiences of CET identified by workers and their preferred forms of such provision across the two phases of the study.

What is evident from the first line in the table above is that the participants in the study stated that their preferred form of engagement in learning was on-site from an experienced co-worker (57.0 %). Further, they rated this as their most common mode for developing new knowledge and skills (76.0 %). In explaining why they attributed this ranking to the option of working with another experienced colleague at work, the study participants provided a range of reasons. The following examples give a flavour of the different reasons workers proffered to rationalise this choice.

> … I'm one of the more experienced people now, but a few years ago that wasn't the case and I most relished being with my experienced buddies who were doing my job, who were deeply familiar with what I was doing, who could give me insights into my job. People from the outside, their advice was often, not always, often less relevant because they didn't have intimate details of my job and they couldn't be expected to. (finance worker)

This worker respected the 'depth' of knowledge and the 'intimate details' about his job that his co-workers had developed and could share with him. This was compared, somewhat unfavourably, with guidance from others who lacked these attributes.

Another worker, this time within the aged care sector, focused on the likelihood of currency and practicality inherent in this mode of learning. That is, 'whatever they're telling you actually works 'cause they do it all the time'. Still another worker highlighted the opportunity to build team unity at work through learning from and with peers. This can be seen in the following quotation.

> The individual peer support, that's always good. I think it fosters a nice team environment and then it gets a broad range of knowledge across the whole team so if you can keep that communication open it just enhances the way that the team works together. (finance worker)

Other workers identified processes that were perceived as helpful when learning from their co-workers. The following example indicates a stepped sequence of

learning guided by peers that was claimed by a participant to have been effective in learning to TIG weld.

> Well watching people doing it you get a rough idea how it goes and getting someone to help you, they will give you a rundown … show you and then they'll tell you to do it and while you're doing it they'll watch you and tell you what you're doing wrong. (mining worker)

For truck drivers within the transport system learning from other drivers was particularly important as these employees are very mobile. It was evident from the interviews that there are few opportunities for this particular occupational group to meet together, either informally or formally, to develop new knowledge. However, as well as appreciating the CET support available from those colleagues with longer service in the industry, one interviewee noted that learning from others also involved a form of reciprocity between older and younger workers.

> Quite honestly, I still think it's the same thing where you can pass knowledge on and you can take knowledge and it works in two ways. If you've got a young person, you're virtually teaching them part of it I suppose, and you can learn something from them as well. I still think that's the better way after 48 years on the road. (transport worker)

These examples of workers' justifications for why they preferred to learn from and with a peer emphasised the belief that these unofficial 'trainers' were generally highly experienced and understood current and effective practices. In addition, a relationship of trust existed in such learning milieu where mistakes could be corrected through positive and developmental processes.

The mode of learning ranked closely to individual peer support preferences by interviewees was individual mentoring by an authorised workplace expert (e.g., a supervisor) within work settings (55.5 %), although it was somewhat less commonly available (56.0 %) than in the mode discussed above (76.0 %. In the transcript excerpts below, several features of this mode of learning are highlighted.

In the first example there is recognition by the worker that initial training at work, however it might be conducted, will not suffice. The value of being assigned a mentor is that a particular person with experience is available to address questions or issues as they arise.

> … The reason … for my first choice, which is one on one mentoring, is because whatever job you do, there's always that need to go to the next level. Having someone who has been there, done that, helps you to ask your questions freely and … you wouldn't have to wait for a different course ten months down the line to ask a question, because you either have forgotten about it or lost interest in the question. (aged care worker)

Another participant valued the efficiency and the highly focused nature of the relationship that is possible to develop with a mentor.

> Oh because it's just you and the supervisor one on one. He can just be talking to you and not trying to explain it to this one and then next one and next one, sort of thing. … It's easier to concentrate. If there's more people around then it's a little bit distracting. You don't have all different people trying to talk at once. (mining worker)

Another element of efficiency in learning that was rendered by a mentorship relationship was the increased likelihood of learning from mistakes and, ultimately,

avoiding them. In the two interview transcript excerpts below which relate to the mining and tourism industries respectively, these features are evidenced.

> I think if you work with an experienced person you are less likely to commit mistakes and if you do commit mistakes they will show you why and they will explain to you how not to do it again instead of… you know, because in the industry we are in we can't afford to make any mistakes. We're talking about lots of pressure on those wells, so we've got to make sure we do it and we do it right. (mining worker)
>
> This isn't the sort of job. I mean a lot of it, a little bit of it is trial and error, you learn from your mistakes, but there's not much leeway to make mistakes here, because you're talking about working with animals that have had a lot of training and you make too many mistakes and it can set that training backwards. So learning by your mistakes is probably not a great idea. (services worker)

As with the first preferred mode of learning that workers identified, the importance of trainer knowledge and experience was highlighted. However, in this case, these attributes were legitimised and this was critical, particularly within high risk industries, where the margin for serious errors is very fine. Another aspect of this type of learning arrangement was its inherent individualised nature and where, optimally, assistance could be staged in a way that was responsive to a particular worker's needs.

The third model of learning that was preferred by the study interviewees (49.0 %) was small group learning interactions (e.g., through the media of meetings or organised discussions) guided by a knowledgeable facilitator. This form of on-the-job knowledge and skills development was the second most commonly experienced option with this group. In the three interview excerpts shown below, the interviewees emphasise different aspects of learning through engagement in small group meetings and discussions with managers and in-house trainers. The first quotation focuses initially on affective benefits whereby those workers who may be reticent to speak in a more formal setting 'will actually pipe up to say something', in a small group setting within an aged care facility. A further point that was raised is that this mode is an efficient way of sharing information that is pertinent to a specific group of employees.

> [Opportunities to learn in an in-situ group setting] I find are quite beneficial because sometimes a few are a quieter person in a group. Like, in the office, you might not feel confident enough to say something but once you're in a group setting with people you might actually pipe up and say something and other people talking encourages you to speak and that's why I find those are quite good. And they allow you to get a whole lot of information across to a group of people as opposed to telling everyone individually and people getting the message differently or whatever the case may be. (finance worker)

In the transcript fragment cited below, the worker identifies a number of features of this mode of training. First, it is provided by someone 'qualified' (a teacher) from a different part of the organisation who has developed specific 'new' skills and knowledge ('things)' and practices ('ways') that are both practical and effective in this workplace setting. Second, the training is conducted on-site using modern equipment which has been designed to meet both legislative and the physical requirements of the residents.

> We do have training here like continence management, pressure area management, … hoisting, fire training, first aid. We do have a lot of training. Taylor House provides a teacher from the other faculty. So, they train us and they teach us the new things, new ways, the good ways. They teach us those things, we're pretty much applying. … They always bring in new equipment, the latest equipment and the people who use those [sic] equipment teach us here so they share the knowledge and they share the information which is good for us. … Because we do many manual things here and teaching manual handling will definitely minimise the risk of being injured. It's really essential. They have to update what is going on in a legal way or in a mechanical way, anyway. It's essential. (aged care worker)

Another benefit raised by a worker with respect to small group learning was the availability of opportunities for workmates to explore notions and even point out, in a supportive way, erroneous approaches that were being practised that this mode presented. The excerpt below focuses on this point.

> I've always found in the group you could bounce ideas off other people; you can present your opinion, whether it's wrong or… at least the group can sort of close in what they feel you're saying is wrong and convince you, okay, I need to think a different way; or you might be able to comment on somebody else who is thinking the right way, "Oh yeah, but if you look at that and try and think through it a bit better".… I think I benefit more out of group training because I mean it's all part of team construction as well as … sharing information that you know with other people and knowledge isn't knowledge unless it's shared. (mining worker)

Again, it is evident that the workers in the study reported here valued 'trainers' who were experienced and knowledgeable about effective work practices which included the use of specific equipment in their occupational contexts. They also noted that this mode was characterised by learning within a supportive environment where all voices were respected and, specifically, its efficiency in sharing information.

While the three sets of preferences elaborated above were initially conceptualised by the study researchers as discrete, it is evident that, as well as being understood by the participants as having common features, they were sometimes seen as complementary in specific learning events. For example, an older aged care worker stated that when she was first employed in her current role it was necessary for her to improve her computer knowledge and skills. This learning was achieved successfully through a number of different training modes, not all of which were practised in her workplace.

> I've had a mentor on the floor who's actually shown me step by step, written down the instructions for me, plus I've had training offered to me in the computer side of things and I've taken those up and that's really helped a lot. [In the case of] computing at home, [I have] young children who just haven't got the patience to wait for poor old Mum. … They're four or five steps ahead of me, but we've gotten there. I've gotten there. I've had to if I wanted to better myself and step up, which I want to do in the position that I'm in. I've had to learn but I've enjoyed it. It's been a great journey (aged care worker)

Another worker, this time in the mining industry, saw his preferred learning mode as a set of sequences, some of which were likely to be iterative. His understanding of the linear and mixed-modal process that his learning was anticipated to

take is shown below in the first quotation and this is then summarised in the second.

> … I've started yesterday so I'm going through a training program at the moment. I've just been given the booklet, so at the moment I'm just reading through and learning all the parts of a well, all the joints of the pipes and things like that. After that I'll spend some time on the field with one of the operators just looking and learning and after that I believe I'll go straight to the training classes to undertake training as well. …
>
> Yeah, so what do you do? The way I'm thinking is to get a bit of knowledge inside the workplace first, so you get that knowledge and then you go away and do class studies with an organisation which will teach you all the theory. So once you've learned all the theory you come back to the practical again. (mining worker)

As the few and brief excerpts of worker interviews above indicate, work is a dynamic blend of active engagement in the enactment and development of occupational skills and knowledge through training, sharing and doing what is required. Such is the practice of on-going learning in and for work. Learning is working and working is learning. Both conceptually and pragmatically, all the worker participants in the CET project reported being constantly involved in some form of learning for their work.

12.4 CET for Working

Work is increasingly about learning – learning to improve, to respond, to innovate, to work together, to secure employability and to learn. From a practice theory perspective this is unsurprising. As Hopwood (2014, p. 351) states, "learning and knowing are about what people do and say, bodily, and the material worlds in, amid and with which these actions unfold". Hence, work is a learning practice and ongoing learning is a work practice. For the worker participants in the research reported here, the inseparability of work and learning is not simply a case of securing an authenticity that ensures the links between work and learning are relevant, efficient and supported. Such authenticity is important and fundamental to good learning practice. Saliently, this inseparability is the actual lived and unfolding experience of all these workers. Seeking to separate work and learning as distinct experiences may seem necessary to separate and distinguish, for example, workers' engagement practices in a training room (i.e., where they are being informed about new procedures) from their engagement practices in the actualities of work (i.e., where they may implement and enact those new procedures). However, such separation, in terms of learning experience, is at best artificial and at its worst denies the ways workers learn and prefer to learn. And yet, this kind of 'training' perspective remains the common understanding and experience of workers and their employing organisations – perhaps as a legacy of institutional schooling and the need for carefully managing limited resources such as time available (and away from immediate production tasks) and access to expertise (those who have the knowledge and capacity to support effective learning).

Practice theory perspectives suggest a more integrated approach to the on-going learning provision for CET is necessary. It is not that getting together in classroom contexts is unnecessary; rather, it is about who gets together and how that togetherness is enacted for learning. For example, Gherardi (2010) examines the 'knowing-in-practice' that is telemedicine and how the specialist cardiologist, the general practitioner and the patient come together through the mediating technology of ICT (information communication technology). However enabled and evaluated, such coming together accomplishes the work of telemedicine. Together, in the authentic connectedness of their collaborative work tasks, the three participants collectively enact and develop the work. The practice of the work secures the practice of learning how to do the work. This is the message the workers of the project reported here are delivering. Learning needs to be practice based. Minimally, this is about getting workers and experts together, on site and in situ. Further, however, it is about getting all invested parties together, that is, clients, co-workers, experts, managers and others, in ways that progress practice rather than simply create instruction opportunities. The worker participants in the project reported here emphasised throughout the need of greater sharing and collaboration amongst themselves, and with experts, trainers, mentors and supervisors as the basis of their learning preferences for current and future work-learning.

Such collaborative practice, that engages the vertical (e.g., clients, managers) and horizontal (e.g., co-workers, tools and equipment) resources of work practice, reflects the 'knotworking' that Engestrom (2008) identifies as the activity system of work. A group of workers in a classroom may constitute a 'knot' that is working towards expanding a learning object. However, such a knot is relatively passive and far less resourceful than that which the workers in the research reported here are advocating as the basis of their on-going learning or CET. Knotworking is task and goal oriented, deploys multiple skills, perspectives and applications, and is highly temporarily bounded and typically unconstrained by the need of generating new solutions to emergent problems, rather than being limited by the structured application of known techniques to predictable problems. Hence, knotworking is intensive, creative and boundary crossing (Engestrom, 2008). More than team and meeting focused, knotworking is dynamic resourcing for whatever can emerge as optimal output for the needs of the system (Sinikara, 2012). Workers know how to knotwork. Their work and learning demands they draw on all that is available to them at the time of the need. They recognise that the primary source of these necessary resources is their work, hence, their co-workers, expertise, diverse learning opportunities, organisational support and so on, and they work to secure these resources when and if they become available. As a truck driver in the research sample stated when describing the benefits of learning together, "knowledge isn't knowledge unless it's shared". Such an understanding of how knowledge for work is generated through collaborative engagement in addressing the needs of work is suggestive of knotworking.

The resources brought together in learning through knotworking are not equally valued and homogenous; they can't be, given the nature of the different skill sets and perspectives brought together. Workers are not equally gifted to deploy similar

learning legacies that evidence their years of previous engagement in work-learning. All workers are different. The typical classroom training session with a single instructor and its assumptions of students being similarly prepared and enabled to learn denies the diversity and flux that is work-learning. For the workers in the research reported here, after the tasks and activities of work itself, the most commonly cited learning resource was co-workers and this because of their differences and yet complementary understandings of the learning requirements of their work. The next most commonly cited resource was expertise, that is, having opportunity to access and work alongside experts (be they more experienced co-workers, supervisors, mentors, subject matter experts, trainers, etc.) was considered necessary to effective CET. Throughout the interviews, workers spoke repeatedly about seeking information and support from their co-workers whether they were novices, colleagues, buddies, supervisors or managers. From Smith's (2014) perspective, this seeking of the additional learning resources that co-workers represent constitutes negotiating participation in work as personal work-learning practice. Importantly, it is unsurprising that workers actively seek each other out through their learning. Rather, what is significant is how and why they do this, given that each of them will effect this in different ways at different times, for different purposes and with different expectations. Smith points out that the negotiations these work-learning encounters constitute can be viewed as intentional goal oriented interactions that secure resolution of the work requirements generating the encounter. For example, and as the worker excerpts noted above indicate, a worker seeks assistance, receives it and is able to complete the work. However, Smith also points out how the negotiations of work-learning can lead to a variety of enactments and outcomes that can be unintentional and yet lead to unexpected discoveries (favourable or otherwise) and or can lead to repeated intentional enactments that do not find resolution and so remain on-going (pleasantly or unpleasantly). What negotiation perspectives (Smith, 2014) and knotworking perspectives (Engestrom, 2008) suggest for effective CET and as the workers interviewed attest is that on-going work-learning needs to accommodate and promote workers' self-directed engagement in bringing together the resources necessary to their sustained and developing work practice.

Hence, CET must be recognised and supported as a relational social engagement through which workers, in collaboration with the numerous resources (personal, organisational, material, etc.) that comprise their work and its future, promote and support their work-learning. Workers do this anyway as they make the best of what is available to them. Expanding this set of resources and supporting the relationships on which resource access and generation is accomplished should be accepted as a CET priority. For some workers, this will mean establishing the clear (seemingly linear) pathways that work-training-work engagements can accomplish (as demonstrated in the quotation above by one of the finance sector participants in the study). Such endeavour may mean negotiating more closely and collaboratively with employing organisations and managers to secure greater training opportunity. However, such distinctions between theory and practice that separate training from application may prove unnecessary when those charged with the deployment of work-learning resources are enabled to foster the conditions (e.g., of expansive

learning environments, Fuller & Unwin, 2003) that better support workers' agentic engagement in their on-going learning.

Billett (2008a) outlines the bases from which workers and their contexts can move to secure greater engagement in learning. So, for example, "workers need to engage in the socioculturally-derived and supported practices that make up the workplace in order to secure the knowledge required for work. While this necessity drives workers' learning and participation, the social practices that make up the workplace require workers to secure the purposes and goals of the workplace" (Billett, 2008a, p. 40). However, securing such goals and purposes is not a simple matter of workers' acceptance or transference through some enculturation process that instructs and inducts them into the priorities of their work. Rather, it is negotiated and thereby, highly person-dependent as workers personally and hence differently construe and enact what their workplaces and occupational practices suggest is necessary and valued. The bases of, and outcomes emergent from, these negotiations (minimally between work and workers but more holistically among all the resources that constitute work) are the relational interdependencies of worker engagement and workplace affordance enacted as workers create and respond to the learning opportunities necessitated and opened by their work. They cannot be seen as suggestive of reciprocity or equality. Such intersubjectivity or shared understanding is more complex, dynamic and transformative of practice than reciprocity suggests (Billett, 2008a). From these perspectives of the relational nature of work-learning provision and enactment and the need of expanding workers' opportunities to exercise more productively and collaboratively the personal agency (however weak or strong) they cannot cease to enact, CET needs to be seen in terms of enabling and supporting workers to do more effectively what they will do anyway, that is, learn to sustain and develop their practice within the opportunities and constraints their work affords.

12.5 Conclusion

To conceptualise CET in the terms of workers' on-going learning through instruction focused training practices forces such learning to be limited by the degree to which those who design, deliver and evaluate its processes and outcomes can imagine and secure its enactment. This has been and remains the case in the Australian context where institutionally led schooling type practices that address the needs of entry level (often adolescent) learners persist. Within this tradition, the limitations of CET can be characterised by seeking to secure the intentions of those who instruct over those who learn. Under such circumstances, the demonstrated capacities of experienced workers, when it is they who are the focus of learning, cannot be adequately accommodated and drawn upon as strong contributions to the learning that sustains their employability and that generatively responds to the increasing changes marking contemporary work. The work-learning theoretical perspectives

underpinning this chapter advance that the nature of effective learning is collective, negotiated and practice transforming. Similarly, the workers in the research cited elaborated their understanding and practice of effective work-learning. Effective learning is emergent from their own endeavours, particularly when those endeavours are supportive and respectful of their learning priorities and preferences. These priorities and preferences have been developed and refined across their many years of experience in learning in and for work. Workers recognise the need of instruction based training. When such training is conducted by experts from within the context of its application, workers welcome and take up the learning opportunity this represents for them and their employing organisations. However, and additionally, these same workers recognise the limitations such learning experiences generate and work hard to overcome them through the exercise of what agency they can secure to enact alternative forms of learning and access to other learning resources.

The workers who participated in the research reported here were very clear about the importance of learning in and for work and equally clear about how best they learned. Their work-learning experience, like the research literature utilised throughout the chapter, suggests that effective CET goes beyond a focus on classroom training for skills development to meet immediate needs. Rather, effective CET takes a more expansive and learner-centred focus on supported learner engagement in the personal and organisational development requirements that meet and direct work and occupational change as a constituting element of work practice. Workers know how to learn and what is necessary to support that learning. While they may not have influence over the kinds of changes they are subject to through the decisions and priorities of their employers and industry regulators, they cannot be overlooked as sources of the successes that come from effectively responding to and generating the learning that is work.

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