Myths surrounding learning, transfer, contextualisation and generic skills

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The Institute for Adult Learning (IAL) aims to contribute to the competitiveness of Singapore by developing an effective, innovative and responsive Continuing Education and Training (CET) sector that is able to meet the needs of industries and the workforce. It achieves this by raising capabilities, catalysing innovation, and leading research in workforce learning.

This conference paper was presented at the 7th International Conference on Researching Work and Learning, 4 to 7 December, Shanghai, China. It is also available on page 909 of the conference proceedings.

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Abstract

Each of the terms in this title: learning, transfer, contextualisation and generic skills has been co-opted in various ways by various groups and has come to be understood in different ways. Drawing on data from three Singaporean company case studies (hotel, construction, and food and beverage), this paper will explore some commonly held perceptions about the role of classroom learning, and assumptions about transfer and learning in relation to the development of generic skills. Using interviews, survey data and analysis of training and development documentation and observations, these studies confirm what those undertaking their work know implicitly, but for policy makers, internationally, is problematic. That is, at any one point in time, no single generic skill is in use; rather there is a clustering of generic and domain knowledge or technical skills and dispositions. What generic skills are predominant in particular industries is mediated by the mode of production, ways in which work is organised, the situated context in which the work is done, the discipline or industry knowledge, and the dispositions of the individuals involved. These studies are undertaken in the Singaporean policy context of generic skills being delivered in classroom settings, a recent call for "contextualisation", a growing awareness of the role of workplace learning in competency-based training programmes. This paper scrutinises some of the myths implicit in assumptions made about t learning, transfer, generic skills and contextualisation.

Importance of generic skills

There is now a great deal of literature that identifies the importance of generic skills. Goldney, Murphy, Fien and Kent (2007) write that changing patterns of economic competition and forms of work organisation have led to a greater call for these skills, particularly teamwork, work ethic, and a preparedness to be flexible and to embrace change. Cushnahan and Batman (2009) note that the teaching of generic skills has "been identified globally as significant to a country's economic security" (p. 6). Virgona, Waterhouse, Sefton and Sanguinetti (2003) comment that changing working arrangements mean that employees are required to negotiate their competence and manage their own learning and career development, suggesting that generic skills constantly evolve over time as forms of production change. As decision-making and responsibility are pushed down the hierarchy, skills of self-advocacy, entrepreneurial consciousness, and financial planning (Sefton, Waterhouse, & Cooney, 1995) are increasingly required in the labour market. This literature not only highlights the importance of generic skills, but also points to the constantly evolving nature of generic skills and the contextual nature of these skills.

However, we need to be cautious about what we mean by generic skills and the various terms used to describe these skills (e.g. key skills, employability skills, soft skills. Claims about the increasing importance of generic skills assume these skills are similar at different levels, and that all types of organisation require new and increasingly demanding and complex sets of generic skills. Generic skills are listed, grouped, regrouped, added to and massaged in various ways, but the very listing of these skills places each one as a discrete, stand alone skill (Gonczi, 2002a), atomising and reducing what is involved and thus failing to capture the complexity of these skills in use. Why is it that internationally (in Australia and Singapore for example) the dominant approach taken to conceptualising and working with generic skills is that they are indeed considered generic across multiple contexts and for multiple purposes, that they are taught as individual sets of skills (e.g. problem solving, team work), and that they are skills attained by the individual? We can begin to understand these questions by examining what is behind the framing of generic skills.

Framing of generic skills

Generic skills are neither value free nor generic (Stevenson, 1996). Virgona et al. (2003) identify two distinct perspectives on generic skills, a practitioner discourse and a policy discourse. Through the processes of social engagement and meaning making, we shape what is acceptable and what is not, capturing values and ideologies, ways of thinking, doing and being resulting in dominant discourses being taken for granted. This process is evident in discourses of generic skills; Vocational Education and Training (VET) policy makers use an abstract conceptualisation of generic skills, based on an atomisation of tasks (Gonczi 2002a in Virgona et al., 2003) redefined into individual competencies. Policy makers find it useful to think of generic skills as being free of context because this provides a unified concept for programmes and funding. Whereas trainer practitioners tend to emphasise the holistic nature of generic skills and the teaching and learning processes that facilitate their development. "Thus, even when using the same label, VET policy-makers and practitioners may be talking about quite different constructions or conceptions (Virgona, et al., 2003, p. 14)." Despite these different understandings, it is the policy maker perspective which is dominant and has come to be considered as the common understanding. This "economic model" (Hockey, Bescos, Maclean, & Spaul, 2010) means that skills are understood as goods which members of a workforce achieve; the claim is that these goods are "subject to the mechanisms of supply and demand, and are transferable across working contexts." (p. 524). The implications of a discourse that considers key skills as generic is to strip them of their embedded values, to assume that these skills are similar across different contexts and that these skills can be "bolted-on" (Bailey, 2005, p. 349) to practitioners. However, as Stevenson (1996) and others (Cushnahan & Batman, 2009; The Allen Consulting Group, 2006) note, when generic skills are enacted or "operationalised" (p. 2), they are different in different contexts.

Hull (1997) suggests that lists of generic skills are indeed conceptualised and developed at a distance, whereas if we based our understanding of these skills on observations of work, then our conclusions could be radically different. Our challenge is to work out what these skills mean in different *contexts* and determine how they can best be fostered and developed; furthermore this should be a dialogue with the relevant stakeholders in the different contexts (Virgona, et al., 2003). We can see why an approach such as this would not be an easy task of policy-makers. Taking for granted the generic nature of these skills is one matter; another is their framing as individual skills. Skills such as communication, teamwork, interpersonal skills and workplace safety are social skills, exercised by individuals within a context. Gonczi (2002b) for example, states, *There is no such thing as the generic competency of problem solving only individuals bringing together appropriate attributes in a particular context to solve the specific problem that confronts them. The key competencies will never stand alone (Gonczi, 2002b, p. 4).* Moy (1999) categorically states that generic skills "should be integrated explicitly and systematically with technical competencies within all phases of the training cycle" (p. 22). Generic skills are used, not one at a time, but in combination and with technical skills (Bound & Lin, 2011) as required within a given context (which may include work across contexts / boundaries), social relations and at a given point in time. It is the competency of the collective however it is constituted at different points in time that is important. Using ethnographic investigations of work in practice, Darrah (1994) showed how groups of workers are able to complete tasks in which they appear not to possess skills. The competence rests within the collective; the whole is greater than the sum of its parts. Hockey et al. (2010) found in their interviews with planners that culture, leadership and management skills in the organisation play an important part in the competent operationalising of skills.

The organisation of production or service delivery, organisation of work, the division of labour and power and workplace culture all impact on how generic skills are operationalised. It follows that generic skills are not truly generic, but context specific. The operationalising of generic skills is highly dependent on culture, time, access and support but also on the organisation of production, the nature of the work, the demands of the tasks, discretionary power (Bound & Lin, 2011; Bound, Lin, & Li, 2011), consequently generic skills differ across workplaces, vocations and industries (Chappell, Hawke, Rhodes, & Solomon, 2003; Waterhouse & Virgona, 2004). This suggests that focussing on generic skills as residing entirely in the individual is problematic. Sandberg (2000) argues that competence in the way workers understand their work is not contained in lists of skills and attributes but in the development of collective competence in the workplace, suggesting that "without a shared understanding of their work, no cooperative interaction will emerge, and by then, no collective competence will appear in the work performance". Collective competence, he postulates is cultural; members are enculturated into the work and workplace and through access to and use of systems of shared symbols and tools collective competence is developed.

When skills are labelled and perceived as individual it is easy to use a deficit model labelling individuals as lacking in certain skills. It follows from this framing that what is required are programs where these skills are imparted free of context attributing responsibility to the individual to acquire them (Virgona, et al., 2003). It is assumed that generic skills, taught free of the context in which they are used are transferable by individuals from one context or setting to another. Contrary to the implicit assumption that skills are transferred unproblematically, transfer is now considered a learning and adaptive process (Waterhouse & Virgona, 2004) that takes place over time and requires making sense of different contexts. It is increasingly described in other ways, for example, packing and unpacking skills, (Down, 2001) or recontextualisation (Evans, Guile, Harris, & Allan, 2010; Guile & Okumoto, 2008). Not only does the conceptualisation of generic skills as generic, context-free and as individual facilitate the use of a deficit model, labelling individuals as having skills gaps, but it has implications for the ways in which these skills are taught. A context free conceptualisation encourages the use of an acquisition metaphor (Sfard, 1998), assuming that 'new and improved skills can be "bolted on" to practitioners (Bailey, 2005, p. 349).

Two studies

This paper draws on data from two studies undertaken in Singapore. The research questions were similar for each study seeking to find out what skills are valued and how they are developed. One study focussed entirely on the valuing and development of generic skills, involving four companies from different industries (Hotel, F&B, Retail and Construction). Across these four companies we surveyed 429 employees using Johnny Sung's Skills Utilisation survey, interviewed 121 staff and analysed training and development documents of each company. For this paper, we use data from the Construction Company (96 survey respondents and 28 interviews) and the F&B Company (71 survey respondents and 28 interviews). Using similar research questions, the second study used an ethnographic approach using observations, interviewing of trainees and their supervisors, and document analysis of company training and development policies. In the second study the four cases were a hotel, an F&B company (different companies to the first study), a nursing home and an aerospace maintenance company. We followed 10 trainees undertaking competency-based programmes with a workplace learning component, undertaking 26 observations. In the Hotel Company we followed three trainee chefs, interviewing them and their supervisor and undertook five observations. The following section presents the three case studies. Each case is followed by a brief analysis. The reference to specific generic skills comes from the Singaporean Government's Employability Skills Framework.

Ways in which generic skills are used

Hotel Company Learning how to learn in different workplaces is an important skill for both the individual's personal growth and the organisation's development. In the Hotel kitchen, Eric was able to recontextualise what he learnt in school on stock making to stock making practices in the Hotel kitchen to give him "*a different perspective of how to do it in a more refined way. I just fuse the two ways together like the last time how we do it and the new method that I learnt, so it's making much more better sauces*". After working at the butchery section for over a month Wei reflected, "*it surprised me how lousy my butchery skill was*". Giving the example of filleting fish, Wei explained the difference between what he learnt in school and the Hotel method is in the order of the steps, but the butcher chef's method caused less tears in the meat. As he moved from one kitchen to another one of six kitchens in the Hotel each three months Wei needed to learn different cooking styles, about different work teams and workflow, leaving him feeling stressed. However, this exposure meant he became better at knowing what questions to ask: *So you try very hard from the first day ask, ask, ask, ask, … I think I've pretty much got it down to; I know what questions to ask then first is, where is everything kept? Tell me, this chiller is for what purpose? This trolley is for what purpose? This place in the chiller is for what? That place in the chiller? So at first when I just started, you know, I go in there and say, what do you do here? Now you know what the right questions to ask. What is your operation like? What's this? What's that? So I find that the assimilation time is shorter and shorter, you get accustomed to it faster.* Wei began by asking general questions such as "*what is your operation like?*", but learnt that these general questions did not help him much. He learnt to ask specific questions to help him understand and become part of the flow of work rather than be disruptive of the flow, as Wei utilised his technical skills in these situations, he built up confidence in his abilities as a professional chef, "*you trust your skill and you trust your knowledge even more*". Thus he is better able to handle unexpected situations when they arise. In the preparations for the Superbrunch for over 1000 guests Wei "*kept taking [photos] and then asking for the recipe and then step by step, also go back, you take the photo, you document the photo and you try to remember*". In terms of organisation and planning, John, commented that he learnt how to organise, plan and think ahead. There are layers of organisation involved such as setting up the workstation with the right tools, finding out the quantity of food that needs to be prepared, and co-ordination with other chefs who may be working on the same or different dishes. Trainees need to be aware of both the big picture plan and the details of their individual tasks. According to John, these work habits, initially developed in and for the kitchen, have now become "*innate*". As a result of working closely with team members, trainees learn to 'read' what is happening and what is yet to happen; this enables them to participate fully in the workflow. When they work on different components for the same dish, there is a sense of trust in each other's abilities. This trust can be attributed to the inclusion of the whole team in the planning process for new dishes, "*everybody's got to think of something [to*

contribute] too, in the processes, yeah so it's the whole team" (Eric). With an understanding of the thinking behind the various dishes, trainees are able to better appreciate not only 'how' to carry out tasks, but the reasons 'why' certain tasks are undertaken in particular ways.

We see from this case study how generic skills are used in an integrated way; no one generic skill is used at any one time, rather multiple generic skills are used together. For both Wei and John, learning to learn is part of further developing organisational and planning abilities which are integral to the workflow and development of technical skills. Wei's development of questioning skills to find out about workflow and the organisation of the kitchen illustrates how these learning to learn skills are tied to a particular context and purpose to better enable him to use his technical skills, appreciate the purpose of individual and group tasks, of tools used, the work flow, and ways of working. It was necessary for Wei to be part of a workplace to learn these strategies; it would not have been possible for him to develop his questioning strategies in a classroom. Moving from kitchen to kitchen every three months facilitated the trainee chef's learning of different dimensions of competency such as job and role management skills as they experienced different kitchens and their responsibilities. Job and role management skills relates to having the capacity to deal with the responsibilities and expectations of the workplace, including work-related responsibility and working with other. Task management skills are about handling a number of different tasks within the job to complete an entire work activity. In order to do this, trainees need to be able to recognise what is happening around them and anticipate what is going to happen next, requiring knowledge of how their work is organised and what the daily work routines are.

What is also interesting about this case study is the trust in each other, the opportunity to develop confidence, and to contribute meaningfully. The culture encouraged development of each individual, recognised and tapped into each individual's passion and commitment. When mistakes are made they are seen as a learning opportunity. For example John misread the decimal place on the scales resulting in 10 loaves of bread having to be thrown out; he commented "*... you learn hard and they will stay forever*". The supportive culture extended to the deliberate setting of challenges such as when John's supervisor asked him to make a dessert he had not made before – chocolate mousse – close to the end of the shift, with no room for error in terms of timing and available ingredients. His supervisor guided him at each step. These trainee chefs are learning not only technical and task management skills of their vocation, but are also learning about workplace relations, standards, timing, the scope of the work, the ways in which tasks and workflow are organised, about workplace communications as they chat over shared tasks, overhear conversations and they see the delivery of ingredients contributing to their understanding of organisation, quantities, timing. The generic skills of organisation and time management, for example, are embedded in the vocation, the standards and clientele of the workplace, the workflow and organisation of work within the Hotel

Kitchens. Contingency management skills are about being able to respond to problems and irregularities such as breakdowns and changes in routine. Like stipulated standards in the workplace, knowing what to do during unexpected situations is learnt through experiencing these situations. The development of contingency management skills is also determined by trainees' knowledge of the whole workplace (e.g. workflow) and the degree of discretionary power they have. Trainees are given space to learn how to solve problems and make independent decisions on the spot when faced with unforeseen circumstances. Eric gave an example of how he had to prepare a raw vegan dish while working in the room service kitchen and noted that his supervisor "*trust(s)*" them. Wei shared that he could practice making a chicken consommé and labels it as chicken broth if he fails. Space is created for learning, responsibility is handed over and as a result confidence is built and contingency management skills and their inherent generic skills are exercised.

F&B Company has multiple outlets in Singapore and in the last three years has established a training and development division, offering a range of competency-based training under the Workforce Skills Qualifications (WSQ) system, including training in generic skills. Training takes place in onsite classrooms; the training stands outside of workplace practices and is used as a major strategy to implement changes in cultural practices. A non generic skills course (The Certified Service Professional (CSP)) that focuses on service excellence was often cited in the interviews as being useful in helping respondents communicate better with internal and external customers (guests): *Basic courtesy between colleagues, you know people is busy, greeting people has become a forgotten thing, it refreshed us, how nice it is to be greeted in the morning. So after attended the CSP, now I know how the staff went through if they face the difficult guests. From there I interact more rapport, good rapport from them, with the outlet staff.* Interviewees are aware of the importance of providing excellent service - the common goal across service and kitchen staff evident in this respondent's comment *"we take care of the guest"*. In their pursuit of providing service excellence, F&B Company staff employ problem solving and decision making skills when it comes to handling customer relations. *Let's say today I meet a very nasty guest I make sure that what the guest actually needs, whether it's my internal one or from outside one, some guest they from outside they bring in their problem to us, they just show it to us but of course we will share their problem, I mean I will share the problem, you see actually what they need, offer them some you know keep them talking to erase their problem away.* Communication, problem solving and decision making skills are often used in conjunction with content knowledge. For example, service staff need to be familiar with company promotions (such as the 1-for-1 lunchtime promotions as well as the 'add-ons') and menu items, while kitchen staff talked about job-specific tasks such as ensuring food quality and kitchen cleanliness, knowledge of their subject matter (such as cuts of meat, in the case of *David*), as well as new menu items and their preparation methods. Interpersonal and communication skills are also used in

conjunction with product knowledge to manage guests, for example, Gary spoke about using interpersonal and communication skills in ensuring he and his staff are "*on the same wavelength*",. These generic skills are used in addressing issues such as staff shortage, either when employees did not turn up or during peak periods. Some respondents recounted how they had to re-delegate duties, multitask as a short gap measure or call on other outlets to provide support (which in turn relied on manager's networks across outlets). In F&B Company 46.4% of interview respondents commented positively on the working environment; some respondents spoke about being treated like family, having a sense of belonging and commitment to the organisation. However, 60.7% respondents raised issues of concern to them, including 25% who had made very positive comments about the working environment. Challenges, issues and tensions mentioned by interview respondents include high staff turnover, limited access to training, tension between kitchen and service staff / working as a team, sense of fear, and salary and benefits. Despite management giving a clear directive for middle managers and supervisors to be supportive of staff we did not hear of stories of these middle managers receiving support themselves as they daily tried out different approaches. As one respondent commented there are considerable generic skills involved in implementing this new approach, *Tackling some of these staff is not that easy so like how to counsel this people, how to tackle problem ... you have to be tough but when it's training they don't ask you to be tough.* This quote highlights the dangers of isolating learning of generic skills from the work environment. The sense of fear particularly amongst junior staff was raised by many interview respondents. *When there is a higher management over there they will don't dare to, they got problem, they don't dare to call, talk to you, ah They don't dare to face [you]. They just know us as oh every manager for scold, scold, scold and never take care of them. Never don't want to know their problems, you know?* This sense of fear extended beyond junior staff, limiting creative and innovative approaches, *Everybody is protecting themselves ... They might get into trouble to make initiative or make changes ... nobody is speaking their mind.* In this environment of fear and mistrust supervisors and managers constantly need to coach newcomers, both for kitchen and service staff; this is an industry with high staff turnover. Good communication and interpersonal skills are integral to coaching and developing others, as suggested by this manager who was concerned to develop his staff: *I used these skills everyday to not only handle the guest or coach my staff but actually communicate with them down to my staff so that my staff and myself we are on par, as in we're both on the same wavelength.* Management, supervisory and people development skills are highly varied in F&B Company, ranging from those with considerable expertise and with a people development orientation to those who exercise their power to "*scold*" and contribute to an environment of fear and mistrust.

As in the Hotel case study, it is evident in F&B Company that no one generic skill is used alone; rather employees use these skills in complex, highly contextualised ways. The comment, "*you have to be tough but when it's training they don't ask you*

to be tough" suggests there is a disjuncture between what happens in the classroom and what happens in the workplace. There is no link between classroom and workplace learning. Trainers need to be highly cognizant of what does happen in the workplace and there needs to be opportunities for participants to move between classroom and workplace, to work collaboratively on projects and use the classroom as an opportunity to reflect on everyday practices and develop alternatives (see for e.g. (Crebert, Bates, Bell, Patrick, & Cragnolini, 2004; Dawe, 2002)). This is a vastly different approach from an acquisition model of learning (Sfard, 1998).

In F&B Company, there appears to be a lack of collective understanding of the intent of the change management initiative to support and develop staff, contributing to the sense of fear, blame and lack of risk taking. The use of generic skills is a critical factor in changing organisational cultures, but it is not only the individual, but the collective (teams, outlets the whole organisation), organisational systems and values and orientations that need to be designed to complement each other to support a cultural shift and changes in practice. Training is not <u>the</u> answer; rather it is one part of a solution. A people development orientation, requiring generic skills such as good communication, negotiation, counselling, and teaching skills (including giving responsibility) is underpinned by a valuing of people, a belief that people can learn. This aspect of generic skills is not recognised in national systems; the closest reference to it is the dispositional attributes listed in the Australian Chamber of Commerce and Industry & Business Council of Australia *Employability Skills Framework*. The ways in which generic skills are used reflect organisational values, mission and vision. In the F&B Company there is an historical legacy that is being played out in the behaviours and skills of some managers and supervisors and still embedded in various systems such as audits (see quote about "*people protecting themselves*" / "*nobody is speaking their mind").* There is a stark contrast between F&B Company and Hotel Company. Hotel company values, mission, workplace structures and culture are aligned, creating not only supportive work and learning environment, but opportunities for supervising staff to use generic skills to develop others and for trainees to used their generic skills to both contribute to the team and develop generic skills that are highly contextualised to their vocation.

Construction Company has a very different learning culture than F&B Company; there was evidence of commitment from managers to developing their team members, deliberate attempts to develop team work necessary for smooth operations, and career enhancement opportunities. Support varied from setting challenges, opportunities for constant feedback and working together as a team. Following safe practices is a high priority. Respondents used a range of communication skills including non-verbal communication, such as using drawing and sketches in the event of a communication barrier to ensure the construction workers followed safe practices. Others spoke about the need to communicate "at their level" (referring to the contract construction workers from other parts of Asia), using very simple English, or sometimes even dialects or other languages such as Hindi or Thai. In short, ensuring information is conveyed and understood by the other party is often talked about in conjunction with work safety issues. Time management, planning one's work activities and managing of one's feelings were cited by the interviewees as being crucial in helping them deal with the demands of meeting project deadlines and the associated stress. *Sometimes like the boss gives you one task and you are very short of time, to complete the task. That is something that is quite challenging, is time management and stress, able to take the stress.* A high level of interfacing (shared problem solving, exchange of information etc.) between teams of architects, engineers and other specialist departments is required in order to meet project deadlines. A range of cognitive, communication and interpersonal and decision making skills are used to identify and address problems while also ensuring the flow of work is not disrupted within what are often tight time frames. *With colleagues you must know who to look for, then you need to understand when they tell you, you need to think and to analyse, whether is this a feasible workflow. I mean would there be a problem?* The workflow is defined and embedded in the work processes, the workplace infrastructure and systems, as well as in shared symbols and tools mediating the use of communication skills and mediums for communication. An example was the frequent mention of "drawing coordination", where technical drawings are used as the medium of communication across departments; drawings represent a system of shared symbols that are understood by employees across different departments. The following example shows how problem solving, overall knowledge of how the organisation works (and with it, the workflow and work processes) as well as communication and collaboration are strongly interrelated and cannot be discussed in isolation: *Because there are so many problems that will arise and it will slow down the flow of work because of this problem. So we try to settle early those problems, we try to detect early those conflicts, discrepancies and problems so that we can settle it, then after settling the problem then the work flow is smooth… So it needs a lot of coordination, needs a lot of writing with other teams, site and internal department, we need to work together. We need to have a good communication, coordination…*

There is a high level of interconnectedness between generic skills used in Construction Company (Bound & Li, 2011). The findings reinforce the notion that skills are seldom used singly, but in combination with each other and with domain knowledge and skills, the use of the skills differs according to the task and domain expertise. Construction work requires extensive collaboration between various departments and calls for reshuffling of teams after the completion of a project. How the company is organised and structured to deal with the demands of the construction, its hierarchy and individual's roles often dictate how information is shared, flows, and the nature of how employees interact with one another. The systems in place for the organisation to function from communication infrastructure, to software used across architecture, engineering, M&E, to drawing coordination and SOPs influence the use and look and feel of generic skills.

Schön (1987) notes that practitioners often need to resolve, integrate or choose among conflicting perceptions of a situation in order to construct a problem worth solving. The nature of the work for professionals in the construction industry within one site requires coordination, sharing of platforms, software tools, different perspectives and purposes in the work of each profession. This alone has the potential for conflict, let alone the need for choosing among conflicting perceptions to construct the problem; the need to address the problem overrides potential conflict. For example in resolving issues with the crown of a complex building the architects who designed the building, the architects and structural engineers working for Construction Company realised that what had been drawn as a straight line was in fact a bow. This applied not to just one strut (steel tube that carries a load) but many struts in the crown of the building. To resolve the issue this group of different professionals moved from using a two dimensional drawing package to a CAD package that modelled the building in 3D. There were at least three rounds of adjustments made as a result of the modelling exercise. The 3D modelling allowed these professionals to "see" where windows could open or not, to allow for the appropriate placement of a maintenance mechanism that penetrated the frame and for the frame to be in line with the view from the apartments. This information was critical for the prefabricator of the struts. In this instance a tool (the 3D Archicad package) mediated the communication, problem defining and solution processes. Generic skills and their use are mediated, not just by the individual and collective competence, but by the tools used.

Conclusion

Generic skills are not generic; as our data demonstrates, they are highly contextual. When any group of generic skills are used, the tools used, the purpose, and intent mediate the operationalisation of these skills. But more than that the job role and how that role contributes to strategic direction, the requirements for collaborative work and interfacing (Daniels, 2010), the design of the job, the discretionary power, the culture of the situated context (Waterhouse & Virgona, 2004), the vocation or the

profession (and hence domain knowledge and identities) (Evans, et al., 2010), and the agency of the individual (Billett, 2001), all mediate the operationalisation of generic skills. The workplace context triggers different types of cognition and thus different types of information processing and problem solving(Eraut, 2004). To frame generic skills as discreet, to atomise them, robs them of their context dependency and assumes they are an individual skill set. Atomising generic skills can result in missing nuances hard to capture, but critically important for individual and collective success. If on the other hand, we frame generic skills as both individual *and* collective, as part of competency that is about understanding the work(Sandberg, 2000), not about demonstration of individual performance and underpinning knowledge free of context, then we allow for recognition that concepts and practice change as we use them in different settings and that learners change as they recontextualise concepts and practices (Evans, 2011). Generic skills are far more complex than individual performance criteria and underpinning knowledge. It was interesting to note that our data also demonstrated that the dimensions of competency (e.g. task and contingency management) encompass the use of generic skills in each of the Hotel, F&B and Construction Company contexts. Furthermore, the dimensions of competency capture collective understandings of the work, the task and the setting. If we understand competency and the dimensions of competency as a collective understanding of the work that captures collective processes, then we make visible the affordances of a workplace for recontextualisation of knowledge and skills learnt elsewhere. Consequently there is no longer the problem of transfer. Instead we understand that these skills are framed up as a being part of a *process* of *recontextualising* (from one context to another) according to the setting. As our data demonstrated learning to learn or metacognitive skills are essential for enabling us to apply skills from one setting to another (Owen & Bound, 2001) and indeed as we work, we learn self-regulation skills (Virtanen & Tynälä, 2008). Settings encapsulate values, beliefs and valuing of particular behaviours, processes, knowledge and shared symbols and thus ideologies (e.g. customer service, tight deadlines must be met (because they impact on profit); generic skills are not only not generic, they are not value and/or ideologically free in the way they are used.

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