

Securing intersubjectivity through interprofessional workplace learning experiences

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Keywords

Interprofessional working
Interpsychological processes
Workplace learning experiences
Inter-subjectivity
Co-working
Shared intuition

Abstract (200 words)

Effective interprofessional work is premised on high levels of intersubjectivity (i.e. shared understandings) among those who are co-working, particularly when quick or seemingly spontaneous responses are required for urgent or immediate action. For these kinds of performance, they require what might be termed 'shared intuition'. The concern is how best to assist the development of these bases for effective interprofessional working, particular in circumstances when co-working is temporary, goals to be achieved are ambiguous and processes indeterminate. It is proposed here is that much of the required levels of intersubjectivity arise ordinarily through development processes that are a part of everyday healthcare co-working. However, to promote this development and achieve the kinds and levels of intersubjectivity required for non-routine interprofessional work may require particular curriculum and pedagogic interventions. Those practices are about organisation and sequencing of experiences to provide a foundation of shared understanding of concepts, procedures and values. Yet, to assist the articulation, sharing, appraising and elaborating disciplinary and personal-professional positions, value and procedures specific interventions may be required albeit embedded in co-working practices.

Introduction

Like work in other sectors, providing healthcare is often inherently interprofessional work. It frequently requires physicians, nurses and allied health professionals from diverse specialties to work effectively together in addressing patient needs and conditions. Sometimes, this co-working is through routine healthcare provisions, where roles and relationships are as well-defined as the procedures being enacted. In other situations, such as emergency medicine, intensive care, trauma etc, however, co-working occurs under conditions that are dynamic, where goals and processes are far from routine, being ambiguous, multi-parted and outcomes far from guaranteed. In these circumstances, those engaging in interprofessional work can also constantly change. So, this co-working can be tentative or partial, as practitioners simultaneously work with other patients and groups of co-workers. Episodes co-working therefore are often temporary; comprise combinations of interprofessional engagements extending across disciplines, occupational hierarchies and distinct professional cultures. Yet, regardless of these complexes, when addressing key healthcare goals, such as improving patient safety and positive healthcare outcomes, the capacities for effective co-working performance becomes essential. For instance, Manser's (Manser, 2009) review indicates that improvements in these kinds of performance are likely to be based more on better communication, co-ordination and inclusion, than on

enhanced clinical skills. That is, through improving co-working capacities. Molyneux's (Molyneux, 2001) categories of these capacities include: i) personal qualities and commitment of staff; ii) communication within the team and iii) development of creative working methods, that are contingent upon and relational to the qualities of co-working practice such as outlined above. All of these factors suggest a need for initial and continuing healthcare professional education to include, focus on or emphasise the development of capacities required for effective interprofessional co-working. Fundamentally, such capacities are likely premised on high level of intersubjectivity (i.e. shared understandings) among co-workers, particularly when quick or almost spontaneous responses are required in urgent or immediate action where pre-empting co-workers' actions may be critical. Therefore, the goal, particularly for healthcare work that is non-routine, ambiguous and perilous for patients is how level of intersubjectivity required for co-working can be developed and extended to comprise shared intuition. These requirements most likely to arise in circumstances when co-working is temporary, goals to be achieved are ambiguous, processes indeterminate and outcomes far from guaranteed. That is capacities for co-working that are almost spontaneous, minimising conscious decision-making and correctly pre-empting what co-workers will need to act.

Here, the focus is on how continuing education efforts can achieve these outcomes through using the circumstances of practice (i.e. work and work activities) as platforms for that development. So, although the purposes for continuing education are usually about sustaining individuals' occupational competence, securing career advancement or changing occupations, necessarily here the concerns and processes go beyond individual performance. Instead, they emphasise those securing both individual and collective development. The concern is how best to assist the development of intersubjectivity to the level of shared intuition needed for healthcare interprofessional practices requiring almost spontaneous decision-making and action. This is, without doubt, a tough developmental outcome to achieve. Yet, it is most likely to be secured through experiences comprising workplace activities and interactions where intersubjectivity can be promoted and interventions enacted to augment that development collectively, and through which participants will engage effortfully and openly as they engage in co-working.

Proposed here is that healthcare staff's engagement in activities and interactions that constitute co-working and in circumstances where it occurs offer platforms for developing intersubjectivity required for effective interprofessional work. To advance this case, the central role of intersubjectivity for co-working is discussed first, followed by an account of how such attributes arise inter-psychologically. Next, a framing of how this development can be understood within the context of work activities is presented. Following this, a set of curriculum and pedagogic practices that might be enacted in healthcare workplaces are advanced as means of securing these kinds of outcomes.

Conceptions: intersubjectivity, interpsychological and workplace experiences

Intersubjectivity

Intersubjectivity is defined by (Rogoff, 1990): 71) as "shared understanding based on a common focus of attention and some shared presuppositions that form the ground for communication". Yet, earlier, (Trevarthen, 1980): 530) defines it more broadly and includes "both the recognition and control of cooperative intentions and joint patterns of awareness". These two definitions are helpful, albeit focussing on understanding and awareness. Yet, intersubjectivity also extends beyond conceptual knowledge to shared

procedural capacities and also values. Whether referring to dentists and their assistants' co-working or that of an orchestra or other musical performers, teams in kitchens preparing food, intersubjectivity extends to shared ways of undertaking tasks and working towards common goals. So, whilst shared understandings and awareness are essential and powerful foundations for effective co-working, they need to be complemented by shared procedures (i.e. how to do things) and dispositions (i.e. values, beliefs, interest). This is not to say that the dental assistant needs to have the same kinds and levels of understandings, procedures and beliefs as the dentist, nor musicians be able to play other instruments etc etc, but that there are commonly shared procedural capacities and values required for effective co-working.

Securing intersubjectivity of these kinds is not necessarily an outcome that is forced or needs external prompting. That is, it does not always require educational interventions, although in some circumstances these may be essential (as discussed below). Engaging with others in ways that secure intersubjectivity is an ordinary process of cognition. It is not even restricted to humans. Whether referring to the ontogenetic ritualization that baby and mother Orangutans engage in to negotiate access to breast milk (Tomasello, 2004), apprentices' learning through actively understanding what and how skilled tradespersons perform, and how to engage with them to learn that (Singleton, 1989) or children securing the ambiguous process of securing a cookie (Baldwin, 1894), there is an active process of comprehending what goals directs others' actions. Indeed, necessarily, much of social engagement is about securing intersubjectivity. We require it to engage in our everyday activities. Newman, Griffin and Cole (Newman, Griffin, & Cole, 1989) noted that how humans construct meaning is person-dependant and, therefore, idiosyncratic and the key purpose of communicating with others is to develop common understanding. They note that if individuals did develop understandings in a uniform way merely from what they experience socially, there would be no need to communicate. However, we do not do so. Key social constructivists such as (Berger & Luckman, 1967) note that there is no guarantee that what is suggested by the social world would be either projected in unambiguous ways or taken up in similar ways. Therefore, securing intersubjectivity is central to everyday human activity and is particularly significant to activities such as living, working and communicating. This is perhaps never more so than when dealing with issues such as interprofessional patient care, particularly when immediate joint decision-making and responses are required. Yet, its development requires both access to what needs to be learnt and a willingness to engage with it.

The key point here is that every day processes of interaction amongst humans provide opportunities for building intersubjectivity, which goes beyond merely developing common understandings. Instead, it can provide a nuanced awareness of why co-workers have distinct perceptions and preferred actions. Intersubjectivity is also not some endpoint of shared understanding to be achieved through social interaction. It comprises an ongoing process through which similarities, commonalities and distinctive conceptions of knowledge and knowing can be made accessible, shared and comprehended. Nurses spending significant times with particular patients may come to know their sensitivities, concerns, and reactions, in ways that fleeting visits from specialists may not, yet whose specialist knowledge provides insights that may not be apparent through nurses' informed observation of patients. Consequently, the process of co-working permits these elements of intersubjectivity to be developed and elaborated through everyday acts of engagement, collaborative and shared activities and interactions (Billett & Somerville, 2004). Moreover, it

is vital when humans engage in co-working activities where misunderstandings and inconsistencies can have significant consequences, such as in healthcare, that high levels of intersubjectivity are achieved. Moreover, as noted, in circumstances where quick and seemingly spontaneous responses are required some notion of shared intuitive actions is likely to be desirable.

Interpsychological processes informing intersubjectivity

The process of intersubjectivity is ongoing and can never be complete, as noted. It incorporates and extends beyond shared understandings to include awareness of why particular responses are likely to be forthcoming from co-workers. That is, understanding others' subject positions and preferences. However, across all its levels and forms, intersubjectivity is achieved through inter-psychological processes: those between the person and social and brute world beyond them (Billett, 2006). Indeed, the majority of what knowledge individuals need to learn for engaging in socially derived purposes and practices, such as healthcare roles, come from outside of the individual: beyond the skin, so to speak (Wertsch & Tulviste, 1992). Understanding others' positions and preferences is no exception here. Just as the learning of occupational tasks needs to be sourced through engagement with social partners, artefacts and institutions, so does understanding about others. That knowledge arises and is transformed through history, culture, society and situation and is learnt by engaging with occupational activities, artefacts and more informed others (Billett, 2003). Yet, the same goes for intersubjectivity. Through focussed engagement with others, shared understanding, awareness and nuanced understanding about subjects' positions and preferences arise and become refined and honed through their articulation, appraisal and ability to assess causal responses.

The development of intersubjectivity needs to be seen as an interdependent and relational interpsychological process (Billett, 2006). It is interdependent in so far as the social world needs human actors to understand and engage with it (for an occupation to be practiced and further developed, for instance) and the actors need what the social world affords or provides for them to learn about and practice that occupation, and enjoy its benefits. Without developing and understanding the requirements and practices of an occupation, it cannot be enacted. Hence, there is interdependence between the person and the social world that underpins both learning and the enactment of the occupation. However, that interdependence is relational. What for one individual will be a compelling and transformative learning experience, for another it might be quite routine. So, just as trainee doctors might find confronting the emergency room activities in large metropolitan hospital on a Saturday evening, the senior residents have become quite accustomed to the outcomes of behaviour (e.g. drunkenness, violence, sports activities) which shapes their work on these evenings. The point is the impact of the same social experience or suggestion is construed and constructed (i.e. learnt) relationally by individuals. So, interpsychological processes are not set and predictable, as with behavioural or automatic responses - they are situationally-based and person-dependent. That is, premised upon the strength of what is being suggested to individuals in the workplace, on the one hand, and how individuals elect to engage with what is being suggested to them. In this way, the learning arising is the legacy of individuals' construing and constructing what they have experienced. It is not a given. So, subjectivity arises through both what learners experience and how they come to know or make sense of those experiences. Given that, it is useful now to consider how intersubjectivity arises through workplace experiences.

Workplace learning experiences: affordances and engagement

The requirements for securing intersubjectivity associated with interprofessional work most effectively arise through opportunities for co-working in the circumstances of their practice. This occurs perhaps most optimally when there are opportunities for individuals to articulate and justify their positions, and subject them to others' appraisals. For occupational practices, such as healthcare these opportunities most likely arise through everyday work practices, albeit sometimes augmented by particular kinds of intentionally organised experiences. Hence, the attributes of workplaces as a circumstance of learning need brief elaboration, thereby tying together the concepts advanced above.

When individuals engage in and complete work activities, two other legacies or changes arise. Firstly, through engaging in work activities, individuals come to change what they know and do. This is called learning. It occurs continuously across our lives and is not reserved for or privileged by interludes in educational institutions or their programs. Sometimes, the learning that co-occurs with working can be quite incremental. For instance, through healthcare workers' learning arising through refining and honing what they know or what they do or, what they value in their work activities (Billett, 2001a). In other circumstances, that learning can be transformational through engaging in activities which are wholly novel to these workers. These experiences open up or expose them to concepts, practices or values which are quite novel for them: new learning arises. Put simply, through engaging in goal-directed work activities and interactions learning of different kinds arises (Billett, 2001a). Moreover, not all of that learning might be described as being positive, ideal or even desirable. Bad habits, ill-informed practices can be learnt, as well as knowledge that empowers and extends what these workers come to know. Nevertheless, individuals' learning of different kinds arises through everyday work activities and interactions as shaped by the particular sets of experiences that are afforded by the workplace settings in which they engage. So, importantly work and learning necessarily occur as workers engage in goal-directed occupational activities and interactions.

The second kind of change that occurs through individuals undertaking work activities is that the occupational practice itself is remade (Billett, Smith, & Barker, 2005). Occupations are dynamic and continually evolve as requirements for their practice change. They are also manifested in particular ways in specific circumstances which are subject to and respond to the workplace's circumstances, actors, and changing work practices and technologies. Essentially, this remaking arises through practitioners engaging in occupational activities and interactions at a particular point in time and response to particular actors' needs, activities and interactions. This process of practitioners engaging in particular practices in specific circumstances is how society sustains itself and is advanced (Scribner, 1985). So, as healthcare practitioners engage in their daily work they are learning and also engaging in the process of remaking and transforming their occupational practice. So, for instance, the move now to have interprofessional work as a key element of healthcare requires collaboration by practitioners who may have previously been separated by traditions of practice and workplace hierarchies, but who now need to work together under new sets of relations and co-working arrangements.

When considering how the learning required for intersubjectivity occurs in workplace settings, two interrelated concepts are informative: affordances and engagement (Billett, 2001b). Affordances refer to the degree by which individuals are invited to participate and learn in a social setting. That is, granted the access to, engagement in and

support when engaging in work activities and interactions. Affordances can be high, with individuals being included, guided and supported in their learning and provided with opportunities to learn new knowledge, and reinforce and hone what they have learnt through opportunities to practice and engage with more informed partners. Alternatively, affordances can be quite low and limited in their invitational qualities. For instance, limited access to practice, short periods of time within clinical settings, being ignored or intimidated by co-workers and others are instances of low affordances that potentially restrict the extent of individuals learning. It is also important to be reminded that particular categories of learning are likely to be generated by particular kinds of experiences. Hence, the kinds of experiences that workers are allowed to participate in will shape what they learn. You cannot become effective with specific procedures (i.e. taking a temperature, auscultation, taking patients' histories) without opportunities to practice, rehearse and be guided by experts. Hence, learning about other workers' preferences or disciplinary positions or conceptions warrants experiences that require them to be articulated (i.e. stated). So, workplaces afford a range of activities and interactions that, by degree, assist learning of different kinds and in different ways.

However, beyond these affordances are the bases by which individuals elect to engage with what is afforded them. Even the most welcoming and supportive of the workplaces might be rejected by workers who are uninterested in engaging with and learning what is being afforded them. Conversely, through their efforts and tenacity, highly active and engaged individuals may be able to overcome the limitations of low workplace affordances (Billett, 2001b). Importantly, therefore, how individuals elect to engage is central to what and how they learn. Yet, this engagement and learning is partially person-dependent. What for one individual is a welcoming workplace, for another it might be construed as having low affordances. Certainly, studies of learning at and for work emphasise the importance of learner agency through their engagement in goal-directed activities ('just doing it'), observation and listening ('just being there'), how they engage with more informed workers (i.e. direct guidance) and also utilising opportunities for practice to refine, hone and extend what they know (Billett, 2001a). Indeed, perhaps the most commonplace process of securing these outcomes is mimesis: observation and imitation. This process, which should never be seen as mindless mimicry, comprises an active interpsychological process that humans and other creatures use to comprehend, predict and act (Byrne & Russon, 1998).

For interprofessional working and learning about it, the quality of participants' engagement will be essential in providing opportunities for securing the kinds and levels of intersubjectivity. That is, it will be particularly necessary for developing intersubjectivity in co-workers from distinct disciplines, with different roles and particular sets of concerns to be able to articulate and share their conceptions, values and procedures. This is particularly the case when there is the need to develop shared intuition: a level of intersubjectivity that allows more spontaneous and collaborative responses from co-workers. This kind of capacity is likely developed through co-workers engaging in routine activities on a regular basis through interprofessional work. However, it is far more difficult to achieve when the co-working situation is temporary, inconsistent and partial.

From the above, it can be seen that much of intersubjectivity will arise through normal everyday processes of individuals interacting together. Indeed, it is proposed that the very need for this interaction is directed by concern for promoting intersubjectivity so that partners can come to engage with and complete tasks collaboratively, albeit in the

workplace, home or educational institution or other social settings. However, given the need here to promote high levels of intersubjectivity, these may not be able to be achieved through everyday interactions alone. This, plus the potentially diverse backgrounds and specialisms of co-workers suggest there is a need for there to be structured experiences to support that development.

Curriculum and pedagogic practices promoting intersubjectivity

As a starting point, to intentionally promote intersubjectivity it is helpful to consider two long-standing concepts albeit in this particular context: curriculum and pedagogic practices. Curriculum refers to the course to travel or the pathway of experiences upon which individuals learn (Billett, 1996). In the case of workplace learning activities, the concern here is the kinds, sequence and duration of practice-based experiences that comprise the practice for workplace curriculum. So, considerations about the organising and ordering of experiences for interprofessional working can be seen as being associated with curriculum practices. Beyond these are interventions to promote particular kinds of learning. These are pedagogic practices that can augment experiences such as those provided through just engaging in co-working. In particular, where knowledge which will not be easily learnt through participation and discovery, there may be a need to utilise particular pedagogic practices. For instance, Rice (Rice, 2010) illustrates how auscultation training is augmented by particular pedagogic practices of a senior clinician to ease the solitary process of trainee doctors' learning to listen and diagnose through stethoscopes. So, there are curriculum and pedagogic practices that can promote intersubjectivity and, by degree, to a level maybe approximating shared intuition.

Principles

Four core principles shape considerations curriculum and pedagogic practices for intersubjectivity: i) the participants' capacities and sense of self within their own occupation; ii) the ability to engage in co-working and learning arrangements with those kinds of practitioners with whom interprofessional work is intended; iii) that engagement occurring within physical and social circumstances in which interprofessional work occurs and iv) through activities that permit the articulation of goals and processes, and the ability to engage dialogically about them. A key aspect of interprofessional working within professional development is that experienced healthcare practitioners, unlike novices, will have senses of selves or subjectivities associated with their occupation. Such subjectivities are important when engaging in shared and dialogic processes.

Articulating disciplinary and professional identity is important before interprofessional relationships can be successful. It is difficult to form collaborative ties when one is unsure of one's professional identity,' (Dombeck, 1997)15).

The principles associated with engaging with workers from other professions and disciplines and, in the circumstances where this co-working needs to occur and use of specific pedagogic practices are discussed below.

Curriculum practices

If not already occurring, it is necessary to secure opportunities for those who are to co-work to engage in working inter-professionally. Some consideration might be given here to

providing experiences, initially, where engage is through routine activities undertaken inter-professionally. Such activities are usually less demanding and urgent, and may well provide a foundational experience for interprofessional working whereby relations, understandings and subjectivities are developed initially. Hence, aspects of interprofessional working which are frequently conducted may first be used as bases for developing intersubjectivity. These affordances might occur before individuals attempt to work inter-professionally in circumstances where levels of patient acuity, emergency or uncertainty are higher. Hence, work activities such as when cases are reviewed, the planning and organisation of patient treatments etc may well provide co-working situations to secure intersubjectivity. Then, increasingly interprofessional working can extend into work situations which are more critical and acute.

There is nothing particularly novel here. This progression is a base principle for curriculum generally (i.e. develop foundational knowledge and within learners' readiness to progress), not just for practice-based curriculum. For instance, anthropological studies reported progression from engagement initially in activities which if mistakes are made there are few consequences of errors through to those activities where error is greater (Lave, 1990). This arrangement provides bases for incremental engagement and development of opportunities for developing subjectivity which are open ended and not predictable in advance. The fact that interprofessional co-working comprises engaging in non-routine activities means that there will always be new novel situations, circumstances, combinations of factors and causal considerations that will need addressing. Hence, the working within non-routine activities can provide pathways for ongoing learning and developing further intersubjectivity and shared intuition. Moreover, these experiences need to be of sufficient duration that the capacities can be developed, refined and honed. Whilst often fleeting, partial and co-occurring with other activities, the ability to co-work with others over time provides opportunities to understand, appraise, and even predict others' responses. The development of shared intuition requires lengthy periods of co-working. However, it is insufficient merely to provide access to and sequencing of interprofessional working experiences. Instead, there is a need to augment these experiences in maximising their contributions including permitting implicit understandings to be made explicit and subject to elaboration. These are important goals for pedagogic practices.

Pedagogic practices

A key concern for pedagogic practices is for assisting those co-working is for them to articulate their dispositions, values, goals and procedures so they can be understood, appraised and compared, as well as critiqued by co-workers. One potentially helpful example here is the use of handovers, by health-care workers to brief the incoming shift. A common practice in these handovers is to discuss: i) the patient, ii) their condition, iii) their treatments, iv) how they are responding to those treatments and v) then making a prediction or prognosis about their progress. Through these activities, dialogue often occurs and can be encouraged further. As the case of each patient is addressed, particularly in the move from description about patient, conditions, treatments, to discussion and dialogue about their responses and prognosis, rich opportunities arise for the articulation of perspectives, goals and preferred procedures, and their justification. These routine workplace activities provide ongoing bases to build and develop further intersubjectivity, including new understandings about co-workers' perspectives, and particular emphases. Then, there are practices such team objective structured case examinations (TOSCEs) with

the potential to provide the same kind of experiences and outcomes. Such experiences can even be augmented by the use of instructional media of different kinds. Simulated activities such as the use of videos of events within TOSCEs can play an important role (Gordon et al., 2013) in preparing and assisting healthcare practitioners to co-work effectively. These authors note the salience of using practice based experiences, such as joint case study notes, as a means to develop intersubjectivity. The process of articulating both conditions and the preferred treatments provides insights into particular subject or professional positions and their justifications. Consequently, the provision of an engagement in such activities can progressively be used to generate rich intersubjectivities.

Yet, in addition, there may well be a need for experiences that explicitly draw out preferences, emphases and their justifications across a range of professional and disciplinary perspectives engaged in co-working which may be inhibited by inter-personal or inter-occupational tensions. Given the hierarchies existing in the healthcare sector, it may be necessary for practitioners to be prompted to review and change their conceptions and positions. This process may require facilitation in circumstances where entrenched hierarchies and disciplinary or professional positioning is resistant to being articulated, and subject to appraisal and engagement.

Conclusion

It has been proposed here that a key foundation for effective interprofessional working is high levels of intersubjectivity amongst co-workers. Particularly in circumstances where immediate tasks are required to be enacted with only limited time for conscious and deliberate decision making, levels of shared intuition are likely to be helpful. Intersubjectivity arises ordinarily through individuals communicating, interacting and working together. Yet, it may not be sufficient simply to allocate individuals to interprofessional working arrangements and then allowing them to progress autonomously. Instead, it may be necessary to order engagement in particular kinds of activities to promote intersubjectivity and shared intuition. That is, going beyond relying on authentic activities are authentic and emphasise those that have a particular narrative quality through which co-workers can engage in a considered and critical ways, cushioned from workplace hierarchies or power relations. Through these kinds of practices greater levels of intersubjectivity can be generated, perhaps even to the level where shared intuition can be experienced.

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