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Author(s)	Ryan, Susan; Hills, Carol
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5 Context and How It Influences Our Professional Thinking

Susan Ryan and Carol Hills

Introduction

Narrative is a powerful tool that is proving useful in illustrating and demystifying theoretical constructs that are sometimes hard to grasp (Ryan, 1999a). According to Smith (2006), stories and narratives develop our understanding of events in situ and are vehicles for co-creating change. These personal experiences bring life to situations. They create a window through which we can look to see how one person is thinking, reasoning and acting. This glimpse allows us to reflect on a particular situation and consider how we would have handled it. It also enables us to use this link to circle back to the theoretical constructs that we have read about.

In this chapter we introduce you to Mary. She was a final-year student embarking on her last practice experience before she graduated. She tells us her rather complicated story about her negative experiences in practice. From stories such as these, we can learn a great deal. When examining her reasoning, or anyone else's reasoning, we can see that the person's resulting abilities depend on many factors: the type of educational theories her undergraduate programme exposed her to, her own personal experiences, her own academic and professional capabilities, and how she is able to 'put it all together' (Slater, 1991) and integrate the various strands of her thinking. At this stage in Mary's professional development, she was close to being qualified and should have been almost ready to work autonomously but with close supervision. We have used Mary's story to illustrate how professional reasoning, apart from the factors mentioned above, is also highly dependent on, and shaped by, the context in which one is working – in other words, the overall contextual reasoning.

'It's a bit like peeling an onion – there are many layers!'

This was Mary's last placement before she qualified but it was her first one working with people who had physical disabilities. The context was a stroke

unit in a hospital. Mary's first impression was that it was very well organised. It was a new service, being only two years old, so she felt that it had been set up well instead of growing in a piecemeal fashion like some of her other placements. It aimed to provide a seamless service throughout the local area so there was an active interchange between those working in the hospital and those in the community. The team-work appeared to be excellent.

Unfortunately, at the start of her placement the head of the department was leaving and one senior therapist and an assistant were away on sick leave, so they were very short-staffed. Mary's supervisor did not have too much time to induct her or to guide her subsequent work. Mary was left very much to her own devices. Furthermore, her supervisor made sure that Mary got clients who 'would stretch her'. Mary told us, 'I wasn't getting the easy ones, I was getting those that made me think, those where their problems weren't that obvious'.

'I wouldn't have a clue how to assess her'

Mary's story was about an 87-year-old lady who had suffered a stroke. She chose to tell us about her 'because she was a unique person, she really stood out from everyone else on the ward, and she was such a character. I can still hear her voice in my mind'. Mary said that her client also had a lovely sense of humour once she had broken through her natural reserve. Mary painted a vivid picture of her:

> She was a dynamic lady who was always rushing around and was very active but she had a peculiar gait: She had osteoporosis of the spine and some vertebrae had started to collapse as well. So she ended up with a hunched back and her whole stance was leaning forward. The way she counteracted that balance was that her arms would be out like as if she was flying and there was very high tone in both arms and she was quite stiff around the shoulders. Because she rushed everywhere and didn't look to her right, if she bumped into anything or tripped over anything she was a danger to herself. And she couldn't quite remember where she was sometimes. She would be lost and would rush around somewhere else and then get into more of a muddle. Her background was a vicarage. She was brought up there and she was very middle-class, very, very private school accent as well as being very loud.

Putting Mary's practice in context

In the first part of Mary's story she stated that her practice context was a stroke unit. This context is a specialised area of acute rehabilitative care with good evidence to support the outcomes. We also know from Mary that the unit was trying to achieve a 'seamless service' from hospital to home. However, when Mary was telling us this, her remark was almost

casual and there was no evidence that she had really thought about what this context meant in terms of what sort of practice she should follow. She did not enquire what would be expected of her but was told she would be given 'difficult clients'. Her over-worked practice educator did not stop to find out what she actually knew about this area, or to induct her or give her a guiding framework. She did not make clear what sort of interventions were usually practised in this setting and the pragmatics associated with these areas. Because she did not do these things, it would seem, in hindsight, that Mary should not have been given 'difficult' clients. We can see from following her story that almost immediately, Mary zeroed in and started to describe the individual practice with her client. She had not stopped to contextualise or situate her thinking and reasoning in a 'Big Contextual Picture'. Had she done so, it might have helped with some of the later dilemmas she had with her client.

In 2008, Ryan and Higgs provided a guiding framework for developing contextual reasoning. They believed this 'Big Picture' framework would help students, as well as therapists, draw together the multiple contextual factors that they needed to be aware of before they started practising. The authors believed that doing this sort of exercise before moving to a setting or in the induction period would help to 'situate', 'contextualise' and 'ground' their reasoning. Thinking or writing about a particular context, and/or discussing it with someone else working in that setting, acts as a springboard to increase an inexperienced therapist's awareness of what the clients need and what it is possible to offer them. This exercise also avoids creating confusion about practising in this context, especially for someone like Mary who does not have a wealth of experience to draw on.

This contextual framework comprises the following bands (Ryan and Higgs, 2008), which need to be thought through separately and then put together to make a contextual and coherent story:

1. *Thinking wide*. Thinking about the social, political, legal and professional policies that are influencing and impacting this area of practice – *contextual reasoning*.
2. *Thinking about the specific community context*. Thinking about the aim of the service, the length of stay of the clients, the admission policies, the discharge policies, how the multiple disciplines make decisions, what the client demographics are like – in stroke, for instance – what facilities are already available in the area that could be utilised or liaised with, and what other community features could be developed – *contextual reasoning*.
3. *Thinking about the structure of the service*. Thinking about the demographics of the staff, the range of expertise they have available, the geographical spread and catchment area, and the transport and other facilities that would impact on the service – *contextual reasoning*.

4. *Thinking about the nature of practice*. Thinking about the goals of the team, the nature of the team members and how they specifically work together as a team, the theoretical base that they currently use to underpin their professional practice and whether this is coordinated with other disciplines or individualised, with each therapist doing their own work – *contextual and pragmatic reasoning*.

5. *Thinking about the practitioners working in the service*. Thinking about the staff's disciplines, their professional backgrounds, their Continuing Professional Development (CPD) profile and their working hours, and if these are staggered across weekends and evenings as well as the daily hours that are expected – *contextual and pragmatic reasoning*.

6. *Thinking about the clients who use the service*. Thinking about their demographics, their cultures, their expectations and hopes. Thinking about what forms of evaluation have previously been completed and what is currently in place, such as feedback forms, focus groups or a suggestion box – *pragmatic reasoning*.

7. *Thinking about your individual practice*. Thinking here includes the different forms of reasoning currently published, in addition to contextual and pragmatic reasoning – *contextual and pragmatic reasoning + scientific (procedural), diagnostic, interactive, conditional, narrative and ethical reasonings*.

Additionally (Finlay and Gough, 2003):

8. *Thinking about personal contexts*. Thinking here includes personal knowledge of your values, knowledge of your level of professional competence and an awareness of how your life experiences and life roles may affect the way you interpret your work – *personal reasoning – contextual and pragmatic reasoning + scientific (procedural), diagnostic, interactive, conditional, narrative and ethical reasonings + personal context*.

This contextual framework is useful when situating case stories like the one told by Mary. Using and discussing it, even for one instant at the beginning of a placement or a job, helps to stimulate a learner's or practitioner's thinking about the wider implications of decision making in a particular context. Keeping this framework in mind for service evaluation will also help to create a structured, well-thought-through service rather than an ad hoc, experience-based service. In other words: What is expected in this context and what is outwith the boundaries? What is the background of a person's clinical reasoning? Neither Mary nor her practice educator worked through any of this reasoning. The contextual thinking framework starts the process early. It forms the 'Big Picture' of practice.

Pragmatic reasoning was first proposed by Schell and Cervero (1993) and further developed by Boyt Schell and Schell (2008). Pragmatic reasoning starts from the middle part of the contextual framework described above and encompasses bands 4–6. It can be summarised as an awareness of the realities of service delivery used by the therapists you are working alongside. Pragmatic reasoning can help you to attend to the issues within the practice context that may directly facilitate or inhibit therapy. According to Boyt Schell (2009), these factors may include: reimbursement for services, management directives and the personal situations of the therapists. Pragmatic reasoning also includes the individual therapist–client interaction and is characterised by thinking about and including the relevant external influences on intervention in the practice context.

It is our contention that one of the most common mistakes is that students and therapists often start with individual practice, as Mary did. The impact of context-directed practice is not sufficiently considered. Starting with individual practice results in students gradually and vicariously learning about the contexts of practice in a haphazard fashion. It is recommended that the six contextual reasoning bands should be sitting in a person's awareness so as to form a backdrop and a foundation to individual reasoning (i.e. the 7th band).

Contextual and pragmatic reasoning are therefore a sophistication of thinking and reasoning and an extension beyond individual practice. Contextual reasoning goes beyond the pragmatic, forming an overarching meta-framework that should be considered first in order to orientate your reasoning to a specific context of practice.

Individual practice, then, is the seventh feature that should be considered. It is in this individual space that most of the other features from the clinical reasoning literature appear. This is because Mattingly and Fleming (1994) and Rogers (1983), who were among the original researchers of clinical reasoning, concentrated their study on a collection of individual practices. Perhaps this is why most people start from this place. Mary certainly started here!

When examining an actual individual intervention though, according to Boyt Schell (2009), the aspects of this individual practice must include several other elements of clinical reasoning. These are: scientific (procedural), diagnostic, interactive, narrative and conditional reasoning. More complex and sophisticated individualised frameworks would also include ethical and moral reasoning too. Let us look more closely at this individualised section, so that we can see that the context and the subsequent contextual reasoning can also change the relationships of the different types of reasoning. Contextual reasoning not only forms a backdrop to a therapist's reasoning (bands 1–6), it also changes *the emphasis* of the other elements of reasoning identified in band 7. Imagine these in your mind as shaded areas where one has prominence over the others at various times, as if it were glowing more brightly.

Taking this metaphor of mind-shading, we can see that, depending on the context of practice, there may be a different emphasis on one type of reasoning over another. For example, in an acute care stroke unit, where Mary was working, there would be more focus on scientific, procedural and diagnostic reasoning. This would then be tempered by the other types of reasoning (such as interactive or conditional) in order to think holistically about the individual. In contrast, in a community context, more emphasis would be put on narrative and interactive reasoning – the diagnostic reasoning would still be there, but would be in the therapist's background consciousness.

This sophisticated way of reasoning was very difficult for a student like Mary who had little help from her practice educator, the more experienced therapist. An experienced therapist has the 'art of practice' sitting within their reasoning mind. This therapist is able to draw many threads together in order to weave excellent practice that is real and tangible. Mary, at this starting level of professional competence, could not be expected to be able to reason like this on her own. She needed a more experienced therapist, one who, according to Titchen and Ersser (2001), had developed the 'craft' of practice and could guide the less experienced person through this complex warp and weft of thinking. For students like Mary, having a pro forma or written framework to help guide this contextual thinking would be very beneficial as professional reasoning is different in each context of practice, in each placement and, indeed, for each individual. By having the different bands written down, and by being able to put a greater or lesser amount of information within each band depending on the context of practice, it becomes evident that the context guides practice and shows where the emphasis on reasoning should lie in any one particular context and with any one particular individual.

Another snag in this tapestry of weaving in thinking and reasoning is that the international literature defines *context* differently. We all know that occupational therapy, as a profession, works in a wide range of different practice contexts. But these contexts are also described differently. The Australian Association of Occupational Therapists (AAOT, 2009) has described these contexts in terms of physical locations. These include hospitals, health centres, homes, workplaces, schools, reform institutions and housing for seniors. The American Occupational Therapy Association (AOTA, 2009) has described their contexts more in terms of client groups, such as: Mental Health, Aging, Children and Youth, Healthy Living, Work Related, Disability and Rehabilitation. Careful analysis of both definitions shows that the latter group can almost be subsumed within the former.

The importance of having multiple context experiences in a range of settings is embedded in our professional education. The World Federation of Occupational Therapy Revised Minimum Standards (WFOT, 2002) for the education of occupational therapists direct that students experience a range of different clients who have different needs and who are in

different contexts. The aim of this range of contextual experiences is stated as being to integrate knowledge, professional reasoning and professional behaviour within practice. These multiple experiences will serve them well in the future as practice contexts change, and, necessarily, their reasoning will change with these contexts.

Let us return to Mary to illustrate more aspects of these contextual features. In Mary's story we know that this was her first experience in an acute physical setting and that she needed to have tools supplied or a framework to guide her through this experience. The next section of her story shows that this was evident.

Mary's story continues

Mary's main worry was that she did not know what to look for or what to assess. Mary was trying to match in her mind what she saw with what she knew. She did this in order to get an idea for a treatment plan. She said to herself, 'This is what I am seeing, what does this mean?' One positive aspect was that she had *time in the rehabilitation unit* as she only had a small caseload of five clients. Mary could not tell what part or parts of the brain had been affected by the stroke. She thought it might be the frontal lobe but the signs and symptoms described did not fit an infarction in that area. She tried to piece things together and used her own ways of describing what she understood: there were some memory problems as her client continually got lost; there were visual problems as her client wrote things cramped up at the top left-hand side of a page, and she did this with a clock face as well; her client was not able to scan across pages and would read from one newspaper column to the next column in a straight line and then would say, 'That makes no sense'. Mary felt her client was not safe walking around as she would knock into doors on her right side. She also had ideational problems. Mary explained:

> She'd get stuck on one particular train of thought and then she would find that it suddenly jumped to another train of thought. But she couldn't get back to the original one, so she had all these ideas crowding in her head and she found it difficult to concentrate on one thing at a time.

Mary was not clear if there was any dementia. Her previous experience in one of her other placements working with this condition directed her towards looking for signs and symptoms of something that were familiar, rather than going back to the scientific bases of reasoning. Eventually, she decided that the cognitive effect of the stroke had affected her client's insight, problem solving and concentration. She came to the conclusion that any assessment should be functional…

Reasoning and time both differ in different contexts

We have already seen above that the degree of concentration on particular types of reasoning will differ in different contexts and that one type of reasoning will fade in as another fades out, or that one type of reasoning will be more dominant than another. Another factor that must be taken into consideration when working in different contexts is *time* for reasoning. A learner will need time to 'put it all together' in order to make sense of the situation, and this may happen in reflective exercises focusing on the different bands of contextual reasoning. But contexts influence the amount of time available for client contact too.

In all these instances, the reasoning foundation, whichever it is, must be readily accessible to work with and to extend the next phase of reasoning. Ryan (1990) found that students focusing on a case study of a lady with a stroke spent three times as long to reach a decision as an experienced therapist in the same practice. This time for 'working out what to reason and do' must be allowed for, particularly with students, and more particularly with students starting in a new practice context.

As we know, Mary was an inexperienced student working in an acute care specialised stroke unit as the context. She was not closely supervised. However, she had the luxury of a small caseload of five people, even though they were complex clients. She was in this specialised stroke unit, not an acute medical ward, so she did not have to deal with a multitude of diagnoses, just different manifestations of stroke. Although she had no assistance, she had *time* to try to work things out and reason them through. Time, and the amount of time spent with clients, is very controversial from a management versus a professional viewpoint. In different contexts the time allocation varies considerably. This amount of allocated time also affects the breadth, the depth and the focus of our reasoning. According to the contextual reasoning framework presented above, it is the systems that put restrictions on the allocated times we spend with people. In a UK study, Finlay (2001) put a counter-argument to this proposition. She believes that these restrictions do not or should not happen without our professional participation in the process. In her research on 'holism in practice in occupational therapy', she reported that the participants who worked within acute hospital settings faced considerable workload pressures and in order to get through large numbers of patients a day, they pragmatically adopted procedure-centred treatments. She cited this as an example of the impact of both the context on the workplace and the organisational influences on therapists' professional and subsequent contextual reasoning. The therapists in this research example had thought about the most effective way to complete their work within a biomedical environment and, using contextual reasoning about what the organisation needed, made pragmatic decisions to work more procedurally.

Mary's narrative shows that she did have time on her side, and it also illustrates that she was trying to work in a procedural way. The problem was that she started in the wrong place in her line of reasoning. She needed to gain a better foundation of knowledge and she had not taken her scientific reasoning to the deeper level that was needed to work out the causes and effects of the stroke, nor of the other chronic conditions that beset her client. Mary apparently did not go back to the medical notes, nor did she ask advice from her supervisor or other team members or consult her text-books. And, not having done those things, she also had not consulted her textbooks. In effect she was 'winging it'. These uncertainties were losing her time in an unproductive and frustrating way. In a workshop in 1999, Ryan argued that when a therapist gets 'stuck' in practice they need 'time and personal space' in order to reflect in several different layers and ways of thought (Ryan, 1999b). In the end, Mary decided to change contexts for her client and took her on a home visit. She continued the next episode of her reasoning:

Mary changes context

> When we did a home visit she [the client] had to think about where she was. She really had to think about her bedroom and she couldn't quite see where the phone was. The most telling point was she wanted to make tea and a sandwich for visitors. She just could not see if the gas was on and because her hands were constantly moving – her left hand was doing something and her right hand was doing something else – she'd forget that she had put it [the gas] on … So, I was getting a bit depressed at this point. I kept thinking, 'I'm never going to get her home' and she really didn't want, and she really didn't need, to be in a nursing home. Could she be maintained at home with supervision? I was a bit stumped!

At this point Mary began to realise how much having a severe stroke changes a person's life, especially when she saw her client in her own surroundings. But she felt, 'being an OT I can't be a miracle worker.' Mary kept reiterating that this client was a real challenge and she was left feeling totally drained. Mary was also confused by all the jargon connected with strokes and tried not to use it as 'it really tied me up in circles'. She had to do a lot of work trying to clarify the different forms of dysphagia (swallowing). In the end she said, 'I could learn the actual condition off by heart but I really didn't feel I was up to doing it on the clinical side'. In conclusion, she told me:

> I started making a bit more sense out of things and I was starting to apply it. I looked at my strengths. I could communicate with her, I could get on to her level and maintain that level.

Changing contexts

You can see from the above section of her story that Mary wasted precious time on her placement because of her lack of awareness of the importance of understanding the context. This *unproductive time*, which used trial-and-error learning, is a different aspect of *time* than is normally discussed in the literature. In Mary's story we can read clearly about her problems of reasoning. Within that specialised context she had problems working out what to do and where to start. She then changed the context of the intervention for her client but that did not really help her either. She had not worked out the fundamental foundation of her reasoning nor had she made the links. On listening to Mary's story, as experienced occupational therapists, it seemed clear that it was too early in her client's intervention to take her home even for a trial.

As Mary continued her story she explained that as part of their seamless service the stroke unit liaised with the community service that supported the clients once they went back in their home environment. Mary was trying to bridge the gap between the unit and the community. She was really in a 'freefall' about knowing what to do. Working in a person's home with their family and/or neighbourhood as supports, in addition to working with the actual person demands adjustments to the pace and space of practice changes. The change in context also impacts on the therapist's focus and the content of their reasoning.

According to Chapparo and Ranka (2008), this change in context was illustrated in a research study by Shepherd (2005), who demonstrated how 'therapists who worked in a brain injury rehabilitation setting thought about clients differently from those who worked with the same clients in a transitional residential situation' (Chapparo and Ranka, 2008, p. 273). Using the terms 'house person' and 'hospital person', Shepherd showed that the context of thinking, rather than the diagnosis, determined the types of decision that were made about the focus of intervention, as well as judgments about its worth. The differing contextual reasoning within the two settings, acute care and community care, resulted in different reasoning outcomes.

Another factor that alters this change of space and pace is the characteristics of the client a therapist is working with. In some contexts people have multiple needs and problems that are ongoing and will change space and pace as they progress through different stages of their lifetime. This happens particularly with people living in the community or those in residential care. Although the scientific, procedural reasoning still forms a background to a therapist's thinking, emphasis in reasoning in these circumstances can be likened to a narrative with particular interventions being at certain chapters in a person's life, where a therapist works with therapeutic activities or occupations that are meaningful to the current chapter. In the end, Mary's client did go home.

'Putting it all together'

It wasn't until the last two weeks of placement that everything started to come together. Mary went back to the hospital three weeks after the placement ended. Her client was still there but a package of care was being arranged for her on her return home and her son, neighbours and family were sharing responsibility for looking after her. In her next position, Mary continued to work in the physical side of therapy despite this negative episode of trial-and-error learning.

Personal context enhancing contextual reasoning

Another aspect of reasoning that is surfacing in the literature from a few research studies is personal context (Hooper 1997). No matter where the geographical context (location) of the practice is situated – hospital, community, acute/chronic care – a person's clinical reasoning is also affected by their life values.

Previously, studies in reasoning had focused on a therapist's professional thinking and reasoning without being cognisant of the background, values and beliefs of the therapist doing the thinking. The focus of the research studies was on the reasoning that happened in the practice context, as if it was removed from the person. Finlay and Gough (2003) introduced the idea of reflexivity, which embraced the therapist's personal context of thinking and reasoning. This personal context included personal knowledge of the therapist's clinical competencies, preferences, commitment to the profession and other life roles outside of work. They believed that these must colour a therapist's reasoning and affect the way they practised. In summary, their repertoire of therapy skills to *'read'* or interpret the practice culture, their negotiation skills with the people they work with, as well as their personal motivation, must be considered. According to Boyt Schell and Schell (2008), this personal awareness must be added to the contextual framework.

Personal context includes a therapist's internal 'knowing' sense of what he or she is capable of and has the time and energy to complete. The authors above acknowledge that there is much to explore in this issue of personal context in reasoning. This enhanced contextual reasoning should include a reflection of personal values and beliefs as they relate to the people we work with. Little work has been done on this aspect of professional reasoning as the definition encompasses more than the client–therapist relationship and is really about the therapist as a person. In Mary's story, we see her talking to herself: 'I'm a good therapist, I'm going to get through this or at least half-way in the right direction'. She did have some self-belief left! She did not elaborate on her personal qualities.

In this chapter we have looked at the 'Big Contextual Picture' – contextual reasoning that overarches and influences all types of practice environment. We have looked at and compared this framework to pragmatic reasoning, which contains bands 3–6 above. We have discussed the actual individual practice context (band 7) and seen how the majority of published papers on clinical reasoning focus on this aspect. We have seen how individualised context alters between the stroke unit and the home, which highlighted the differences between contexts in acute care and ongoing community care. Lastly, we have been alerted to the fact that personal contexts (band 8) influence everything we think, reason and do, and how we go about our practice. We have advocated that this personal context should be included into a contextual framework. We have looked at all these constructs through the window of Mary's story.

References

AAOT (2009). Australian Association of Occupational Therapists. Retrieved 7 November 2011 from http://www.otaus.com.au/aboutus/about-ot/about-ot#where-do-occupational-therapists-work.

AOTA (2009). American Occupational Therapy Association. Retrieved 15 December 2009, from http://www.aota.org/Consumers.aspx.

Boyt Schell, B. (2009). Professional reasoning in practice. In E. Crepeau, E. Cohn and B. Boyt Schell (Eds.), *Willard & Spackman's Occupational Therapy* (11th ed.). Sydney: Wolters Kluwer, Lippincott Williams & Wilkins.

Boyt Schell, B. and Schell, J. (2008). *Clinical and Professional Reasoning in Occupational Therapy*. Philadelphia: Lippincott Williams & Wilkins.

Chapparo, C. and Ranka, J. (2008). *Clinical Reasoning in Occupational Therapy*. In J. Higgs, M. Jones, S. Loftus and N. Christensen (Eds.), *Clinical Reasoning in the Health Professions* (3rd ed.). Sydney: Elsevier, Butterworth-Heinemann.

Finlay, L. (2001). Holism in occupational therapy: elusive fiction and ambivalent struggle. *The American Journal of Occupational Therapy*, 55(3), 268–276.

Finlay, L. and Gough, B. (2003). *Reflexivity: A Practical Guide for Researchers in Health and Social Sciences*. Oxford: Blackwell Sciences.

Hooper, B. (1997). The relationship between pre-theoretical assumptions and clinical reasoning. *American Journal of Occupational Therapy*, 51(5), 328–338.

Mattingly, C. and Fleming, M. H. (1994). *Clinical Reasoning: Forms of Inquiry in a Therapeutic Practice*. Philadelphia: F. A. Davis Company.

Rogers, J. (1983). Clinical reasoning: the ethics, science and art. *American Journal of Occupational Therapy*, 37(9), 601–616.

Ryan, S. (1990). Clinical reasoning: a descriptive study comparing novice and experienced occupational therapists. Unpublished Master's dissertation. New York: Columbia University, School of Occupational and Physical Therapy.

Ryan (1999a). Why narratives? In S. Ryan and E. McKay (Eds.), *Thinking and Reasoning in Therapy: Narratives from Practice*. Cheltenham: Stanley-Thornes.

Ryan, S. (1999b). *Layers of Reflection: Opportunity, Time and Personal Space*. Workshop presented at The College of Occupational Therapists' Annual Conference, 20–23 July, 1999, Liverpool University, UK.

Ryan, S. and Higgs, J. (2008). Teaching and learning clinical reasoning. In J. Higgs, M. Jones, S. Loftus and N. Christensen (Eds.), *Clinical Reasoning in the Health Professions* (3rd ed.). Sydney: Elsevier, Butterworth-Heinemann.

Schell, B. and Cervero, R. (1993). Clinical reasoning in occupational therapy: an integrative review. *American Journal of Occupational Therapy*, 47(7), 605–610.

Shepherd, B. (2005). *Influences on Residential Care Staff Decision Making*. Unpublished PhD Thesis. Sydney: University of Sydney, School of Occupation and Leisure Sciences.

Slater, D. (1991). Staff development through analysis of practice. *American Journal of Occupational Therapy*, 45(11), 1038–1044.

Smith, G. (2006). The Casson Memorial Lecture 2006: Telling tales – how stories and narratives co-create change. *British Journal of Occupational Therapy*, 69(7), 304–311.

Titchen, A. and Ersser, S. (2001). The nature of professional craft knowledge. In J. Higgs and A. Titchen (Eds.), *Practice Knowledge & Expertise in the Health Professions*. Melbourne: Butterworth-Heinemann.

WFOT (2002). *Revised Minimum Standards for the Education of Occupational Therapists*. Forrestfield, WA: WFOT Secretariat.