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**FACULTÉ DES ÉTUDES SUPÉRIEURES  
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**FACULTY OF GRADUATE AND  
POSTDOCTORAL STUDIES**

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**Ph.D. (Education)**

GRADE / DEGREE

**Faculty of Education**

FACULTÉ, ÉCOLE, DÉPARTEMENT / FACULTY, SCHOOL, DEPARTMENT

**Workplace Pedagogic Practices: Understanding Learning Among Beginning Occupational Therapists**

TITRE DE LA THÈSE / TITLE OF THESIS

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**Workplace Pedagogic Practices:  
Understanding Learning Among Beginning  
Occupational Therapists**

Darene Toal-Sullivan

Thesis submitted to the Faculty of Graduate and Postdoctoral Studies

In partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Education

Faculty of Education  
University of Ottawa

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*Your file* *Votre référence*  
ISBN: 978-0-494-73932-7  
*Our file* *Notre référence*  
ISBN: 978-0-494-73932-7

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## ACKNOWLEDGEMENTS

I would like to thank the following people who have supported me along this PhD journey.

To the five occupational therapists who so generously allowed me to be part of their practice and learn with them and from them. Without your generous spirit, this study would not have been possible.

Thank you to the many clients and families who shared their experiences with me. Your stories are some of my most important learnings from this study.

To Rachel Gervais, occupational therapist. Thank you for your unending support throughout this study. I believe that you are a true leader in occupational therapy. I learned from your determination and advocacy for the profession's contribution to client care.

To my thesis supervisor Dr. Raymond Leblanc: Thank you for your kindness and encouragement. I am so appreciative that you shared your depth of knowledge and your love of learning-this continues to inspire me. Thank you for giving me independence but also knowing when I needed guidance and direction.

Dr. Barbara Graves: You have been with me throughout the MA journey and now my PhD. Thank you for always challenging my thinking, for raising the bar high, and for encouraging me to question and be open to what unfolds during the research process.

Dr. Janice Ahola-Sidaway: Thank you for careful attention to detail and for sharing your knowledge in qualitative research. Your early advice to keep a researcher journal, while a great help in my study, also allowed me to reflect on how I have grown as a person- thank you.

Dr. Rachel Thibeault: Thank you for your constant belief in me. You always remind me of what is important, and the real meaning of being client-centred (and student-centred). I am so grateful for your friendship.

My family and friends: I could not have achieved this without you. I am truly thankful for you, and for your love and support. I only hope that you know how much you mean to me.

To Jasper, my constant companion, who brought me so much joy. From you I learned that with persistence anything is possible.

A special thank you to Dan, my husband. I am blessed to share my life with you. You always believe in me. You are my unwavering encouragement and my strength. This is our achievement.

## DEDICATION

Dedicated to and in honour of:

Hélène Lauzon

My dear friend and fellow ergothérapeute

## ABSTRACT

It is a critical time in health care characterized by new models of service delivery, complexity of care, diverse practice environments, and evolving regulatory and legislative requirements. This is accompanied by recognition that the experiences and supports provided by workplaces are critical for initially developing the knowledge required for work and also for lifelong learning. In occupational therapy, there is relatively little understanding of how beginning occupational therapists learn to practice and how they resituate knowledge learned in the context of school, to the context of work. The objective of this research was to understand how beginning occupational therapy practitioners learn in the practice context, how clients mediate practitioners' learning, and the factors which shape practitioners' participation and learning through work.

This qualitative study used an ethnographic approach to understand the situated practices, interactions and actions of occupational therapists in an acute care hospital context. Data collection consisted of semi-structured interviews, observations of practice, participant journal entries, researcher journal entries and meetings with the occupational therapy manager, over a period of twelve months. The study participants comprised five occupational therapists with less than two years of clinical experience. Activity theory provided an integrative, conceptual framework to understand how knowledge is co-constructed and distributed across a particular hospital system.

The findings of this research help us understand how workplace affordances and constraints, and individuals' agency shape beginning occupational therapists' participation and learning through work. There are complex relations and interactions among the components of the activity system engaged in the object of patient care. A conceptual framework, the *Workplace Learning Model for Occupational Therapy*, was developed to understand how learning occurs in practice and the pedagogic means to support occupational therapists' engagement in work. The findings of this study contribute to the evidence in workplace learning and participation.

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## CHAPTER 1. INTRODUCTION

Current research about workplace learning and transition between educational institutions and work contexts, (Billett, 2002a, 2003, 2004; Guile & Griffiths, 2003; Hodkinson, 2005; Tennant, 1999; Tuomi-Gröhn & Engeström, 2003) identifies a need to understand the complex relationships between individuals' knowing and learning, and their social world. Research exploring transition from student to new graduate in occupational therapy has tended to focus on therapists' expectations of practice, preparedness to practice, perceptions of their first occupational therapy position, job satisfaction, and level of stress (Adamson, Hunt, Harris, & Hummel, 1998; Atkinson & Steward, 1997; Hummell & Koelmeyer, 1999; Rugg, 1996; Sutton & Griffin, 2000). While this has been useful in identifying strategies to assist beginning therapists in overcoming the challenges of transition, there is relatively little understanding of how health professionals learn in the workplace and develop ways of doing practice (Middleton, 1998). I believe that this knowledge must form the foundation for the development of work practices which support learning. Without this basis, the learning that workplaces are able to provide may be ineffective, and organizations and workers may become disillusioned with the quality of learning in the work setting (Billett, 2001a).

There are three primary reasons for pursuing knowledge about the workplace pedagogic practices which support newly graduated occupational therapists' learning within their professional culture. First, health care reform in Canada including new models of patient care and service delivery, reorganization of management structures and cost containment, have had an impact on the roles and responsibilities of health professionals (Blau et al., 2002; Miller & Solomon, 2002; Walker, 2001). Increased involvement of the

private sector in health services (including provision of rehabilitation services by auto insurers and workplace safety insurers), and reorganization of home care services are examples of system changes that have changed the nature of occupational therapy practice in Canada (Rappolt, Mitra and Murphy, 2002).

Regulatory and education requirements have also had a profound effect on the occupational therapy profession (CAOT, 2004). Effective in 2008, a professional master's degree (non-thesis degree) in occupational therapy became the required credential to practice in Canada (CAOT, 2008). The move from a bachelor's degree to master's degree was based on the belief that advanced knowledge and skills are required for beginning practitioners in a health care environment that is characterized by complexity, diversity, and rapid rates of change. Occupational therapists as regulated health professionals are accountable to their provincial regulatory body which protects the public interest by setting practice standards and supporting the competency of practitioners (COTO, 2009). Occupational therapists must demonstrate evidence of their lifelong learning and adherence to the standards of practice, in order to meet the requirements of the quality assurance program administered by their regulatory association (COTO, 2009). While there have been significant changes in health care services, policies and education, research has not explored the ensuing shifts that are occurring in the practice context among health professionals, such as the knowledge required to work effectively within an evolving health care system and how that knowledge is constructed (Oandasan, 2006). There has been little exploration of how health professionals support each others learning embedded in the practice context. Similarly, the role of clients in health professionals' learning is an area requiring further study. Although researchers acknowledge the need to study medicine from a collaborative, multi-site perspective, "there

is minimal awareness of the need to study how practitioners and patients cope with, shape and create transformations in their work” (Engeström, 2004, p. 158-159).

Second, over the past decade there has been increased interest in learning through engagement in work practice and recognition that the experiences and support provided by workplaces are critical for initially developing the skills required for work and also for lifelong learning (Billett, 2002a; Fenwick, 2008b). Transfer of learning is a topic of debate among researchers (Beach, 2003; Guile & Griffiths, 2003; Tennant, 1999; Tuomi-Gröhn & Engeström, 2003). At the core, is the concept of transition between systems and the changing relationships among individuals, activities, and artifacts. An individual’s ability to make transitions between school and work, and between different client populations and practice settings, “constitutes a very profound form of learning and development” (Griffiths, 2003, p. 3). Participation requires the resituation of knowledge and skills, and the construction of meaning in a changed context. Research has failed to address how beginning practitioners negotiate their learning through work experience and how they are supported in mediating the relationship between school and work contexts. As well, there is limited research about how to help beginning practitioners engage in activities of practice (Guile & Griffiths, 2003). Studies which have focused on transition from graduate to new practitioner in occupational therapy highlight the importance of participation in learning (Cusik, McIntosh, & Santiago, 2004; McInstry, 2005; Toal-Sullivan, 2003), and the provision of support and supervision from colleagues to mediate the boundaries of school and work (Greensmith & Blumfield, 1989; Hummell & Koelmeyer, 1999; Parker, 1991; Rugg, 1996; Sutton & Griffin, 2000, Tryssenaar, 1999; Tryssenaar & Perkins, 2001). However, research has not explored the learning potential of participation in the day-to-day activities of the workplace community of

practice. An understanding of how to support learning “in and through work” (Fenwick, 2008b, p. 229) is needed in occupational therapy education and practice.

Third, I believe that learning to practice occupational therapy has unique challenges. There is extreme diversity in practice settings, client populations, age groups, and types of services and programs. Occupational therapy is a health profession that is rarely understood or recognized by other health professionals and the public. In Canada, the model of occupational therapy practice<sup>1</sup> provides the context for discourse on occupation, engagement, and client-centred practice (Townsend, 1998). This is in contrast to the discourse of medicine which concerns diagnosis and cure for disease, illness or injury (Wilding & Whiteford, 2007). This paradigmatic conflict influences the recognition and power of occupational therapy in client care. Finally, although clinical fieldwork experiences are woven throughout the educational curriculum, students continue to feel they lack the knowledge and skills for practice.

### **Purpose of the Study**

The purpose of this qualitative study was to understand how beginning occupational therapy practitioners learn in the workplace and develop ways of doing practice. A situated perspective of learning was needed to inform the development of pedagogic strategies which support knowing and doing in a community of work practice. The study participants comprised five occupational therapists with less than two years of clinical experience, who were employed in a large acute care hospital in Canada. Data collection consisted of five strategies: 1) observation, 2) semi-structured interviews, 3) participant journal entries, 4) meetings with the Discipline-Specific Leader for Occupational Therapy DSL (OT), and 5) a

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<sup>1</sup> Canadian Model of Occupational Performance and Engagement (CMOP-E)

researcher journal. The study was conducted at 2 hospital sites over a period of 12 months from October 2007 to September 2008.

This study of learning through participation in practice is conceptualized from a sociocultural paradigm, in which learning is understood as the construction of knowledge and skills which are socially mediated and embedded in context. Activity theory (Engeström, 1993) allowed me to gain insight into the relationship among workplace affordances, constraints and the occupational therapists' agency in learning. The processes and patterns of collaboration in the workplace were explored to understand how health professionals and clients contribute to beginning practitioners' learning. The workplace provided a space for learning "distributed among activities, continuous interactions and relationships of people" within the activity system (Fenwick, 2008b, p. 228). The daily routines of professional practice enabled me to understand the nature of the community of practice and how occupational therapists develop ways of knowing.

### **Research Questions**

This study sought to answer the following questions:

1. How do beginning occupational therapy practitioners learn in the practice context?
2. What are the workplace pedagogic practices which support the construction of knowledge among beginning occupational therapy practitioners?
3. How do clients mediate occupational therapists' learning?
4. How do workplace affordances and constraints, and individuals' agency shape beginning occupational therapists' participation and learning through work?

## **Terminology**

To foreshadow the use of the different discourses of ‘client’ and ‘patient’ for the reader, I will use the term ‘patient’ when discussing the study site and the nature of activities in the acute care hospital context such as patient care, patient care plans, patient chart, patient safety and patient priorities. ‘Patient’ will be used in the Literature Review if this was the term used in the articles or books discussed. ‘Patient’ will be used primarily in the Methodology and Description of Findings chapters of this thesis. I will use the term ‘client’ throughout the remainder of the thesis because this discourse reflects my philosophy and values as an occupational therapist, and my belief in client-centred practice.

## **GLOSSARY OF TERMS**

### **Activities of Daily Living (ADL)**

Self-care (toileting, dressing, bathing, grooming, eating), mobility (transfers, ambulation), communication, home management (shopping, meal preparation, household activities), community living (driving, shopping). In some classifications, instrumental activities of daily living (I-ADL) are used to describe activities that require more complex environmental actions and skills and would include community living and home management (Pedretti & Early, 2001).

### **Assistive devices**

Medical equipment or a product that enables people to participate in daily life activities. The technology may compensate for limited function such as a wheelchair or cane for mobility; or may maintain independence and quality of life (e.g. adapted driving aids, medical alert system, self-care equipment). Home safety products are another category of assistive devices (e.g. bathroom grab-bars, ramps, non-slip flooring, motion sensors).

### **Canadian Model of Occupational Performance and Engagement (CMOP-E)**

A conceptual model which describes the interaction between person, environment and occupation, and involves clients doing or participating in occupations (Townsend & Polatajko, 2007).

### **Client and Patient**

The patient is the recipient of health care services. I will use the term ‘patient’ when discussing the study site and the nature of activities in the acute care hospital context such as patient care, patient chart, patient care plans, patient safety and patient priorities. ‘Patient’ will be used in the Literature Review if this was the term used in the articles or books discussed. ‘Patient’ will be used primarily in the Methodology and Description of Findings chapters of this thesis. I will use the term ‘client’ throughout the remainder of the thesis because this discourse reflects my philosophy and values as an occupational therapist, and my belief in client-centred practice.

### **Client-centred practice**

“Collaborative and partnership approaches used in enabling occupation with clients who may be individuals, groups, agencies, governments, corporations or others; client-centred occupational therapists demonstrate respect for client’s needs, and otherwise recognize clients’ experience and knowledge” (CAOT, 1997, p. 180).

### **Clinical reasoning**

Critical thinking and decision-making processes involved in clinical practice; “it enables practitioners to take ‘wise’ action, meaning taking the best judged action in a specific context” (Higgs & Jones, 2008, p. 4). It is “the process used by practitioners to plan, direct, perform and reflect on client care” (Schell & Schell, 2008, p. 5).

**Collaboration**

“Interdependence of thinkers in the co-construction of knowledge-among partners and in small groups” (John-Steiner, 2000, p. 3). Collaboration involves mutual learning, dialogue and co-construction of knowledge.

**Grand Rounds**

A format meeting of health professionals, at which physicians present a clinical problem, case or treatment. “Grand rounds originated as part of residency training wherein new information was taught and clinical reasoning skills were enhanced. Grand rounds today are an integral component of medical education”

<http://www.medterms.com/script/main/art.asp?articlekey=40370>

**Kardex**

A method of medical documentation providing a quick reference to patient care information such as medications, contacts, treatment goals and discharge plans. The information is recorded on a file card (Kardex <sup>TM</sup>). (Mosby, 2009).

**Occupation**

The activities people engage in throughout their daily lives to give their life purpose and meaning, develop their identities and express themselves (Christiansen, 1999).

**Occupational change**

Adapting, adding or removing occupations because of transitions, losses, and/or changes in health and well-being occurring throughout one’s life (Townsend & Polatajko, 2007).

**Occupational performance**

The ability to engage in occupations within a particular social, cultural, physical and institutional environment (Baum & Law, 1997; CAOT, 1997).

**Occupational therapy**

“Occupational therapy is a profession concerned with promoting health and well being through occupation. The primary goal of occupational therapy is to enable people to participate in the activities of everyday life. Occupational therapists achieve this outcome by enabling people to do things that will enhance their ability to participate or by modifying the environment to better support participation” (World Federation of Occupational Therapists, 2004, p. 3).

**Occupational therapist (OT)**

Occupational therapists are regulated health professionals “who help people learn or re-learn to manage the every day activities that are important to them, including caring for themselves or others, caring for their home, participating in paid and unpaid work and leisure activities. The people occupational therapists work with may be having difficulties because of an accident, disability, disease, emotional or developmental problem or change related to the normal aging process” (College of Occupational Therapists of Ontario, 2010).

**Occupational therapy assistant (OTA)**

Personnel who support the occupational therapist in providing occupational therapy services. In some contexts, the term support personnel is used instead of occupational therapy assistant. An occupational therapist supervises an OTA and assigns components of occupational therapy services to them. As a regulated health professional, the occupational therapist is responsible and accountable for occupational therapy practice (CAOT, 2007).

**Scope of practice**

“The procedures, actions and processes that a registered individual may perform. A professional scope of practice describes the full range of activity open to the profession as a whole” (College of Occupational Therapists of Ontario, 2009, p. 2).

**Senior therapist**

An occupational therapist with minimum of 6 years of practice experience, with advanced competencies, demonstrated professional development and best practice, and ability to provide leadership.

**Team meeting**

A multidisciplinary meeting in which members of the team responsible for patient care review patients’ progress and share information regarding their care trajectory.

**Therapeutic communication**

An interpersonal interaction between a health care provider (practitioner) and a client in which the health provider communicates respect, understanding, and empathy and focuses on the client’s needs (Davis, 2006).

**Thoracic**

Related to a person’s chest.

**Transfer**

To move a patient or assist a patient in moving from one surface or position to another such as from a bed to a wheelchair, or from standing outside the bathtub to sitting in the bathtub. Transfer may also be used to signify when a patient changes systems such as transfers from a hospital to a long-term care facility.

**Unit**

A floor(s) of the hospital designated to a particular patient population or specialty area such as medicine, orthopedics, surgery, or rehabilitation.

## CHAPTER 2. LITERATURE REVIEW

The interest in workplace learning research and practice has expanded in the past decade (Bratton, Mills, Pyrch & Sawchuk, 2003). Political, economic and social changes such as a revolution in information technology, increased casual and contract work, globalization and privatization have resulted in a greater emphasis on learning in the workplace (Fenwick, 2001; Tennant, 1999). As an interdisciplinary field of study, workplace learning draws upon a diverse theoretical foundation including adult learning, sociological, and organizational theories (Bratton, Mills, Pyrch & Sawchuk, 2003).

Fenwick (2008b) conducted an analysis of the literature focusing on individual and collective learning in the workplace, published in journals reflecting diverse perspectives of inquiry. Two perspectives of the learning context emerged. Learning was conceived “as a web of relations or as a container” (p. 239). Context viewed as a web of relations reflects notions of learning as participation, embedded in practice, distributed among a community, and mediated by tools, symbolic systems and people. These themes are congruent with a sociocultural paradigm which is the worldview I adopted for this present study. In this chapter I have chosen to discuss topics that are consistent with workplace learning conceived as a relational process (Fenwick, 2001). I will discuss the situated perspective of learning through engagement in work, the role of patients in health professionals’ learning, the contemporary health care context, affordances and constraints, transition between the contexts of school and work, and curricula frameworks.

## **Workplaces as Learning Environments**

There has been an increased focus in educational research on workplace learning (Fenwick, 2001), including debate concerning how learning is conceptualized in workplaces and educational institutions. Part of the discourse in workplace learning concerns the formalism of practices situated in academic and work contexts (Billett, 2002a). Billett (2001, 2002a, 2004), Eraut (2004a), and Hodkinson (2005) have discussed informal and formal attributes of learning. Eraut (2004a) proposes that workplace learning is informal characterized by a greater scope and flexibility for learners than formal training found in academic settings. He proposes a continuum ranging from informal learning characterized by implicit, unstructured learning, without a teacher, and formal learning characterized by deliberative, planned learning opportunities, with a teacher or coach. Hodkinson (2005) argues that learning cannot be clearly separated into two distinct entities, rather elements of “formality and informality in learning coexist” in education institutions and workplaces (p. 524). Billett (2001) believes that these contexts represent different kinds of practices that are socially, culturally and historically situated, and learning is a product of engagement in the activities of a particular practice. Describing workplaces in terms of formality does not promote an understanding about the characteristics of workplaces as learning environments or learning spaces (Billett, 2004). This conceptualization also erroneously supports the assumption that in the absence of an educational institution, teacher, or formal curriculum, learning is either not occurring, or if it is, this learning is inferior or weaker compared to that which occurs in educational settings (Billett, 2004). Furthermore, characterizing learning environments as informal or formal does not account for people's own agency in engagement in work practices and knowledge construction. A broader perspective of learning is needed which considers participation as the primary focus of a workplace pedagogy (Billett, 2002a).

This is salient because in the contemporary workplace individuals are responsible for their professional development and lifelong learning. The knowledge required for effective participation in work, is constructed, in part, in the workplace, therefore it is critical to understand the activity systems, the ways in which a person interacts with the systems, and how these influence learning (Billett, 2001a; 2002b; Greeno, 1997).

In activity theory, the contexts for learning are activity systems comprising the subject, object and mediational means in a holistic manner (Engeström, 1993). Activity theory considers that individuals' development is shaped by their participation in the social practices of their community (Daniels, 2004). This provides a valuable perspective to explore how learning is "structured by and distributed across social practices" (Billett, 2002c, p. 83) and how the workplace affords or constrains opportunities for learning. A situated perspective of learning conceptualizes knowing as changing participation in a community of work practice including the development of a vocational identity (Billett, 2002c). The participation metaphor (Sfard, 1998) focuses on the bonds between the individual and others, and underlies how learning is embedded in the activities, tools, and interactions in the workplace. Wenger (1998) proposes that learning is a "process of becoming" and of transforming "who we are and what we can do" (p. 215). In this perspective, learning involves constructing knowledge in a particular context which offers a space for participation and the formation and transformation of identity. Identity may be defined as "an image, a symbolic code, representing something the subject desires to belong to or identify with" (Fenwick as cited in Hökkä, Rasku-Puttonen, & Eteläpelto, 2008. p. 54). Individuals' engagement in sociocultural activity and the meaning they derive from this lived experience contributes to the development of professional identity (Lave, 1993). Participation can be

conceptualized as the “process of appropriation of meanings and thus learning *to be*” (Hung & Chen, 2002, p. 248). This concept is different than learning ‘about’ which comprises the factual knowledge or theories that belong to a particular community such as how health is conceptualized and understood in a medical community. Therefore identity in a profession is developed through enculturation within a community of practice in which individuals engage in activities mediated by rules, artifacts, roles and interactions with others (Daley, 2002; Hung & Chen, 2002). Communities of practice are practitioners who share a domain of interest or endeavour (Wenger, 1998). They engage in joint activities and have a shared repertoire of tools, stories, experiences, and ways of approaching and working on problems. Wenger describes this collectivity as “a shared practice” (Wenger, 2006, p. 1). The concept of communities of practice allows us to identify the norms, values and procedures of workplaces, and explore how the division of labor and opportunities for participation are distributed across the work context. Lave and Wenger’s (1991) situated learning perspective emphasizes the relational nature of learning (Sebrant, 2008). Identity is constructed through participation with others and the appropriation of ways of knowing within a community. Workplace learning therefore requires an understanding of a person’s role and status in a community, how they engage with workplace practices, and how they make sense of their experiences (Hökkä, Rasku-Puttonen, & Eteläpelto, 2008).

Eraut (2004a) proposes that the workplace context is “rarely structured with learning in mind” (p. 247). Therefore, the learning that occurs through participation in work is often unrecognized by workers and employers. The amount of knowledge building that occurs in the workplace is underestimated. Workplaces do not consciously think of their workers as learning, rather, they are focused on the outcome of workers doing a good job (Millar, 2008).

In contrast, Billett (2002a) proposes that work activity is intentionally organized to structure workers' access to the knowledge needed to sustain a particular practice. This structuring is described as the learning curriculum by Lave (1990), “a pathway of experiences that leads to full participation in the social practice” (p. 314). The object, norms, practices and division of labor in the workplace determine who engages in workplace activities and how they engage (Billett, 2001b). The pathways of participation shape learning, beginning at the periphery and enabling a means of accessing resources for understanding (Lave & Wenger, 1991). Support from more experienced co-workers assists learners in developing ways of thinking and acting to develop the capacities needed for work. Learners engage in goal-directed activities which progress in complexity and lead to competence in practice. Participation and learning are therefore regulated by the workplace in the same way that an educational institution has norms, goals and practices to frame students' engagement in learning activities. Billett (2002c) emphasizes the need to “understand how the workplace invites workers to participate in its activities and guidance, and how individuals elect to engage with what is being afforded by the workplace” (p. 94). The pedagogical qualities of workplaces as learning contexts are based on an understanding that knowledge is embedded in, and distributed across social practices (Billett, 2002c; Cole & Engeström, 1993).

Billett (2002c) identifies four interdependencies in workplace settings which can be used to determine individuals' participation and how knowledge is distributed in the workplace. First, learning is a process shared with others. It is therefore important to identify the historical and cultural structures associated with work which influence access to guidance and participation. These structures may be formal such as a health care team that determines the division of labor around the object of patient care, or informal such as a collaborative

working relationship between an occupational therapist and an occupational therapy assistant. Secondly, participation and support provided to workers is influenced by the worker's standing in the workplace such as whether they have full-time or part-time status, perceived value of the work by others, their decision-making role within the organization, and their physical location in relation to other workers. Thirdly, Billett (2002c) proposes that guidance may be more accessible when workers are engaged in similar activities than when the learners are isolated from other workers. Lave's (1990) study of tailor apprentices is an example of learning from others in a community. The apprentices learned from tailors and other apprentices the practice of making garments. They also developed social and cultural knowledge such as learning about customers' social status and about the value of the tailoring trade. In this view, access to observation of others and to expertise provides an opportunity to learn with, and alongside others. Through this participation, individuals become full participants in the activities of practice. Finally, it is the interaction among elements of the activity system comprising individuals, artifacts, and objects, which mediate participation in work practice.

## **Role of Patients in Health Professionals' Learning**

### ***Patient Participation in Clinical Practice***

In the health care context, patient care is the shared domain of interest for members of the community of practice. In this collective view of learning, what is the role of patients in health professionals' knowledge construction and meaning-making? The literature on patient participation reveals two foci of inquiry: 1) philosophical approaches to clinical practice involving patients' role in clinical decision-making, or 2) structured approaches to patients' involvement in health professionals' knowledge construction. These domains will now be discussed.

The notion of patient participation in health care began with the World Health Organization's Charter on Health Promotion, which was launched at the First International Conference on Health Promotion in 1986. This Charter defined health promotion as "the process of enabling people to increase control over, and to improve their health" (World Health Organization (WHO), 2009, p. 2). The adoption of a holistic approach to health involving patient participation is attributed to WHO international policies and research emanating over the past 30 years since the creation of the landmark Charter. Societal changes including increased awareness of consumer knowledge and rights, the advent of self help groups, and increasing health care costs and fiscal constraints have also contributed to the emergence of patient participation in health care interactions (Cahill, 1998). Researchers have proposed various models to describe the contributions of the patient and professional in these interactions. Two of these conceptualizations, patient-centredness and client-centredness will now be explored. I will use the term 'patient' to reflect the discussions in the medical literature and 'client' to reflect the discussions in the occupational therapy literature.

In medicine, the term 'patient-centredness' is "a widely used, but poorly understood concept" (Stewart, 2001, p. 444). A common misconception is that patient-centredness means sharing all knowledge and decisions between patients and doctors. However being patient-centred means placing the person at the centre of the intervention, responding appropriately to their desire for information, and "attempting to understand the patient's thoughts, feelings and expectations as well as his or her symptoms" (Sumsion, 2006, p. 5). Levenstein, McCracken, McWhinney and Stewart (1986) present a patient-centred model in family medicine which integrates the parallel agendas of physician and patient. The physician's objective is to determine the diagnosis through medical tests and procedures. The

patient's objective is to understand their illness through expressing their thoughts, expectations and apprehensions regarding their situation. In a patient-centred approach, there is an effort to find common ground and reach agreement on the patient's problems, treatment goals and the roles of the patient and physician in the care plan (Stewart, Belle Brown, Weston, McWhinney, McWilliam & Freeman, 2003). This is facilitated by exploring both the disease and the patient's experience of illness, and by understanding the person within their social and cultural context. An enhanced patient-doctor relationship is the foundation for physician's coming to know the patient and enabling them to improve their health (Stewart et al., 2003).

In occupational therapy, the term 'client-centredness' describes an approach to practice which focuses on the person, their strengths, their view of the problem, and their goals for treatment (Law, Baptiste & Mills, 1995). In client-centred practice the therapist and client work in partnership to achieve goals, with the therapist assuming the role of collaborator and facilitator rather than directing the treatment process (Sumsion, 1993). There is a philosophy of empathy, respect and support for individuals receiving occupational therapy services. While there are some shared components of patient-centred and client-centred approaches, the language reflects fundamental differences in the discourse of medicine and occupational therapy. Physicians' power and authority are "communicated by defining people as patients" (Townsend, 1998, p. 46). A shift in power from dependence to partnership and interdependence is communicated by using the term client (Townsend, 1998). In this approach individuals have an active role in defining treatment goals and outcomes, and making choices about the occupations that are important to them (Sumsion & Law, 2006).

Cahill (1998) conducted a critical review of the literature on patient and professionals' roles and perspectives of patient participation in health care practice. Cahill discusses different conceptualizations of participation and identifies common elements among these including patient involvement in identifying problems, setting treatment goals, sharing information and making decisions about health. In understanding patients' preferences for participation in care, factors such as the individual's age, culture, level of education, medical condition and knowledge of their condition are important to consider. Some patients such as older adults and those who are more acutely ill may not want to participate in decisions regarding their care. For others, such as persons living with chronic disease, participation is essential if they are to manage their health and avoid deterioration and progression of symptoms. In the hospital setting, the voice of medicine "dominates and decontextualizes events" to fit the institution's routines and norms (Maseide, 2007, p. 613). This context, in which services are structured according to a medical hierarchy, may be less oriented to patient participation compared to an organization in which services are structured in a more horizontal, collaborative fashion, such as a community clinic (Cahill, 1998). Therefore, sociocultural and political factors influence patient and health professional perspectives about the concept of participation and how it is enacted in practice. Most of the studies about a participatory approach to health care have used quantitative methodologies and have not observed what actually happens in practice (Cahill, 1998). The majority of the research has also been conducted in the context of medicine and further studies are needed within the context of other health professions.

In an occupational therapy study, eight consumers in the Ontario mental health system shared their perceptions of client-centred practice in two focus groups (Bibyk et al., 1999). The groups were led by the clients' occupational therapist however the influence of this relationship on the data findings was not discussed. Participants believed that being client-centred means that there is an equal, participatory, and respectful relationship between client and therapist. The therapist is non-authoritarian and it is this "absence of a struggle for power and control" that is one of the essential elements of being with a client-centred therapist (p. 12). Responsibility for setting treatment goals and working towards these rests with the client. Participants in this study hoped that their insights and discussion would encourage occupational therapists to recognize clients' knowledge of their abilities, limitations, and resources, and provide clients with choice regarding their health. Participation is conceptualized as an integral part of practice in which the voice of the individual receiving services is heard and respected. In a more current study exploring health consultations in general practice, homeopathy, and psychoanalysis in Finland, Peräkylä, Ruusuvuori & Lindfors (2007) propose a similar conceptualization of participation. This approach "involves the ways in which patients are given opportunities to contribute to the discussion on *what the health problem is* and *what should be done about it*" (p. 122, emphasis in the original). They caution that the nature and meaning of patient involvement depends on the context, the goal of the health interaction, and the practice paradigm and related activities. For example, while the enactment of psychoanalysis requires patient participation, general practice may be less dependent on patient participation to arrive at a diagnosis and determine a treatment direction.

Exploring the extent to which patients desired a voice in health care consultations was the focus of Thompson's (2007) qualitative study. Data collection consisted of 48 semi-structured interviews, 36 focus groups, and 12 workshops with the same 208 individuals. Participants reflected differences in social class, age, health, gender, physical environment (rural, suburban, inner cities) and experiences with the National Health Service in England. The interviews and focus group discussions concentrated on individuals' type of involvement in health care consultations. Participation was understood as "involving patients in discussions about their condition, providing them with relevant information, asking for their opinion on possible treatments, and involving them in the decision-making process, should they so wish" (p. 50). It was acknowledged that some people cannot be involved or choose not to be involved because of their knowledge, attitudes or values, or because of their medical condition such as a traumatic injury, or cognitive impairment. Thompson classified patients' perspectives of desired involvement into five levels; non-involvement, "information-seeking, information-giving, shared decision-making, and autonomous decision-making" (p. 58). These levels were contrasted with professionals' perspectives of patient involvement. In shared decision-making there is mutual respect, open communication, and collaboration between the patient and professional. Dialogue and shared power is the foundation for patient participation. Similar to Peräkylä, Ruusuvuori and Lindfors (2007), Thompson proposes that patient participation is dynamic. It depends on the type of illness, the patient's knowledge and interest in participation, and the social, cultural and political context. His taxonomy is a means to identify patient and professional perspectives of involvement to promote effective communication.

In summary, many researchers are advocating greater client participation in health care encounters to achieve a more holistic view of the client, their disease and their illness experience, and to enable clients' autonomy in decision-making (Thompson, Ruusuvuori, Britten & Collins, 2007). In addition, there is evidence that client-centred communication is associated with patient compliance, satisfaction, and improved health outcomes (Stewart, 2001). Research also indicates that client participation in health care leads to shorter periods of hospitalization (Lott, Blazer, & West, 1992).

### ***Patient Participation in Clinical Education***

Research on patient-centred approaches in medical education has tended to be descriptive, focusing on enhancing doctor/patient relationships through health communication skills, and strategies for teaching at the bedside (Bleakley & Bligh, 2008; Kurtz, Silverman, & Draper, 2005; Ramani, 2003; Spencer, 2003). Research on health communication concerns how to facilitate clients' participation in physician-client interactions. Studies indicate that physicians often restrict clients' opportunity to share all of their concerns and pursue a problem without knowing if this is the most important to the client (Marvel, Epstein, Flowers, & Beckman, 1999, p. 286). This form of interaction is likely based on time constraints and financial pressure to maintain high client caseloads (Langewitz, 2002). Marvel et al. (1999) recorded the interviews of 264 client visits to 29 family physicians. The study was conducted in doctors' offices in the United States and Canada. Different aspects of the interviews were analyzed such as the physician's statement to begin the interaction "How can I help you?", "What brings you in today?" (p. 284), the client's indication that they were completed expressing their concerns, and the physician's interruption of the client's talk. They found that physicians allowed clients an average of 23 seconds to initially discuss their concerns before they take the lead in communication. It is

important to note that this length of time is not the total time available for the clinical interview, but refers to the initial portion in which the agenda for the visit is set. Marvel et al. (1999) suggest that redirection of clients' initial descriptions of their concerns may be associated with "missed opportunities to gather potentially important patient data" (p. 283). Similarly, Langewitz (2002) studied the uninterrupted talking time of 335 patients and 14 doctors at an outpatient hospital clinic in Switzerland. Physicians were asked to use a stopwatch to record the length of time clients talked before they indicated that they wanted the physician to assume the lead. The clients were unaware that they were being timed. The results indicated that the clients talked for an average of 92 seconds. The majority of clients completed the initial disclosure regarding their concerns in two minutes. While the time factor in the above studies is interesting because it is very succinct, the relevancy of the findings from a sociocultural perspective is found in the statement, "in all cases doctors felt that the patients were giving important information and should not be interrupted" (Langewitz, 2002, p. 682).

The first international conference, entitled *Where's the patient's voice in health professional education*, explored clients' teaching role within various academic initiatives (Farrell, Towle, & Godolphin, 2006). The conference proceedings illustrated clients' participation in the education of occupational therapists, physiotherapists, nurses, physicians, social workers and other disciplines. Clients are involved in structured learning sessions for health professional students such as lectures and laboratories, and in university curriculum committees. As teachers, clients are part of standardized assessment and training in licensing examinations for various health professionals. In these exercises, students' skills in physical

examination, observation, listening, and empathy are evaluated. Clients are also involved in sharing stories of their medical condition and experiences with students in the classroom.

Doshi and Brown (2005) discuss methods of patient-based teaching for psychiatry trainees in the UK. Medical students may be assigned a caseload in which they are responsible for assessing and treating patients under the guidance of their supervisor. Patients are carefully selected so that their health is not adversely affected by participating in teaching and to ensure that the identified learning objectives will be fulfilled. Learners share their findings and impressions with the medical team and with their supervisor. Shadowing an experienced clinician's interactions with patients is another form of patient-based teaching. In these approaches, a curriculum is clearly defined with learning outcomes based on the physician's professionalism and performance of tasks (Doshi & Brown, 2005). In medicine, patient-based teaching, or bedside teaching as it is sometimes termed, is structured to enable students to develop medical knowledge and professional skills including decision-making, communication, empathy and clinical reasoning (Spencer, 2003). Researchers note, however, that opportunities for this form of teaching is decreasing because of fewer patients (patients are too sick to participate, faster patient discharges), reliance on technology, limited supervisory resources, and conflicting demands of providing patient care and teaching students (Doshi & Brown, 2005; Ramani, 2003; Spencer, 2003). In occupational therapy, similar structured approaches to learning in the clinical environment can be found in fieldwork experience. Fieldwork enables students to apply theory to practice, learn and practice assessment skills and treatment methods, and know the real-world of occupational therapy through interaction with patients and team members (Missiuna, Polatajko & Ernest-Conibear, 1992; Thompson & Ryan, 1996b).

Bleakley and Bligh challenge the conventional model of medical education in which the dialogue between doctor (as teacher) and student is the primary means of knowledge production. The researchers propose a patient-centred model involving patients, different health professionals and students. The patient “assumes an active role as educator” and the student collaborates with patients, health professionals and other students in their learning (Bleakley & Bligh, 2008, p. 95). This shifts the power in learning from doctor as the source of knowledge, skills, and attitudes, to shared power between student and patient who co-construct knowledge. In a patient-centred model, the medical student’s clinical expertise is based on their ability to listen to the patient’s voice (what is said, what is not said, the silences and inconsistencies), and to tolerate uncertainty. This is radically different than trying to fit the patient into a defined medicalized script or a general case study which is enacted in rational, problem-based learning. Dialogue between student and patient allows for the construction of new knowledge and the “interpretation of the symptoms of this specific person in this specific context” (Bleakley & Bligh, 2008, p. 104). This patient-based approach to learning in medicine is consistent with activity theory in which students and patients’ participation is mediated by health professionals, language and other artifacts in a community of practice.

The mental health literature has explored the participation of consumers of mental health services in the design of nursing curriculum and in changing stigmatizing attitudes towards persons living with mental illness (Bennett & Baikie, 2003). Bennett and Baikie discuss their collaboration in a mental health course in an undergraduate nursing program. Bennett, a nurse educator, and Baikie, a client with schizophrenia, collaborated in the development and presentation of education sessions in which Baikie shared stories of his

mental illness and experience of recovery with nursing students. Students were later asked to respond to an exam question which required them to reflect on their understanding of the impact of mental illness on a person living with schizophrenia. Their responses indicated that they developed knowledge about mental illness, awareness of their attitudes, and empathy for the individual's experience. For the client, the opportunity to share his story with students allowed him to reflect on his illness and discover meaning in his illness experience. Bennett discovered that through her collaboration with Baikie her own assumptions about mental illness were challenged. Bennett and Baikie noted that a critical component of involving clients in the education process was students' enhanced understanding "about the nature of lived experience, and personhood as it relates to the illness" (p. 110). They concluded that involving clients in the education process has the potential to benefit students, educators and clients.

In summary, while the research recognizes that clients have an important role in the education of health professionals, the research focuses on structured approaches to client participation and involvement in learning. A reconceptualization is needed in which clients are viewed as an integral part of learning in a health care community of practice.

### **The Contemporary Health Care Context**

The current health care context is characterized by social, political and economic changes, as noted earlier (Fenwick, 2001; Tennant, 1999). These changes have contributed to the belief that the key to survival in such a competitive environment is the development of knowledgeable workers and innovative practices with workplaces as sites of "creative communities of learning" (Fenwick, 2001, p. 5). However, this vision does not consider the political dimensions of the workplace which shape participation and knowing. Power

structures have resulted in an increase in privatization, a move from full-time to casual or part-time work, and an increase in workplace stress (Fenwick, 2001). Governments are limiting public spending and emphasizing value for money. Education and health-care sectors in particular, are being scrutinized and evaluated (Barnett, 1999). In health care, patterns of work, roles, systems and institutions have changed. Since the early 1990's, health care restructuring has had a profound impact on health care professionals' identity and practice (Lopopolo, 2002). The health care system has been reformed because of "a budget crisis and political directives [which] called for large-scale decreases in care costs" (Sebrant, 2008, p. 196). A significant portion of these health care costs are related to health professional services, therefore funding organizations such as insurance companies have tried to assume greater control over health professional services (Rappolt, Mitra & Murphy, 2002). In an effort to achieve fiscal responsibility and managed resources, hospitals have undergone major organizational change. The private sector has also become more involved in health services (including provision of rehabilitation services by auto insurers and workplace safety insurers), and home care services have been reformed (Rappolt, Mitra, & Murphy, 2002).

In the past 10 to 15 years, a decentralization process has occurred in hospitals and other institution-based health organizations to eliminate the traditional hierarchy of profession-specific departments and directors, and achieve smaller, managed entities (Rappolt, Mitra, & Murphy, 2002). Program management was introduced in which services are organized according to diagnostic groups which are typically managed by nurses and other clinical and financial administrators. This reform was supported by the Ministry of Health in Ontario through funding initiatives based on a program structure (Baker, 1993). While the

arrangement of individuals and work groups varies in hospitals across Canada, program managers are usually responsible for decision-making, and human and fiscal resources (Miller & Solomon, 2002). Baker (1993) highlights some of the advantages and disadvantages of a program management structure. The traditional organizational design encouraged “identification of professionals with their disciplinary colleagues,” and provided supervision by a director from the same profession (Baker, 1993, p. 221). In program management, many professionals fear the loss of their professional identity and standards because they are no longer aligned with their discipline. Baker (1993) also notes that the elimination of a departmental director makes career advancement more difficult. Conversely, program management allows an organization to clearly define its role in patient care, the resources required, and the outcome of services provided. The emphasis is on financial control, achievement of workload demands within the program budget, and improved patient care. These conditions influence the context of work and how individuals learn in “workplace communities of practice” (Fenwick, 2001, p. 7).

Rappolt, Mitra and Murphy (2002) interviewed occupational therapists who worked in the restructured health settings of program management, home care or private practice, to examine their perceived capacity to engage in continuing education and evidence-based practice. In the program management group, nineteen occupational therapists with an average of 18 years of practice experience were interviewed. The participants worked in mental health settings, rehabilitation centers, or chronic care facilities. The majority of the participants had both clinical and administrative responsibilities. In their administrative role, the participants did not have authority for management of occupational therapy services or a budget for continuing education. They reported to managers who were not occupational

therapists, which is the typical structure in program management. The study findings suggested that these contextual factors reduced “the capacity of occupational therapists practicing in program management to meet professional standards of accountability” (p. 298). The participants perceived that organizational support for continuing education was inadequate and felt that they were unable to use research evidence to inform their clinical practice. In all three restructured contexts, the occupational therapists experienced a sense of isolation from their peers, loss of control of their work, and instability of job positions and work settings. The study indicates that strategies are required to enable occupational therapists to gather relevant research evidence, appraise it, and integrate research findings into clinical practice. An understanding of individual and workplace factors that support the utilization of evidence is needed to promote optimal services for clients.

Lopopolo (2002) surveyed 273 physiotherapists in the United States who worked in hospitals that were involved in organizational restructuring for an average period of 4 years. The purpose of the study was to identify the relationship between changes in professional role behaviours and the outcomes of job satisfaction and commitment to the organization. The influence of perceived stress and commitment to the physiotherapy profession in relation to the two outcomes, were also explored. The majority of the participants in the study provided direct patient care and were supervised by a physiotherapist. The participants completed a questionnaire which examined role behaviors, role demands, job satisfaction, and organizational commitment. Findings revealed that participants who had higher levels of stress as measured by role conflict, role demand and role ambiguity had “lower levels of job satisfaction” (p. 997) and less commitment to the organization. Professional role behaviours, notably interactions and integration with other clinicians, had a positive influence on job

satisfaction. Lopopolo (2002) proposed that these interactions may contribute to a sense of individual competency and group cohesiveness, and may facilitate adaptation to changes in the hospital environment. Commitment to the profession also had a positive influence on job satisfaction and organizational commitment. Lopopolo recommended that workplaces nurture professional behaviours and commitment to the profession as a means to mitigate the negative effects of restructuring on productivity and effectiveness of care.

Miller and Solomon (2002) conducted a qualitative study of 29 physiotherapists to learn how a change from a profession-specific departmental structure to a program management structure, influenced their professional practice. The physiotherapists were clinicians in a large teaching hospital and had practiced an average of 10 years. Five focus groups were held with 3 to 7 physiotherapists per group, for a total of 25 participants. Individual semi-structured interviews were conducted with another 4 physiotherapists. The physiotherapists' experience of professional practice following the move to program management was captured in different themes including low morale, and a feeling of loss related to their professional identity that was fostered in a cohesive, profession-specific department. They missed the interactions, opportunities for emotional support, access to role models, and friendships that were afforded to them in a departmental structure. Another emergent theme was the loss of opportunities for professional development. Program funds were designated for patient care and education funds were often not included in program budgets. Some of the participants perceived that the change to program management provided them with a greater recognition of physiotherapy's role with an opportunity to expand their scope of practice beyond direct patient care. However the majority of the participants felt that program management had a negative effect on physiotherapy services.

There was less time available for patient care because of additional administrative and operational responsibilities inherent in a program structure. Miller and Solomon (2002) recommended formal mentoring programs to support physiotherapists in a program management environment. They propose that mentorship will foster socialization of new employees, professional development, and promote professional attitudes and values.

### **Affordances and Constraints**

Learning through work is shaped by engagement in everyday work activities, and access to both direct guidance (supervision, interactions with co-workers, questioning) and indirect guidance (artifacts, modeling, observing) (Billett, 2002a). According to Lave (1993) “situated activity always involves changes in knowledge and action” and these changes are “what we mean by learning” (p. 5). Participation is learning (Lave, 1993). Therefore how the workplace affords opportunities for participation and access to support, and how individuals choose to engage in social practices, will help us understand learning through work. Activity theory assumes that individuals are active in their own development (Russell, 2002) but also recognizes that individuals act in environments with others and with shared tools. Therefore to understand learning at work it is necessary to consider the factors that shape participation in the actions and interactions of the workplace (Billett, 2002c). Learning through work involves the negotiation between workplace affordances and constraints, and individuals’ agency (Billett, 2002a, 2004). Although workplace learning strategies such as observing, asking questions, and practicing skills provide a basis for developing working knowledge, what we do not know is how these are “afforded to and distributed among workers” (Billett, 2002c, p. 83). Although an occupation requires certain sociocultural skills, the requirements for performance will vary according to situational factors which determine how activities are enacted.

Billett (2002a) investigated the work practices of four hairdressing salons and found that although there were common activities, the characteristics of the practice varied depending on situational factors such as the socioeconomic location of the salon, and clients' age, circumstances, values and interests. The salons also differed in how they afforded participation in hairdressing activities to apprentices. In a smaller salon, each hairdresser participated in a range of tasks such as greeting clients, cleaning the salon, and cutting and styling hair. This context provided a pathway of activities that enabled apprentices to gain competence and allow them to work independently early on in their practice. In a larger salon, the apprentices spent time initially learning about the hygiene and cleanliness of the salon, and how to interact with clients. Through observing and listening, the apprentices learn about each task in the hairdressing process. Their participation gradually becomes less peripheral as they begin to perform components of hairdressing such as washing and cutting hair. They continue their engagement in activities of practice until they become a full participant and style hair independently. This study emphasizes the importance of situated activity in learning and illustrates how a particular workplace determines how activities are structured and the pathways for participation. The history of individuals, their disposition for learning and their unique ways of knowing influences participation in work practices (Billett, 2003). In this perspective, individuals define and are defined by their social practice.

Power and control regulates workplace learning opportunities and participation, consequently learning in the workplace is not informal, ad hoc or unstructured (Bierema, 2001; Billett, 2004; Solomon, 1999). The readiness of the workplace to afford opportunities for participation and access to support depends on a number of factors including gender, age, class, language, culture, employment status, and workplace affiliations (Billett, 2001a;

Fenwick, 2001). Consequently, workplace affordances are not distributed evenly.

Individuals' access to knowledge is complex and contested. Contestation is an important characteristic of workplace communities in which "practices and rules of engagement are constructed through the unequal interactions of those within it" (Hodkinson, 2005, p. 524).

Contestation arises when there is an imbalance between individuals' knowing and the expectations and demands of work, or the norms of the community of work practice (Billett, 2002c). Individuals' agency will determine how they participate and learn within the community and strive to overcome this dissonance.

The structure of the social practice, "its power relations and its conditions for legitimacy" shapes the possibilities for learning (Lave & Wenger, 1995, p. 98). Contextual factors such as the organization's funding, legislation, procedures and resources influence what participants do and the development of a workplace community. Fuller, Hodkinson, Hodkinson, and Unwin (2005) explored learning among apprentices in three companies associated with the steel industry in England. A case study approach was used to identify workplace and individual factors in learning. The companies varied in the structure of their apprenticeship program such as the amount of time the participants spent in college and in the workplace, the degree of internal boundary-crossing (within the company) and external boundary-crossing (within the community), and the methods of supervision. The company that was more limited in scope of practice and access to participation beyond the workplace was categorized as offering restrictive participation (Fuller & Unwin, 2003). Providing access to learning opportunities for the apprentices was a low priority. In another company, the goals of the apprenticeship and the supervision arrangements were unclear. The apprentice had limited access to other communities of practice within the organization.

During training the apprenticeship was relocated to another department based on the company's need. The worker had no control or choice over moving departments because of the low status afforded to the position of apprentice. Finally, the company that allowed the apprentice to spend time in both college and work contexts and provided the apprentice with opportunities to experience different departments within the workplace enabled the learner's full participation. Fuller, Hodkinson, Hodkinson, and Unwin (2005) conclude that the issue of power is relevant to understanding the process of learning at work. Those in control of resources, exert power by creating or eliminating barriers to participation and therefore learning. The researchers advocate for further case study research that explores power, inequalities and the dynamic nature of communities of practice to inform our understanding of how individuals learn at work (Fuller, Hodkinson, Hodkinson & Unwin, 2005).

### ***Paradigmatic Conflict and Power Relations***

The medical profession occupies the top position of the power hierarchy in health care (Sebrant, 2008). However in the current health care climate, other professions such as nursing have challenged the traditional power discourse with demands "to be able to act independently and not merely as assistants" to the medical profession (Sebrant, 2008, p. 203). The profession of occupational therapy has had to fight for their influence as a professional group in the discourse of acute care institutions. A lack of understanding by clients, other health professionals and the public about the value of occupational therapy in promoting health and preventing illness is a longstanding problem within the profession (Wilding & Whiteford, 2007). A related problem is the ongoing debate about the domain of the profession, a focus on enabling occupation, function or developing skills. This is constrained by the confusing definitions of the constructs of occupation and activity which are often used interchangeably (Golledge, 1998a; Toal-Sullivan & Henderson, 2004).

Pedretti and Early (2001) identify that occupational performance is the domain of concern of occupational therapists across practice contexts. Occupational therapists are the only health professional who considers how a health problem impacts upon an individual's life roles and the occupations needed to support participation in these roles. Golledge (1998b) argues that in order to survive in the current health care climate and maintain professional power, occupational therapists need to clearly articulate the uniqueness of the profession if they are to effectively promote their services to clients and to funding bodies such as insurance companies. Walker (2001) proposes that the current health care environment creates an opportunity for occupational therapists "to set the record straight about OT... explain, define, and defend what we do and to identify functional gains from therapy" (p. 133).

In the acute care context, occupational therapists receive referrals that place the medical condition at the forefront. This is at odds with the focus of the occupational therapy profession which concerns clients' ability to participate in occupations or the activities of daily life that are meaningful to them. The occupational therapist is concerned with how the medical condition interacts with other personal and environmental factors to enable or constrain their everyday occupations. In an acute care setting, patients are often seen by the therapist based on their diagnosis not on whether they have an occupational issue. Patients' readiness for discharge is often determined by whether their medical condition is resolved or stable, not whether they are able to manage at home, perform their daily activities or have the required physical and/or emotional support in place. Wilding and Whiteford (2007) conducted an action research project with 10 occupational therapists in an acute care setting to explore how they articulated and justified their practice. The participants varied in terms of their work experience. Four of the participants were new graduates, five of the participants

had 3 to 10 years of experience and one had more than 10 years of experience. Interviews were conducted on an individual basis with each participant. The study findings revealed that the language used to describe practice was over inclusive and did not provide a clear understanding of the occupational therapist's role or domain of concern. This problematic discourse was attributed to the notion that a "straightforward definition of occupational therapy looked far too simple" (p. 189). The years of education, reflective practice, research, and "the therapist's consideration of this person, doing this occupation at this point in time and space, are *invisible* to the outside world" (p. 191). Wilding and Whiteford (2007) proposed that the philosophy, theory and language of occupational therapy are not consistent with a medical paradigm leading to fundamental differences in how health is conceptualized. While medical discourse concerns anatomy, diagnosis, surgery, and cure for disease or injury, occupational therapy discourse concerns occupational performance, participation, and engagement. In the next phase of that action research project, the participants chose to explore new ways of talking about occupational therapy practice (Wilding & Whiteford, 2008). In this phase, 11 occupational therapists participated in individual interviews and five group sessions. The group sessions involved discussion of patient cases and the clinical reasoning process, how occupational therapy was explained to patients, families and other members of the team in an acute care setting, and the impact of the research project on the participants' practice. The occupational therapists chose to change the language used to describe their practice, replacing the word 'function' with 'occupation' and charting using headings such as occupational performance and occupational history. The researchers believe that 'function' is used by a range of professions and does not represent the unique philosophy or core constructs of occupational therapy. Wilding and Whiteford (2008) advance the notion that a change in language transformed the participants' professional identity and

representation in the hospital, from being unsure and vague about their role to being confident and clear about occupational therapy's valuable contribution to patient care. They conclude that language has the power to improve knowledge about and portrayal of occupational therapy in the workplace.

Walker (2001) conducted a qualitative study with 25 occupational therapists working in a managed care environment. Through individual interviews, participants discussed how reformed health care affected their practice and what educators should be teaching occupational therapy students to enable them to function in this changed health context. The participants' views were grouped into three categories that reflected their experience of practice. The first category, "pushing against it," describes the occupational therapists' challenge to adjust to a new practice process and the perceived negative effect on patients. They experienced a dissonance between what was required clinically for the patient based on their professional opinion and what was funded by the insurer based on cost-containment. There was a sense of "loss of control over the occupational therapy process" (p. 132). The second category, "going with it," describes the therapists' acceptance of changes in their practice to remain competitive in, and meet the demands of managed care. The third category, "making the best of it," reflects the participants' ability to adjust their practice within the constraints of the system, by focusing on what they can effectively and efficiently achieve with patients. The participants recommended that occupational therapy educators instill in students a strong sense of their professional role including the ability to clearly articulate the value of occupational therapy to others in different practice contexts. Students also need to learn how to prioritize, and work efficiently and effectively with diverse

populations. Knowledge of financial and business practice was also recommended to respond to demands for cost-effective care (Walker, 2001).

In communities of practice, the shift in power destabilizes practices and changes participation and “the kinds of meaning that can be created in a certain context” (Wenger, 1998, p. 93). The restructuring of health care can be conceptualized as a contradiction or tension within and between activity systems. External influences such as political directives and funding constraints which drive health care change, create an imbalance between the elements of the system. Conflicts emerge requiring renegotiation of relationships, redefinition of the object or goal of the system and development or redefinition of artifacts, rules, and norms to sustain the practice. The change to managed care is not a single event that required a period of adjustment and implementation, rather, health care will continue to change, “driven by competition, demographics, and above all, technology” (Lohman as cited in Walker, 2001, p. 15). This situation affords and constrains access to resources, activities and technologies needed for practice (Contu & Willmott, 2003).

### **Transition between the Contexts of School and Work**

Transfer of learning or “how knowledge acquired in one situation applies (or fails to apply) in other situations” (Tennant, 1999, p. 165) is a common concern for school and workplace educators. However, this concept of transfer and acquisition is not consistent with a sociocultural perspective of learning. Situated learning theorists do not believe that transfer of knowledge exists because knowledge cannot be decontextualized (Tuomi-Gröhn, Engeström & Young, 2003). Knowledge is historically and culturally embedded and developed within communities of practice. The ability to adapt to changes in work contexts depends on the commensurability of participation and the learner’s ability to negotiate these

different systems (Lave & Wenger, 1991). Therefore, when seeking to understand individuals' transition between communities such as school and work we need to consider that this involves "the construction of knowledge and skills understood as transformation rather than the mere application or use of something that has been acquired elsewhere" (Tuomi-Gröhn, Engeström & Young, 2003, p. 3). Transition involves transformation of the complex relationships among the individual, mediated action and the larger social community or contexts in which learning occurs (Cole, 1996; Engeström, 2001). In a sociocultural perspective knowledge must be constructed and re-constructed across contexts. The concepts of boundary-crossing and polycontextuality in activity theory recognize that individuals are engaged in multiple communities of practice simultaneously with specific forms of participation (Engeström, Engeström, & Kärkkäinen, 1995). Griffiths (2003) believes that "the development of the capacity to make transitions, to 'cross boundaries', constitutes a very profound form of learning and development" (p. 3). Similarly, Billett (2003) states that the learner's response to variations in practice, an important objective of rich learning, is the result of participation in those practices.

Activity theory has important implications for how we view learning when people change or transition between contexts such as school and work. Knowledge does not transfer from one context to another, "what moves from college to workplace is not the learning, but the learner" (Hodkinson, 2005, p. 527). Students and beginning practitioners require help in integrating and resituating knowledge learned in school, in workplace practice. Students have learned how to participate in an academic community of practice (Hodkinson, 2005). This is different from learning in a workplace community of practice with its inherent objectives, rules, division of labor, relationships and artifacts. Hodkinson (2005) argues that research

concerning the transfer of learning from the academic to the workplace context is based on a vertical perspective in which education prepares an individual for work. In this view, individuals progress through a hierarchy of knowledge (Guile & Griffiths, 2001). This assumes that learning is a product to be acquired and “separates the product of learning from the learning process, from the learner and from the context of learning” (Hodkinson, 2005, p. 527). While the vertical perspective of development is important, workplace activity often involves new problems that cannot be solved by transferring knowledge and skills from school (Tuomi-Gröhn, Engeström, & Young, 2003). A horizontal and multi-dimensional perspective of development recognizes that different contexts “demand and afford different, complementary but also conflicting cognitive tools, rules and patterns of social interaction” (Engeström, Engeström, & Kärkkäinen, 1995, p. 319). Transition between school and work requires the reconstruction, resituation and interpretation of knowledge and skills, and the formation of artifacts to mediate the differences in context. Practitioners must seek mediational means to combine theory and practice to engage in a workplace community of practice.

Eraut (2004b) describes different forms of knowledge and the influence of context on knowledge construction. Learning in the education setting comprises theoretical knowledge derived from core disciplines such as sciences, an applied field such as health, and the practice itself. Eraut’s typology applied to occupational therapy involves methodological knowledge about the development and utilization of evidence in the work context. This involves practical skills and techniques that are developed in laboratory sessions and clinical fieldwork, and general knowledge about the profession including the domain of concern, models of practice, norms, values, ethics and regulatory requirements. In contrast,

knowledge in the workplace is socially situated and requires experience of working in the clinical setting (Eraut, 2004b) to understand the relational, cultural and historical components of a community of practice. Learning comprises codified knowledge including textual forms and information specific to organizations such as the patient chart, patient information sheets and prioritization guidelines.

Learning also involves the development of technical and interpersonal skills needed to perform work-related activities and roles and uncodified knowledge constructed through participation in activities with others in the work setting. This type of knowledge which is tacit is often taken for granted and people may be unaware of its impact on their actions (Eraut, 2004b). Schön (1987) describes an implicit knowledge that is revealed by how professionals approach practice situations and perform tasks. This knowing-in-action is “embedded in the socially and institutionally structured context shared by a community of practitioners” (p. 33). This practice knowledge is derived from the professional’s body of knowledge, experience, and reflection, and provides the basis for thinking and acting in the workplace. In addition to codified and uncodified knowledge there is a need to recognize an “individual situated (as well as a socially situated) concept of knowledge in the complex, rapidly changing, post-modern world” (Eraut 2004b, p. 203). Fuller, Hodkinson, Hodkinson, and Unwin (2005) propose that it is important to recognize what an individual brings to the workplace community such as beliefs, values, attitudes, and knowledge. This “prior learning, including education, has helped to construct the whole person who arrives” to the workplace (p. 66). The cultural knowledge is unique to each person because of the experiences that they have participated in and the meanings they have constructed. Dewey’s (1938) work in human development underscores the connection between cognition and context. Dewey believed

that the knowledge and skill developed in “one situation becomes an instrument of understanding and dealing effectively with the situations which follow” (p. 44). Both Vygotsky and Dewey emphasize the importance of not separating events and circumstances from their contextual whole (Cole, 1996).

### ***Transition in Occupational Therapy***

In the occupational therapy literature, research has explored the perceived “gap between theory and practice” that occurs between course work and fieldwork, academics and clinicians, schools and departments (Steward, 1996, p. 264). This disjuncture tends to arise from beliefs that knowledge that has been formalized in the classroom can be readily transferred to clinical practice (Spouse, 1998). Evidence suggests that new graduates of occupational therapy have particular problems making the transition from student to therapist (Allen & Cruickshank, 1977; Hummell & Koelmeyer, 1999). These difficulties concern issues of self-confidence, relationships with others, and uncertainty about their professional identity and role. New practitioners feel inadequately prepared and suggest that not enough emphasis is placed on the practical aspects of occupational therapy in university such as learning about equipment, applying theory, and planning treatment (Parker, 1991).

Parker (1991) sought to understand the transition process, identifying the areas in which new occupational therapists needed support and supervision, and establishing methods to meet these needs. Fifty-one therapists who had been working for 6 months participated in the study. A questionnaire consisting of Likert scales and open-ended questions was used to identify aspects of occupational therapists’ employment which created a sense of uneasiness and aspects which inhibited job satisfaction. The participants were also asked to describe the support and supervision they would have liked to receive when they began to practice.

Findings revealed that “making decisions and the lack of practice experience created the most apprehension” for therapists (p. 164-165). Limited recognition of occupational therapy by other professionals was the most common factor impeding job satisfaction. Sixty-five percent of the participants desired regular supervision, defined as “a source of direction, guidance, instruction” to improve skills in performing professional responsibilities (p. 165). Eight-two percent believed that time allocated to meet with an experienced occupational therapist on a one-to-one basis to discuss aspects of practice would have helped to facilitate the transition from school to work. A number of recommendations were proposed with the recurrent theme of providing support to assist new therapists entering the profession. An educational program in occupational therapy, The Robert Gordon Institute of Technology in the United Kingdom, implemented one of the recommendations that involved a peer support group. Students in the final year of their university program meet with recent graduates to share “experiences, solutions to problems, positive and negative aspects of working” (p. 166). This helps students become aware of the real world of practice and provides an opportunity for developing strategies to adjust to the workplace.

The phenomenon of transition from student to therapist was explored by Tryssenaar and Perkins (2001). Three occupational therapists and three physical therapists maintained reflective journals every 2 weeks during their last clinical fieldwork placement and their first year of practice. The participants worked in different health care settings on a temporary or contract basis. The researchers analyzed the journals to gain an understanding of the experience of transition and to identify changes in behaviours and values to inform strategies for supervision of students and new graduates. The journals revealed that participants felt this period of transition consumed their energy and time, and they were both mentally and

physically exhausted. Four consecutive stages described their experience in becoming a therapist: 1) transition, 2) euphoria and angst, 3) reality of practice, and 4) adaptation. Participants expected that clinical practice would be less stressful than university and were surprised by the pace and demands of work, and were fearful of experiencing burnout. They were challenged by the politics of the health care system and the organization, paperwork, and the hierarchy among team members. Only one of the practitioners had access to supervision, and Tryssenaar and Perkins (2001) propose that this lack of supervision may hinder the transition from school to the workplace. Therefore, a key recommendation of this study was the need for mentors to assist novice professionals through the transition process and for educators to teach students how to find mentors. The researchers also emphasized the importance of educating students about the transition process and what to expect in the real world of practice, and assisting students in developing strategies to proactively cope with the complexities of practice.

Hummell and Koelmeyer (1999) investigated 74 occupational therapists' perception of their first job 6 months following graduation. A self-administered questionnaire explored the initial orientation and supervision they received in the workplace, their level of stress, and job satisfaction. The participants were also asked about factors that supported, restricted, and would have facilitated their transition from student to practitioner. The majority of the respondents was between 20 and 24 years of age and worked in the public health sector including hospitals and rehabilitation centers. While 89% of the participants found the transition from student to practitioner stressful, they were also satisfied with their job. An orientation program to the workplace that consisted of information regarding operational and policy issues was deemed helpful. The study found that support and supervision from

experienced occupational therapists assisted the new therapists in making a successful transition from student to graduate. Factors that hindered the transition included lack of supervision and support from occupational therapy colleagues, lack of practical knowledge and skills, and lack of recognition of the value of occupational therapy and a resulting weak professional identity. The participants believed that addressing these areas would have assisted in their transition process. Hummell and Koelmeyer's (1999) recommendations included the need for support and supervision of new graduates and further research regarding effective strategies to assist in the transition from school to the workplace.

In my Master research I explored the phenomenon of professional transition from student to practitioner among six Canadian occupational therapists in the first year of their career (Toal-Sullivan, 2003). An initial interview was conducted with each participant in their third to fifth month of practice. The participants then maintained a journal for one month. A second interview was held with each participant in their eighth to tenth month of practice which explored the learning experiences documented in their journals and changes in their knowledge and skills since beginning practice. The transitional experiences of the occupational therapists revealed that they were challenged by their limited practical experience, the responsibilities of client care, system issues, and role uncertainty. The support of colleagues and peers was critical to their learning and eased their adjustment from student to occupational therapist. The relationship with clients was particularly valuable to the participants' learning and professional identity. Recommended strategies to support learning situated within the workplace context included case studies and small group discussions with peers and experienced occupational therapists, clinical problem-solving involving interprofessional collaboration, and academic curriculum development which

includes knowledge about health and social systems, team function and communication, and administrative and management aspects of practice. Finally, mentoring was viewed as an important aspect of socialization for the novice practitioner facilitating the development of their professional identity (Toal-Sullivan, 2003).

### **Curricula Frameworks**

Guile and Griffiths (2001) propose that new curriculum frameworks are required to consider work as the basis for development of knowledge, skills and identity. They suggest that most models of learning through work experience have not considered the influence of context on learning, including the type and availability of support for students to negotiate the change between education and work settings. Context has been conceptualized as an object or a condition, rather than as a means “*through which* students can learn and develop” (p. 117). Guile and Griffiths (2001) review five different models of learning through work experience which may be conceptualized along a continuum of traditional, experiential, generic, work process, and connective. In reviewing these models, the consideration of context becomes more apparent as we move from a traditional to a connective model. In the former, it is assumed that knowledge and skills can be taught independent of context or their application. The focus is on skill acquisition in which academic education prepares students for the world of work. This makes it difficult for students to relate their vertical development (progression through academic subjects) to their horizontal development (links between work experience and education). The connective model considers the influence of context on learning and the relationship between education and work. Connectivity does not imply connectedness (linking contexts or ways of learning), but refers to mediating the demands of different contexts (Griffiths & Guile, 2003). Learning requires the ability to cross boundaries of different activity systems and recontextualize and resituate knowledge. The concept of

polycontextuality advanced by Engeström, Engeström and Kärkkäinen (1995) refers to a horizontal dimension of knowledge in which individuals participate in multiple tasks and communities of practice. This perspective reflects the dynamic nature of knowledge requiring practitioners to move “across boundaries to seek and give help, to find information and tools” wherever they can (p. 332).

Learning to belong is a product of the particular workplace, how the social practice is enacted and individuals’ agency in how they participate in the opportunities afforded by the workplace. Learners require support to participate in the discourses associated with a particular workplace community of practice (Griffiths & Guile, 2003). This expands the concept of participation beyond apprenticeship in a community, to how knowledge is created by both individuals and the systems in which they are a member (Edwards, 2005b). An ideal workplace curriculum would be one in which the goals and interests of the workplace and the worker are shared. This is likely to engage workers in “appropriating the kinds of learning that are important both to themselves and the workplace” (Billett, 2006, p. 44). This conceptualization of a workplace curriculum is needed to both acknowledge and legitimize the critical role of workplaces as spaces for learning (Billett, 2006), and to develop strategies and situated practices to develop the knowledge needed for work.

## **Summary**

Learning conceptualized from an activity theory framework (which is discussed further in Chapter 2), requires that we understand how knowledge is distributed among a system comprising practitioners, artifacts and activities (Engeström, 1993; 2004). Workplace learning involves human development or change “that occurs primarily in activities and contexts of work, however it is defined and located” (Fenwick, 2001, p. 4). While there is an

extensive literature on organizational learning, there is a need for research that explores learning processes and the relations between the individual and the collective in development (Boreham & Morgan, 2004; Engeström, 2001; Fenwick, 2008b). This includes studies which explore how individuals interact with different forms of mediation in their work contexts to enable participation, and how the collective activity system changes and develops when individuals work together in a shared practice (Engeström, 2004; Fenwick, 2008b). These questions invite an understanding of workplace learning as a social, relational, and resituated process (Hodkinson, 2005). Studies are needed that explore how collaborative activity is organized in a health care setting, and the actions and interactions which allow occupational therapists to work on problems embedded in practice. This knowledge would provide a perspective to understand how beginning occupational therapists make meaning and learn through participation in a community of practice with shared activities, “associated stories, traditions and ways of working” (Tennant, 1999, p. 173).

It is a critical time in health care characterized by new models of health service delivery, complexity of care, diverse practice environments, evolving regulatory and legislative requirements, and an emphasis on evidence-based practice and lifelong learning (CAOT, 2004). This is accompanied by the recognition that the experiences and supports provided by workplaces are important for initially developing the knowledge required for work and also for lifelong learning. Educators, clinicians, and employers need to understand how to enable beginning practitioners to meet the demands of today’s rapidly changing health environment. This information is required not only for the provision of quality patient care but also for the retention of health professionals (Fooks & Lewis, 2002). In occupational therapy, there is relatively little understanding of how beginning occupational therapists

learn to practice and how they resituate knowledge learned in the context of school, to the context of work.

Previous studies exploring transition to practice in occupational therapy indicate that the early work experiences, availability of mentoring, support and supervision from experienced colleagues, and congruence between academic and clinical learning are important factors contributing to one's identity as an occupational therapist and decision to remain in the profession (Greensmith & Blumfield, 1989; Hummell & Koelmeyer, 1999; Parker, 1991; Rugg, 1996; Sutton & Griffin, 2000, Tryssenaar, 1999; Tryssenaar & Perkins, 2001). However, what is missing is an understanding of how to assist beginning practitioners in making the transition from school to work and how to support their learning to practice (Doherty, Stagnitti, & Schoo, 2009). Activity theory provides the conceptual tools and methodologies (Engeström, 1993) to gain insight into how workplaces afford or deny opportunities for learning and how individuals choose to engage with workplace activities. These concepts are central to understanding workplaces as learning environments. With this knowledge, pedagogic practices can be developed which support learning not only among beginning practitioners but also therapists experiencing other forms of transition such as returning to practice after a period of absence or changing their context of work.

The influence of historical, political and social factors on learning is critical to understanding learning through engagement in work (Billett, 2002a; Fenwick, 2001; Griffiths & Guile, 2003; Wertsch, 1991). Research is needed to explore how power relations underpin beginning practitioners' learning in the workplace. A community of practice defines the division of labor, the hierarchy of employee roles and decision-making powers concerning the object of the system and related activities. For example, knowledge may be

reserved for particular health care professionals and this privileging can determine access to participation and therefore, learning (Billett, 2001c). In the acute care context, the different discourses and their relationship to power require further study.

The processes and patterns of collaboration in the workplace are important to our understanding of how health professionals and clients contribute to beginning practitioners' learning. The joint activity of healing or helping involves shared tools, routines, words and other forms of mediation which are part of the culture (Wenger, 1998). Therefore, learning about, from and with clients is an inseparable part of practice. Studies have explored the role of clients in teaching health professionals using formalized or structured learning approaches in the classroom or clinical context (Bleakley & Bligh, 2008; Farrell, Towle, & Godolphin, 2006; Kurtz, Silverman, & Draper, 2005; Ramani, 2003; Spencer, 2003). I believe that learning from clients embedded in the day-to-day activities of practice, is an area that has not been explored in the research and warrants study.

Fenwick (2008b) recommended that researchers need to clarify their assumptions about learning, and their reasons for studying learning. This will help to create a space for dialogue among different research disciplines and “enrich approaches to understanding individual” and collective learning in the workplace (p. 240). I have two assumptions about learning; 1) learning involves participation in sociocultural and historical activities, and 2) learning requires the contextualization of knowledge and skills which can be guided and socially mediated. In the present study I conceptualize the workplace as a learning space, and a weaving together of people, artifacts, and contexts within and across activity systems. The concepts of boundary-crossing, collaboration and discourse are very relevant to

understanding how beginning occupational therapists negotiate the transition from school to work, and how they move between systems within the hospital context.

My primary reason for pursuing this area of research is my unwavering commitment to occupational therapy students' learning and my knowledge of their expressed need for support in beginning practice. In activity theory, becoming a member of a community of practice "allows participation, and therefore learning, to take place" (Fuller, Hodkinson, Hodkinson & Unwin, 2005, p. 59). Learning is conceptualized as "expanding involvement" within the workplace activity system (Jonassen & Rohrer-Murphy, 1999, p. 68). This perspective highlights the learning potential of work experience, and is pivotal to our understanding of how to support practitioners' transition into the work context.

## CHAPTER 3. THEORETICAL FRAMEWORK

### **Sociocultural Theories of Learning**

A sociocultural worldview which embraces the core concepts of culture, context and mediated activity, is critical to advance our understanding of the experience of learning to practice occupational therapy. The research of Russian theorist Lev Vygotsky has been seminal in changing learning theory conceived as a process contained in the mind of the learner, to learning as a process of engagement in activities and interactions, mediated by language and other artifacts (John-Steiner & Mahn, 1996; Kozulin, 2003; Sfard, 1998). A sociocultural theory of learning emphasizes the collaborative construction of knowledge in specific social, cultural and historical contexts. This theory proposes that vocational practices are the result of shared experiences, processes, norms and values within a particular culture (Billett, 2003). The notion that the locus of knowledge is within the individual is rejected. Rather, the relationships between individuals' knowing and their social world are viewed as inseparable (Billett, 2001a; Palinscar, 1998). Vygotsky's conception of learning involves the following foundational themes: the social origin of human development, the mediation of human action by language and other artifacts, and the situated nature of learning (John-Steiner & Mahn, 1996; Palinscar, 1998). Vygotsky's work guides the thinking of contemporary scholars concerned with culture, action and mediation such as Wertsch (1991, 1998), Cole (1995, 1996), Lave and Wenger (1991), Rogoff (1990, 1995) and Engeström (1999a, 2001) and places a renewed emphasis on Dewey's (1938) perspective of education as a dynamic and social process. The concepts of these sociocultural theorists will now be discussed, building on Vygotsky's foundation.

## ***A Social and Intrapsychological Approach to Development***

A sociocultural approach to mind is based on the assumption that action is mediated and “cannot be separated from the milieu in which it is carried out” (Wertsch, 1991, p. 18). The specific values, knowledge, and skills of a community are mastered by participation in context-specific activities which are mediated by people and artifacts (Cole, 1996; Guile & Young, 2003; Kozulin, 2003; Lemke, 1995). Artifacts are the social practices, routines, schemas, material tools or objects, and other cultural forms that are developed and accumulated over time (Cole, 1996) and are “appropriated by an individual” to mediate their learning (Stetsenko & Arieviditch, 1997, p. 161). Language and other sign systems not only mediate an activity but also lead to the development of activities that would not be otherwise possible (Wertsch, 1979). In this perspective, artifacts mediate the construction of knowledge and connect the social (external world) and the individual (internal world) (Cole, 1996).

For Vygotsky (1986) language plays a primary role in mediating human action. Vygotsky believed that development proceeded from the social to the individual; speech provides the means for regulating an individual’s behaviour “only after it has been developed as a means of operating in the social realm” (Wertsch, 1979, p. 25). Vygotsky proposed that any function in a child’s cultural development appears twice, first between people on an interpsychological plane and then within the child on an intrapsychological plane. This schema of development distinguishes between speech for oneself, inner speech, and speech for others, external speech. Speech initially serves a social function, followed by an intramental function in which knowledge is internalized (Wertsch, 1991). Social speech represents the dialogue, a mediational tool used to understand the meanings of objects and practices in an individual’s environment. This is evident when a student is learning the language of their profession and practising the appropriate use of words or phrases to

understand their meaning (Spouse, 1998). External speech requires learners to articulate their knowledge and is the tool to frame the meaning of actions in their environment (Cope, Cuthbertson & Stoddart, 2000). Vygotsky believed that speech for oneself was integral to a child's activity. Children speak while they act so that "their speech and action are part of one and the same complex psychological function, directed toward a solution of the problem at hand" (Vygotsky, 1978, p. 25). Inner speech enables the learner to internalize their thinking and situate their learning within their overall framework of understanding (Samaras & Gismondi, 1998). An example of intrapersonal speech can be found when a beginning practitioner thinks aloud when proceeding through an initial patient evaluation. Inner speech promotes higher mental functions such as logical thinking, judgment, memory and attention (Wertsch, 1991). For Vygotsky, language and other cultural tools change not only the performance of an activity but also mental processes (Edwards, 2005b). It is this reconfiguration of the internal plane that allows learners to act on the world.

### ***Situated Learning and Participation***

Building on the work of Vygotsky, Lave and Wenger (1991) advance the position that learning is embedded in context, and socially and culturally constituted (Lave & Wenger, 1991). Situated learning is based on assumptions that learning is an inherent part of participation in practice and "knowing, thinking, and understanding are generated" through this participation (Lave, 1997, p. 19). The term 'knowing' represents how a person interacts with others in their environment and links learning with thinking and acting (Greeno, 1997). For Schön (1987) knowing describes the dynamic nature of knowledge revealed in performance of an activity illustrated for example, when a therapist makes a hand splint for a patient. Knowing is revealed in the action. Edwards (2005b) proposes that learning is "coming to know in different situations" (p. 59) and participation is the means to explain

how knowledge is constructed in context. Participation is therefore an ongoing, social process involving individuals' engagement in their learning and in the shared practices of a community (Lave, 1993; Rogoff, 1995; Wenger, 1998). Participation changes over time and is fluid, similar to Levinson and Holland's (1996) notion of culture as a continual process of constructing meaning in social contexts.

An apprenticeship metaphor describes how “newcomers to a community of practice advance their skill and understanding through participation with others in culturally organized activities” (Rogoff, 1995, p. 143). In the beginning, newcomers to a culture may be on the periphery, observing the actions and language of practitioners at various levels to learn about their expertise and activities of work. This peripherality can be viewed as a space for learning. Learners require support and guidance from others to move through their zone of proximal development defined as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86). Members of a community support or scaffold learners' initial performance of an activity that later will be performed without assistance (Lave & Wenger, 1991). Spouse (2001) interprets the zone of proximal development (ZPD) in nursing practice as the stages through which learners move from having theoretical knowledge or “knowledge-in-waiting” (p. 515) to craft knowledge or “knowledge-in-use” (p. 515). In health care learners progress through their ZPD with the guidance of others, expanding their understanding of clinical practice. In this sociocultural perspective, “apprentices learn to think, argue, act, and interact in increasingly knowledgeable ways” alongside others (Lave, 1990, p. 19). Through engagement in practice a newcomer moves

from peripheral participation to more central participation (Rogoff, 1995). Participation, however, is not restricted to the relationship between expert and beginner, but includes a range of interactions in which people are engaged in the everyday activities of their community. Members interact, learn from each other, and construct new meanings and in this way share their knowledge (Wenger, 1998). Without this social interaction it is impossible to develop an understanding of the activities, artifacts, members' roles, and rules of the community. Learning-in-practice embraces embodied knowledge and the relationship between the person and the social world (Lave, 1997). This conceptualization allows us to understand how “participants *learn to be*, forming an identity particular to that community” (Hung & Chen, 2002, p. 247).

### ***Learning in a Community of Practice***

A community of practice is not synonymous with a group, team, network or social category but is defined by participants' mutual engagement in activities based on a common purpose (Wenger, 1998). Practice may be defined as a continuing pattern of activity (Boreham & Morgan, 2004). In health care, a professional practice is a community of health providers with a joint purpose, shared experiences, procedures, stories and their own artifacts and rules (John-Steiner, 2000; Schön, 1987; Wenger, 1998). Beginning practitioners are immersed in a community in which they may hear and “use the terms that carry key concepts (public meaning in the intermental plane), but not understand them” (Edwards, 2005b, p. 61). Development continues with sense-making on the intramental plane and expanding involvement in activities of practice. Similar to Dewey (1938) and Lemke (1995), Wenger believes that shared activity is based in historical, cultural, social and institutional contexts which give meaning to experience. The history of the community, including personal and collective experiences and artifacts that are passed down to generations over time, are

important components of learning (Wenger, 1998). Edwards (2005b) proposes that an understanding of learning through participation requires that we explore the workplace practices and what they afford and constrain. This highlights the notion that participation does not imply cooperation (Wenger, 1998). Workplace communities of practice are sources of contestation, or competition and disequilibrium (Billett, 2001). Conflicts arise between roles, personal goals, and status within the different communities to which we belong. This notion of conflict is explored in the literature review on workplace learning.

McInstry's (2005) qualitative study of five newly graduated occupational therapists, illustrates how learners can be supported in the transition from a peripheral to a central member in a community of practice. McInstry followed the therapists as they completed their final year at university and for eighteen months post-graduation. An initial focus group was held with final year occupational therapy students and occupational therapy managers to identify major issues facing new graduates. Semi-structured interviews were then conducted with the occupational therapists at 6, 12 and 18 months following graduation. The results of McInstry's study indicate that newly graduated therapists valued support and guidance from other health professionals including formal supervision and the opportunity to observe experienced colleagues engage in the activities of practice. Participation in team meetings and patient documentation introduced the new therapists to the discourse of their workplace community. They were supported through their zone of proximal development as they moved from performing simple to more complex activities of practice requiring more advanced clinical reasoning skills. Learning was situated and was a fundamental aspect of therapists' engagement in the activities of practice.

Similarly, research on preparing nurses (Spouse, 2001) and physicians (Sheehan, Wilkinson, & Billett, 2005) for clinical practice, identifies participation and apprenticeship in which a more experienced clinician scaffolds and guides the beginning practitioner, as being important for how new health professionals learn to practice. Participation allows practitioners to integrate conceptual knowledge and problem-solving activity, with “guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86). This space provides opportunities for mentors to assist new practitioners in their transition into the world of work. Sheehan, Wilkinson and Billett (2005) found that among new physicians, the opportunity to engage with the clinical team and participate in shared activities led to intersubjectivity or shared understanding. The researchers suggest that ongoing dialogue about patient care, opportunities to provide feedback, and a sense of collaboration in problem-solving can increase interns’ participation, learning and confidence.

### **Activity Theory**

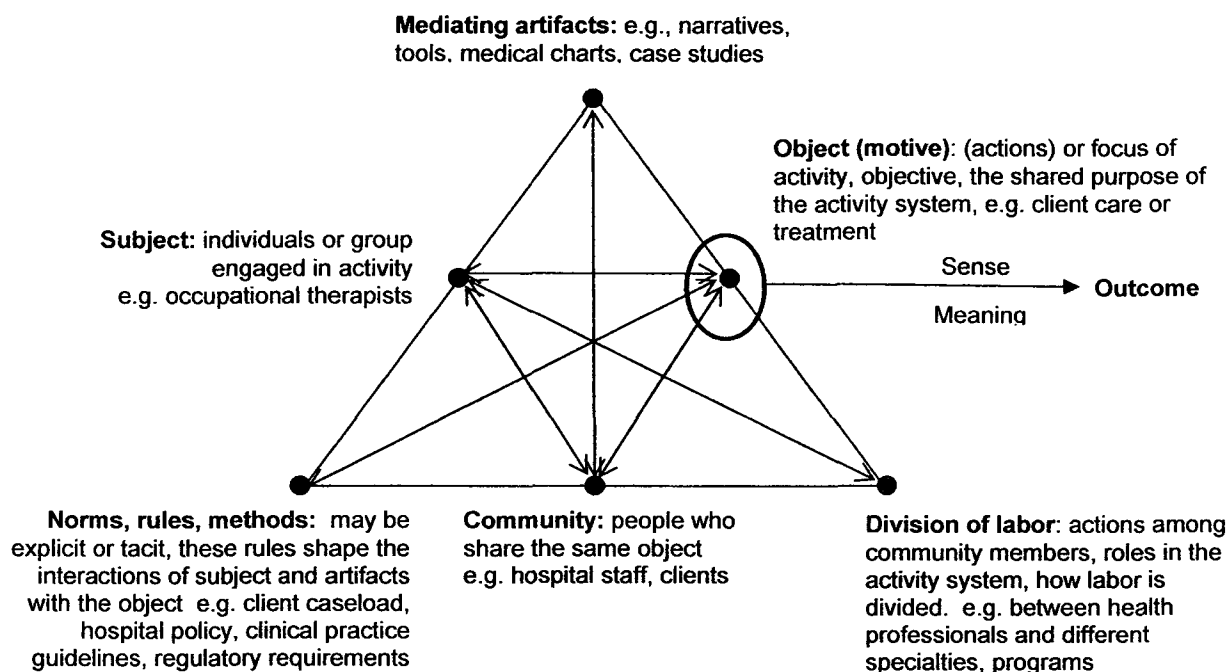
Engeström’s (1999a) research in cultural-historical activity theory builds on the notion of learning as a social and mediated process. In activity theory, the context is the activity system and the relations among subject, object, and mediational means including material tools, and symbolic systems, and people (Daniels, 2004; Engeström, 1993). The activity system is the main unit of analysis and individual’s actions are understood “against the background of entire activity systems” (Engeström, 2004, p. 149). Engeström (2001) suggests that activity theory has evolved through three generations of research. The first generation initiated by Vygotsky proposes the concept of mediation of activities. For Vygotsky, “social interaction mediated by cultural tools and symbols” is the source of human development (Arievitch, 2008, p. 43). Language is the primary mediational tool involved in the transformation from lower psychological functions to higher psychological processes,

and between the individual and social domains. Wertsch (1991, 1998) builds on the work of Vygotsky and emphasizes the important influence of historical, institutional and cultural settings on mental functioning. He argues that mediation provides the critical link between action, the context in which action occurs, and the individual. The first generation of activity theory advanced by Vygotsky (1978) depicts this dynamic, relationship expressed as a triad of subject, object, and mediating artifact. The subject is the focus of analysis and is the individual or group that engages in interactions within an environment, constructing knowledge through doing. The object is the focus of activity or the “problem space” which is acted upon and “transformed into outcomes” through mediating artifacts including tools and signs (Engeström, 1993, p. 67). These are culture-specific and shape people’s thoughts and actions (Jonassen & Rohrer-Murphy, 1999). Tools change over time as people bring in new tools or new ways of working together (Russell, 2002).

Engeström depicts a second generation of activity theory (Figure 1), as an expansion of Vygotsky’s mediational triangle to include community, rules, and division of labor; the social relations needed to understand learning. The community comprises the individuals or groups concerned with the same object. The division of labor refers to the horizontal division of tasks and the vertical division of power and position, among members of the community (University of Helsinki, 2009). Russell (2002) proposes that “new affordances and constraints, arising at any of the other node, may change the division of labour” (p. 70). For example, a change in how patient information is documented on the patient chart to include multidisciplinary notes resulted in a new occupational therapy standard issued by the provincial regulatory body. The standard stated that every entry on the medical record needed to be signed by the author and not by anyone else (College of Occupational

Therapists of Ontario, 2008). Finally, the last node in the activity system is the rules and norms that regulate actions and interactions within system (Engeström, 1993).

**Figure 1. A Model of an Activity System in Health Care<sup>2</sup>**

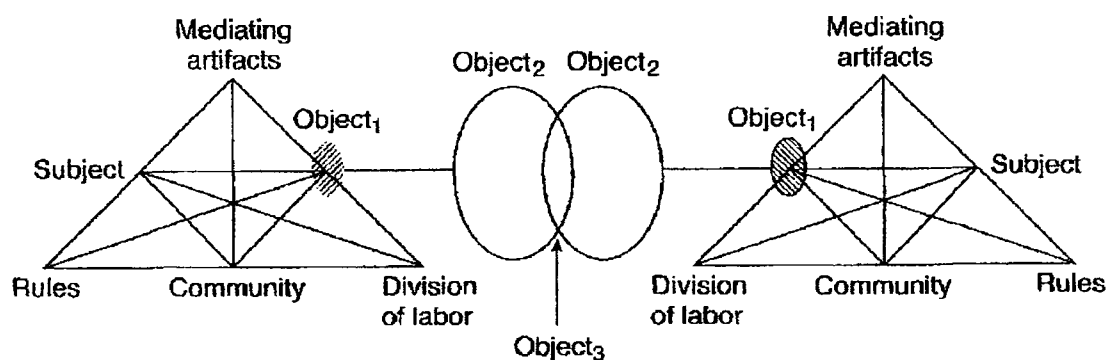


The third generation of activity theory (Figure 2) was developed to understand multiple voices and perspectives of interacting activity systems with a shared focus of activity or object (Engeström, 2001). In health care for example, there are a number of potential interconnected activity systems such as the patient program or unit in a hospital, medical team, health professional discipline, hospital site and community. The object which is patient care, may be shared among these systems. This is an example of knotworking or coordinating systems to contribute to the collaborative care of patients. Increasingly, the work of health professionals and their discourse are “socio-spatially distributed” (Engeström, Engeström & Kerosuo, 2003, p. 306) among multiple organizations and consist of

<sup>2</sup> From "Expansive learning at work: Toward an activity theoretical reconceptualization," by Y. Engeström, 2001, *Journal of Education and Work*, 14(1), p. 135. Copyright 2001 by Routledge. [Adapted] with permission.

interconnected actions, because of the complexity of patient care. Patients may have multiple medical problems or illnesses requiring input of many health professionals in different settings. The third generation of activity theory provides a conceptual map of the distribution of human cognition in activity systems (Cole & Engeström, 1993). In this perspective, learning involves both vertical and horizontal development. The vertical notion of development involves mastering “stages or levels of knowledge and skill” (Engeström, Engeström, & Kärkkäinen, 1995, p. 319). While the vertical perspective is important, Engeström and colleagues have proposed a broader view of expertise, one that is horizontal and multi-dimensional. This recognizes that people participate in a variety of tasks and contexts at the same time, or numerous, parallel activity contexts (Tuomi-Gröhn, Engeström, & Young, 2003). This ‘boundary-crossing’ may demand different artifacts, norms, rules, and patterns of actions among community members, requiring new forms of participation and new meanings (Guile & Young, 2003). The situatedness of social practices is consistent with Vygotsky’s perspective. Development takes place through the use of cultural tools that are available in the context of human action (Daniels, 2008). Development does not occur in a “one-dimensional, even fashion” but involves complex processes of mediated activity (Vygotsky, 1978, p. 29). In the present study, the horizontal view of development is relevant to understanding learning as individuals negotiate the transition from the context of school to work, and the change in activity systems within the workplace.

**Figure 2. The Third Generation of Activity Theory: Two Interacting Activity Systems<sup>3</sup>**



Activity theory focuses on the interdependence between mind and social practice (Jonassen & Rohrer-Murphy, 1999). Engeström (2001) describes five principles of activity theory; 1) the unit of analysis is the activity system in its entirety, 2) there are multiple viewpoints and interests (multivoicedness) in an activity system which are carried in the community's artifacts, rules, and division of labor, 3) an activity system can only be understood against its own history including the history of activity, tools, objects, and ideas, 4) contradictions (tensions within and between activity systems) contribute to change, and 5) activity systems transform over time as a result of contradictions. Relationships in the system change and new ways of doing activity evolve. There are multiple interactions that can be analyzed within an activity system, with the goal of understanding human activity, learning and doing within context. One means of analysis is to seek answers to the following questions: who is learning, "why do they learn, what do they learn and how do they learn?" (Engeström, 2001, p. 138). Answers to these questions predicated on the principles of activity theory noted above, provide a framework to understand learning and development in a community of practice. Engeström used this approach to study the challenge of

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<sup>3</sup> Note. From "Expansive learning at work: Toward an activity theoretical reconceptualization," by Y. Engeström, 2001, *Journal of Education and Work*, 14(1), p. 136. Copyright 2001 by Routledge. Reprinted with permission.

coordinating hospitals and primary care centers in Helsinki, Finland that provide care for children with multiple and chronic illnesses. An important political influence on these systems was the high use of hospital services which were publicly funded and pressure to increase the use of primary care services. Health professionals and management staff from hospitals and primary care centers met for ten sessions and discussed a series of patient cases. The cases were illustrative of difficulties resulting from a lack of communication among different health care providers. The contradictions could not be solved by teaching new skills and knowledge, rather learning needed “to occur in a changing mosaic of *interconnected activity systems*” (p. 140) which included the child’s family. In particular, ownership for the child’s path of care needed to be addressed. A care agreement was developed which consisted of a treatment plan and the roles of different health professionals. A horizontal dimension of patient care, responsibilities and interactions was created among four interconnected systems which involved the child’s physician, the hospitals, primary care centers, and the child’s family. The term ‘knotworking’ was used to describe this new pattern of activity, “a “tying, untying and retying together of otherwise separate threads of activity” (Engeström, 2004, p. 153) resulting in collaboration. Engeström (2001) concluded that knotworking expanded the object of activity (patient care), and the relationships and responsibilities among individuals involved.

Fuller, Hodkinson, Hodkinson and Unwin (2005) believe that a strength of Engeström’s approach is the notion of horizontal interaction and how workers can construct new knowledge through collective problem-solving. This is consistent with John-Steiner’s (2000) notion of collaboration, the “interdependence of thinkers in the co-construction of knowledge-among partners and in small groups” (p. 3). Learning in organizations does not

involve learning something well defined and stable, but learning new forms of activity that are being created in the process of participation (Engeström, 2001). Edwards (2005a) advances the concept of relational agency to reflect a focus on community and collective action. Relational agency is defined as the “capacity to align one’s thoughts and actions with those of others in order to interpret problems of practice and to respond to those interpretations” (p. 169-170). This requires the ability to seek support from others and offer support to others (Edwards, 2005a). The activity system and the object that is worked on, changes and expands as a result of different interpretations that individuals bring to work on the object. The expanded object also reshapes other components of the system such as the artifacts used, or the interactions among members of the community. Edwards and MacKenzie (2005) propose that learner’s “ability to engage with the world is enhanced by doing so alongside others” (as cited in Edwards, 2005a, p. 168). This is consistent with the concepts of collaboration, expansive learning and knotworking, and is relevant to how beginning occupational therapists learn to practice.

### **Language and Discourse**

In the workplace, language is a powerful mediating resource for learning about social practice, facilitating participation, and enabling understanding and problem-solving (Griffiths & Guile, 2003). A social group’s language and how they construct their worldview is based on a cultural system of beliefs, values, assumptions, interests and biases (Bakhtin, 1986; Lemke, 1995). There are many forms of language including languages of generations, professions, trends, and political and social systems (Landay, 2004). Leadbetter (2004) believes that the study of shared language is particularly important when different professionals are talking and working jointly to achieve common objectives. The activity of engaging in dialogue with others is a means to collaboratively reflect on situations and

construct an understanding of events. In a hospital setting the dialogue of the health care team allows them to explore the dilemmas of practice such as how to manage a difficult patient case. In this perspective, a team provides a “discursive resource” (Middleton, 1998, p. 238) for patient care.

Discourse may be defined in different ways ranging from a focus on language, to a broader view of the sociocultural practices of a community (Engeström, 1999b). The following are just a few of the conceptualizations of discourse that I discovered. Wells (2000) defines discourse as “the situated, purposeful use of the phonological/graphological and meaning potential of language” (p. 71). Discourse mediates participation and knowing in practice. Mehan (1993) proposes that discourse culturally constructs objects and events, and influences our actions and our understanding of the world. Discourse is a perspective or a way of viewing the world (Bakhtin, 1986; Mehan, 1993). Similarly, Fenwick (2001) proposes that discourse influences how people see themselves, their experiences, and others. Fenwick defines discourse as “a system of norms, values, and symbols (images and words) shaping particular beliefs and behaviors” (p. 9). Perez (as cited in Alfred, 2002) describes discourse “as an ‘identity kit’ that encompasses ways of acting, talking, writing, and communicating a particular role that others recognize” (p. 9). Foucault views discourse as a historically and culturally embedded system of knowledge and power, which is manifest in patterns of action, every talk, and interactions among individuals and their community (Holstein & Gubrium, 2005). Finally, Lemke (1995) conceptualizes discourse as the activity of “making meanings with language and other symbolic systems in some particular kind of situation or setting” (p. 6).

I struggled with trying to determine my perspective of discourse. After considerable reflection I integrated aspects of different definitions (Jaworski & Coupland, 1999) to arrive at the following conceptualization: discourse refers to spoken and written language used to make meaning in a community of practice. Discourse shapes individuals' actions and interactions and is socially, culturally and historically constituted. This reflects the complex relational nature between persons acting and their social world. In an activity system, discourse is revealed in the relationship between different nodes of the system such as subject and object. For example, in my research study discourse may be an artifact found in the text of a patient chart which mediates an occupational therapist's (subject) understanding of a patient (object of activity). The norms of the institution outlined in the hospital's priority guidelines for patient care, may be another form of discourse which influences participation in practice. I believe that my conceptualization of discourse aligns closely with Fenwick's definition described above, which situates discourse in a system. My interpretation is a functional one, in which discourse is analyzed in relation to what is done by people more than "what is said (or written, or drawn, or pointed at) by them" (Jaworski & Coupland, 1999, p. 13). Discourse is embedded in the "social fabric" (Engeström, 1999b, p. 169) of a community of practice, linking language and practical activity.

Every community has its own forms of discourse, which are the ways in which members perform actions that are meaningful in a particular culture (Lemke, 1998). In the present study, I employed some of the theoretical tools proposed by Engeström (1999b) to understand the hospital's discourse from an activity theory perspective, particularly the concepts of coordination, cooperation, contradiction and social language. For example, the concept of coordination directed my analysis to how the occupational therapists' actions are

regulated by a script such as the hospital's priority guidelines for patient care, or expectations regarding the therapist's role. The concept of cooperation helped me to understand how interactions with other team members and with patients, contributed to the occupational therapists' learning. Some of the barriers to participation and learning in the workplace involved contradiction or contestation. My observation of a different social language between occupational therapy and the acute care setting, led me to read some of the literature in this area by Townsend (1998) and Wilding and Whiteford (2007, 2008). Townsend proposes that health professionals use language to "define the boundaries of their power" illustrated in the texts and actions of their scope of practice (p. 46). Medicine is the dominant profession in the hierarchy of health professions. Therefore to maintain a position of power relative to medicine, health professions typically align their services in terms of diagnostic categories and specialty areas organized by medical language such as cardiology and orthopedics. However, Townsend argues that this language is inconsistent with occupational therapy's domain of concern. In Canada, the model of occupational therapy practice<sup>4</sup> provides the context for a discourse of occupation, engagement, and client-centred practice. A language of client-centredness respects people as active participants in their health, working with them "rather than treating them as if professionals always know best" (Townsend, 1998, p. 48). This shifts the power from dependence to interdependence between people receiving health services and the professionals who provide these services. Townsend suggests that health and health outcomes could be based on determinants of health which are occupationally based, challenging the language of diagnostic categories in medicine. This illustrates the potential of language in changing power. Discourse framed in the fundamental

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<sup>4</sup> Canadian Model of Occupational Performance and Engagement (CMOP-E)

concepts of occupational therapy, can express the potential of the profession and demonstrate respect for clients.

In an earlier phase of their action research, Wilding and Whiteford (2007) found that therapists had difficulty describing occupational therapy, which was attributed to different epistemological foundations between occupational therapy and medicine. Similar to Townsend's (1998) reflections, Wilding and Whiteford (2007) propose that the philosophy, theory and language of occupational therapy are not consistent with a medical model paradigm which values the drama associated with medical and surgical interventions. In contrast, occupational therapy is concerned with the everyday life activities of patients, which is less dramatic. Wilding and Whiteford's (2008) study describes the actions undertaken by eleven occupational therapists to become more articulate in describing their profession in an acute care context. The participants chose to replace the word 'function' with 'occupation' when talking about their practice. Their experiences were captured in a series of group meetings held over a period of 5 months. The therapists found that describing their practice as 'enabling occupation' was more powerful than talking about function. The term 'function' limits the scope of occupational therapy practice to more familiar concepts such as activities of daily living. A focus on function undervalues the complexity of occupations in a person's life and the skills, abilities and environmental factors associated with performance of occupations (Christiansen & Baum, 2005). The findings of Wilding and Whiteford's (2008) study revealed that the participants' change in discourse enhanced their awareness of their professional identity and their confidence in explaining their role in the hospital. Wilding and Whiteford concluded that language is a powerful means to "transform common understandings, professional identity and institutional representation" (p. 185).

Maseide (2007) studied how discursive control was negotiated among different health professionals working in a Norwegian hospital. Medical discourse was defined as “interactional activities that accomplish medical problem-solving” (p. 613). Data were collected from observations of a medical interview between a patient and a physician, and from patient conferences conducted by the medical team on a thoracic ward. In the interview, the physician and patient jointly constructed the patient’s history of their lung condition. The physician directed their questions to fit the problems defined by thoracic medicine. While the patient talked about problems that were not relevant to the institution's discourse, the physician negotiated a balance in their interaction to elicit the required information. In the thoracic conferences, various patient cases were presented and discussed by physicians. The dialogue among physicians constructed a medical solution to the patients’ problems, consistent with the institution’s discourse for managing thoracic conditions. Maseide highlights how the team’s verbal exchange recognized the expertise distributed among physicians and demonstrated both personal and professional respect. Talk, and the use of artifacts such as x-rays, resulted in a direction for the team and a “collective medical action” (p. 625). Maseide concludes that discourse, shaped by professions and institutions, is used to regulate and solve complex problems in hospital medical work.

A study by Engeström, Engeström, & Kerosuo (2003) explored professional discourse in the care of adult patients with chronic illnesses. Data comprised interviews with health practitioners and with patients, observations of patients’ consultations with practitioners, and review of patients’ medical records. Interviews and observations were videotaped. A new set of videos were then created by the researchers using data which highlighted gaps in patients’ care. Health practitioners, patients and researchers met to review the video excerpts with the

objective of determining the flow of patient information and the division of labor. Engeström et al. present findings from the case of a female patient with multiple chronic illnesses. Different types of discourse were identified in the medical consultation. The patient's health history was co-narrated by the physician and the patient. Although the patient responded to the physician's questions, she also initiated her own topics. The physician offered their treatment decision and the patient was given the choice to revise the decision. In addition to these co-narrating and joint decision-making discourses, the patient's participation in the meeting with health professionals was critically important to understanding the patient's life. The patient is usually a "silent co-producer" in health care interactions "whose agency, if noticed at all, is noticed mainly after the fact" (p. 308) such as when there are issues of non-compliance. In this study, the patient co-constructed their illness and treatment path. Engeström et al. describe this type of discourse as "gaining a voice" (p. 309). The researchers conclude that research on the discourse of health professionals' has largely overlooked the object of their work, the patient. They recommend that studies of discourse should embody the patient's life experience, allowing the patient to gain a voice and co-produce their illness and care narrative.

In summary, the perspectives of situated learning, communities of practice and activity theory have important implications for workplace learning. Although there is an extensive literature on organizational learning, there is a lack of evidence about the processes or actions involved in the learning process (Boreham & Morgan, 2004; Engeström, 2001). Lave (1996) believes that we need to explore how relationships among members of a community support, constrain, recontextualize and expand participation in practice. Similarly, Lave (1996) and Rogoff (1995) identify the need for further research to explore how learning

occurs through participation in sociocultural activity. I am not aware of research that has explored how occupational therapists learn, from a sociocultural world view. In the present study, activity theory provides a unique perspective to understand the complexity of patient care, how work is organized in an acute care hospital context and the notion of participation as learning to practice. The artifacts, norms, roles and division of labor within the activity system mediate the learning of beginning practitioners. The workplace is conceptualized as a learning space which is a weaving together of mind, artifacts and community. This is the basis for a workplace learning curriculum, the *Workplace Learning Model for Occupational Therapy*, which will be advanced in the chapter on Implications for Practice.

## **CHAPTER 4. METHODOLOGY**

I will first explain the process of collaboration with an occupational therapy colleague to situate my research within the particular sociocultural and political context of the study site. This collaboration and connectedness allowed a critical dialogue which enabled us to bounce ideas off each other and share perspectives (John-Steiner, 2000), which enriched the research experience for both of us. I will then discuss the qualitative methodology used, the research site, and participant recruitment process. Data collection and analysis strategies will then be presented. Finally, I will share the challenges of obtaining ethical approval for my research, and introduce you to the occupational therapists that participated in this study.

### **Background Information**

In June 2006, I met with a long-time colleague. This colleague is the Discipline-Specific Leader for Occupational Therapy at an acute care hospital comprising three different sites. We discussed my PhD study and she expressed support for the present study. The hospital is structured according to a program management model of service delivery. The occupational therapists report to a unit or clinical manager who is from another discipline, most often nursing. Clinical managers are responsible for determining the need for, and funding of, occupational therapy positions. While they must consult with the Discipline-Specific Leader, Occupational Therapy, DSL (OT), prior to determining resource requirements, they may choose to allocate resources to another health professional discipline. My colleague reported that there is a lack of awareness of the need for occupational therapy to provide treatment for different client populations. This concern is echoed in research that explores the impact of health care restructuring on the practice of occupational therapists (Rivard, Hollis, Darrah, Madill & Warren, 2005). Consequently there are limited occupational therapy resources and high client caseloads throughout the hospital. In addition,

this situation is intensified by epistemological tensions between working in an acute care setting with a biomedical focus, and the enabling occupation focus of occupational therapy (Wilding & Whiteford, 2007). This means that the value of occupational therapy may not be recognized or remunerated in the competitive acute health care climate (Wilding & Whiteford, 2007). There appears to be little understanding of the role of occupational therapy in enabling people to maintain or resume their meaningful daily life activities.

My colleague also reported that generally there is a lack of support for occupational therapists' learning and the development of their professional practice. She identified that there is a different structure to occupational therapy services among the three hospital sites. In one site, *Hospital A*, occupational therapists work as part of a team in which they have access to other occupational therapists and health professionals, as well as resources for their learning. *Hospital B* is more fragmented in which occupational therapists are often isolated and not well-integrated into teams. They provide service to a wider variety of client populations throughout the hospital. She also identified that the latter site has traditionally been poorly staffed with a high rate of turnover. *Hospital C* is a remote site and provides services through outpatient clinics. Occupational therapy is involved in an orthotics clinic and in a joint replacement education clinic at this site. My initial plan was to conduct my research at *Hospital A*, based on the guidance of the DSL (OT). She believed that *Hospital A* would provide a rich context for exploring individuals' agency in learning, the pedagogic practices which support learning, and the organization's culture and role in regulating learning including the workplace affordances and constraints. However, the present study was conducted at the three sites because of challenges in recruiting participants and the actual location where beginning practitioners were working.

## Qualitative Methodology

A qualitative methodology was used to understand how beginning occupational therapy practitioners learn through work. The strengths of qualitative research include the ability to study complex phenomenon, provide insight into human experience and ground data in context (Johnson & Onwuegbuzie, 2004). This qualitative study used an ethnographic approach to understand how beginning occupational therapy practitioners' resituate and integrate knowledge from an education setting to a clinical practice setting, and how they learn in the workplace context.

The focus of ethnography is on how members of a community make sense of their social world and construct meaning based in the contexts studied (Holstein & Gubrium, 2005). Ethnography is oriented to a collective rather than an individual and examines how members use artifacts, rules, and roles or division of labor to construct knowledge and identity particular to a community (Hung & Chen, 2002). Knowledge, skill and competence are distributed among a local community comprising practitioners, artifacts and activities (Engeström, 2004). The focus of analysis is the activity system and the relations among individuals and their sociocultural and historical environments (Cole & Engeström, 1993).

Ethnography enables a detailed study of professional practices and can therefore reveal "how a professional practice is embedded in quite ordinary competences and *also* elaborate" how it is unique to a particular activity system (ten Have, 2004, p. 17). Engeström and Middleton (1998) state that there has been little understanding of how collaborative activity is organized in work environments and call for ethnographic studies of work practices and interactions. This can advance our understanding of the notion of distributed knowledge, and how people make meaning through participation in a community of practice with shared

stories, traditions and ways of performing activities (Tennant, 1999). In the present study, beginning occupational therapists relied on the ‘know-how’ grounded in the routine of every day practice. Sarangi (2005) argues that “it is this ‘know-how’—in addition to the ‘know-what’—that is in need of detailed description, comparison, and theorization” (p. 103). The research questions of how do beginning occupational therapists learn in the workplace context, and what are the workplace pedagogic practices which support the construction of knowledge, seek to provide an understanding of social practice. In the present study, the occupational therapists’ participation in the daily routines of practice, including interaction with patients and members of the health care team formed the basis for understanding their world (Middleton, 1998; ten Have, 2002).

Consistent with ethnography, I was immersed in the field for a prolonged period of time, totaling nine months from the date of the initial interview to the final observation session. While I was a member of the profession that I was studying, I was not familiar with the community of practice in which I conducted the fieldwork. I had not practiced in a large hospital setting or with an acute care population. Prior to my first day of observation with a participant I wrote the following in my field notes:

Even though I have a lot of years of practice experience behind me, I am being thrown into a context in which I am not at all comfortable. I have never worked in acute care; ICU, trauma, and I do not know anything about ICU, oxygen, and other related equipment in acute care. I am not concerned about relating to the patients at all, or the blood or illness aspects. It is more the equipment that concerns me, and what do occupational therapists do in this setting? [*Field notes, October 30, 2007*].

This entry highlights that learning is part of social practice embedded in a historical, political and cultural context (Lave & Wenger, 1991). The enactment of occupational therapy depends on the particular activity system in which the practice is situated.

As a researcher, I acted as a participant or participant-observer focusing on the occupational therapists' day-to-day practice. My participation with them in the context of their work allowed me to derive an understanding of how knowledge was distributed among the systems in which they worked and the division of labor, rules, norms, and forms of mediation (Engeström, 2004). My own experience as an occupational therapist shaped my understanding and interpretation of the participants' experiences (Borland, 1991).

## **Research Site**

This study was conducted at River Valley Medical Centre (pseudonym) a large acute care hospital in Canada. The hospital is a provider of tertiary level patient care, health care professional training, and research programs. The hospital has affiliations with universities, community colleges, and research institutes. The organization has a staff of over 14,000, with 80 occupational therapists, 3 rehabilitation assistants and 7 occupational therapy assistants. The structure of the hospital is similar to other health care corporations in Canada consisting of a number of sites within one organization. The hospital is structured according to a program management model in which profession-based departments (e.g. occupational therapy departments, nursing departments, dietary departments) have been eliminated and services are organized according to patient populations (Miller & Solomon, 2002; Rappolt, Mitra & Murphy, 2002). Occupational therapy services are decentralized to 12 clinical programs at the 3 hospital sites. The DSL (OT) is one of 12 discipline leaders who form the hospital Professional Advisory Committee. This Committee was introduced to address professional practice issues affecting disciplines and programs. Similar professional practice structures have been established in organizations across Canada to "address health care professionals' concerns regarding loss of professional identity" and the potential threat to

their standards of practice within a program management model (Lankshear, Laschinger & Kerr, 2007, p. 63).

## **Participants**

### ***Recruitment***

This study involved a purposeful selection of participants based on a criterion strategy and a convenience sample (Maxwell, 2006). The criterion for selection was beginning occupational therapists defined as those with less than one year of practice experience. Practitioners who were unfamiliar with the hospital context and/or with their assigned patient population or those who felt that they needed support for their learning were also eligible to participate in the study. The participants needed to be proficient in the English language. A sample of five to seven participants was desired for the study. A convenience sample was chosen because I had a connection with a colleague who provided entry to a hospital site that employed a large number of occupational therapists working with a diverse patient population. In this environment beginning practitioners had access to other occupational therapists and health professionals, which was viewed as important for learning to practice through participation in work.

In September 2007, I met with the DSL (OT) to discuss some possible methods to recruit participants. We reviewed the sample of occupational therapists working in the hospital that had less than one year of practice experience. There were only three possible candidates who met this criterion. The DSL (OT) explained that she did not typically hire those without previous clinical experience because she found that working in acute care as a casual staff member, (which was the employment status for occupational therapists beginning work at the hospital), was very challenging. She suggested expanding the study criterion to therapists with less than two years of experience. She knew that she had a

number of occupational therapists in this range. She then informed all occupational therapy staff about the research study during a staff meeting.

An information session to discuss the background, research objectives, and the roles of the researcher and the participants was planned at one hospital site in October 2007. The DSL (OT) sent an email to all staff in which I invited occupational therapists that graduated from 2005 or later to attend the information session. She thought we would have 7 attendees, however only one person came to the session. This therapist was unable to participate in the study due to a change in their job from clinical to administrative responsibilities. The DSL (OT) offered that the poor attendance was because the target group were casual staff who were “running from ward to ward, and do not have the time to attend a meeting”

*[Observation, October 12, 2007]*. She shared that since our meeting in September she was considering hiring new graduates to expand the pool of potential candidates for positions at the hospital, and there were two candidates being considered. I provided her with an electronic copy of the recruitment text (Appendix A) which she emailed to therapists with less than 2 years experience, inviting those who were interested to email me or telephone me. From this email I recruited three participants to begin the study. I decided to proceed with an amendment to the ethics boards to add a compensation for participants in an effort to recruit additional practitioners.

The DSL (OT) subsequently hired two more staff, both of which joined the study, one in December 2007 and one in January 2008. There were a total of five participants in this study. The participants and I signed a consent form (Appendix B) including my commitment to maintain confidentiality and anonymity and the practitioners’ right to withdraw from the study at any time. In addition, a Patient Information Sheet (Appendix C) was signed by

myself and the patients during the observation sessions. A Letter of Information for Hospital Employees (Appendix D) was provided to employees who requested information about the study.

### **Procedure and Time-Line**

I used five strategies to gather data to answer my research questions: 1) observation, 2) semi-structured interviews, 3) participant journal entries, 4) meetings with the DSL (OT), and 5) a researcher journal. These methods of data collection will be elaborated below. The study was conducted over a period of 12 months from October 2007 to September 2008. The period of time for the data collection captured learning conceived as a change in participation and expanding involvement of new practitioners with others in a community (Engeström, 2001; Russell, 2002). Appendix E provides a month-by-month view of the data collection methods and time frame. The study design began with an individual interview with each of the five occupational therapists that participated in the study. This was followed by a period of observation comprising six months with each participant. The beginning and end-date of the observation sessions depended on when the participant joined the study. Three participants joined the study in October 2007, one joined in December 2007 and one in January 2008. A second interview was conducted with each of the participants a little over halfway through the observation period. Journal entries were primarily collected at the end of the observations. Meetings with the DSL (OT) were held periodically throughout the study as noted in Appendix E. I began writing my researcher journal in September 2005 and continued this during the writing of the dissertation. Observation was the primary source of data comprising a total of 119.75 hours among the five participants. This strategy will be discussed first, followed by the other methods.

## **Observation**

On-site observations were conducted with each participant and provided a way of learning about the mediational artifacts, the norms and rules of the workplace, the roles of community members and the learning experiences which facilitated or constrained learning (Sheehan, Wilkinson & Billett, 2005). Observations occurred over a period of eight months from November 2007 until June 2008. These sessions began in November 2007 with 3 participants and in January 2008 with 2 participants. Minimal on-site observations were conducted in December 2007 due to the holiday season and adverse winter weather conditions. The observation sessions were an average of two hours in duration and occurred at different hospital sites and units, times of the day and days of the week to capture the diversity of work activities and interactions. I arranged to meet with each participant as their schedule and my schedule allowed, striving for an average of 2-3 times per month where possible with each therapist. As noted above, I completed approximately 120 hours of participant observation between 3 hospital sites on the following units: medical-surgical, general medicine, urology, orthopedic, rehabilitation, psychiatry, intensive care, trauma, neurology, cardiac care, the joint replacement clinic, and the geriatric assessment unit. Appendix G provides a detailed view of the participant, site and clinical service observed during the study, and the breakdown of hours of observation per participant. Prior to ending the observations I asked each participant if they were comfortable completing the observations at that time and they all stated that they were.

I observed the participants in their day-to-day activities of practice with patients, families, members of the health care team and community agencies. The physical space for these interactions included patients' rooms, hospital corridors, nurses' stations, occupational therapy staff offices, and equipment rooms. I observed occupational therapists' assessment

and treatment sessions with their clients as well as their interactions with other occupational therapists, occupational therapy assistants (OTAs), and health professionals, both informally and in team rounds. Therapists' dialogue with health professionals from other systems such as home care case managers, community occupational therapists, and equipment vendors were also observed.

On the first day of observation with a participant, I was nervous and did not know what to expect. I needed to develop rapport and trust with each individual participant as well as other "insiders in the field setting" (Bogdewic, 1999, p. 53) including members of the health care team. I proposed that perhaps a reasonable approach to begin the observations would be to create a discourse similar to that found in an occupational therapist-student relationship. The participant would demonstrate and explain to me what she does in her workday, similar to how an occupational therapist teaches a student on a clinical fieldwork placement. Initially I was more of an observer than a participant. Within a few sessions, I was able to approach each occupational therapist and ask if they were comfortable with me reflecting my observations, asking questions, and discussing the experiences we shared together. They were in agreement. My role evolved quickly to one of participant observer and I think this was facilitated by my membership in the community in which I was studying.

I was a participant observer for the occupational therapists' interactions with clients and other health professionals. Participant observation was the primary data gathering method. This was characterized by my prolonged period of engagement with the participants, grounded in the daily activities of practice, in their milieu (Jorgensen, 1989).

I adopted the role of observer for team rounds and family meetings and did not participate in these sessions. This was the appropriate role suited to the situation involving

discussion of confidential client information. In the field notes from my first observation of team rounds, I wrote:

I was amazed that when the Nurse Manager came into the room and took the binder from the physio and then began to lead the meeting, that she looked at me, but just continued on. Like there was an assumption that I belonged there; perhaps because it is a teaching hospital and they are used to many different students/professionals coming and going. Instantly, it was like I was not even there so my observation was quite unobtrusive as I had so hoped for. *(November 6, 2007).*

Field notes from observation sessions were recorded at the time of the observation where possible (such as during team rounds), or while waiting for the occupational therapist while she wrote notes on the medical record in between seeing patients. I would often sit outside in the hall by the nurses' station to write, or at the end of the day before leaving, I would write notes in the hospital coffee shop. If I did not record my thoughts on site, then I wrote within a few hours after returning home. I recorded observations using the Observation Guide for Site Visits (Appendix H) as a framework for organizing my fieldwork. I also wrote in a narrative format which was a more descriptive account of my observations (Bogdewic, 1999). After two months (January 2008), my observations became more focused and I began ending my entries with a summary of themes. I returned to Engeström's (2001) activity theory (Figure 1) as the framework to capture the different relationships, how these mediate the participants' participation and to understand learning within the particular system I was observing.

## ***Interviews***

The initial study design involved 3 one-hour semi-structured interviews conducted on a one-to-one basis with each of the participants. The interviews were to be held at the beginning of the study, at the 3<sup>rd</sup> month and at the 6<sup>th</sup> month of the study. However, during

implementation of the research the second interview was delayed and actually conducted at the end of the 6<sup>th</sup> month/or beginning of the 7<sup>th</sup> month of the study. In the case of one participant, the second interview was held at the beginning of the 9<sup>th</sup> month of observations. This change in the timing of the interviews was due to two factors; 1) scheduling challenges because of the participants' workload, varied agendas, assigned units and locations within the hospital, and 2) extension of the study from six months to twelve months in order to achieve approximately the same number of observation hours with each participant. I decided not to conduct a third interview because I felt it would not provide me with new information. I felt I had gained extensive data from the on-site observations and face-to-face discussions with the participants. I discussed this with them and they were in agreement and comfortable with the modification to the study design.

The first interview was held at the beginning of the study. Initial interviews were conducted with 3 participants in October 2007 and with the 2 participants who later joined the study, in December 2007 and in January 2008. The interview questions (Appendix I) were based on themes prominent in the literature including the research of Billett (2000), Engeström (2001), Fuller and Unwin (2003), John-Steiner (2000), Guile and Griffiths (2001), Hodgkinson (2005), McInstry (2005), and Sheehan, Wilkinson and Billett (2005). The results of my M.A. research also informed the development of the initial interview questions.

To prepare for the second interview I reviewed the transcriptions and initial categories I developed from the first interview and the recorded field notes for each participant. Interview questions were developed from review of these texts and were specific to each occupational therapist. I also informed them that the second interview would be a means of validation, to obtain their feedback on whether I have understood their reality as they

construct it (Holstein & Gubrium, 2005). The interview questions for each participant reflected their way of doing practice including how they learned and what they learned. The participants' engagement in activities and negotiation with the organization's affordances and constraints were also considered in the development of the second interview questions. These varied according to the systems in which they worked, including the patient caseload, team members, hospital units and sites. The interviews were held face-to-face in a quiet room at the hospital such as the occupational therapy kitchen or treatment room. Immediately following the interviews, notes were made on the ideas and concepts captured during interviews, and my impressions. The interviews were tape recorded and transcribed.

### ***Journals***

Participants were asked to maintain a journal throughout the study to reflect on their learning in practice. Two types of journals were proposed; an electronic journal in which participants could dialogue with the researcher and share their learning experiences through electronic mail, or, a journal in which participants maintained a record of their own stories for personal reflection. The participants were asked to identify critical incidents in which significant learning occurred and to "describe the event, the context, and the factors that helped his or her learning and/or contributed to this becoming an effective learning event" (Billett, 2000, p. 303). I realized after about two months, that journals were not a viable form of data collection. I had received only two journal entries from one of the participants. When I discussed this with each participant, it seemed that writing a journal at the end of the day was 'one more thing to do' in addition to their required hospital documentation of statistics and various patient records. One of the participants stated that she was writing notes of learning in her agenda as she went throughout the day and may prefer to hand this in, rather than write an e-journal, however this did not occur. There was limited access to computers in

the occupational therapy staff office, and the computers at the nurses' stations were not private. Therefore this was a barrier to journaling in the workplace. I therefore began to focus the end of my observation sessions by asking the participants what they felt they had learned that day and the supports and constraints to their learning (Tompson & Ryan, 1996).

On the last observation day with participants, I asked them if they would be willing to record some journal entries for a 4-week period, which would then complete the study. Together we decided that perhaps a journal for the last month of the study would be a means for them to reflect on their learning (Black & Halliwell, 2000) since they began working at the hospital. The journal entries from each participant provided a personal reflection of the change in their participation in the activities of practice. I emailed each participant the directions to assist with journaling (Appendix J). Journal entries were received from the participants in July and September 2008.

### ***Meetings with the Discipline-Specific Leader of Occupational Therapy***

A total of five face-to-face meetings were held, averaging approximately once per month with the DSL (OT) in which we discussed occupational therapy practice within the hospital system including scope, roles, and profile of the profession. I learned about the norms, values, rules and organizational structure of the hospital that influenced the interactions within this system. I maintained hand-written notes of my meetings with the DSL (OT) at the time of our discussions. When I returned home after our meetings, I transcribed these notes on the computer in the "field notes" file. These discussions were critical in enabling my understanding of the complex hospital workplace, the interactions within this system, and the affordances and constraints influencing occupational therapists'

participation in practice. I also learned about the DSL (OT)'s vision for supporting the professional practice of her staff.

### **Researcher Journal**

In addition to the field notes from the observation sessions, I also maintained a journal. I began this in September 2005 upon the advice of a professor in a qualitative research course in which I was enrolled, and continued this journal throughout the writing of my dissertation.

I have just read Billett's (2006) article on workplace curriculum. I think I will use this term instead of mentoring, I think. An advantage to using 'workplace curriculum' is that it gives credibility and recognition to learning through work and provides a conceptualization of what needs to be learned, how to best support this learning, and the influence of social, cultural and historical factors on learning...A brain wave! Can I use Activity Theory as the visual representation for the learning curriculum or workplace curriculum? [*Journal entry, August 6, 2008*].

The journal was a place to record my thoughts and reflections about articles I read and discussions I had, revelations in which complex ideas or concepts became clear, and the struggles and rewards of conducting my research study. Journal writing allowed me to reflect on the data, record my insights and lessons learned, and document connections to the literature (Lincoln & Guba, 2000). I became aware of my biases and how these shaped what I saw in the field and the interpretations I made (Van Maanen, 2004). Journal writing was therefore an important mediational activity for my learning over the past 5 years.

### **Data Analysis Strategies**

The purpose of the data analysis was to understand how occupational therapists make meaning and learn through participation in a community of practice. Gathering information through observation sessions, interviews, journals and meetings with the DSL (OT), allowed me to develop a portrait of the shared culture of beginning practitioners (Maxwell, 1998).

An ethnographic approach to data analysis involves searching for cultural patterns in the data (Wolcott, 1994). These patterns were initially described as themes. These themes were then grouped into categories. The categories were theoretical and derived from the literature and the researcher's knowledge as an occupational therapist. The themes were situationally constituted and arose from the relationships among the different aspects of the activity system studied.

The data analysis was an iterative process that I initially approached according to the time-line of the study. I began with an analysis of the first interviews, followed by an analysis of my field notes from the observation sessions. This process allowed me to construct a case narrative for each participant. The second interviews were then analyzed and the individual narratives were further developed. Finally the journal entries and the meetings with the DSL (OT) were examined. A qualitative software program, NVivo, was used as a second phase of analysis for the interviews, field notes and meetings with the DSL (OT). As I analyzed each form of data and spent more time reflecting on the texts I had gathered and the narratives I had written, my "understandings of the social world" of my participants were reconstructed (Denzin & Lincoln, 2005, p. 184). I moved in "analysis circles" (Creswell, 1998, p. 142) involving reading, making notations, interpreting, coding, describing and re-writing the case narratives. I read and re-read my journal notes to help me understand the participants' world as they constructed it (Holstein & Gubrium, 2005; Wolcott, 1994). Different parts of the texts were checked against each other to elucidate the meanings of my participants' experiences (Odman & Kerdeman, 1997). Re-coding in NVivo enabled me to further organize and refine my thoughts, as well as the categories I had developed. These previous representations contributed to the analysis circle in which the phases of my writing

built upon and influenced each other. Appendix K is a diagrammatic representation of my data analysis process. I will now describe the data collection strategies and the phases of analysis.

### ***Initial Interviews***

All interview sessions were tape recorded and transcribed. Immediately following the interviews, notes were made on the ideas and concepts captured during interviews, and my impressions to try to capture the meaning of the participants' responses (Stake, 1995). An individual who did not have a background in health care or medical vocabulary transcribed the initial interviews. This rendered portions of the transcriptions incomprehensible due to errors or gaps in the text related to the use of medical terms by the participant or myself during the interview. Consequently, I had to re-type portions of each interview. Data analysis began with listening to each of the initial interviews and re-typing portions of these recordings. I then made notes on the Microsoft (MS) Word file for each participant about my ideas, impressions, topics and concepts. The file was then imported into NVivo and reviewed again. This allowed me to develop initial patterns (themes) and to group some of these into categories or nodes. These were based on the literature and on the significance of the participants' responses in order to capture their experience of learning to practice occupational therapy. Themes which did not seem to fit into a category were allocated to a file called "free nodes."

### ***Field Notes***

I initially recorded my observations using the Observation Guide for Site Visits (Appendix H), which allowed me to categorize my observations of team rounds, therapist-therapist interactions and client-therapist interactions using Engeström's activity theory. After approximately two months, I began to write my observations in a narrative format that

I found gave me a greater sense of the interactions among the elements of the system I was trying to understand. At the end of each field note entry, I identified some themes based on the significant verbal and non-verbal behaviours of the participants, and some themes based on the literature.

In analyzing the field notes, I first extracted these into a separate MS Word document for each participant and documented my ideas and concepts. I then transferred the MS Word documents to NVivo and reviewed the files again. This recoding in NVivo allowed me to reflect on how I classified the themes and how I organized information into categories or nodes. This allowed a deeper analysis of the data; I merged some nodes, developed new ones and re-defined others to better capture what I had observed. From this, I began to write a case narrative for each participant, rendering five stories. The participants' stories created a context for understanding their learning experiences which in turn became a basis for making sense of their actions (Holstein & Gubrium, 2005). The narratives were embedded in the culture of the participants' work environment, and its historical and political context. I then re-read the initial interviews and further developed the case narratives. Writing "the interpretive text, telling the story" of each participant enabled me to make sense of and understand what I had learned (Denzin, 2004, p. 450).

Often I discovered that a field note entry contained my personal reflections about my experiences and discussions with the participants, members of the health care team, and patients. I extracted these into a separate file entitled "Researcher Reflections." This data also contributed to the development of the case narratives.

## ***Second Interviews***

In analyzing the second interviews, I read and re-read the transcripts of the interviews and listened to the recordings. I followed the same process as for the initial interviews and field notes. I made notes first on the MS Word document for each participant and then transferred the MS Word documents to NVivo and recoded each file. Information from the second interviews contributed further to the construction of the case narratives.

## ***Journal Entries***

The narrative accounts from each participant were read and re-read to try to understand their perspective of how their participation and interactions changed over time. When I coded the journal entries in NVivo this led to the creation of a new category, change in ability to practice. Data from the journals contributed to the participants' stories and the study recommendations.

## ***Meetings with the Discipline-Specific Leader for Occupational Therapy DSL (OT)***

I followed the same process for analyzing the written entries I made from these meetings as I did for analyzing the field notes. I recorded my impressions first in a MS Word document and then recoding again in NVivo. These reflections contributed to my interpretations and meaning of the texts (Stake, 2005). The historical dimension of activity and the contextual knowledge gained from this source of data were integral to the development of the findings and recommendations of this study.

## ***Cross-case Analysis***

Following the analysis of the five data sources and the construction of the individual case narratives, a cross-case analysis was conducted to determine commonalities and differences in the participants' experience in learning to practice. While the individual case narratives help us to understand the unique experience of learning to practice occupational

therapy, a social perspective focuses attention on knowledge construction, context, and the range of cultural practices and artifacts that are resources for learning (Eraut, 2004). The cross-case analysis revealed how the participants' professional practice was embedded in everyday participation in the historical, political, social, and institutional context of a multi-site acute care hospital.

## **Quality Criteria**

### ***Authority***

A text and its authority are based on the theoretical paradigm, experience and bias of the writer, interpretive criteria chosen, and style of the text (Denzin, 2004). Smith and Hodkinson (2005) propose that we are in an age of relativism requiring a change in the metaphors of research "from those of discovery and finding to those of constructing and making" (p. 921). Relativism contrasts with empiricism which defines truth as an accurate, objective "representation of an independent existing reality" (Smith & Hodkinson, 2005, p. 916). In a social constructivist paradigm, a relativist ontology is adopted in which realities are understood as multiple constructions which are locally situated and dependent on the shared meanings of the cultural group studied (Guba & Lincoln, 1994). In this present study, I sought to understand the voices of occupational therapists in their social, cultural, institutional and historical context and what it means to be initiated into a community of practice. This required a sensibility to the interaction among meaning, representation and legitimation in story telling (Denzin, 2004). As an interpreter I was able to draw on my experience as an occupational therapist in seeking an understanding of the social practice I studied. Odman and Kerdeman (1997) argue that interpretation "is a function of situated engagement: without a context of already interpreted meanings, understanding is impossible" (p. 73). A local or emic interpretation shed light on the complexity of practice and allowed

me to use words, concepts, and meanings in my story telling that exist in the field (Denzin, 2004). I attempted to provide a thick description of the participants' practice with the goal of understanding learning and doing within context. My experience and interpretation shaped the narratives (Borland, 1991), yielding multi-voiced texts involving myself and the participants.

### ***Representation***

Objective interpretation does not exist; the researcher's bias is present in the text and reflects gender, culture, experience and language (Denzin, 2004). Therefore reflexivity or "knowing the self within the processes of research" (Lincoln & Guba, 2000, p. 183) is an important issue, as I assumed both an inquirer and a participant role in my study. I made several assumptions in my research which influenced how I interpreted and understood the activity system I studied. The first assumption was that learning in university and learning in the workplace are "fundamentally different phenomena" (Hodkinson, 2005, p. 521), requiring beginning practitioners to learn new knowledge and skills in a different context. I found however, that while the transition from university to practice is challenging, my participants assumed responsibility for their learning and were able to re-situate and mediate the demands of different contexts (Griffiths & Guile, 2003). The second assumption was that learning involves collaborative relationships with others in the workplace including health professionals and clients. I expected that beginning practitioners would learn about some of the activities, artifacts, norms, rules, and division of labor from other members of the health care team. I believed, however, that the participants would develop occupational therapy knowledge, skills, attitudes and a sense of identity from members of the same profession. This assumption was based on research findings (Hummell & Koelmeyer, 1999; Parker, 1991; Toal-Sullivan, 2003), my clinical experience and values. Another assumption was that

the workplace may afford opportunities for learning, but may also constrain learning. I adopted a broad perspective in exploring the factors involved in learners' participation in work practice. I also assumed that the participants may initiate and shape their own learning.

There were two important biases that emerged during the study. The first concerned my belief that occupational therapists need to have a solid foundation in medical terminology, pathology and the implications of disease and illness on an individual's function. My second bias was that I believed that participants needed to focus on obtaining an occupational history and profile of their patients. I felt that the personal narrative of the patients was often overlooked in the context of acute care practice. Occupational performance and engagement, the core domain of occupational therapy, were not emphasized. These assumptions and biases shaped what I saw in the field and the emerging narratives (Van Maanen, 2004).

### **Validation**

I have considered threats to the validity of my study including the credibility of my interpretations, descriptions of participants' experiences and explanations through the following strategies (Maxwell, 2005). Triangulation of data included observations, interviews with the participants, participant journal entries, meetings with the DSL (OT), and a researcher journal. These strategies allowed me to gain an in-depth and holistic understanding of how beginning occupational therapists learn in the practice context. The study was conducted over a period of 12 months to capture learning as a change in participation and expanding involvement in a community of practice (Engeström, 2001; Russell, 2002). This time period enabled me to learn about the social, cultural and political contexts of the hospital. Establishment of trust with the participants, and my professional

experience as a practicing occupational therapist contributed to the credibility of the data (Creswell, 1998; Lincoln & Guba, 1985).

Knowledge about what human beings do and say “depends upon some background or context of other meanings...understanding is interpretation all the way down” (Schwandt, 2000, p. 201). Therefore, a critical aspect of the narrative is to ensure that the researcher’s understanding of the experience represents the participants’ intentions (Borland, 1991). My initial interpretation of the data from the first interview and from the on-site observations was checked with the participants. I sought their responses and views regarding my impressions during the observation sessions and at the second interview. Following the writing of the case narratives, I emailed each participant their story and asked them to provide me with feedback on the completeness and correctness of my representations and interpretations of their experiences, behaviours, feelings and words. Specifically I asked them: Did the story reflect their experience of how they learned to practice occupational therapy? What was missing from their story that they felt was important to convey to the reader? What changes to the text was required to provide an accurate representation of their “sense of self” (Borland, 1991, p. 71)? This allowed me to give a voice to the ‘other,’ respect the truth in the writing of the text, and reflect understandings that emerged between the researcher and the participants (Denzin, 2004). I also compared my findings with the existing literature and identified the differences and similarities to my study. These strategies helped to ensure that my interpretation reflected the experiences of the participants and addressed the validity threats to my research study (Maxwell, 2005).

An additional opportunity for validation came as a result of restructuring within occupational therapy at the River Valley Medical Centre, in September 2009. The DSL (OT) proposed a change to hospital management to allow greater emphasis on the professional practice of occupational therapists. She expressed that our dialogue throughout the research study, had reinforced for her the need to develop supports for beginning practitioners' learning. In the new structure, the senior therapists continued to carry a clinical caseload, but also assumed responsibilities for coordination of professional practice. This coordination encompassed day-to-day operational issues such as staffing on the patient units, as well as mentoring, quality assurance, student fieldwork placements, research, and orientation of new staff. The DSL (OT) invited me to meet with her and two senior occupational therapists on October 27, 2009 and December 2, 2009 to discuss the study findings and my thoughts regarding the study's implications for practice. The opportunity to talk with these colleagues helped me understand where I needed to change or refine my interpretations, so that they were reflective of occupational therapy practice within the unique sociocultural and historical aspects of River Valley Medical Centre. The occupational therapists also shared some of their ideas for strategies and resources to support occupational therapists' learning, including those that they were presently working on. This experience helped to inform the development of my final implications for practice.

## **Ethics**

The initial step in the process of obtaining ethics approval was to seek permission for my study at the senior management level of the hospital. My colleague contacted her supervisor who is a member of the executive and secured their support for the study. From this point, I encountered a number of challenges to the ethics process which involved

negotiating the different criteria of the Hospital Research Ethics Board (HREB) and the University of Ottawa Research Ethics Board (UOREB).

This required coordinating similar aspects of documents, revising documents or developing new ones, and then translating from English to French the many subtle changes in the final 5 forms which I had:

1. Consent Form-English and French
2. Patient Information Sheet-English and French
3. Letter of Information for Hospital Employees –English and French
4. Recruitment Text-English and French
5. Electronic Journal Directions for Participants-English

The ethics approval process took 8 months. During this time I lived my theoretical paradigm of activity theory. I learned about working with different activity systems, a university and a hospital, and the related power structures and constraints to boundary-crossing (Tuomi-Gröhn & Engeström, 2003). I received correspondence from the HREB July 26, 2007, which acknowledged this situation; “Ethics approval is somewhat cumbersome in terms of crossing jurisdictions.”

Approval from the UOREB was required before proceeding with the HREB. I submitted my initial ethics application to the UOREB January 2, 2007. This included a letter from the hospital granting permission for me to access the premises for my research. I completed the revisions requested by the UOREB and submitted these on May 25, 2007. I did not hear back from the UOREB until July 8, 2007 when I sent a follow-up email; they did not realize that they had not responded to my revisions. More changes were requested

which I completed and emailed July 16, 2007. Final approval for the study was obtained on August 22, 2007 (Appendix F).

I applied to the HREB July 5, 2007. The response July 26, 2007 indicated that a number of changes to the forms were required. In addition, the documents which I had translated by a professional translator had to be sent to the HREB's "own" translator for review. Revisions to the original French documents were then required. In my researcher notes I wrote about the frustration of dealing with two ethics boards "who somehow will need to reconcile and agree on the final documents. It seems that they are waiting for each other to provide me with approval."

Final approval from the HREB was obtained on August 17, 2007. A subsequent protocol amendment was submitted to both ethics boards at the end of October 2007 for changes to the participant consent form. In an effort to assist in recruitment, compensation was added which participants could use towards a professional development activity of their choice. Ethical approval was received November 26, 2007.

### **Profile of the Participants**

All participants had been hired since June 2007, so they were new to the River Valley Medical Centre at the start of the data collection. The participants' differed in their years of education in occupational therapy, the type of degree obtained, and their clinical experience prior to beginning work at the hospital (Appendix L). They were all relatively new graduates and were hired as casual employees (or relief). They were hired with this status because there were no new permanent positions at the hospital at that time. It takes on average three years for a casual employee to become permanent and this typically occurs when a vacancy arises such as when someone leaves the hospital. All casual employees can apply for a permanent

occupational therapy position; however seniority (those with the most years of experience) plays a critical role in obtaining a permanent position. Jennifer, one of the participants, explained:

They don't typically post positions either temporary or permanent positions externally. So in order to apply for an internal position you already have to be employed as a casual. So I was hired as a casual so basically I can tell Amélie and Catherine when I am available and when I am not available and they give me hours as needed. Now since I'm a casual and now an internal applicant or whatever, any time a temporary or a permanent position is posted, I can apply for that and then if I get an interview, I do the interview and then it is the same you know, process of maybe I get the job, maybe I don't. So I know a lot of it does work on seniority but I can apply for jobs, for temporary or permanent jobs now. *[Initial interview]*.

As casual workers, the occupational therapists are assigned based on need, to different units within a hospital site and between two of the three hospital sites. All of the participants in this study worked an average of full time hours at 37.5 hours per week.

### **Amy**

Amy graduated in 2006 from Queen's University with a Master of Science in Occupational Therapy. She obtained an Honours Bachelor of Physical Education from Brock University in 2004. At the time of the initial interview Amy had been practicing as an occupational therapist for 13 months. She had been employed in her current job at the hospital for approximately 4.5 months. For the first 5 months of her career she worked for a private rehabilitation company in which she counseled individuals who were off work due to physical injury or mental health problems, and provided ergonomic evaluations, worksite interventions, and home assessments. After this position she worked for another private company providing similar vocational services. In both situations auto insurance companies were the primary referral and funding sources for occupational therapy services. In the initial interview on October 31, 2007, Amy expressed that she desired to work in a hospital when

she graduated from university, however found that it was difficult to “get into hospitals” in the city where she resided. She therefore worked in the auto insurance industry, knowing that this was not where she desired to stay. She was hired at the River Valley Medical Centre in June 2007.

### ***Heather***

Heather was the most recent graduate of occupational therapy among the five study participants. She graduated in September 2007 from McMaster University with a Master of Science in Occupational Therapy. In 2004 she obtained a Bachelor of Science in Human Kinetics from the University of Ottawa. At the time of the initial interview on December 5, 2007 she had been practicing as an occupational therapist for 5 weeks and had the least experience among the participants (Appendix L). She began her job at the River Valley Medical Centre on October 31, 2007.

### ***Jennifer***

Jennifer graduated from Dalhousie University in May 2006 with a Bachelor of Science in Occupational Therapy, comprising 4 years of occupational therapy education. At the time of the initial interview, October 25, 2007, Jennifer had been practicing as an occupational therapist for 17 months. She had been employed in her current job at the hospital for 4 months. Jennifer previously worked in home care, and in acute care and family medicine at a regional hospital in other provinces. Jennifer perceived that an advantage of being a casual worker was that it allowed her the opportunity to apply for a permanent position in the hospital as an internal applicant. It also provided her with exposure to different units throughout the hospital and the opportunity for staff to get to know her.

### **Elizabeth**

Elizabeth graduated in 2006 from the University of Western Ontario with a Master of Science in Occupational Therapy. She obtained an Honours Bachelor of Science in Human Kinetics from the University of Ottawa in 2004. At the time of the initial interview on January 7, 2008, Elizabeth had been practicing as an occupational therapist for 16 months. She had been employed in her current job at the hospital for 2 months. For the first 10 months of her career, Elizabeth worked for a private rehabilitation company providing occupational therapy to adult clients in their homes, and to children in the school system. Elizabeth then decided that she wanted to explore work in a hospital setting. The manager of the rehabilitation company where she was employed allowed her a 3-month leave. This enabled Elizabeth to work in an acute care hospital providing coverage over the summer months. She then returned briefly to the rehabilitation company before being hired at the River Valley Medical Centre at the end of October 2007.

### **Emma**

Emma graduated from Queen's University in 2006 with a Bachelor of Science in Occupational Therapy, comprising 4 years of occupational therapy education. In 2007 she completed a Clinical Master of Science degree in occupational therapy at the same university. She chose to do a Masters degree because of the change in occupational therapy education requirements in Canada that would be effective in 2008. At this time, the entry credential to practice changed from a bachelor's level to a professional master's degree. She felt that by obtaining a graduate degree without delay, this would expand her opportunities for practice given the profession's new educational requirement: "I didn't want it to be seen as a hindrance for not having a Masters, so I went ahead and did it right away" [*Initial interview*]. Emma has the greatest number of years of academic education in occupational

therapy among the 5 study participants (Appendix L). At the time of the initial interview October 30, 2007, Emma had been practicing as an occupational therapist for 4.5 months. Her employment at this hospital is her first position as an occupational therapist after graduation.

## CHAPTER 5. DESCRIPTION OF FINDINGS

I will now share with you the stories of the five occupational therapists who participated in the present study: Amy, Heather, Jennifer, Elizabeth and Emma.

### **Amy**

This narrative is based on 34.0 hours of observation with Amy over a period of 7 months, two interviews (one held at the beginning of the research study and one at the beginning of the sixth month of field work), and a reflective journal entry. Among the study participants, I spent the most time with Amy. I think this can be attributed to her openness to my observation of, and participation in, her practice and her willingness to accommodate me in her work schedule. All of the observations were conducted at one hospital site.

Observations of Amy's interactions with patients occurred in their rooms on different units in the hospital. In the intensive care unit (ICU) and in the trauma unit there were a number of beds in an open concept design that permitted health care professionals to visualize and monitor patients from a central nursing station, or substations. Team rounds were held in designated meeting rooms on different wards.

### ***Patient Caseload***

At the time of the initial interview Amy had been practicing as an occupational therapist for 13 months. She had been employed in her current job at the hospital for approximately 4.5 months. She had worked on the neurology unit and neurosurgery unit. At the time of the interview she was assigned to the orthopedics unit. Approximately one month later, her caseload changed again and she was responsible for a number of different units including intensive care and trauma. When I asked Amy how she felt about changing caseloads she saw it as "an opportunity to learn" however she acknowledged she would miss

the people she had been working with [*Observation November 22, 2007*]. Amy's disposition to learn allowed her to perceive this imposed change in work as a chance for personal development (Hodkinson & Hodkinson, 2004). Amy's changing contexts within the hospital system is typical of a casual worker. She was able to mediate these transitions through the sharing of ideas with colleagues and problem-solving around patient care (Engeström, Engeström, & Kärkkäinen, 1995).

### ***Experience of Transition***

Amy felt that her university education prepared her for knowing how to research information regarding an unfamiliar case or patient diagnosis. She also felt prepared in the theoretical knowledge of the profession including core subjects such as anatomy and the practice philosophy of client-centred practice. She felt that she knew how to use her resources, which she described as having the insight to research an unfamiliar case or diagnosis. However, she noted the need for clinical skills when she began to practice:

So, I really felt that the actual lack of clinical hands-on experience was missing and that I would say would be the largest learning curve. [*Initial interview*].

The work context revealed the complexities of practice that were not captured in classroom case studies. She felt that the classroom portrayed the "ideal situation with one problem" and not multiple problems which patients experienced in clinical practice [*Initial interview*]. While clinical fieldwork provided an opportunity to encounter a real-world practice environment including dealing with actual patients, Amy felt that the short duration and the timing of the placements during university were a constraint to learning. For example, the timing of her final university placement in a physical medicine/rehabilitation setting was approximately 18 months prior to her first job in which she worked with a similar

patient population. This lack of recent experience was a challenge. As well, the fieldwork experiences were 6 weeks in length, which limited engagement in activities of practice:

They [fieldwork placements] are 6 weeks. So it was interesting...we always joked it was good on paper, you could give them the world, but then when you get into the world, well your role is so, it is just one component of the allied health. And yes, just the actual physical presentation of someone is a lot different than how they present on paper. *[Initial interview]*.

Amy had some experience in acute care hospitals during her clinical placements as a student, however the context was more rehabilitation-focused, "I wasn't in such acute floors" *[Initial interview]*. She was however, able to resituate and build on knowledge gained in the clinical fieldwork setting to the acute hospital context. She described how her previous experience working with patients who had hip or knee replacements was beneficial in her position on the orthopedic unit. Patients presented with similar problems and this contributed to Amy's ability to perform her work. Billett (2002c) describes homogeneity in work practice as a basis for participation and learning in the workplace. As well, Amy's previous experience working for private rehabilitation companies helped her learn about community resources and services, which were important artifacts for practice:

I think it was a worthwhile experience especially coming to the hospital and knowing about discharging plans and what happens in the community and what is available in the community. *[Initial interview]*.

This "prior learning, including education, has helped to construct the whole person who arrives" to the workplace and underscores the importance of what the therapist brings to her new community of practice (Fuller, Hodkinson, Hodkinson, & Unwin, 2005, p. 66).

The knowledge that Amy needed to perform her work effectively is dependent on understanding the context including the division of labor, objectives and organization of work:

I find this setting a lot different than many settings. I mean maybe it is just because it is a larger setting than any other one I have been in. So like even with the doctors, knowing now that there are doctors and then there are residents, and attendants all underneath. That was something for me that was, working here was a little challenging to figure out at first. Who is on whose team. *[Initial interview]*.

In the second interview Amy again reflected on her initial lack of comfort in the hospital context, “I mean, definitely starting out, I found hospital settings to be intimidating.” In her journal she wrote that this feeling was attributed to anxiety about her limited experience but also “the pace was much faster in the hospital and judgment had to be made much quicker.” Over the months of practice, she became more comfortable in the workplace and confident in her skills. She developed a routine to her practice and engaged in “collaborative thinking and problem solving” with team members, notably the physiotherapist and social worker.

### ***Personal Agency in Learning***

Amy’s orientation to clinical practice consisted of meeting with different therapists and reviewing documentation and charting. She described that the initial support for learning consisted of the senior therapist looking over her notes, calling Amy to see how she was doing or asking another therapist to “check up on me on the unit to see if I was okay and to review my caseload” *[Initial interview]*. The occupational therapy assistant (OTA) was valuable in helping Amy learn about the different systems, activities and artifacts of each hospital unit. The OTA had the unique role of working throughout the hospital and was therefore familiar with the different patient units.

Asking questions was a critical learning strategy for Amy. A beginning practitioner needs to be assertive and seek information from others. The initial supervision of Amy's practice (as noted above) did not continue. When asked if she felt supported in her professional practice she stated:

I think if you're not the personality type to go and seek assistance, then no. Because if I, I mean when I first started they were very good, you know, at asking. But I mean learning doesn't happen in one month, two months. *[Second interview]*.

Amy identified the need for ongoing guidance from, and collaboration with, experienced occupational therapy colleagues beyond the initial entry into the workplace.

In the beginning months of practice she was concerned that 'not knowing' reflected on her ability as a therapist. With experience, Amy felt less intimidated to ask questions to support her learning. In the second interview she described a situation in patient rounds in which she asked for clarification regarding a medical term, something that she would not have done in her initial few months at the hospital:

I remember seeing this, starting out and just looking at some of the terms on the chart and I would be afraid to say "what is that?"... And now I'm becoming more comfortable because I'm really realizing it's not going to make me look like a bad OT [occupational therapist].

Similar to the other occupational therapists in this study, dialogue about patient care was a valuable mediational tool in Amy's development. In the second interview she frequently referred to the notion of validation. Talking out loud with a colleague provided Amy with support and confirmation regarding her thoughts and actions. She described how talking with the social worker on the unit provided information for her occupational therapy assessment and also helped her "thought process for discharge:"

And again they [social workers] help validate. When I make a recommendation and, you know, they sit there and listen and then they, they'll agree with me... So having that relationship with the social worker, telling them your recommendations and then having them also advocate for the same thing for the patient is good. [*Second interview*].

The occupational therapy staff office provided a physical and emotional space for validation. Amy was able to brainstorm and problem-solve about different patient situations with another occupational therapist:

And, you know, going through scenarios and we both sat there and said this is sort of, this is important to do because it helps to validate what you're doing because, I mean, you are<sup>5</sup> alone a lot. You know? So how would you know if you're being a poor therapist? Especially starting out. [*Second interview*].

Validation was a critical means to deepen Amy's understanding of occupational therapy knowledge and skills. Discussions about patients also occurred in team rounds. These meetings were a form of discourse that allowed reflection and decision-making regarding patients' problems, but also generated "new patterns of activity" (Engeström, Engeström, & Kerosuo, 2003, p. 288). Team rounds provided an opportunity for Amy to learn how to prioritize patients on her caseload in terms of need for intervention. The sharing of clinical impressions, assessment findings and treatment plans by various health professionals also provided a form of validation for Amy's own professional perspective:

Having other disciplines and to know how they see patients and what the plan is with patients and then you kind of get to know well- you just assess them, you know if you are completely out in left field or if you are on the same wavelength as the rest of the team. So that helps too. [*Initial interview*].

On one particular unit "learning rounds" were held weekly in which a physician would share knowledge about a diagnosis with other team members:

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<sup>5</sup> transcription symbol of underline word(s) represents the speaker's emphasis or intonation

So they would actually pull things up on the computer and so that was kind of helpful to understand sometimes why people present [e.g. certain symptoms], like what is actually happening in the brain. *[Initial interview]*.

Observing the practice of other occupational therapists is another mediational tool for learning. When Amy first began to work at the River Valley Medical Centre, she worked on the orthopedic unit where there was an experienced occupational therapist two days per week. Amy exercised personal agency by asking the therapist if she could observe her work with patients. Amy would then try to “pick up where she left off to follow the patient” *[Initial interview]*. In this situation the experienced therapist was able to scaffold Amy’s learning. Amy described how they would “de-brief” after the observations and this allowed her to learn the clinical reasoning and assumptions behind the therapist’s actions (Tompson & Ryan, 1996a). The orthopedic unit was unique in that it allowed Amy to see patients more than once, enabling her to learn about their progress and recovery over a period of time.

Amy also used observation of colleagues as a form of feedback regarding her own performance. In one example she described how she had completed an assessment of a woman who had sustained a stroke. Amy expressed that she did not have clinical experience in the area of stroke and did not have the knowledge or skills to assess the complex presentation of the patient. She felt that her assessment was “vague” and waited until the full-time occupational therapist returned to the unit:

I asked her to come with me. I had already done my assessment and then I asked her to do hers and then I was able to compare what I did to see if I basically did it right or if I didn’t. *[Initial interview]*.

From this collaboration Amy learned about the neurological function of the patient, that she felt she would not have been able to learn on her own. This interaction also provided a form of validation that she was “doing the right things, but again it is just sort of knowing

the reasons why you are doing it and just the insight I find into a different area” [*Initial interview*]. In her journal entry, she described a situation in which she consulted with an occupational therapist in the hand therapy clinic regarding a patient. Amy developed her own assessment and treatment plan:

Researching in textbooks and other academic resources help facilitate my plan. Then I gave my clinical assessment to the hand therapist and allowed her to complete hers. We were then able to compare assessments and I was able to learn from the experience.

Discussions with a more experienced colleague assist Amy in reflecting on her actions and in developing practice knowledge (Gamble, Chan & Davey, 2001). I observed that Amy frequently collaborated with the OTA. The OTA provided Amy with advice and guidance, particularly in the area of wheelchair adjustment and adaptation such as the type of chair and seat cushion to use with a particular patient. These practical skills enabled Amy to learn how to modify a wheelchair to meet the needs of a patient. In the ICU Amy felt that sometimes team members were not receptive to occupational therapy input and questioned her actions. Amy would often page the OTA or arrange a time to meet in the ICU so that they could see a patient together and set up a wheelchair. Amy felt more confident in her role when accompanied by a peer, the OTA:

In more settings like the ICU when I start to do hands on things with a patient, getting a patient up, I like having [the OTA] there I think as a backup almost...I feel more comfortable going in and speaking when somebody's there... when I'm alone I'm a little bit more intimidated. [*Second interview*].

Trust was an important element in Amy and the OTA's collaborative relationship. Amy knew that the OTA assumed responsibility and followed through with work activities, for the shared object of patient care. The OTA's experience in boundary crossing throughout the hospital helped Amy learn about common practices with patients or “What is typically

done. So she is sort of a resource that way because she works with so many therapists” [Second interview]. Heather and Elizabeth shared the same perspective regarding the role of the OTA in assisting their understanding of the norms of the activity system. Amy also worked closely with the OTA regarding patients’ treatment programs. For example if time permitted, the OTA would see a patient to follow-through on a fine motor skill (hand therapy) program developed by Amy.

Similar to the other participants in the study, Amy shared that because physiotherapy have more staff assigned to a unit they have often seen a patient before occupational therapy. On one particular hospital floor, Amy shared that the physiotherapist “makes it her point to know what is happening on the unit with the patients so she is a good person to go to for help” [Observation March 6, 2008]. Amy looked for the physiotherapist to learn about patients’ medical restrictions and function. The physiotherapist also identified those that needed to be seen by occupational therapy. [Second interview]. However, Amy preferred that the occupational therapist have more control in determining the need for services. The physiotherapist's emphasis on the physical or biomedical aspect of the person differs from the occupational therapist's emphasis on the whole person and their environment:

They just think mobility. So ...it's not necessarily a positive thing. But we do have to rely on physio's [physiotherapists]. There's just nothing else you can do. [Second interview].

While Amy preferred to have another occupational therapist accompany her during a patient assessment or treatment session, this was often not possible because she was the sole occupational therapist assigned to the unit. Over the months of practice, Amy learned the system and whom she could seek support from on the unit; physiotherapists, nurses, social workers and/or personal care attendants (PCAs). The relationships Amy established with

colleagues were the mediational means that enabled her to cross boundaries and perform her work activities. “I think the learning has come from being on the floor and working with other disciplines.” [*Second interview*]. Amy learned through participation in the activities of practice.

During one observation session, Amy called the PCA to assist with helping a woman move from her wheelchair to the bed. Amy advised the PCA that she had not transferred the patient before and asked him to advise her on how she could help with the transfer. They worked together to adjust the patient’s position in bed. This is an example of relational agency or the capacity to work with others towards the shared purpose of the activity system (Edwards, 2005a). In the hospital context the joint action is patient care.

While not a primary means for learning, Amy used textual material (books) and tools such as the Internet to learn about diagnoses and to search for solutions to address patients’ needs. During the workday, the Internet is the most time efficient means for researching a practice question. Amy identified that one of the challenges with her caseload was not having enough time to answer emails and participate in professional development activities. However, information from conferences or workshops was sometimes shared among therapists. Amy described that after work she had little energy to read journal articles. Therefore she relied on participation in the day-to-day activities of practice, working alongside others and working with patients as the most important supports for learning (Eraut, 2004).

Over the months of observing and participating in Amy’s practice, I felt that I engaged in problem-solving and asking questions to scaffold Amy’s learning, more than with the other study participants. On one rare occasion in which Amy did not have a lot of new

referrals, she had time to read about a case and we had more of an opportunity to participate in the clinical reasoning process together [*Observation March 18, 2008*]. I met Amy while she was consulting an anatomy textbook to learn about a diagnosis of a patient she had seen. We discussed the implications of the diagnosis (brachial plexus injury), and she shared her observations of the patient's upper extremity mobility. She explained that she wanted to do some exercises with the patient and was trying to figure out his injury and the movements he could perform. I provided some guidance and asked a few questions regarding what he could or could not do. She asked me if I thought fine motor activities would be helpful for him and I agreed that they would be indicated. After seeing the patient, Amy wanted to return to the textbook to check what she had observed. We discussed the patient's movements and the related muscle function, as well as the meaning of some laboratory tests found on the patient chart. Amy seemed to appreciate discussing patients and therapy events with me. This may be a reflection of our comfort level in interacting with each other, perhaps attributable to the time I spent with Amy. Among the study participants I spent the most hours with Amy, observing and engaging in her practice.

### ***Space for Learning***

As noted earlier, the occupational therapy staff office was a valued space for learning because it provided an opportunity to talk to other occupational therapists about patients, problem-solve, and receive guidance. However, similar to the other participants in this study, the nurses' station was the primary space for collaboration about patient care. Most often this dialogue occurred with other members of the health care team. People come and go at the nurses' station. They are independent working on the patient chart or on the computer, yet interdependent on each other for information sharing. Ward clerks, nurses, orderlies, physiotherapists, occupational therapists, social workers, home care case managers, and

physicians share this physical space [*Observation November 22, 2007*]. Amy found that when she was working in the community in her first job, it was very difficult to meet with other health professionals. She therefore appreciated the immediacy of support provided in the hospital context. This was important for her learning and for carrying out patient care:

In my first few weeks working at the hospital, I relied on other therapists to validate my clinical decisions. However, I gradually began to use all the skills I had learned to assist me in my assessment, treatment and discharge planning... I realized very quickly that a team approach was needed to deliver the best patient care. [*Journal entry*].

The nature of Amy's caseload required her to work on a number of different floors on the same day, often going back and forth between units. As well, Amy needed to be adaptable and responsive to last minute requests, such as attending a family meeting. The act of being physically present on the unit afforded an opportunity to learn and consult about patients, as different professionals went about their activities in patients' rooms or in common work areas such as the ICU. Being visible and available on the unit also facilitated crossing boundaries between hospital and community contexts. During one observation, Amy learned that an occupational therapist from a private rehabilitation company was meeting with one of Amy's patients and their family [*Observation January 16, 2008*]. Amy was able to meet with them and answer the therapist's questions about the patient's physical status and their need for equipment such as a wheelchair. This collaboration helped to facilitate the patient's discharge plans.

I observed that the complexity of patient problems as found in the ICU, necessitated collaboration among a number of health professionals. Problem-solving around a multifaceted case often occurred through dialogue and trial and error, involving the nurse, occupational therapist and physiotherapist. In the ICU there was receptivity among health

professionals in working together for patient care. There also seemed to be a genuine respect for each discipline. On one occasion Amy spent quite a bit of time reading a patient's chart [*Observation February 11, 2008*]. A resident asked Amy to see the chart but when she realized that Amy was still reviewing it, stated she would write her note later. The resident recognized the importance of the chart in learning about the patient and documenting their history and care. In this example, the chart seems to afford a sharing of power between the physician and occupational therapist.

In the ICU, cooperation and consultation often occurred in transfers such as moving a patient from their bed to a wheelchair, which required the assistance of a number of professionals. Being available and being receptive to assist, contributed to a collaborative atmosphere (Baggs & Schmitt, 1998). During one observation, Amy worked with the OTA, a nurse, physiotherapist and physiotherapy student to get a patient up into a wheelchair. Similar to other transfers that I observed, Amy talked with the patient and advised them about the process, whereas the physiotherapist attended to the medical aspects of the transfer such as adjusting breathing or chest tubes and moving equipment such as a ventilator or heart monitor. This illustrates Amy's client-centred approach to patients, ensuring that they understood and were part of the treatment actions.

### ***Patient Stories in Teaching and Learning***

Patients helped to inform the occupational therapy evaluation by offering information or asking questions. This dialogue helped Amy understand the patient and their situation and also guided her future interactions with patients:

If they [the patient] ask you a question, something you didn't think about before and then the next patient you see, that's an area that you remember to kind of bring up to address. [If there is something] about the home or something they see as a problem or a barrier to discharge and I didn't really think of that. *[Initial interview]*.

Amy described an experience in which collaboration with a patient influenced clinical decision-making. The medical team wanted to discharge a patient, however the patient, family, and Amy did not feel the patient was ready. Amy wrote a report describing the reasons why the patient should not be discharged, and the team agreed to postpone this *[Initial interview]*.

Patients play an important role in helping the therapist learn about effective communication. During one observation session, Amy saw an older gentleman who was in hospital for surgery related to cancer *[Observation January 11, 2008]*. The patient described how he functioned at home and stated that he did not need any assistance upon discharge from hospital. Prior to admission, he spent the majority of his day visiting his wife who also had cancer and was in a hospice. Amy assessed his safety in the bathroom and said she would refer him to the social worker regarding support for housecleaning and meal preparation. Amy then shared with me that she realized she had “brushed over” the gentleman’s concern regarding his wife and when she tried to return to this later in their conversation, the patient did not wish to discuss it. Amy learned that she needed to really listen to what the patient is saying, and to “hear and understand how the client articulates their needs and fears” (Parker, 2006, p. 62). Amy then relayed an experience she had earlier in the week with another gentleman who did not want to have rehabilitation follow-up, because he was concerned about being with his wife and his wife’s health. Amy realized the importance of supportive communication. She would not be able to intervene with the patient

without building rapport and trying to understand his situation. This communication helped to “create better understanding” between the therapist and patient (Purtilo & Haddad, 2007, p. 162) and enabled Amy to work with the patient in forming intervention plans which reflected his needs.

In the second interview, Amy described a situation with a patient who had an outburst because they were frustrated and tired of being in hospital. She felt she did not spend enough time with the patient and had focused only on their equipment needs. Amy was reminded how participation in meaningful activities influences a person’s health and well-being. This learning is described further in the section on workplace constraints.

Similar to the other participants in the study, Amy learned about patients’ previous medical histories and the plans for their current hospital admission. Patients also informed the occupational therapist about how they managed their daily activities at home prior to admission and the help they believed they would require upon discharge. During one observation, a patient’s narrative revealed his history of skin breakdown and circulatory problems in his legs, the plans for surgery, and the physician’s advice regarding the patient’s skin care. This story assisted the occupational therapist by providing important information for her assessment. This learning also shaped the development of Amy’s intervention plans with the patient [*Observation January 16, 2008*].

In the ICU, the patient’s family often constructed the patient’s medical history, care and present status because the patient was unable to do so. The family informed the occupational therapist about the patient’s function such as their ability to move, their tolerance or the meaning of non-verbal signs used to communicate [*Observation February 11, 2008*].

### ***Learning from the Patient Chart***

The patient chart was an important artifact for learning. Similar to the other participants in the study, Amy read the chart prior to seeing a patient. As mentioned earlier, often a physiotherapist had already seen a patient by the time Amy read the chart. This was helpful as she learned about the specific needs of the patient such as “if it is a case that you know stands out to be a little more challenging than your straight forward case” [*Initial interview*]. The chart provided her with a sense of what to expect and also helped her identify if she required the assistance of another health professional to assess a patient. Amy tried to review patient charts every morning to remain up-to-date regarding patients’ care trajectory. She described this daily review as “my own sort of rounds” [*Second interview*]. The Kardex is another documentation tool that is used in the ICU as a means to communicate among members of the health care team. If Amy provided an assistive device such as a splint to a patient, the protocol for wearing the splint was documented in the Kardex.

The patient chart also mediated the occupational therapist’s actions when providing coverage for another therapist. Through reading the occupational therapist’s assessment report and progress notes, Amy learned about her colleague’s clinical impressions of a patient. During one observation, Amy saw an older woman who had been experiencing frequent falls and had another fall in the bathroom on the ward [*Observation April 4, 2008*]. Amy read the chart and found that the other occupational therapist documented her concerns about the patient’s cognitive status. This provided Amy with critical information about the patient’s safety and susceptibility for future falls.

In my first weeks of being with Amy, the knowledge of medical terminology and abbreviations arose. I was not familiar with some of the acronyms used on the patient chart

and asked Amy about their meaning. She had learned some of the terms by reading the chart or by asking other members of the health care team. She shared that medical terminology was not covered in her university education and that there were a number of terms that were still unfamiliar to her. I bought her a pocket book on medical abbreviations, which she subsequently carried in her binder. When reading through the chart, she would make a list of unfamiliar abbreviations and consult the book for their meaning.

Amy carried a large binder that contained referrals for patients, assessment forms, contacts, and other information relevant to her day-to-day practice. She sorted through the referral forms checking the reason for the occupational therapy consult, and then read the charts to help her decide which patient to see first. Consultations with nurses, social workers and physiotherapists also helped her determine priorities among the referrals. Amy also maintained notes at her desk and an agenda, as mediational tools to help her organize her day.

### ***Workplace Constraints***

The type and degree of occupational therapy involvement with patients was constrained by high patient caseloads and limited occupational therapy coverage. Amy felt that the existing occupational therapy allocation of 3 days per week for the medical/surgical unit and the ICU was a constraint. She felt this needed to be increased to 5 days per week. In the ICU Amy addressed the actions stated on the referral and may not have assessed other potential areas for occupational therapy involvement. Amy expressed concern that some of occupational therapy's role in the ICU was relinquished to physiotherapy. For example, while occupational therapists could provide passive range of motion for patients, this intervention was performed by physiotherapy [*Observation May 13, 2008*]. Because of more

staffing, physiotherapists were able to see patients everyday and sometimes twice per day. Amy felt this explained why “physiotherapy always seems to be more knowledgeable about the patient’s medical status and the patients in general” [*Observation February 11, 2008*]. She attempted to promote occupational therapy’s presence through enlisting the help of the OTA to see patients for treatment where possible. She thought this would also help raise occupational therapy’s visibility on different units.

I also observed this difference in power between occupational therapy and physiotherapy in team rounds [*Observation November 6, 2007*]. Notably, I found that physiotherapy’s clinical opinion was most valued and determined patients’ readiness for discharge from the hospital. This decision occurred with minimal or no input from occupational therapy. I found myself asking how the physiotherapist could establish readiness for discharge based primarily on patients’ function in mobility (such as walking and transfers), when there are other critical factors to consider such as their ability to care for themselves, their roles and responsibilities at home, and the accessibility of the environment. This is the domain of occupational therapy that did not appear to be considered in discussing patients’ discharge. Amy explained that while physiotherapists received referrals for all of the patients on the unit, occupational therapists did not. The physician’s referral determines and regulates occupational therapy’s participation in patient care. A difference in staffing also contributed to this constraint. There were 2.5 physiotherapists assigned to the unit and only one occupational therapist. The power implications of this situation resulted in Amy often assuming a receiving role about patients’ status, rather than an information-giving role (Sebrant, 2008).

During one observation Amy shared that she had received up to 30 new referrals in one week and consequently a number of patients were discharged without being seen by occupational therapy. “I went to team meetings and had little to contribute other than talk about the patient’s wheelchair and then I am afraid that I will get to be known as the wheelchair person, when there are so many other occupational performance issues to work on” [*Observation June 13, 2008*]. This situation narrows the scope of occupational therapy practice. In the second interview, Amy emphasized the challenge she faced in trying to expand her role. She was adamant that she did not want to be known as “the girl that gave the wheel chair” [*Second interview*]. She talked about the limited attention to patients’ mental health in the acute care setting. Many of the patients on her caseload were quite ill and were hospitalized for a long period of time. They were unable to participate in their usual activities of daily life or as Wilcock (1998) states “the natural health-giving functions of occupations” (p. 341). Amy described how team members proposed medication for patients who appeared depressed however she felt that this was not the answer:

You know, it’s almost like, they [members of the medical team] see it as a negative thing that these people are becoming depressed. But it’s really just a human thing because, I mean, you’ve been in a hospital for almost three months. You’re not, you’re just getting to bed. I mean some of them they can’t even go outside to get a breath of fresh air...And, you know, you don’t think anyone would be depressed? They just need coping strategies. Not medication. That’s my opinion. [*Second interview*].

Amy believed that patients needed to be engaged in some meaningful activities, which is the focus of occupational therapy. She suggested that this could be a possible role for the OTA, if additional resources were available. High caseloads and limited staffing were workplace constraints on the scope of occupational therapy practice.

In the acute care setting it is often a challenge for the occupational therapist to see a patient because of the biomedical focus and emphasis on diagnosis and “remedying illness and injury” (Wilding & Whiteford, 2007, p. 185-186). Amy’s plans to see a patient were often disrupted because a patient was sent for medical tests and were therefore not available for therapy. This necessitated returning a number of times to try to “catch” the patient in their room [*Observation January 16, 2008*]. The emphasis on physiotherapy in the acute care setting was also a constraint to the occupational therapist’s participation in practice. Often the physiotherapist met with a patient before the occupational therapist. Consequently the patient was then too fatigued to participate in occupational therapy. One morning, Amy had planned to help two patients in the ICU get out of bed and into wheelchairs [*Observation February 24, 2008*]. She arranged for the OTA to assist, however when we arrived in the ICU the physiotherapist informed Amy that the patient was too tired to get up. Amy went to the patient’s room and his nurse provided the same observation. Amy mentioned that she had assistance now to get the patient up. The OTA volunteered that she could return to the ICU with Amy in the afternoon if needed. Amy expressed frustration because her plans for these patients fell through because of other disciplines’ earlier involvement. She felt that she did not accomplish anything in this situation. I think Amy’s concern was also about losing time when there were so many patients to be seen. She wanted to use her time as constructively as possible.

For Amy, the rotation to different units throughout the hospital was both a constraint and an affordance to her learning. This change in activity systems influenced her interactions with other team members and the sharing of knowledge. Amy felt that colleagues assigned solely to one unit often did not know whom she was. It was therefore more challenging to

collaborate with them and this influenced the nature of Amy's involvement in patient care [Initial interview]. In the second interview Amy reflected on her months of working on different units throughout the hospital. While she felt that this structure presented some barriers, she also felt it was important to her development [Second interview]. Rotation enabled her to maintain a broad scope of practice, with exposure to diverse patient diagnoses and different ways of accomplishing the activity of patient care. This learning helped her in her interactions with patients. For example, she was able to resituate knowledge about back braces from the orthopedics unit to a patient she saw on the trauma unit. This learning instilled confidence both in Amy and in the patient:

And he has a brace, the big brace, and I'm a bit more familiar with them because I have worked on ortho which, again, that is kind of the bonus of being casual. [Second interview].

### ***Client-centredness as a Value and Norm of Practice***

Amy's client-centred approach to patients was demonstrated in her daily interactions with patients. In the ICU, sometimes patients were not alert. She greeted these patients with respect and caring, taking the time to introduce herself and inform them about why she was seeing them [Observation May 13, 2008]. On other units, Amy often met with a patient only once for evaluation of functional problems or to provide a particular piece of equipment. Being able to see a patient more than once enabled more of an understanding of "the patient's thoughts, feelings and expectations" (Sumsion, 2006, p. 5). Amy explained:

I found it interesting when you can see them more than once, seeing the changes that can happen in a patient and just interacting with a patient, asking the patient how they feel about what they are doing and getting their kind of insight into it, helped. [Initial interview].

### ***Amy's Recommendations***

The resituation of knowledge from the university to the workplace could be facilitated by guided participation in the daily activities of practice. During one of our many conversations held in the elevators as we went from unit to unit in the hospital, Amy mentioned that she thought the two year Masters program in occupational therapy was insufficient in preparing her to practice. “It needs to be 3 years. OT should have a residency like medicine” [*Observation January 11, 2008*].

Amy felt that her university education emphasized finding, appraising and using research to inform clinical decision-making. She recognized the importance of incorporating evidence into practice and recommended journal clubs or other means for therapists to learn about evidence quickly. There was no time to review this during the hectic work day and less of an inclination to do so after work hours.

Another recommended support for learning was the opportunity to participate in interprofessional research. Amy was aware of some existing research projects at the hospital but stated that she had not yet become involved in this aspect of practice [*Second interview*].

Amy supported the concept of case study presentations in the workplace as a means to support learning in day-to-day practice. She also recommended an opportunity to discuss assessment findings with experienced occupational therapists. This would help develop clinical reasoning skills as well as provide validation regarding her thoughts and actions, which she desired [*Second interview*].

Amy felt that assistance from another occupational therapist or an OTA for certain aspects of assessment and treatment such as patient transfers and wheelchair seating was an important strategy for developing confidence in practice.

Similar to Jennifer and Heather, Amy emphasized the importance of obtaining feedback on her performance:

And, just even just the performance appraisals, like, knowing, like as I said, I could be doing this work, I'm alone on the job, and yeah the whole rest of the team thinks I'm doing okay because the patient's getting out the door...But just having an OT perspective on how I'm actually doing [*Second interview*].

While Amy felt that rotation to different units in the hospital was important to her development, she also acknowledged that less turnover among occupational therapists would be beneficial for the visibility of the profession. Continuity would facilitate communication among occupational therapists and other members of the health care team who are regularly assigned to the unit. Amy felt that this would also allow them to learn about the value of occupational therapy to patient care. Perhaps then “more occupational therapy services will be funded to provide services on that unit” [*Observation January 11, 2008*].

## **Heather**

This narrative is based on 20.5 hours of observation with Heather over a period of 6 months, two interviews (one held at the beginning of the data collection period and one at the beginning of the last month of field work), and a reflective journal entry. Observations were conducted at two hospital sites. Heather was the only participant in the study who began her job working at one site, *Hospital A*, and then after two months moved to another site, *Hospital B*. The other participants remained at the same hospital throughout the research study.

Observations of Heather's interactions with inpatients occurred in their rooms on different units in the hospital or in a quiet area, which offered privacy such as the sunroom on the ward. Observations of outpatients in the geriatric program occurred in the occupational therapy kitchen/assessment room. Team rounds were held in designated meeting rooms on different wards.

### ***Patient Caseload***

At the time of the initial interview on December 5, 2007 Heather had been practicing as an occupational therapist for 5 weeks. She began her job at the hospital on October 31, 2007. In the first weeks of practice Heather changed units (medicine, orthopedics, short-term rehabilitation, geriatrics) and hospital sites almost every shift. This continual change of activity systems required Heather to quickly learn the procedures of the unit and the tools required for practice. She quickly discovered that the ward clerk was a critical support for her learning:

It is challenging being the new kid at work every day. That's kind of how I describe it, because you go in and you often don't know where anything is. So there is some orientation but because it is quite oral and you are seeing so many units at once, so when you go back it is like "where do you keep the

consults again?” and “how do I page somebody on this system?” or just different things like that. So I do find it challenging going onto a unit the first day but I find once you are there a day or two, you get to know some faces and you meet the ward clerk and they are an important one to figure out who everybody else is. *[Initial interview]*.

Heather made a point of connecting with the attending nurse on each service, first thing in the morning. “They know what is going on, so I just ask them ...so, what is happening and I get an update” *[Observation March 11, 2008]*. This is an example of personal agency demonstrated in knowing where to go for help from other practitioners. Edwards and Wiseman (2005) describe this ability as “knowing how to know who” (p. 178).

After approximately 2 months of working at the hospital, Heather learned that she would be changing hospital sites and would be working at *Hospital B* for 3 months on the geriatric assessment program and orthopedics. She was pleased about this change that allowed her to have consistency in the patient caseload and in the context of work.

### ***Experience of Transition***

Heather found that while she developed theoretical knowledge in university, the resituation of this knowledge in the complex hospital context was challenging. In the academic setting learning is codified in different subjects, curricula and texts. In the hospital setting learning is a social process, in which knowledge and skills are developed through interaction with others and mediated through artifacts (Guile & Young, 2003). The concept of clinical reasoning is an artifact that Heather was able to use to mediate between scientific concepts and specific clinical situations:

Well, it is quite a change because the real world is not quite like academia of course. I found a lot of the things that we learned in school, it is all very theoretical and you talk about it and it all makes sense but then when you get there and you doing it, it is like, well you have to throw in so much more clinical reasoning for everything you do, first of all. And then sometimes uh, it is like well I looked at this you know in a diagram in class or a slideshow and

somebody showed me how to do it but now that I am actually doing it, you question things more, like all the little things, like well, “where do I stand, which way, should I go to the right or the left if they have had an injury on this side?” like some of those little things that you don’t think to ask in class until you are faced with the situation. *[Initial interview]*.

Although Heather was developing clinical reasoning skills through her day-to-day interactions with patients, she needed validation that her assessment was comprehensive and that her professional judgment was correct:

But because each unit is so different and the issues are so specific, or tend to be, sometimes I wonder if I am missing something. And I haven’t gotten that feedback yet as to if I am, but sometimes I wonder, “Like am I missing a major thing about their home environment or this? Like how do I”, so I always wonder if there is a piece of my clinical reasoning that is not there, but no one has told me it is not. *[Initial interview]*.

In her university education, Heather learned how to “find out what I need to know, how to learn,” which included knowing how to access needed information and how to ask people for help *[Initial interview]*. When she began working on a new unit providing coverage for the regular occupational therapist, Heather tried to first meet with the physiotherapists and social workers. These colleagues shared knowledge about patients and helped identify treatment priorities:

And they often know if something major is coming up or if there is something that the OT I am filling in for, you know, had been planning on doing. So sometimes they can guide me in, you know, “you really should see this person today, it is a priority.” *[Initial interview]*.

In the second interview, Heather again highlighted how physiotherapists helped her set priorities. Because there were more physiotherapists than occupational therapists assigned to a unit, they had often seen patients the previous day. The physiotherapist helped identify the patients that needed to be seen because of an urgent clinical problem or an imminent discharge from hospital *[Second interview]*.

The value of clinical fieldwork experience in facilitating the transition from student to therapist was highlighted with Heather. Heather was the only participant who had previous clinical fieldwork experience at the same hospital where she was now employed. Heather shared that her previous fieldwork placement at the hospital helped her obtain her present job. She had experience in the geriatric assessment program with inpatients and applied for a position with this program. “So I was there for 6 weeks and my preceptor recommended I apply and so that was sort of the connection” [*Initial interview*]. Her experience as a student provided her with an opportunity to gain clinical skills in the geriatric program, develop confidence and gain experience in administering different cognitive assessments. She felt that the physicians valued the occupational therapy assessment findings. While this recognition helped contribute to her professional identity, in the initial months of practice she was not comfortable with some of the corresponding responsibilities inherent in her role. During one observation session, Heather expressed that at a team meeting the previous week, a physician asked her about a patient she had assessed. “The physician asked me: What is the patient’s diagnosis? Is she demented?” Heather shared with me, “Am I supposed to know that? I did not feel that I had the experience to answer that question. Maybe if I had more experience like Angela (who had been practicing for 4 years), I could do that” [*Observation, February 15, 2008*]. The complexity of the practice environment requires “wise judgment under conditions of considerable uncertainty” (Eraut, 1994, p. 17). This way of knowing is derived through extensive professional experience and reflection (Beeston & Higgs, 2001).

In the second interview, Heather reflected on her work in the geriatric program and felt that with practice she gained confidence in administering and interpreting the results of various assessments and the implications of the results for a patient’s function:

Having time to get solid feedback on, you know, administering those assessments and just continual practice and I don't need to check the book very often anymore to make sure I did that right. [*Second interview*].

Heather also learned communication skills through her clinical fieldwork placements. Heather's ability to gently share difficult news with a patient and their family was revealed during a family conference [*Observation, February 22, 2008*]. The patient (a gentleman in his nineties), his children, and members of the health care team were present. Each member of the team shared the findings from their assessment and any concerns regarding the patient's pending discharge home. Heather reported on the patient's performance in a kitchen assessment and in formal cognitive assessments. She advised the family of her concern regarding his safety in preparing meals, driving, and bathing. Heather summarized her report by stating that it was her responsibility as an occupational therapist to inform the family of the assessment findings, which indicated issues for the patient's safety. Heather demonstrated confidence in her interactions with more experienced colleagues in the meeting and with family members. After the conference, Heather expressed that the physiotherapist did not state strongly to the family, the patient's inability to do stairs. The physiotherapist had previously told Heather this was a significant concern. Heather found the physiotherapist was not assertive in meetings and "backed down" in front of family members. Heather said that she learned as a student how to deliver bad news; "sometimes you need to practice saying it out loud."

Heather also had the opportunity to complete a clinical fieldwork placement in Africa in a community clinic. This was a valuable learning experience. She felt that she did not learn specific therapeutic knowledge and skills; rather, she developed "problem-solving skills, people skills and communication skills" [*Observation, March 11, 2008*]. Her ability to

communicate in a therapeutic manner and focus on the patient's needs was something that she relied on, at the end of the day. It allowed her to identify a patient's important concerns and communicate understanding, even if she was unsure about her assessment or intervention. This is illustrated in the following excerpt:

I find that that is one of the things that does get me through, is I find I have a good rapport with patients, so even when I had a crappy day, I will think, "okay, well you know, that person really liked me, we got along and I was able to figure some stuff out for them" and that helps you feel like "okay, well, you know, I might have missed a few things or maybe I didn't go as far as I should have in this, or I didn't get to that today, but the client I did see, you know it went well." *[Initial interview]*.

I found Heather had a gentle, caring way of communicating and being with her patients. She had the ability to focus on the person in an empathic and respectful manner consistent with a client-centred philosophy.

In beginning practice, Heather felt unprepared in some clinical skills such as carrying out some types of transfers with patients, evaluating aspects of patients' physical function (e.g. muscle tone), and interpreting the results of different assessments:

I will look at something and I will think what does that really impact and I will have to sit there and think through it and I found that they [university professors] would show us assessments and tell us what they were for but we never had a chance to interpret results and think about how they relate specifically to different functional things. And that's partly, obviously a lot of clinical reasoning but there are some things that are kind of, you know, like it is a guide, you should know right away that if [they] had this impairment, they are going to have a big problem with this. And that is just something I think that, I got some practice with but they did not teach us that in school in the program. *[Initial interview]*.

This excerpt speaks to the challenge of understanding the implications of the knowledge derived from clinical assessment. Similarly, Jennifer and Elizabeth talked about assessing patients and the difficulty in determining the meaning of the information gathered. An understanding of the impact of patients' illness on their function and participation in daily

activities (the domain of concern for occupational therapy) requires knowledge and judgment gained through experience in practice.

Heather also expressed that she was not comfortable working with complex patients such as those who had significant impairment as a result of a stroke. She demonstrated personal agency by seeking out an experienced occupational therapist who worked in stroke who could teach Heather the required skills:

Like right now I am in neuro and I don't have experience and I don't feel yet comfortable to assess like in-depth stroke cases, for example. So I haven't had to do that yet and I have asked for some guidance from one of the therapists there, if I can see her assessing tone and different things like that that I haven't really done yet. *[Initial interview]*.

### ***Personal Agency in Learning***

Heather felt that although acute care experience was necessary to obtain her job, every unit in the hospital operated differently and required knowledge and skills that were unique to that system. She felt that her communication and problem-solving abilities, as well as knowing how to ask questions helped her learn and enabled her to perform her work tasks on the various units *[Observation March 4, 2008]*. Heather stated that she learns “best from watching somebody do something once” *[Initial interview]*. When she started working at the hospital, Heather expected to have an experienced occupational therapist to observe and learn alongside. However, she did not have this opportunity because she was the sole occupational therapist working on a unit. Heather often was able to observe physiotherapists’ assessments with patients. She would feel more comfortable to do her occupational therapy evaluation after observing how a physiotherapist transferred a patient and how they evaluated a patient’s mobility:

So, you know, what's five minutes out of my day to see how they're moving? And then I feel more comfortable with them doing the initial, especially if it's the first time the patient's back, you know, after hip surgery or something. I like to have the physio do the first mobility kind of assessment. *[Second interview]*.

She found that asking questions was an important mediational means for learning. In the second interview she stated that she had learned who she could seek support from. This is an important aspect of learning about the activity system. In describing support for her professional practice she stated:

I think it's there [support] if you look for it. You have to ask for it. But it's there. There are people who will make time for you, some more than others... But as long as you're willing to ask questions and if you demonstrate learning, I think people are pretty patient with you. *[Second interview]*.

The notion of willingness to engage in dialogue about practice seems to be a foundational piece for collaboration as Heather mentions this a few times in the second interview. The above excerpt also highlights Heather's personal agency in learning. This agency is revealed again in the second interview when she described how she learned about how to apply a neck collar for a patient with a spinal injury. She would have preferred to observe another therapist put the neck collar on a patient, however this was not possible. Therefore she asked questions and then did the task on her own.

Heather also learned by trial and error. During one observation session Heather was working on a patient's sitting position in the bedside chair by trying different height footrests. She asked the patient for feedback and the patient identified when she felt most comfortable. This process of trial and error helped determine the appropriate foot support *[Observation, January 18, 2008]*. Similar to the other participants, Heather engaged in problem-solving with the occupational therapy assistant (OTA) particularly regarding wheelchair seating and other equipment needs for patients. Heather felt that the OTA had an

in-depth knowledge of equipment capability and options (such as various accessories and adjustments to fit a wheelchair to the needs of a patient), as well as the ability to modify equipment for patients [*Second interview*]. The OTA often asked Heather questions about a patient and what she hoped to achieve for them. Together, they collaborated and brainstormed to find the optimal solution for the patient:

So one of the things I didn't feel comfort, very comfortable with and confident with, was seating. And I am still going to him all the time and asking questions and brainstorming with him. He's great because he will point out things that I maybe did not think about yet and I will say, "you know, I have to go back and look at that" and so that helps a lot. [*Initial interview*].

The OTA has experience working with different occupational therapists and their patients throughout the hospital, and therefore has knowledge of the unique interactions and tools of the various communities or units.

So sometimes even just problem solving enough with her and asking what the usual things the OT's are looking for on that unit. [*Second interview*].

Heather also sought support from experienced practitioners within the hospital setting. On Heather's second day on the orthopedic unit, I noted spontaneous collaboration that occurred between Heather and an experienced occupational therapist at the nurses' station [*Observation December 11, 2007*]. Heather posed a number of questions regarding a patient who had hip surgery. She said she wanted to make sure that she was not "missing anything." The occupational therapist advised Heather about the bathroom equipment the patient would require and explained her rationale for recommending the equipment. The experienced occupational therapist shared with me that she did not mind answering questions and became "concerned when new therapists did not ask questions." She had been working at the hospital for 20 years and said that she believed learning came primarily through talking with other therapists.

Validation from another occupational therapist is an important means of learning. In the initial interview Heather discussed a situation in which a patient decided that they wanted to go home from the hospital, rejecting the team's recommendation for a period of rehabilitation prior to discharge. The team was concerned about the patient's decision:

And luckily the other OT actually was right there and said "if I were you, I would do this and this" and I said "yah that makes sense." And then when I did it all and I had my results, and I came up with what I thought and I mentioned it to her, "I said well she still is not going and she did this on [the cognitive test] and I think that, you know, I am just going to refer her to this at home" and she said, "yah, great." *[Initial interview]*.

Although there was limited opportunity for guidance from an experienced occupational therapist, when this did occur, Heather found it very valuable.

In the second interview, Heather highlighted the important role that social workers played in her learning about hospital and community systems including available resources (such as medical equipment, home care support) and the process for referring to different services:

Social workers are always on top of things I find, and learning about the system, because that's one thing I find, you know, I'm still trying to figure out who, who does what and where people go and what, what is available for patients. *[Second interview]*.

My interactions with Heather often involved collaboration and guidance, perhaps more so than among the other study participants. She was comfortable in sharing her reflections about a particular clinical situation, discussing her impressions and asking me my opinion. Talking aloud seemed to help synthesize her observations and identify the key issues to address with a patient. During one observation session, Heather planned on transferring a patient with a spinal cord injury out of bed and into his wheelchair for the first time since his admission to hospital. The patient used a power (electric) wheelchair *[Observation March*

11, 2008]. Heather stated; “I don’t know if I am ready for that” referring to how she would position the patient in his wheelchair. She confided that she did not feel knowledgeable about seating and asked my advice. We went to look at the wheelchair and I was able to identify some important factors to consider in seating, as well as share some practical knowledge about the cushion and the operation of the wheelchair. I highlighted another dimension of seating for Heather to consider. It was important to ensure that the patient was seated correctly and comfortably, but the patient also needed to be able to drive the wheelchair independently and move about. Heather then planned to have the battery charged so that the wheelchair was operational. This example illustrates how exploring reflections with a peer or experienced practitioner can help identify “critical elements or subtle variations within the situation” (Gamble, Chan, & Davey, 2001, p. 124).

I tried to establish a supportive, non-judgmental perspective in my role as participant-observer. I think this allowed Heather to feel comfortable in sharing her experiences with me. Sometimes, asking Heather questions to help her gather needed information from a patient for a comprehensive assessment supported her learning. For example, Heather was evaluating the left arm of an older woman who had recently sustained a stroke. I asked Heather if the patient could perform a functional range of motion with her arms (e.g. reach to her head, back of her neck and low back). This feedback helped Heather identify relevant clinical information that she was missing [*Observation April 9, 2008*]. On another occasion Heather completed a cognitive evaluation of an older woman who lived alone and according to the medical history, had memory problems [*Observation May 28, 2008*]. The patient had difficulty understanding Heather’s directions for the evaluation and Heather noted that the patient also had difficulty with personal orientation when using a walker. After meeting with

the patient we reviewed the patient's performance and potential safety concerns. I suggested to Heather that we did not discuss transportation and Heather felt she should go back to the room immediately to determine if the patient was still driving. This dialogue helped expand Heather's knowledge and obtain important information that would influence her therapy recommendations to the team.

In the second interview, I asked Heather about what she had learned from participating in this research study. Engaging in questioning helped to scaffold her learning:

And I think, I was learning from you throughout it, too, because especially early on when you would, you would, you know, at the end you'd say, well, can I ask a question? Yeah, yeah. And then you would ask and I'd be, like, oh, that was a good question. You know. So that, that almost was a little bit of mentoring in the background. [*Second interview*].

During one session on the geriatric unit, we discussed the experience of falling among older adults [*Observation March 4, 2008*]. Heather described how a patient fell in the bathroom while she was observing their transfers. Heather proposed that the fall was due to improper footwear and slippery floors. Heather was upset about the incident, particularly because the patient was angry with her about the fall. Heather sought advice about the situation from other team members who reassured her that it was not her fault. Heather realized that that the patient may have fallen regardless if she was participating in occupational therapy. Heather also sought support from other occupational therapists asking them; "Tell me about your experience with a patient who fell," and she found that others experienced similar unanticipated situations with patients. This shared story-telling helps beginning practitioners learn the cultural knowledge of working in the hospital context. A patient's fall and other unexpected events are part of practice.

## ***Space for Learning***

Occupational therapists, nurses, physiotherapists, and social workers, as well as patients and families were supports for learning about patients' status and function. Interaction with other members of the team often occurred spontaneously on the ward (unit) and at the nurses' station. I observed that the nurses' station is a hub of activity [Observation, December 11, 2007]. At one point I counted 14 people in the small space, all working side-by-side. There were some paired and group conversations, and some comments and humour directed at whoever was listening. In the second interview I asked Heather what she learned from the collaboration at the nurses' station:

I think it just, the fact that it's so open, I'm constantly, I'll hear something about a patient and say, oh, can you repeat that? What did you just say about the patient? Because they're mine and I'm thinking okay, well, any information I have is going to be good information for me to have before I go.

She shared a conversation that she recently had with occupational therapy colleagues in which they contrasted the common central nurses' station with a few remaining nurses' stations at *Hospital A*, which are designed according to the Friesen concept (Adams, 1979). In this design, there are small workstations outside of each patient's room, where supplies and patient charts are located. Heather described the influence of this physical space:

[The Friesen design] really decreases the whole team business because, you know, what are the chances you're going to go to the room the same time the doctor's going to go there... Yeah, so we were talking about how that really, you know, changes team communication. You have to make a more effort to go and meet with some people if you want to do that. [*Second interview*].

The nurses' station provided a physical and emotional space for collaboration, building relationships among staff and allowing knowledge to be shared about patients. Members of the health care team, both within the hospital system and external to the system (such as home-care managers), all come and go at the station. They are interdependent on each other

to learn about the patient's condition and status, yet independent in carrying out their own contribution to patient care.

On the geriatric assessment program, interprofessional collaboration appeared to be a norm of practice. The geriatric program and day hospital are located in a newer wing of the hospital and the team members have their own assessment and treatment rooms and offices in this area in close proximity. This physical space afforded collaboration among health professionals. Also, there was limited time for a comprehensive assessment by each team member in the structure of the day hospital portion of the geriatric program. Therefore, ongoing communication among health professionals was critical to enable them to discuss and plan the care for patients with complex needs. Each health professional contributed their perspective, a collaborative interaction which illustrates the "co-construction of knowledge...in small groups" (John-Steiner, 2000, p. 3). Heather described how social work shared information with the team about the patient's home and family context, the physiotherapist contributed knowledge about the patient's physical function, and the occupational therapist addressed cognitive function and daily activities [*Observation, February 15, 2008*]. She noted that sometimes patients would disclose more about themselves to one health professional than another, requiring team members to be comfortable with role overlap.

Among the participants in this study, Heather had the most interaction with physicians which can be attributed to the context of the geriatric program and the high visibility and involvement of the physicians in this program. The physician was an active member of the team. Heather valued in particular, his recognition of the contribution of occupational therapy to patient care. Members of the team prepared their reports and shared their findings

at rounds that were held every morning. The physician then relayed the team's assessment results to the patient and family. If there were issues that would be best addressed by the team together, such as a concern regarding the patient's living arrangements or the patient's ability to drive, then a family conference was held in which all members of the team contributed their perspective [*Observation, March 4, 2008*]. The physician's presence on the team was also a valuable means for learning about medical issues, knowledge that helps to situate information from other team members and enable an understanding of the patient [*Second interview*].

### ***Patient Stories in Teaching and Learning***

When asked to talk about the role of patients in her learning, Heather stated:

Learning to work with each client is different. So you have to take the cues and learn from each client about how they want to be treated as a patient and how they are going to communicate and different styles that way. I'm trying to think if I had any like great moments where I learned something from a client. And I am sure I have, like I feel like I'm always learning from my clients, it is hard to think about it though. [*Initial interview*].

This example illustrates that learning from clients may not be recognized or be in the occupational therapist's awareness because attention has not been directed towards these experiences (Eraut, 2004).

Patients taught Heather about how they coped with their illness, which was sometimes revealed in their refusal to continue with their participation in the assessment process. During one observation Heather administered a cognitive test to an older gentleman [*Observation, February 22, 2008*]. In the first pencil and paper task, he was required to alternate successive letters and numbers and connect them by dots. He had difficulty understanding the task and seemed to realize that he was unable to do what was required. The patient then began to tell his story. He was a retired university professor who had a remarkable research career. His

inability to complete the simple paper task was perhaps a blatant reminder of his limitations in contrast to his previous abilities. He was aware of his physical and cognitive losses. He stated that he was not feeling well and was too tired to continue with the assessment. In this example, the patient reminds us that they have experienced many valued roles in their lifetime, and this new role, the role of patient, may be a demeaning and difficult one.

Family members taught Heather about the supports the patient has at home, and their roles and responsibilities. This information influences the therapist's treatment and discharge plan. In the second interview, Heather noted:

I find I've also become more aware of asking patients how their partner is functioning. Because, you know, it's so important. We had a patient the other day who was leaving the hospital and, and it was kind of a rushed, you know, oh, wait they're going home right now. Okay, I'd better go. And I asked her how her husband was doing. Oh, well, he's, he's slowing down a little bit mentally, but he's still good. And then, so she gave me a little bit of information, but then the son said he totally has dementia and she's taking care of him and she's not doing so well right now. *[Second interview]*.

Heather also learned from family members how patients were feeling emotionally regarding their situation. On one occasion, we assessed an older woman who had sustained a stroke *[Observation, April 9, 2008]*. The patient's daughter was also present. The daughter shared with us how her mother had been quite discouraged the first few days after surgery, but was now more hopeful because she was able to use her left arm and left leg a bit more. Heather found the patient was receptive to the occupational therapy assessment. The patient completed all of the required tasks in the cognitive test and then advised Heather that she felt too tired to continue with other aspects of the assessment. I mentioned to the patient that I found she had a wonderful sense of humour. She felt that humour was "important to make others happy and yourself happy." She then talked about the recent passing of her husband, their marriage of 50 years, and their children, grandchildren and great-grandchildren. She

displayed a positive outlook. Her story revealed how she valued and took pride in her family. In my field notes I wrote, “This was the most delightful older woman I have ever met.” In my brief conversation, I felt I had the privilege to learn from someone who has lived much longer than I. I also documented my impression that patients’ personal narratives were often overlooked in the acute care context.

During another observation session, Heather and I met with an older gentleman who had spinal surgery and exhibited memory problems [*Observation, June 24, 2008*]. When Heather asked the patient how he was managing at home prior to the surgery, he relayed how everything had changed since his wife died one year ago. In the space of a few minutes, he referred a number of times to his wife’s death and was tearful when discussing this. The month of her death was the time-frame used in his story-telling e.g. “before my wife died....after my wife died.” This significant life event provided the context for how the patient was coping, however this loss was not explored further. I found that occupational therapists in this study often did not explore these emotional issues but concentrated on the physical and cognitive aspects of the person. Perhaps this is attributed to the medical focus of the acute hospital context. The opportunity for patients to share their story with the occupational therapist is not only important in building rapport, but also in helping the therapist understand patients’ personal experiences and learn about what is meaningful to them. This observation forms the basis for building story-telling into the workplace learning curriculum.

Heather described how patients taught her practical techniques such as how they got dressed using their own strategies to compensate for limited function. She was then able to resituate this learning with other patients. Heather also learned about patients’ valued roles

and supports. This learning shaped the occupational therapist's treatment goals and recommendations. For example, Heather completed an initial assessment on an older woman who had a hip replacement. The patient informed Heather about the bathroom equipment she had in her apartment and the assistance she had for housecleaning. She said she was thinking about requesting food delivery services. The patient was aware that reheating frozen dinners as she had been doing, was not nutritionally optimal. Heather agreed to arrange Meals-on-Wheels services. The patient also asked Heather when she would be able to drive because although her son and daughter lived in the city, "I help them more than they help me; I drive the grandchildren around." Heather advised that the patient's physician would determine when she could resume driving. The patient identified what she needed to be able to do upon discharge and her role within the family [*Observation April 9, 2008*].

Patients also provided validation regarding Heather's treatment decisions. In her journal, Heather wrote about an experience with a patient that was palliative and was experiencing lower back pain. Heather discussed the importance of changing positions when lying down and provided the patient with a special cushion for support:

While I was still wondering if I should look at different pressure relief cushions, the patient was very happy with what we had tried. His wife was extremely grateful that they had these aids to take back to their local hospital and provide relief and comfort to her husband. Based on their feedback I felt I had made the right choices. [*Journal entry*].

Client-centredness is a norm of practice for Heather, demonstrated in her collaboration with patients and shared decision-making regarding their care. Heather was planning discharge for an older woman who recently had spinal surgery [*Observation, June 9, 2008*]. Heather advised that the patient would be limited in her mobility because she was wearing a neck collar and needed to be cautious in her neck movements. The patient acknowledged

Heather's concern and together they problem-solved how she would manage at home and the assistance she would seek from her husband, children, and home care.

In the first month of observation with Heather, I noted that she was the only participant I had observed so far that had asked each patient about their goals, what they wanted and needed to be able to do in preparation for discharge [*Observation, December 11, 2007*]. Six months later, I wrote that I remained impressed by Heather's caring, respectful approach and client-centredness [*Observation, May 28, 2008*].

### ***Learning from the Patient Chart***

The patient chart was an important artifact for learning about the patient's care and treatment, as well as providing a textual means for communicating among team members:

Now that I have learned how to navigate it [the chart] a little bit better, it is very helpful. And on different units, they put different things in different sections or they tend to elaborate more or they use different forms so depending on the unit, the chart is more or less helpful too. [*Initial interview*].

Heather's comment illustrates that the content and process of the patient chart varied according to the patient unit and hospital site. There were contextual differences such as how labor was divided among team members (the order of the entries in the chart by professional status) and the forms used for documentation (Hobbs, 2007). As well, some of the medical abbreviations were unique to a clinical area. Heather carried a booklet of medical acronyms with her, as a mediational tool to help with understanding the discourse of the chart. If an abbreviation was not found in the booklet, she learned its meaning by asking another member of the team or by using the Internet [*Second interview*].

Similar to the other participants, Heather always consulted the patient chart prior to seeing a patient. She often began with checking the diagnosis and the physician's medical history. She stated, "A diagnosis is one, very small piece of the puzzle" [*Second interview*].

She needed to know more than the diagnosis such as the physician's plan for a patient's discharge, any medical precautions, a patient's mobility and home situation. This information helped her determine priorities for the occupational therapy assessment. Heather also read the physiotherapy note to obtain a general overview of the patient's physical function, and the social work note to ascertain if there were any family issues or concerns.

When covering for another therapist, Heather preferred to have guidance from them regarding patient priorities. Sometimes she received a hand-written note outlining this information, or she consulted the Kardex (documentation system unique to *Hospital A*) but often had to rely on her own judgment to determine who will be seen:

I find generally prioritizing is a new thing to me. Which is very important on acute units. So that is, it is a challenge when it is a day where there is a lot to think about. Some days I come in and the therapist has already said like "here are the 3 people you should see and take on any new referrals" ... But sometimes you will come in and they will have had 4 new referrals the day before and 2 new ones today, and then that's when I'm like, okay... and I find that challenging to have to go through the chart. [*Initial interview*].

Reading through team members' reports and analyses of the patient helped her to determine priorities. During one observation session, Heather was working on a unit that was new to her [*Observation, May 28, 2008*]. She had 3 referrals on the unit. Heather decided to see a patient who was to be discharged imminently after having scanned the chart and learning that the patient was an older woman who lived alone. She also highlighted the social worker's note about referring the patient to the geriatric program. Heather felt if she could complete a cognitive screening with the patient, she might be able to assist in the team's decision regarding the appropriateness of the geriatric program. The chart and her previous experience working on the geriatric program helped her determine priorities among patients to be seen.

## **Workplace Constraints**

When Heather first began working at the hospital, she wanted to shadow an experienced occupational therapist to learn about patient care in this unfamiliar practice context. This was permitted at only one site, a decision which seemed to rest with the senior therapist. At the other hospital site, shadowing was not permitted for “liability issues” [*Initial interview*]. Heather understood that because she would not be paid to shadow, she would not be covered by the hospital’s insurance. “If I want to see a therapist working with a patient, then that is on my own time” [*Initial interview*]. The other participants in the present study described a similar barrier to learning. Casual workers are not funded to participate in structured education sessions, which may include a scheduled time to meet with an experienced therapist or time to attend a professional development workshop or course. This is a reflection of the status attributed to the casual worker within the medical hierarchy (Fuller, Hodkinson, Hodkinson & Unwin, 2005).

Similar to the other participants, Heather identified that her status as a casual worker limited her ability to follow-through with patients. This was a constraint to her learning because she did not have the opportunity to obtain feedback from the patient regarding the appropriateness or effectiveness of her interventions. Participation as a member of the team on a particular unit was also constrained because of limited interactions. She explained:

So you are only there for one day sometimes. So that is one of the places where I feel good about the rapport I make. Even though I am only seeing this person once, like we got along really well, I got a lot done, I felt like we had a good relationship, but I kind of wish I could follow-up on them to see how they are doing next week, or what ended up happening and I don’t get that a lot of the time [*Initial interview*].

In the initial months of working at the hospital, Heather’s ability to carry out practice activities was limited by the lack guidance or direction from the therapist whose caseload she

assumed. As a result, she felt that it was difficult to know patient priorities and to use her time effectively:

To navigate the information and read some of the doctors' handwriting and all that. So figuring out who to see first and I feel like sometimes I am wasting you know, half an hour to read through all these charts to figure out what to do. So I find that a challenge and, and for some units even when you come in, the therapist can't be that specific you know because they have so many things going on and they didn't leave you a note or they left in a hurry or they left sick. So you don't have guidance all the time when you are covering.  
*[Initial interview]*.

Over the months of practice, Heather learned to trust her clinical impressions and the results of her assessment of a patient. In her journal entry she described a situation in which she was asked by a physiotherapist to provide a different wheelchair for a patient with a spinal injury. She read through the patient chart and changed the patient's wheelchair. However, the next day the patient developed a pressure sore which was attributed to their new seating. Heather reflected that she should have done her own assessment of the patient before providing a different wheelchair:

Because the physio was very experienced I relied on their reasoning rather than starting from scratch and completing a full reassessment. Had I completed a full physical assessment with the patient I would have seen the pressure sore myself. Early on I often looked to other OTs or team members to guide my interventions. This experience made me realize that although I have a lot to learn from my colleagues in other professions I need to be able to recognize when I, as an occupational therapist, am the expert on the topic.  
*[Journal entry]*.

Heather exercised personal agency to create affordances for her learning and negotiate the constraints within the system. She sought members of the health care team to obtain their advice and share her clinical impressions with them. On one occasion, she was paged by the emergency room to see a patient. This was not part of her typical responsibilities. Prior to responding to the page, she consulted with an experienced occupational therapist about how

to proceed. Heather then described what happened. When she was in the emergency room, a medical resident overheard her interviewing the patient. The resident said, “Do you not know what the referral was for? It was to get the lady a wheelchair so she can go home.” Heather then advised the resident that she could not only look at the wheelchair, she also had a responsibility to carry out a more thorough assessment. After doing so, Heather found that although the woman had numerous supports in the home, she was still not coping well. Heather shared her findings with the social worker who expressed similar concerns. Heather mentioned that she was just not comfortable with letting the patient go home. “It was not right.” She said she was glad that she stated her opinion to the resident and that the social worker had validated her findings [*Observation, April 9, 2008*]. This example illustrates Heather’s ability to challenge the power hierarchy within the system and assert her role. It also highlights the value of interprofessional collaboration in validating Heather’s actions.

Heather did not view limited occupational therapy resources as a barrier to her participation in practice. She was able to work within the constraints of the system and was realistic about what she could accomplish. In the following example, she discusses how she handles the limited OTA resources:

Sometimes I think, like, it’d be really great to get this chair right now because we’d like to get the patient up before lunch...And I don’t really have time to go get it and neither does she [the OTA]. But I think that’s just working within what you have – and you’ve just got to work around it. [*Second interview*].

Over time, Heather developed a comfort in knowing that she may not accomplish all of her activities with a patient when she would like and accepted the need to go back to a patient to complete her work. Perhaps this is reflective of an increased understanding of the process of patient care and how it is enacted in day-to-day practice, which is unlike textbook case studies.

Heather did not seem to perceive competition or disequilibrium between occupational therapy and physiotherapy roles. She was comfortable with overlap in scopes of practice and believed that shared goals and interventions were beneficial to patient care:

And I find that the best teams are the ones where it's, [professional's role] it's not really a worry...I can do a little bit of, you know, some mobility stuff and the physio can talk about using a dosette. And you know what? This is for the patients' benefit so I'm not going to get upset about it...If I hadn't gotten there it's great that the physio discussed it, but I'll go into more detail now. *[Second interview]*.

Heather's approach was consistent with the process of interprofessional care in which comprehensive services are provided to patients by "multiple health caregivers who work collaboratively to deliver quality care within and across settings" (Health Force Ontario, 2007, p. 13). Some of the benefits of this approach include improved patient outcomes and less conflict among health providers as Heather illustrates in her excerpt above.

### ***Heather's Recommendations***

Heather felt that time allocated for hands-on practice with assessment and treatment materials was an important learning strategy. Although she was informed that these materials existed, she felt that: "until you go through it yourself you don't –you don't really remember it." This highlights how using the tools involved in subject-object activity, enables the occupational therapist to gain comfort with them *[Second interview]*.

Heather supported the concept of case study presentations with other occupational therapists in the workplace as a means to support learning in day-to-day practice. She also felt that sessions on practical skills such as wheelchair seating and transfer techniques would be helpful; noting that while she had learned some of these skills in school, the context of work changed the nature of the activity *[Second interview]*.

Time to attend courses and workshops was also recommended. Jennifer and Elizabeth also mentioned this recommendation. Heather highlighted the importance of receiving financial support for this activity, which for a casual worker means being paid for their time and receiving funding towards the cost of the workshop.

Heather did not feel that a structured time to meet with an experienced therapist was indicated. She stressed the importance of seeking people that she was comfortable with, to ask questions. Similar to Emma, the immediacy of support appeared to be important for Heather's learning. In the second interview, a willingness and receptivity to problem-solve, brainstorm and share clinical reasoning with colleagues were critical factors to support learning. She suggested that a beginning practitioner may benefit from having a team or group of therapists with whom they could "ask questions, get different perspectives... maybe using different sources, and that's going to encourage them to start asking different people" *[Second interview]*.

Heather emphasized the importance of obtaining feedback on her performance, "to find some way to review where you are with things. Like what, what do you need to work on still? Some positive feedback" *[Second interview]*. She felt it was important for new practitioners to have an opportunity to meet with a senior therapist and reflect on learning goals and receive direction on areas for improvement in practice.

## **Jennifer**

This narrative is based on 22.5 hours of observation with Jennifer over a period of 7 months, two interviews (one held at the beginning of the research study and one at the beginning of the sixth month of field work), and a reflective journal entry. All of the observations were conducted at one hospital site, *Hospital B*. The majority of observations of Jennifer's interactions with patients occurred in patients' rooms on different units in the hospital. If Jennifer conducted a cognitive assessment she would use the patient activity room on the ward. An upper extremity assessment occurred in the occupational therapy department and an evaluation of a patient's ability to function in the kitchen was also held in the occupational therapy kitchen. Team rounds were held in the patient activity room on the ward.

### ***Patient Caseload***

At the time of the initial interview, October 25, 2007, Jennifer had been practicing as an occupational therapist for 17 months. She had been employed in her current job at the hospital for 4 months. She was assigned primarily to the short-term rehabilitation unit, although also spent a few days on the medicine unit, geriatric assessment program, and at the cardiac institute. She therefore had some consistency in her practice activities including the patient population, team members, and the context. She began a new rotation following the initial interview that involved working on multiple floors including vascular surgery, general surgery, ICU, trauma and off-service medicine. However, this caseload lasted only a few weeks. She was then assigned to the short-term rehabilitation unit and orthopedics unit for the next year. Jennifer was happy to know her location for the longer term. She found that the short-term rehabilitation unit was a bit slower pace than the other services she had worked on, with more patient involvement because of the treatment orientation, which she

preferred. Some of the other units such as the medical surgical floor involved more complex cases and tended to be more assessment-oriented.

### ***Experience of Transition***

Jennifer's first occupational therapy job was at a small general hospital located in a different province than her present position at River Valley Medical Centre. Her experience of the initial months of work was characterized by the feeling that she did not have some of the situational knowledge and practical skills required in clinical practice. Work felt similar to being on fieldwork placement, in that she received an "extensive orientation" to her job at the general hospital, and she was accountable to a supervising therapist. The orientation included shadowing the therapist that she was providing coverage for. That therapist in turn, observed Jennifer while she assessed and treated clients, and provided her with advice and feedback. Jennifer as a new graduate, felt intimidated by the supervising therapist. Jennifer did not have previous clinical experience in the practice area and she was not familiar with some of the assessments she was using. She explained:

I'd never done a placement in that area and, you know, it was like using the goniometer and doing manual muscle testing and that sort of a skill that we learned in school probably about a year previously that I hadn't, I hadn't used any of those skills in a long time. So, that was challenging and I found it overwhelming and that there was a lot of new information coming to me at once. She did a lot of splinting in her practice and again that is something in school you get, you know, not a lot of teaching or practice with splinting and it is one of those things that seems like, you know, if you do it wrong, you can do some damage. *[Initial interview]*.

In the above quote, Jennifer's unfamiliarity with practical, hands-on skills such as splinting is acknowledged, along with the recognition that this carried some important health repercussions for the patient. One of the areas which she felt was not covered adequately in

her university education was taking the patient's history. When evaluating patients, she felt she missed important details:

To start with, I really missed out on a lot of important details and a lot of key questions because afterwards I would review sort of my intake with my supervisor and she'd point out some really key things and once she pointed them out, it was like "wow that seems so obvious, how did I not think to ask that? But I didn't because it almost seems really overwhelming and you are like, okay, where do I start? So I think in school definitely more practice with doing intake. *[Initial interview]*.

Learning how to administer a comprehensive medical and functional history is an important skill for clinical practice. Through ongoing participation in practice, an occupational therapist learns to be comfortable in listening to the patient's story and knowing the questions to ask in order to gather information relevant to occupational therapy intervention.

In the transition to practice, Jennifer felt comfortable in patient communication and client-centred practice. She identified the importance of asking clients what they think they need and what feels comfortable for them rather than making assumptions:

Uh, I felt I was well prepared in I guess the communication aspect, like communicating with patients and ah, I guess as well the client- centredness of it, like which is surprising because I mean it is driven in our heads at school and sometimes it gets a little irritating to hear about it.... but you can, I did really notice that in practice like, I'd almost cue myself to be like, oh yah I should ask the client what they think or like. It was nice to sort of have the mindset of doing things collaboratively and asking, cause when you...you feel like you don't know what you're doing, it's kind of a comfort to say to the patient, like "what do you think?" So I guess that was, that I felt prepared in that sense. *[Initial interview]*.

She also identified that she knew how to collaborate with team members to obtain information about a patient and to problem-solve together. Jennifer noted that she was able to rely on her skills in clinical reasoning and identified that it provided a process for her to think critically, to conceptualize and understand patients' problems, and to determine the appropriate action:

Jennifer: So I guess that it does come up a lot where it's like "I don't know what to do" and it's ok, "I need to use my clinical reasoning skills that we talked about in school" and not necessarily that I learned them by the book but it is kind of, a nice comfort again to be like okay.

Darene: To know what to go through, right?

Jennifer: Right and then you kind of go back to your sort of basic OT focus, sort of, when you are trying to figure something out and that can be helpful. *[Initial interview]*.

Jennifer's previous practice experience in home care and hospital settings enabled her to readily establish herself at the River Valley Medical Centre. The changed context however, required her to resituate and build upon her knowledge within a new community of practice. Sociocultural and historical factors such as the size of the hospital, the organization of services in a program management model, and the hospital's role in teaching students in the medical and health professions, were unfamiliar to her. In her journal entry, approximately eight months after the initial interview, Jennifer described how she developed knowledge of the system and how to work within it:

First and foremost my ability to practice has changed based on my familiarity with both the occupational therapy department and greater hospital protocols and procedures that are in place. For example, I am familiar with what forms to use when...what the options are for private vs. public convalescence, I know to page the CCAC [Community Care Access Centre] case manager when I submit a referral, I know an initial ax [assessment] has to be placed on the chart within a certain number of hours, I am familiar with the OT priority system, I know the discharge pathways for total hip and knee replacements. *[Journal entry]*.

### ***Personal Agency in Learning***

Jennifer learned through participation in the everyday activities of practice with patients, families and with other health professionals. She also learned by asking questions and through experimenting with the tools of practice such as wheelchairs:

Jennifer: With respect to wheelchairs, for example, actually sometimes I will just spend you know, just 15-20 minutes in the wheelchair room messing around with the equipment and taking the back, personal back, or whatever type of back on and off the chair, adjusting things and just experimenting.

Darene: Trial and error.

Jennifer: Yeah, trial and error and getting used to using the tools and making the changes and looking at the chair and seeing you know, what sort of adjustability the chair has. *[Initial interview]*.

Due to heavy caseloads, she had limited time at work to read about diagnoses, a difficult case she encountered, or the research evidence related to practice. Jennifer did not regularly attend in-services or courses, because she felt that she could not spare the time to attend. There was a contradiction between the need for clinical education among beginning practitioners and the limited opportunities afforded to casual workers to attend continuing education events. The casual workers were not paid their salary if they attended workshops nor did they receive funding to cover the costs of a workshop or course.

Collaboration with members of the health care team was an important form of mediation for learning. Jennifer identified that she learned primarily from physiotherapists, with whom she worked most closely. They were a source of medical information such as the prognosis for a certain type of condition, as well as the functional implications of a diagnosis. Nurses were also important supports for learning, answering medical questions and providing updates on patients' status. Jennifer felt that talking with social workers helped her understand who the patient was and how they coped with their illness, aspects that were not addressed by other team members:

Social workers I find are a great reminder of all the psychosocial aspects because unfortunately, and that is another thing that I feel I have brought from school, is to pay attention to the psychosocial aspect of things but a lot of times in the hospital you can get really medically focused and focused on like, the discharge and the sort of technical, practical things and you can forget to ask how the patient is coping and that sort of thing. Social work just seems to have such a good understanding of that and it seems to always be the primary focus. I find with them whenever I talk to a social worker about a certain patient it makes me sort of reflect a bit on my interactions with the patient. *[Initial interview]*.

In addition to learning factual information from colleagues, she also identified that she learned about communicating with patients and with other health professionals:

Umm, so I guess from other professionals I learn, there are the factual things that I learn but I find on a more daily basis, I again learn more personal things like watching them interact with patients and sometimes, “well that’s a good approach”, or other times it is like “wow, that’s a not so good approach.” And then it is also learning a lot about myself and how I interact with them and you know, learning about... trying to problem solve or if you are disagreeing, how that goes and how you come up with a solution. *[Initial interview]*.

Jennifer learned practical skills such as splinting and wheelchair adjustment from the occupational therapy assistant (OTA). The OTA also enabled Jennifer’s participation with patients by following through with patient treatment, which Jennifer was often unable to do because of high caseloads and limited time *[Second interview]*. Therefore, the OTA was important in maintaining occupational therapy’s visibility and identity within the hospital.

When Jennifer rotated to the intensive care, trauma, and vascular surgery units from the short-term rehabilitation unit, a mentor was provided for her. She was able to meet with other occupational therapists that previously worked on those services but who were now working on another unit. Mentoring consisted of a 30-60 minute meeting daily to discuss patients *[Initial interview]*. If Jennifer encountered a situation in which she did not know what to do, she waited until she talked to an experienced therapist before proceeding. They provided guidance and validation of Jennifer’s clinical decision-making:

It is even reassurance because there will be some patients that I go and I see and I assess and I write my recommendations and I'm like I hope that's okay and then I sort of go and tell one of the girls this is the situation, this is what I did, what do you think? And even if they are like that's exactly what I'd do, it's so nice to get confirmation because really you don't get that and that's a huge gap from school to practice. *[Initial interview]*.

Talking out loud with another occupational therapist or the OTA helped Jennifer to problem-solve difficult clinical situations or sort through information gathered about a patient. These conversations facilitated the clinical reasoning process, as she described:

There is also patients where I just felt like I just needed to verbalize it, and then once you discuss it then you start, the wheels turn for you, but when you're trying to figure it out all on your own, that doesn't happen. *[Second interview]*.

Through participation in practice, Jennifer learned that she often knew the answer to the question she had, but was "not able to articulate it or fully work through it until I discuss it verbally with another OT" *[Journal entry]*.

Jennifer was comfortable in sharing her thoughts and clinical impressions with me. There were a number of occasions when we spent time in the hospital corridor discussing patients. During one observation session, Jennifer explained that she had administered cognitive and perceptual tests to a patient with a right-sided stroke. Jennifer was concerned about the ability of the patient to return to a seniors' residence, however at the same time, did not feel the woman needed long-term care. The patient and their family wanted the patient to return to the seniors' residence. Jennifer and I talked about the different factors influencing her clinical impression and the family's role in her decision regarding the patient's ability to return home. This was illustrative of the importance of verbal discourse, in particular intrapersonal speech, as part of the clinical reasoning process.

## ***Space for Learning***

Collaboration with other health professionals occurred spontaneously in the nurses' station, hospital hallways, and occupational therapy staff office. These were primary spaces for learning about the patient and sharing information. When Jennifer began working at the hospital the occupational therapy office was located in another building. Therapists would keep their personal belongings as well as their patient binder containing referrals and other tools they needed for practice, on the unit where they were assigned. Jennifer commented: "It didn't really feel like there was a central OT area. And so I sort of miss that connection" *[Initial interview]*. A short time later, a new office was established in which occupational therapists' desks were located in a common area. This space afforded an opportunity for learning from other occupational therapists. I observed that occupational therapists discussed patients, shared stories, problem-solved complex cases and sought help with caseloads. On a few occasions I observed a therapist seek their colleague's assistance in seeing a high priority patient for them, because they were unable to do so. There was an atmosphere of support and collaboration in this context.

The nurses' station was a space for immediate access to support. During one observation session, Jennifer asked an experienced occupational therapist who was charting at the nurses' station about hand sensory assessments for a patient she was seeing with polyneuropathy. The therapist explained a few assessments to her and then offered to demonstrate how to administer one of the tests. Jennifer's access to an experienced occupational therapist within the context of practice enabled Jennifer to carry out the assessment with the patient later that day.

The hub of activity at the nurses' station was also critical in building working relationships. Jennifer described how impromptu meetings with physiotherapists and social workers provided her with an update of patients' progress. These conversations also helped her to develop a better sense of the patient "as opposed to just reading it in the chart" and helped to establish a comfort level with colleagues [*Second interview*]. Jennifer identified that knowing each team member's role and respecting his or her opinion, were important elements in creating a collaborative team atmosphere. In particular, she described how people did not ask her opinion because "they just automatically ask physio or they don't think you'll know" [*Second interview*]. The nurses' station was a crowded place that afforded an opportunity for advocating for occupational therapy by being attuned to the dialogue of others:

Like I guess, even at the nursing station, if you're overhearing a conversation and they're wondering, like, "Well, we'll have to ask physio about that." And it's totally an OT issue, then by saying, "oh, I'm the OT. What's this concerning? It sounds more like an OT issue." [*Second interview*].

### ***Patient Stories in Teaching and Learning***

I think that story-telling was evident throughout the observations with Jennifer, as she talked with me about patients' history and occupational performance, her reflections regarding the assessment results and what she observed, her treatment goals, and team members' role with, and plans for, patients. Patients also shared their stories. Jennifer identified that an important learning from patients concerned how to communicate and interact with different people. Health communication is the means to establish a therapeutic relationship; without this relationship the effectiveness of health care practices is compromised (Drench, Noonan, Sharby, & Ventura, 2007). Communication can help accomplish many goals including establishing a therapeutic practitioner-patient interaction,

identifying the most important patient concern, sharing information, assessing the patient's perception of the problem and identifying treatment goals and interventions (Purtilo & Haddad, 2007). Jennifer's treatment was guided by a patient's previous experience in rehabilitation. If a patient already had extensive rehabilitation, she was less concerned when they reported that they knew how to do their self-care such as dressing, than a patient who was in hospital for the first time, post-surgery [*Observation, November 15, 2007*]. In the latter situation, the patient may state that they can do their self-care but may be unable, because they are not aware of their own limitations. Through participation in practice and experience in working with patients, Jennifer was guided in her clinical impressions.

Patients' awareness of their own abilities and limitations has implications for the nature of occupational therapy assessment and treatment. Patients taught Jennifer about their previous medical history and how they managed at home which contributed important information to the assessment. For example during one of the observations, a 93 year old woman's independence was evident in her story relating how she lived in an apartment in her daughter's home prior to sustaining a stroke [*Observation, May 8, 2008*]. She provided assistance to her daughter and son-in-law for meals and laundry, in addition to preparing her own meals and managing household activities. The patient also shared her story about taking away the car keys and license from her husband when she realized that he could no longer drive safely. "He didn't speak to me for 2 weeks, but I knew he could no longer drive." Jennifer said that she learned about the patient's determination and positive outlook, as important strategies for coping with aging and related losses. Learning how people cope with their illness or disability occurred during daily interactions with patients. Patients also taught Jennifer about their function. They were often aware of their tolerances, how they preferred

to transfer from the bed to the wheelchair for example, and what type of assistance they needed. They were also able to share information about many aspects of their physical function such as their strength, mobility, sensation, and pain [*Journal entry*].

Jennifer also learned how patients challenged her own assumptions and expectations, and encouraged reflection. This was evident in an experience that we had with a patient early on in the study. The woman was admitted for a cardiac condition and Jennifer was practicing dressing with the patient. When I asked Jennifer what she had learned from being with this patient, she said that the woman also had schizophrenia and Jennifer wanted to work with older people with serious mental illness because this was something she was unfamiliar with. Her mental health placements were primarily with persons with dementia. She said she wanted to learn how her perceptions might be challenged and they were. The patient participated readily and demonstrated determination in the occupational therapy session.

Patients helped to make the link between concepts and everyday concepts (Vygotsky, 1986). After administering a cognitive assessment to a patient, Jennifer reflected about her learning and expressed that even though she knew the diagnosis, she did not know how it would present or how the patient would perform on the assessment [*Observation, February 11, 2008*]. Patients taught her about the complexity of practice and that the diagnosis does not correlate with function (impairment does not equal function). Clinical situations contextualized Jennifer's learning and presented "many more realities than can be captured by theory alone" (Tryssenaar & Perkins, 2001, p. 25). Jennifer expected deficits in the patient's activities of daily living (ADL) but the patient coped well that morning in her ADL assessment. On the other hand, Jennifer did not expect the memory problems that were demonstrated on the cognitive assessment.

Patients helped identify treatment goals and activities. Jennifer stated that when she did not know what to do with the client, it was a comfort to ask the client “what do you think?” *[Initial interview]*. She also mentioned the concept of collaboration with the client as part of a client-centred philosophy. Another aspect of learning from patients concerned the individualized nature of how people approached and performed their daily activities. Jennifer shared an example of reviewing dressing with a patient after hip surgery, using the acceptable clinical protocol. The patient demonstrated a method that was easier for them than the standard method. This encouraged her to reflect that patients often assume direction for their own care and can teach the therapist different strategies for participating in activities. “You see how one patient does it, and then you have an idea for the next time with another patient” *[Observation, April 17, 2008]*.

Jennifer built on knowledge gained in her clinical fieldwork experience. During one observation, I asked her how she learned to perform a kitchen assessment with an orthopedic patient *[Observation, December 11, 2007]*. She replied that she had fieldwork placements in mental health and had completed a number of kitchen assessments with patients. Although the contexts were different, she stated that the principles of positioning and using a walker generalize from situation to situation. This is an example of understanding “the continuity of activity and learning” from one context to another (Tuomi-Gröhn & Engeström, 2003, p. 2).

On one occasion, following a shower assessment with a patient, Jennifer explained that a shower could be threatening for some patients after surgery *[Observation, April 17, 2008]*. Perhaps they are afraid of falling, or they are unfamiliar with the shower room and what to expect from the assessment. Jennifer learned that if she showed them the room in advance

and explained the process, patients seemed to feel better. This is an example of bringing learning forward from one patient to the next.

### ***Learning from the Patient Chart***

Jennifer described the patient chart as a “mainstay” for her learning. She preferred to read the chart first before seeing a patient so that she had background information and was prepared. Each discipline provides a different perspective and helps to construct the person who is the patient:

Yes it's very important and I find I like to read sort of every discipline, because every discipline offers a little something different and oftentimes in OT your treatment can be quite global, so you do, you want to know the physical aspects from the physio's notes, you want to know the psychosocial aspects from the social worker's notes, you want to know the medical discharge plan potential, you know, major precautions by nursing and physicians. *[Initial interview]*.

The patient chart provides important information regarding the medical history of the patient and can help situate what the therapist is observing with other health professionals' observations (shared experiences). For example, Jennifer identified that a patient had cognitive problems when she observed his ADL and wanted to confirm if other health professionals had also observed similar concerns on his previous admission to hospital *[Observation, April 17, 2008]*. An important learning for Jennifer over the months of practice was the need to spend more time reading the charts to obtain a comprehensive view of the patient as well as “clarify information directly with patients...to ensure accuracy of information” *[Journal entry]*.

Hand-written notes between occupational therapists are an essential form of communication for casual therapists who are covering for full-time therapists. These notes

assisted Jennifer to learn about the patients who are often unfamiliar to her, helped her to identify caseload priorities, and determine what needed to be done with each patient.

### ***Workplace Constraints***

Limited occupational therapy resources were a barrier to participation and learning. The power structures within the hospital influenced the division of labor. The medical focus of physiotherapy is in contrast to the enabling occupation focus of occupational therapy (Wilding & Whiteford, 2007). Jennifer was aware of the need to advocate for occupational therapy and at the same time recognized that the problems with the recognition and value of occupational therapy have a long-standing history in the acute care context. Jennifer stated that on some units such as short-term rehabilitation, occupational therapy is viewed as a valuable member of the health care team. On other units physiotherapy is more prominent and valued, not only because of their involvement with patients but also because there are more physiotherapists working on the unit than occupational therapists:

Often, patients never get seen by OT. They only get seen by physio. So of course the team's going to go ask the physio about functional stuff because they've never been seen by OT. *[Second interview]*.

This constraint is due to limited funding for occupational therapy. Consequently, physiotherapy assumed part of occupational therapy's scope of practice, limiting the occupational therapist's engagement in the community and their participation in practice. This situation had a negative effect on the occupational therapist's professional identity. On occasion, Jennifer found herself questioning the value of occupational therapy:

I think I've had times where I've questioned, like, well what does OT matter, then? ...Like, why would I have been involved if physio can do all of this, or like, am I not standing up enough for the cognitive functional side of things? *[Second interview]*.

She attributed this to a power difference between the two professions and acknowledged the need to be more confident in advocating for occupational therapy. Power is also exercised when a physiotherapist informs an occupational therapist about what a patient needs, rather than consulting with them. In the following example, Jennifer described her frustration of being told by a physiotherapist about the type of wheelchair a patient required:

“Oh, well, thank you for assessing that patient and determining that they need a tilt chair when I haven’t even seen the patient yet, and I don’t know if they need a tilt chair.” I find that... Like I hate being told by another profession what I need to get for a patient...Because then you feel like you’re just a delivery person and there’s no reason that you went to school. [*Second interview*].

In a program management model of care delivery there is a questioning between allegiance to the unit and to the occupational therapy profession. The clinical manager (usually a nurse) of the program or unit is responsible for determining the need for, and funding of, occupational therapy services. Jennifer expressed: “you feel the pull from the nurse manager on the unit and then you know obviously the pull, I don’t know what you call it, from the OT department” [*Initial interview*]. The rules and roles of the hospital context mediate between the occupational therapist and patient care, and between the therapist and community identity (Hung & Chen, 2002). While the nurse manager is required to consult with the DSL (OT) regarding allocation of resources, they may choose not to proceed with her recommendations. Therefore, another professional who may not understand the role and contribution of occupational therapy in acute care regulates the occupational therapist’s involvement with patients and other team members. This influences the profession’s voice and perspective and constrains participation and effective collaboration (Clark, 1997).

Another tension within the system concerned the different perspective between occupational therapy and nursing on some of the units. The focus in occupational therapy is on enabling the patient to do activities for themselves. Occupational therapy may report that the patient is more independent in self-care for example, than what nursing reports. The lack of value placed on the therapist's clinical opinion is demonstrated by disregard of their documentation on the patient chart:

Things like "This patient needs a reacher and this patient needs this" and it's like, "No, we assessed and the patient doesn't actually need that." And I think, again, it's that whole thing, like, well "go read our assessment. Go read what we said" [*Second interview*].

The caseload for a casual worker is another workplace constraint. Jennifer found it difficult to work on a unit for only one day, which often is the situation when providing coverage throughout the hospital for regular, full-time therapists. The constant change limited situational knowledge required to practice:

Because you feel like you don't get any farther ahead, you're not familiar with the caseload, you're there for a day, I feel the pressure like I don't want this therapist to think I'm totally really bad and don't get anything done for the day, but then you spend a good part of your day trying to figure out who, where, what? [*Initial interview*].

In one observation session, I observed how Jennifer initiated the activity of transferring a patient from the bed to a wheelchair with the physiotherapist [*Observation, March 19, 2008*]. However, the physiotherapist took the lead with the assistance of the nurse, in actually doing the transfer. When we discussed this afterwards Jennifer said if someone is more efficient and comfortable, she will stand back and allow them to do the activity. Jennifer stated that she was just getting comfortable with transferring patients with IV (intravenous) tubes and other medical equipment, and the different types of patient lifts, and then she was changed to another less acute unit. If she performed transfers more often and

had the assistance of an OTA she would have assumed control of the session. There is only one OTA in the hospital for approximately 16 full-time occupational therapists.

Physiotherapists typically have one assistant working with them so the therapists are able to assume a greater role in patient care. Jennifer felt that having more OTAs would not only help support occupational therapy practice but also raise the visibility of occupational therapy within the hospital [*Second interview*].

### ***Client-centredness as a Value and Norm of Practice***

I found that Jennifer is a gentle therapist who shows respect for her patients. She is caring and seeks to understand her patients' feelings and experiences. I found that she exemplifies the notion of enablement as used in the occupational therapy profession. She allows patients to make choices but also provides clear direction for them. She offers positive feedback and encouragement to her patients. She tries to allow her patients to do as much as they can for themselves.

On numerous occasions I observed how Jennifer gently discussed with a patient what they were going to do in the treatment session and how she would be there to help if a patient needed assistance. On one occasion, when observing a morning ADL assessment with a patient, I stood outside the shower area to respect the patient's privacy. I was able to hear the interaction between Jennifer and the patient. Jennifer provided directions, "stand and hold onto the grab-bar with one hand and use the face cloth to wash your legs." She also encouraged the patient to try tasks that the patient said she could not do: "I cannot dry my feet; the home care person does this." Jennifer told the patient: "I will show you a way that you can do it; just try." The patient agreed to try this approach and was successful.

In the second interview, her approach to client-centred practice is exemplified in the following excerpt:

And again, just, it's always learning that what's important for me to do in my job as an OT, isn't always important for the patient. And I think that's the, probably the most important thing to always be keeping a good perspective on the fact that, like, just because this is my job, it should never come across that way to a patient. And I think that that happens sometimes. Like they probably feel like they're just another check mark on your to-do list for the day.

### ***Jennifer's Recommendations***

When asked what can be done to facilitate the transition from university to practice, Jennifer suggested an orientation period in the workplace in which the beginning practitioner is able to observe an experienced therapist, and in turn, the therapist observes and mentors the beginning practitioner. She recommended that university education involve more practice with history-taking and simulated patient interviews and case studies. She also recommended opportunities to learn about and practice different methods of physical measurement such as range of motion, and formalized assessments. In the hospital context, she suggested that documentation pertaining to hospital and clinical procedures need to be accessible to occupational therapists. Assessment and treatment materials should be clearly located and available. The following quote highlights the contextual challenges facing a casual worker who is continually boundary-crossing between hospital units:

I guess just, I don't know, on a more practical sense when you're starting at a new hospital anyways, even if you're not a brand new grad, but, just to be informed of everything, like even things like ...where the cognitive assessments are kept, or where the extra foams are kept, or all of the sort of really practical stuff that if you are on your own and you weren't informed of that, you waste a lot of time trying to figure out and those are the things that I find kind of stressful. Like I have a million things to do and I am wasting my time doing this, you know. *[Initial interview]*.

Jennifer recommended a number of pedagogic practices to support day-to-day learning in practice. She felt that regular meetings with occupational therapy colleagues to consult with regarding patient diagnoses and the functional implications. This may be on a one-to-one basis regarding a specific patient or on a group basis involving the presentation of case studies:

I think it would be helpful to have regular meetings with three or four of you where you're just, or one or two, like, where you're just sort of sitting and saying, "Like this is what I did with this patient. Does this seem okay to you or what would you have done?" or, "This is a new diagnosis I saw" or that sort of thing. *[Second interview]*.

Jennifer also recommended regular meetings with the senior therapist in the hospital to obtain feedback on Jennifer's performance and to discuss professional practice issues or concerns. She emphasized that the time to meet with colleagues needs to be devoted to collaboration and not take away from scheduled time to see patients. This requires a shift in the norms or values concerning how therapists' clinical time is allocated. This shift would involve the entire activity system and specifically negotiation between the nurse manager who allocates professional resources and the DSL (OT) who is responsible for occupational therapy professional practice.

Another recommended support for learning involves observation of practice. Jennifer felt it would be helpful to have another occupational therapist observe her interactions with patients, and provide feedback on what she did well and identify areas for improvement. She would also like to observe an experienced therapist assess patients:

Right down to, like, the questions she'd ask and the physical handling of how she'd assess her [the patient's] range and her strength and right down to the intervention of what splint she would recommend. *[Second interview]*.

In her journal entry, she wrote that structured time devoted to learning from both experienced occupational therapists and physiotherapists was needed. She also recommended time and encouragement to attend courses and workshops. She found that geriatric educational rounds held at the hospital on various topics, were relevant to occupational therapy and valuable to her learning.

## **Elizabeth**

This narrative is based on 19.5 hours of observation with Elizabeth over a period of 6 months, two interviews (one held at the beginning of the research study and one at the 3.5 month of the field work), and a reflective journal entry. All of the observations were conducted at one hospital site. The majority of observations of Elizabeth's interactions with patients occurred in patients' rooms on different units in the hospital. One observation of therapist-patient interactions was held in the occupational therapy kitchen. Observation of team rounds occurred in the conference room on the ward.

## ***Patient Caseload***

At the time of the initial interview on January 7, 2008, Elizabeth had been practicing as an occupational therapist for 16 months. She had been employed in her current job at the hospital for 2 months. Initially she worked on different units at *Hospital B*, "it was 2 days here, 2 days there, 2 days there and I found that was difficult" [*Initial interview*]. She then moved to another hospital site for a brief period before beginning work at *Hospital A*. Changing units within a hospital and changing campuses required resituation of knowledge and adaptation to a new activity system comprising different patients, practitioners, activities and artifacts. Elizabeth explained:

[At the] Hospital B I had no idea, I didn't even know what floor I was on or anything. So it was totally overwhelming, but uhm, within a couple of weeks just by being there more regularly, and getting to know people, it was better. Uh, and then I moved over here, I think I was at Hospital B, then I went to (another site) and I think I was working for about a month, so I was just getting into the hang of things and then they asked me to come here. So again I was, "oh no, I'm nervous." *[Initial interview]*.

When I first met with Elizabeth at the beginning of January 2008, she was assigned primarily to the cardiac care unit and nephrology. Mid-January her caseload changed to the neurology unit, however she was also responsible for patients on the cardiac care, medical-surgical, and orthopedic units. She explained that she was supposed to be assigned to neurology for .9 of a full time equivalent (1.0 FTE) position, which she had hoped for. However due to staffing issues her work was divided among a number of units. She found that working on neurology was particularly challenging because she did not have clinical experience with the patient population. She also had the unique experience of sharing a patient caseload that was unfamiliar to her, with a new graduate. Both occupational therapists were trying to find a means to work together and collaborate regarding a shared patient caseload. Written discourse was the primary means of communication. They wrote notes to each other about the patients they had seen and their priorities for the next day. During one session, Elizabeth completed an initial screening with a patient and wanted to follow through with a bathing and dressing assessment the next day, however she would not be on the unit *[Observation, February 5, 2008]*. She therefore explained to the patient that her colleague would be seeing them tomorrow instead. The lack of continuity on the unit was a constraint to learning. Elizabeth found this work situation very stressful and difficult. Elizabeth shared that she came to work with "my heart beating so hard in my chest" because she was not comfortable with neurology and felt that she was unable to "do a good job" *[Observation February 5, 2008]*.

Managing the demands of changing contexts challenged Elizabeth. She desired an assignment to only one unit, neurology, because she needed and desired knowledge and skills in this area of practice [*Observation, February 5, 2008*]. After approximately 5 weeks she asked the Discipline-Specific Leader for Occupational Therapy, if she could remain on one unit rather than providing service to many different units. Elizabeth's request was approved and she worked for approximately 2 ½ months on neurology (.9 FTE) and on the Awaiting Placement Unit (.1 FTE). She then returned to the cardiac care unit and nephrology where I first met with her. Although she was now familiar with the patient population, this change in communities of practice required her to use skills that were not required with other caseloads.

It is not so much the change, because going back to nephro, [nephrology] maybe because I was there, maybe that is why it was easier because I had been there before. I did have to kind of figure that out again. I did kind of have to adjust back to cardiology and what I am dealing with here and what is important. I never took a heart rate in neuro, [neurology] but I take them every day here. Oxygen, you never did that, but you do that here. You know it is that kind of a thing, kind of switching it. [*Second interview*].

This excerpt highlights how an occupational therapist's everyday participation in social practice is required to develop and maintain skills. Each unit can be conceived of as a separate activity system, requiring Elizabeth to learn not only about patient care but also how to manage her time and prioritize patients [*Observation, April 15, 2008*].

Of the five occupational therapists in this study, Elizabeth was the only participant who openly expressed her anxiety regarding rotations. I think that this uneasiness was in part attributed to her desire to achieve, perform her work tasks knowledgeably, and demonstrate competence in practice.

## ***Experience of Transition***

At the time of the initial interview, Elizabeth had been working as an occupational therapist for 16 months. For the first 10 months of her career, Elizabeth worked for a private rehabilitation company providing occupational therapy to adult clients in their homes, and to children in the school system. Elizabeth then decided that she wanted to explore working in a hospital setting. The manager of the rehabilitation company allowed her a 3-month leave that enabled her to provide summer coverage working in a small acute care hospital. She returned briefly to community practice before being hired in her existing position at the end of October 2007. Elizabeth was hired as a casual worker and was working full-time at 37.5 hours per week. The following comment demonstrates Elizabeth's insight into her learning needs and the desire for support in the activities of practice:

I mean I really enjoyed the kids but I didn't have the same passion, I guess as I did for my adult caseload. I was glad I got to work with both because I was able to realize okay "well which days do I look forward to better?" And they both have their advantages and disadvantages for sure but I think at this time, at the time anyway, the community work was not what I wanted whether it was kids or adults, I really wasn't happy with that type of environment. So I knew at the time that I needed in order to be a better therapist in the community I needed some hospital experience. I needed to be surrounded by people to ask questions. *[Initial interview]*.

When working in the community she was able to call her manager or another therapist to ask questions, however she stated that often it would take a day or longer for the call to be returned. Elizabeth desired a timely solution to the problems she was grappling with. In the evenings after work she would try to find answers on the Internet, often without success. Elizabeth valued collaborative learning within the workplace context. In the following example the practice context is the patient's home:

You know, I didn't have that support, I mean I managed and like I did it. But every once in a while I'd end up in a home and the physiotherapist would also have made an appointment so we would do things together. So that was really good. But that was rare, very rare. And we would meet, every 2 months we would have a staff meeting or something and then I could talk to therapists then, so that was really good. But that was only every 2 months. So I would keep a list of things and by the time we got to it I had already resolved those issues. *[Initial interview]*.

Elizabeth described herself as very organized. She set up a home office and learned about the system of community practice on her own. She worked long hours, seeing patients in the school or home setting during the day. In the evening she would read over the information she had gathered, review what she had done with her patients that day, do paperwork, and prepare for the patients she would be seeing the next day. In the first few weeks Elizabeth discussed all of her patients with her manager to ensure that she was "on the right track but that was a chore trying to get her to meet with me to schedule. That was difficult but I had to" *[Initial interview]*.

When asked to reflect upon the transition from university to the world of work she described this experience as:

Crazy...I have no idea how I survived. I have no idea. Because it was learning to be a fresh new grad and then to be going into someone's home alone. Totally alone. And the thing is I was having to learn all the paperwork, because in the community, I am sure you know, like very specific, this is handed out on this day, this phone call is done on this day and tracking everything and so, I was given an orientation somewhat and was given a box with my caseload and a binder, like a manual and then it was like, "go." *[Initial interview]*.

In beginning practice, Elizabeth felt that university had prepared her well in knowing how to assess patients, gather information, and determine patients' needs, but practical knowledge and skills were missing:

Elizabeth: They did a really good job of teaching us like looking at someone and looking at the whole picture, they really reinforced you know client-centredness and considering all of the different things that come, so that was very clear. And then learning how to identify issues, they did a really good job of teaching us that and then addressing, you know, working out goals to address that and then evaluating. So that was all, like I could do that in my sleep.

Darene: Like in terms of an assessment and a treatment plan, you got that?

Elizabeth: Right, yah, when it came to a case study...But then when you actually went to work with somebody you can, I can identify any issue you want, do I know how to work with this, or do I know how to treat? Not necessarily, that's where I need help because that was missing. [*Initial interview*].

The above text highlights the challenge in developing ways of knowing for the workplace, taking subject-based knowledge from academic contexts to action contexts where an individual is required to apply and interpret knowledge (Steward, 1996). This involves the process of clinical reasoning in which occupational therapists analyze relevant information, identify the patients' strengths and limitations, develop recommendations for occupational therapy services and implement interventions (College of Occupational Therapists of Ontario, 2007).

Elizabeth felt that university prepared her for conducting research, writing papers and delivering presentations. This focus may be a feature of the Masters level program she completed. Her clinical fieldwork placements which were situated in different hospital environments (with the exception of one community setting), afforded her the opportunity to develop some practical hands-on skills.

Elizabeth learned through engagement in the activities of practice. The following text highlights the importance of learning about resources, procedures, and tools "employed and accumulated in the local activity" (Engeström, 2001, p. 137):

And then I think it was just every week once I started seeing similar people, like similar cases and it got a lot easier once I got comfortable, like I went to the vendors, and looked at the vendor, like the equipment that they had, got their catalogues. Once I had an idea where the clients would be going for equipment, what equipment was available and got more comfortable with the whole process, then it got easier and I could see more clients a day. So it probably took me about a month or two before I actually got up to my actual numbers. *[Initial interview]*.

Elizabeth's community-based experience helped prepare her to practice at the hospital.

She was able to build on her knowledge and skills in interviewing patients and applying assessment and treatment methods in a new context. When Elizabeth first began working at the River Valley Medical Centre, she found that the opportunity to dialogue with other occupational therapists was important in mediating the different demands between community and hospital settings. She stated that having access to the equipment and resources needed for practice readily available within the workplace context, was important to her learning (such as bathroom equipment which was needed to carry out a shower assessment with a patient, different mobility equipment and seating accessories which were needed to prescribe a wheelchair for a patient). In addition, templates and guidelines for clinical documentation such as patient assessment forms were important artifacts for learning.

### ***Personal Agency in Learning***

Elizabeth's primary mediational means for learning was by asking questions and observing others. Immediacy of support appeared to be critical to Elizabeth's learning. She did not hesitate to page an occupational therapy colleague or another member of the health care team when she needed help or when she wanted to discuss a patient. Elizabeth learned practical information from the occupational therapy assistant (OTA). This often concerned

different types of equipment for patients such as wheelchairs, cushions, and assistive devices such as a splint for the hand:

I usually have an idea, like a broad idea about what has to happen with this person. Like for whatever the problem is, and then I go to [the OTA] and give the idea that I think, may happen but I need him to break it down, and tell me “okay this is what worked in the past; this is how you do it.” [*Second interview*].

This excerpt illustrates how talking out loud “in collaboration with more capable peers” can assist in problem-solving” (Vygotsky, 1978, p. 86). While Elizabeth had a general concept of what was needed for a patient, she sometimes needed assistance to go to the next step and identify potential solutions.

A unique aspect of how Elizabeth learned involved sharing her thinking out loud and describing what she was doing and the reason behind her actions. Self-talk was a valued form of mediation for Elizabeth. She was the only participant that I met with, who talked herself through activities. For example she would express, “Now I am going to chart and prepare for rounds,” “What should I look for with seating right now? My goal for the patient is comfort” [*Observation, February 5, 2008*]. Elizabeth typically began our observation session by providing a summary of the patients’ we were going to see that day. Talking out loud helped her to plan her day and to identify patient priorities. It was an important means to clarify patient goals, confirm her clinical reasoning, and identify a course of action with a patient. This intermental dialogue helped Elizabeth learn “how to interpret a problem embedded within” the practice context and to know how to act on a problem (Edwards, 2005, p. 172).

When a case is tricky it helps me to talk it over out loud with another OT or another team member. I sometimes ask myself what another OT would do on another unit and it helps me to plan. [*Journal entry*].

Similar to the other occupational therapists in this study, Elizabeth learned through engagement in the everyday activities of practice. During one observation session Elizabeth mentioned that she had recently prescribed and fitted a number of wheelchairs for patients. I asked her if she was becoming more comfortable with wheelchair seating and she replied yes, “just by doing it and problem-solving” [*Observation, March 27, 2008*]. When possible, she preferred to obtain a wheelchair and other equipment by herself, rather than asking the OTA for help: “I find it helps my learning to trial different things on my own” [*Journal entry*]. On another occasion, she commented that she was becoming comfortable with the different nephrology terms and diagnoses, and cardiac conditions because of her day-to-day work in these clinical areas [*Observation June 18, 2008*]. This illustrates how “immersion in a language community” (Edwards, 2005, p. 61) where medical terms are heard and used on an interpersonal plane, are then appropriated by the occupational therapist (the intrapersonal plane). The meaning of concepts carried in medical discourse is learned through the use of language in everyday practice.

It seems that the majority of patients on the nephrology and cardiac care units were referred to a physiotherapist, who assessed a patient and then often determined a need for occupational therapy. The physiotherapist would then request a referral from the physician for occupational therapy [*Observation, January 14, 2008*]. This is an example of collaboration to enhance client care through the identification and provision of needed treatment. Elizabeth described the value of working with the physiotherapist and other members of the team:

Like I'm very fortunate on my unit that people value OT and they understand it which is not the case in other units. So physio and I work really well together so we have that, it's totally, we are totally a team, I feel. And the nurses come to us for things and the doctors come to us for things, they really understand it and I'm very happy, very happy. *[Initial interview]*.

The social worker was another valued support for Elizabeth's learning. Spontaneous interaction occurred with the social worker at the nurses' station and on the ward. During one observation, Elizabeth reviewed two of the patients she was seeing with the social worker, who in turn, asked about the patients' discharge plans *[Observation, April 15, 2008]*. The social worker had not been able to see the patients due to time constraints. On another occasion, Elizabeth and another social worker saw a patient together in the sunroom on the unit *[Observation, February 22, 2008]*. While the social worker focused on the aspect of finances and readiness to return to work, Elizabeth focused on the patient's roles at home, ability to drive, and cognitive status. Although the two health professionals focused on different areas of patient concern, the knowledge gained through this collaborative interaction advances both professionals' thinking about a patient. For Elizabeth, the opportunity to work "alongside others" observing, listening, and participating, is a valued way of learning practice (Eraut, 2004, p. 266).

There were a number of situations in which I observed that Elizabeth seemed to prefer to wait for the physiotherapist to get a patient out of bed and transfer them to a wheelchair. During one observation Elizabeth saw a patient who had recently sustained a stroke *[Observation, March 27, 2008]*. Elizabeth explained to the patient that she wanted to take his hip measurement to be able to get him up in a wheelchair; the patient was not cognitively responsive. The nurse at the bedside informed Elizabeth that the patient was very sleepy and was restrained because he had been trying to pull out his naso-gastric tube. Elizabeth said she

would wait to get the patient up tomorrow and would do this with the physiotherapist. In her journal entry, Elizabeth described how she learned practical skills from the physiotherapist:

I was able to learn a lot by doing joint assessments with the physio. Things like how to move the IV tubing and poles, how to work the bed, where to position the chairs, how/when to contact the nurses are all things that I observed. [*Journal entry*].

While it seemed that Elizabeth often waited for direction from physiotherapy regarding a patient's transfers and mobility, I do not think this was because of a power differential between the professions. Rather, confidence in this aspect of Elizabeth's clinical skills was enhanced with the physiotherapist present. Elizabeth emphasized that she worked collaboratively with the physiotherapist and I noted their collegial relationship.

Interaction with physicians is noticeably infrequent on the unit, with the exception of team rounds. I observed one of these meetings in nephrology [*Observation, April 24, 2008*]. A social worker, dietitian, physiotherapist, pharmacist, physician, resident (Fellow), nurse administrator, ward nurses and Elizabeth were in attendance at the meeting. The physician led the meeting and referred to the resident for a report on the patients' medical status. The physicians and nurses contributed to the majority of the interaction in the team rounds. The physiotherapist and physicians discussed the medical aspects of patient care. The physiotherapist also advised the team regarding patients' readiness for discharge. Occupational therapy reported on one patient's status in self-care. Team rounds revealed the division of labor among team members, as well as notions of power and workplace hierarchies. The emphasis on remedying the patient's medical problem constrains the occupational therapist's participation. The occupational therapist is concerned with the patient's ability to do what is important to them and prepare them for a safe and independent

discharge home. This is in contrast to the other team members' discussion of bodily systems, organs, dialysis schedules, and medication. In addition, not all patients on the unit are referred to occupational therapy whereas the other team members see them. Therefore, the occupational therapist is not familiar with a number of patients who are discussed at the meeting and cannot contribute to the dialogue. This is an example of a constraint created by a conflict between a medical paradigm and an occupational paradigm (Wilding & Whiteford, 2007).

What do beginning therapists learn through team rounds? Elizabeth identified that although she may have been able to report on only a few patients, she found that by attending rounds she was able to identify patients that could benefit from occupational therapy. After attending nephrology rounds she shared that she left the meeting with 4 new referrals [*Observation, April 24, 2008*]. Therefore participation in this team activity is important in raising awareness of the need for, and contribution of occupational therapy to patient care. The interprofessional dialogue was also a means to learn about patients' status, the actions and roles of other team members involved with a patient, and priorities for treatment.

On the neurology unit, Elizabeth had the opportunity to discuss patients with, and receive guidance from, an experienced occupational therapist. The therapist specialized in working with patients who had a stroke, while Elizabeth's caseload involved other neurological conditions. During one observation session, Elizabeth met with the therapist in the hospital corridor and reviewed what had occurred in team rounds that morning. They discussed who would be responsible for each patient and then agreed to meet the next day to determine priorities for discharge [*Observation, February 22, 2008*].

Elizabeth also sought the advice of experienced occupational therapists when faced with a complex patient problem, or a situation in which she did not have the knowledge or skill required. During one observation session, Elizabeth was unsure about what type of wheelchair to prescribe for a patient who was obese. She wanted to ensure that she recommended the right wheelchair, so she planned on consulting with a fellow occupational therapist in the hospital that specializes in bariatrics [*Observation, February 22, 2008*]. Over the months of practice, she gained knowledge of who to go to for help. “So, before I would kind of be jumping around, but I know if it is a bariatric patient, I should just go to Susan because she knows” [*Second interview*].

In my field notes, I wrote about incidences in which I felt I had provided support for Elizabeth’s learning. Most often, this consisted of asking her questions about a patient or her actions to help her reflect and problem-solve. For example, when Elizabeth and I met with a patient who had multiple sclerosis, I asked a few questions to help Elizabeth problem-solve their equipment needs. Did the patient need a lightweight wheelchair because of fatigue due to their medical condition? Was the patient eligible for home care? Did the patient require rehabilitation or nursing services at home? These questions are based on my knowledge of the home care system and the rules governing equipment eligibility. Elizabeth then proceeded to consult with the social worker to determine if the patient qualified for any type of funding support and whether they could obtain a wheelchair rental through home care. The social worker was aware of the community system and suggested home care physiotherapy, thereby allowing the patient to qualify for a wheelchair [*Observation, March 27, 2008*]. This interaction also illustrates the concept of boundary-crossing which is

involved in making arrangements for patients' needs. Elizabeth learned how to mediate the hospital and community systems for effective patient care.

Elizabeth found a means to negotiate and challenge the constraints within the hospital system. In the following example she exercised personal agency in informing a physician that she had seen a patient and documented her assessment. Elizabeth and a social worker were reviewing a few patients they had in common, while seated together at the nurses' station. Elizabeth mentioned to the social worker that she found it very difficult when physicians re-refer the same patient to occupational therapy. Elizabeth received a second referral for the same patient yesterday and called the physician to tell him about the error. The physician acknowledged that he did not read Elizabeth's note and apologized for the second referral. Elizabeth shared that this situation was very frustrating because it felt like her work was not valued. The social worker was surprised that Elizabeth called the physician about the re-referral. The social worker stated "I just tear it up when that happens to me." Elizabeth said, "I called because I wanted him to know that I am doing my job" *[Observation, June 18, 2008]*. I think this example illustrates Elizabeth's ability to exercise power and to negotiate the medical hierarchy. It was important to her that the physician knew that as a fellow member of the team, she was responsible and professional.

Similarly, in the second interview, Elizabeth's confidence and assertiveness are illustrated in her discussion of last minute referrals to occupational therapy. Elizabeth described how she was often consulted at noon on a Friday to see a patient who would be discharged that afternoon. She determined if she had time to see the person and if it would be of benefit, based on reading the chart and talking with team members. However, similar to

Emma's experience, Elizabeth highlighted how the results of her assessment may prolong a discharge plan:

I could be the OT that says; well no you didn't consult me soon enough, I don't have the time and I am not going to see them... I think that there is probably controversy, like people would disagree on that, what they would do, and sometimes I do get frustrated when it is like "if I do pick up a problem: are you willing to keep them in the hospital. If not, then why are you asking?" you know. That gets me upset sometimes. [*Second interview*].

For Elizabeth, a conflict arose between the pressure of the hospital to discharge patients and the occupational therapist's clinical opinion to postpone discharge. Recognition of the value of occupational therapy's role in patient care, and respect for the therapist's contribution were important components in this activity system. Collaboration with physicians was particularly critical because they control occupational therapy's participation by referring or not referring a patient. In the following excerpt Elizabeth described how physicians often consulted only with physiotherapy regarding a patient's readiness for discharge.

I don't know why that is, I think maybe they are just not familiar with our role and what we do or whichever. Those that have worked closely with an OT will usually write OT, PT/OT, social work, or they will write specifically OT this or that or whatever. [*Second interview*].

Elizabeth demonstrated awareness of her learning needs. I believe that this encouraged her to participate in the various affordances offered in the hospital setting. In her previous job, she did not have access to many of the mediational means available at River Valley Medical Centre including various artifacts required for clinical practice and support of experienced occupational therapists and other health professionals. She explained:

At some time in my career I may choose to go back in the community, but only after I have that experience you know. Because I didn't think it was fair to the client to go in and do an assessment when I really, I wasn't really sure if that was the best option, you know, and so... So I really think it is better to gain more experience. Obviously there's going to be times where you are in a situation and you are not sure and you have to problem solve and figure out but, I think if you can get more support at the beginning, you have to. [*Initial interview*].

Elizabeth recognized that her competence and clinical decision-making influenced client care. The above excerpt illustrates an awareness of her professional responsibilities and the regulatory requirements for practice.

Elizabeth's personal agency in knowledge construction was observed in her ability to seek assistance from other health professionals. She had the confidence to engage in, and initiate clinical activities and ask questions. She developed affiliations with colleagues who were primary supports for her learning, primarily physiotherapists and social workers. She desired to work collaboratively and was comfortable interacting with members of the health care team.

### ***Space for Learning***

The occupational therapy kitchen, bathroom assessment area, equipment/workshop, and staff offices were located on a somewhat isolated floor of the hospital. I frequently observed that these different rooms were a physical space for learning. Occupational therapists would pass each other in the corridor and share stories about their patients in an effort to problem-solve or seek another therapist's opinion. In the staff office spontaneous dialogue and interactions occurred among therapists. This was an important learning support for Elizabeth:

Elizabeth: We meet up, we have lunch all the time altogether, so you know.

Darene: That's good, that's probably a lot of information sharing.

Elizabeth: Yah, oh totally...And in our offices, I don't necessarily talk about it at lunch because that's our break but you know, in the office, because of the way we are set up, like I would say probably every single day I ask a question about something, of a general nature, you know. I'm not freaking out about it, I'm just more like "mmmm, what do you think about?" Or complaining about something but it is just to let it out. And then you hear someone say, "Oh yah, totally, I agree, you know." *[Initial interview]*.

Interprofessional collaboration was another important form of mediation for learning.

Elizabeth was able to readily share her assessment results and clinical impressions with other members of the team because of the physical space afforded for collaboration, notably the ward (unit) and the nurses' station. Elizabeth explained that she worked closely with the physiotherapist on the unit. On one occasion, Elizabeth met the physiotherapist who was on her way to see a patient in the cardiac care unit. Elizabeth suggested that they see the patient together. I observed while the physiotherapist performed a screening of the patient's strength and range of motion. Elizabeth and the physiotherapist then proceeded to walk with the patient for a short distance on the unit to observe the patient's mobility. When the physiotherapist left, Elizabeth talked with the patient about occupational therapy's role and domain of concern. The patient told Elizabeth that she would like to try bathing and Elizabeth assisted the patient with this activity *[Observation, June 25, 2008]*. This example illustrates the importance of being present on the unit and how this afforded the spontaneity of occupational therapy and physiotherapy seeing patients collaboratively. This also highlights the need for the occupational therapist to be very flexible in her work schedule. This flexibility is also illustrated in the following journal entry in which Elizabeth described how she learned about planning from "poor planning experiences," in which she did not prioritize patients correctly:

I'd see the people who were staying in hospital for weeks and then miss the ones going home that afternoon. I quickly learned the importance of checking with the team (if possible) to help with planning for the day. I also learned that I need to be flexible with my planning. Some days you get last minute referrals and you need to re-organize your day. *[Journal entry]*.

Elizabeth was comfortable sharing her observations and actions with physiotherapists and social workers. Members of the health care team also sought her clinical impressions and feedback, which she noted as a change in her personal development since beginning to practice at the hospital:

I find I am very able to defend my findings and suggestions and really advocate for OT and for myself. Some days I do this better than others but for the most part I feel like people hear me and generally see my side. I notice this by having other team members coming to ask me questions about patients. I also find new OTs and new PTs also coming to ask me questions, which really shows me how far I've come!! *[Journal entry]*.

In the second interview, she described a situation in which she had recommended a geriatric patient for further assessment. Her recommendation was initially refused by the team and then supported. Elizabeth felt confused and discussed this case with her colleagues:

So I need to like be able to sit down with the social worker and physio and be like "Okay, am I crazy? This is what I was thinking; this is the clinical reasoning why I recommended this in the first place. They were refused on these grounds and now they are accepted." So those times where I really get to sit down and then validate my reasoning and go through it with somebody, and speak out loud about it. *[Second interview]*.

This dialogue provided a means of validation of Elizabeth's clinical reasoning process and was an important support for her learning.

### ***Patient Stories in Teaching and Learning***

The availability, eligibility and processes for obtaining support services and resources are unique to each community. As noted above, Elizabeth learned about different aspects of the health and social system from other health professionals. Patients also have a role in

teaching Elizabeth about how the system works and this often concerned the types of assistive devices that they have, how these were obtained, and related funding mechanisms. In the following example, Elizabeth engaged a patient in a dialogue about their home. She sought information about how the patient used the assistive devices and identified potential safety issues for discharge.

Sometimes they are like “no I just went to Wal-Mart and bought the [grab-bar] bar and my son put it in.” And I’m like how do you know that’s the right spot or how is that working for you? Are you able to use it right? Those kinds of things I think is really interesting or especially when they come in and they’ve had a ramp installed, and you know, a lift installed and the government paid for it and so I go “which program paid for this?” [*Initial interview*].

Patients helped to construct their medical history by talking about their previous experiences with health care providers and the hospital system. For example, Elizabeth learned what type of interventions were effective: “If they can recall previous admissions and what happened last time, I mean it is helpful to know what worked out best, this worked out well last time” [*Second interview*].

During one of my initial observations sessions with Elizabeth I noted that it was the first time in my data collection that I observed a participant ask a patient about what they used to do in terms of their paid work and leisure. The older woman talked in depth about her job prior to retirement and her hobbies of fishing, painting and crochet. She described her efforts to take care of herself, as well as her husband who was also quite ill. The patient’s narrative provided insight into her life revealing not only her valued occupations, caregiver and creative roles, but also her determination and initiative [*Observation, January 14, 2008*]. Elizabeth had a broad occupational perspective to her interactions with patients. She focused on a person’s experience of occupational disruption and change, as well as their valued roles.

When I asked Elizabeth about occupational therapy's unique contribution to the medical chart, she felt it was the emphasis on the person:

The chart is full of all these terminology, medical things, temperatures, numbers, blah blah blah. And then you finally come to ours, even physio has a small little section about the person, and the rest is all [physical]. I mean they have things about the person, the physical person; it doesn't have the issues about the social and all the other things. So our thing is finally like, "okay who is this Mr. X in this bed, sick? Okay well someone who lives alone, lives with their wife, etc." so that I think is really nice. [*Second interview*].

This excerpt highlights Elizabeth's client-centred approach, which Sumsion (2006b) suggests involves "a way of thinking and a different attitude" (p. 4). Elizabeth identified the need to understand who the patient is, where they are from, their situation, and their ideas about their illness and function.

Patients taught Elizabeth about their desires and choices regarding their care. In the initial interview I asked her about what role clients play in our learning. She responded:

Elizabeth: A lot, a lot, because you can go in with you know, a preconceived notion of how this is gonna go. It is probably going to go this way because you've read the chart but until you go and talk to them and realize what do they want? ...like this particular gentleman, we went in and here he is doing all these things, pretty independently or with supervision whichever, so both OT, or physio and myself, are like okay so this, let's set him up with this and put everything to help him be more independent so we can help him get back to the retirement home. You go to talk to him and he's like "I don't want to go back there. It's too much, I'm too much for my wife" and so he had made it, he was cognitively in touch, quite bright, and he had just decided for himself it was too much because he is having fluctuations. [*Initial interview*].

This illustrates how the patient's decision challenges the health professionals' assumptions regarding discharge planning. Elizabeth expressed that this interaction reminded her of the need to be cognizant of client-centred practice in which the autonomy of individuals is respected as well as "the need for client choice in making decisions about occupational needs" (Law, Baptiste, & Mills, 1995, p. 253).

During one observation in the cardiac care unit we met with a gentleman in his eighties [Observation, April 24, 2008]. Elizabeth asked the patient what his goals were and he replied, “to go home.” Then he said “I need to know. I have 3 problems; lungs, heart and blood in my stool. How much breath do I have left? 3 months, 1 year, 2 years, I am getting near the end of my breath.” I was so moved by what he said. He was asking to be informed and to be included in decisions regarding his care. He found that staff was “always changing” and he did not have a clear answer. Elizabeth reassured him and told him that she also wanted to know about his medical status and plans for his care. She planned to return to see him later in the day with some information for him. She said she would focus on the activities he needed to perform to allow him to return home. This example illustrates collaboration between the patient and the occupational therapist in defining the goals of intervention and the desired outcomes.

Client-centredness was a norm of practice for Elizabeth. She was often dealing with patients who were very ill and who were discouraged about their situation. On a number of occasions, I observed Elizabeth stopping by a patient’s room to see how they were doing, although they were medically unable to participate in therapy. She said sometimes she did not know what to say to a patient, but felt that checking in on them and telling them that she wanted them to be comfortable, was important. Elizabeth’s communication skills were very sensitive and caring [Observation, June 18, 2008].

Patients determine their desire to participate in occupational therapy. During one observation session, Elizabeth went to see an older gentleman whose health was deteriorating and who was depressed [Observation, June 18, 2008]. He was lying in bed. Elizabeth asked him if he wanted to sit up in bed and she would help him bathe. He replied that he would do

whatever she wanted. She gently stated, “I want you to be comfortable. You do not need to do what I want. I only want to encourage you to participate.” She then asked the patient if he wanted to be left alone and he nodded his head in agreement. She asked him if she could come back later and he agreed. Following this interaction, Elizabeth said to me, “Having a patient agree to do what you want them to do, is not consent.” She stated that she had recently seen a number of patients on the ward who were depressed. Through participation in practice and everyday interaction with patients, Elizabeth learned how and when to provide patients with autonomy and choice. This example also illustrates the importance of obtaining patients’ consent prior to initiating treatment, a requirement of occupational therapy practice.

Patients also taught Elizabeth how they coped with their illness. Elizabeth saw an older woman who had been recently re-admitted to hospital due to a cardiac condition [Observation, April 15, 2008]. The patient shared with Elizabeth that although she knew she had to take it easy when she went home, she had overdone it and had to be re-admitted. The patient expressed that she was tired of being in hospital and knew that she had to make some adjustments at home. This story helped determine Elizabeth’s actions regarding the patient’s care. Elizabeth arranged for home care occupational therapy and personal support services for the patient upon discharge.

### ***Learning from the Patient Chart***

In my first observation with Elizabeth, she emphasized the importance of the patient chart, and the occupational therapists’ responsibility for documentation [Observation, January 14, 2008]. She explained the process for obtaining an occupational therapy referral, various aspects of the chart including the occupational therapy assessment form, and progress notes. Similar to Jennifer and Emma, she read the chart prior to seeing a patient.

She looked for the physiotherapist's initial evaluation, as this information was helpful to her own assessment, notably to learn about the patient's function in mobility. I observed that a great deal of the information for the occupational therapy assessment was derived from other health professionals' notes. This may be done as a means to save time as different members of the medical team often ask patients similar questions. Although the questions may be similar, I think that they are asked with a different cultural lens. The question posed to a patient by a physiotherapist; "How many steps are at the front entrance to your home?" may indicate the level of mobility a patient requires for discharge. The question is framed to address the domain of concern for physiotherapy. The same question asked by an occupational therapist may be expounded with notions of accessibility, transportation, snow clearing for safety, and the activity of carrying groceries while ascending stairs and using a cane. These are the occupational aspects of daily life that the patient needs to perform upon discharge, which is the domain of concern for occupational therapy. The act of extracting information from the patient chart involves making decisions about what is relevant to the occupational therapist's assessment. In turn, documenting clinical impressions and a course of action is a means to communicate to others the unique contribution of occupational therapy to the patient record.

Elizabeth was very conscientious about documenting on the patient chart and often expressed that she needed to write about her evaluations or interventions with patients as soon as possible. Sometimes our observation sessions would end earlier than scheduled, to allow her time for documentation. During the sessions, she entered her notes on the patient chart, and wrote some of the same information on the Kardex and also a clipboard which she carried with her everywhere. The clipboard contained her "to-do" list in which she recorded

notes and reminders on each patient, such as “get cushion, find wheelchair for patient.” She crossed off each activity when completed. This form of mediation along with thinking aloud helped Elizabeth to prioritize patients’ needs, organize her day and guide her activities of practice.

Medical terminology is a unique form of discourse. Knowledge of this discourse is necessary to understand the narrative of the chart including patients’ histories, what tests have been done and their meaning, as well as how the diagnosis will affect patients’ function in the occupations of life. I observed that Elizabeth was unfamiliar with some of the abbreviations in the chart. She learned medical terms and diagnoses through team meetings and daily interactions with colleagues. Medical abbreviations and acronyms are a unique form of language in the community of practice and there is not a formal means to learn this discourse.

When reviewing the patient chart, Elizabeth assigned a priority to the goals she identified for a patient. Patient referrals are activated by the occupational therapist according to the River Valley Medical Centre occupational therapy prioritization protocol. This guideline document serves as a rule and norm of practice within the acute care setting. Patients are assigned a priority on a scale of 1 to 4. At a level 1 the referral requires immediate action because patients are at risk for aggravation or deterioration of their medical condition. At a level 4, patients are medically unstable or have a chronic condition and not deemed appropriate for acute care occupational therapy, or their needs can best be met through alternative services such as rehabilitation or community support (Gauthier, Straathof, & Wright, 2006).

In the second interview, Elizabeth described how the patient chart helps her to identify when to intervene with a patient:

It is a really good tool to follow through and to see what is going on, and whether I have to see them. After I have assessed them and they are waiting for their next plan or whichever, to refer to the chart to see how things are going, and how are they progressing. That is really good that way, to know when I need to step it up and figure out okay now this person is ready to go or things have changed.

The chart provided “a running log of the patient’s care” (Hobbs, 2007, p. 41) including team member’s observations and actions. It was therefore an important mediational tool for communication among members of the health care team.

### ***Elizabeth’s Recommendations***

Elizabeth felt that time allocated to meet with experienced occupational therapists on a weekly basis would not only benefit new practitioners but also those that are new to the hospital setting. An opportunity to discuss patients would provide the desired reassurance and validation that her decisions and actions are appropriate. Elizabeth also emphasized the importance of obtaining feedback on her interactions with patients and other members of the health care team. Similar to Jennifer, she felt that observation of her practice would be helpful and she desired a performance review:

I haven’t been observed working with anybody yet. And you know, that is surprising because I feel like you should see what I do. It is just lack of staff, it is lack of resources or whatever. I think as much as we don’t like being watched, it would be good to get that feedback; or to come and ask my co-workers, “are things going well, what do you think, what are some suggestions?” [*Second interview*].

As discussed, the patient chart was an important mediational tool for learning and advocating for occupational therapy. Elizabeth felt that a review of medical documentation

and clear expectations for occupational therapists' charting would facilitate day-to-day practice [*Second interview*].

Finally, she desired the opportunity to attend courses, and suggested that those offered at the hospital such as medical rounds on the lunch hour, would be more accessible. Her status as a casual worker remained a constraint because she was not paid for her time to attend courses.

## **Emma**

This narrative is based on 23.25 hours of observation with Emma over a period of 7 months, two interviews (one held at the beginning of the research study and one at the beginning of the sixth month of field work), and five reflective journal entries. The observations were conducted primarily at one hospital site, *Hospital A*. The majority of the observations of Emma's interactions with patients occurred in patients' rooms on different units in the hospital. Sometimes observations occurred in the occupational therapy department where patients were brought to evaluate their needs regarding different types of assistive devices and equipment.

## ***Patient Caseload***

At the time of the initial interview October 30, 2007, Emma had been practicing as an occupational therapist for 4.5 months. For the majority of the data collection period Emma was assigned to the orthopedic unit and to psychiatry at *Hospital A*. The orthopedic unit also serves medical-surgical patients and 'off-service patients', which describe patients who are awaiting a bed on another unit such as oncology or neurology. The majority of the on-site observations were conducted on the orthopedic unit and one observation was held in

psychiatry. At the beginning of the last month of the study, Emma was offered a permanent position at a Joint Replacement Clinic at *Hospital C*. One observation was held at this clinic.

For her initial weeks of practice Emma did not have consistency in the location of her work or type of caseload. She worked at both *Hospital A* and *Hospital B*, on “a different floor almost every day working for a different service” [*Initial interview*]. She therefore had an opportunity to work on the medicine, neurology, thoracics, general surgery, inpatient psychiatry and intensive care units. The longest period of time, 2-3 weeks, was spent working on the orthopedics unit at *Hospital A*. As a casual worker, Emma was responsible for covering other occupational therapists’ caseloads. “I share their patients, but they are kind of primary therapists and I work one or two days for them” [*Initial interview*].

She described her role in acute care as involving primarily assessment and discharge planning. The emphasis was on preparing patients for discharge from the hospital and ensuring their safety in daily activities to enable them to return home. There was minimal treatment in this context, however proper positioning, seating, and splinting were priorities to prevent deterioration in function or aggravation of a patient’s medical condition. On average Emma met with a patient 2 or 3 times, with the exception of neurology, where patients may have been seen a couple of times a week and may have been hospitalized for months waiting for transfer to a rehabilitation setting or placement at a care facility such as a seniors’ residence. Emma found that the pace of work was fast, but she enjoyed it.

## ***Experience of Transition***

She began working at *Hospital A* on June 11, 2007 a few weeks following her graduation. She was offered a position in private practice in the area of acquired brain injury. She did not accept the job because she felt she would not have the support she desired in the community:

I had [a] private practice [position] with acquired brain injury that I actually got after I got this when I was offered the job and in hindsight, but even when I was applying I thought, girl, you must be setting yourself up for failure because the population that you are working with is quite involved and there is not the support. *[Initial interview]*.

Emma had some previous acute care experience during one of her clinical fieldwork placements, which comprised an inpatient orthopedics caseload in a general hospital setting. She also had fieldwork experience in paediatric rehabilitation, an adolescent community-based program, and private practice.

Emma received a one-day orientation to the hospital, which she described as corporate training which addressed the functions of the hospital, confidentiality, fire codes, and various aspects of being an employee of the hospital. It appears that the emphasis in the orientation was on the operational aspects of the system, rather than the activities of clinical practice. When Emma was at *Hospital B*, she was able to follow a couple of occupational therapists for a brief period of time in which she observed a few patient assessments, and learned about the patient record and how to chart. She stated that the majority of her orientation to practice came from accompanying the OTA. She learned the location of rehabilitation equipment and became acquainted with the different units in the hospital.

I was amazed at Emma's comfort in being able to adapt to the unpredictable nature of her work. When she first started work at the hospital she was constantly changing units and

campuses. She needed to quickly learn about complex patient problems, members of the health care team with whom to consult, the location of the equipment and tools for practice, and the unit procedures. She was continually boundary-crossing to different communities of practice. Emma adjusted to this type of work. Emma acknowledged that she was surprised to discover that she was more independent than she thought. The ability to not be afraid to ask questions enabled her to perform her work tasks and made the transition from school to work “smoother” than she expected. Her familiarity in orthopedics from her clinical fieldwork experience also facilitated the entry to practice:

I understood how acute care worked and prioritizing caseloads so I think that was probably the biggest strength that I brought because I was the most familiar with that. *[Initial interview]*.

She described herself as someone who does not like change, yet in this setting, she was in a constant state of change. She did not think she was able to deal with high stress situations, however she appeared to demonstrate self-efficacy, “a person’s perception of their capabilities within specific situations and activities” (Cheal & Clemson, 2004, p. 81). This definition highlights the importance of the social context of learning. Through engagement in activities within this particular acute care hospital setting, Emma’s belief in her ability to work independently, flourished.

The transition from school to work was also made easier by having the support of other occupational therapists. This support did not manifest itself as hands-on demonstration or observation, but the emotional support and shared understanding of both younger and older staff, who could relate to Emma’s experience of beginning to practice:

So there's been a lot of support, no matter what... Yes, even if it wasn't hands-on, it wasn't actually helping me, it was more recognizing what I was going through, so it wasn't helping me to necessarily get over it but knowing that they were being supportive emotionally, I guess. *[Initial interview]*.

She identified that she felt she had managed the transition and coped with it better than she anticipated:

I think it was smoother in the sense that I managed with all the things that I was so unfamiliar with, like IVs, I didn't feel familiar with a lot of things like I never even worked with a foot drop splint. I had never seen most, I'd never done a wheelchair setup myself. So there was a lot of things I had never done. I had never done their initial assessment, so most of the stuff I felt that I hadn't done, but I guess I felt that I managed with it and coped with it better than I ever anticipated. *[Initial interview]*.

Emma described that she was initially apprehensive to walk into a patient's room and introduce herself when other professionals were present. She was fearful of not knowing how to work with a patient and what to expect in terms of their level of function and ability. The theoretical diagnosis and medical information on the chart does not translate into the practical situation-at-hand. It takes time to learn clinical knowledge and skills, build up confidence to present oneself as an occupational therapist and identify your role to a patient. Emma stated that over time, she developed more confidence and initiative. This was demonstrated for example, in her ability to page a nurse and ask them questions about a patient, "not hesitating and realizing that that's my right to ask them" *[Second interview]*.

In beginning practice, she did not feel prepared for working in a large hospital. She did not know the type of resources available within the hospital and community, how to navigate her way around the different floors and units, how labor was divided among members of the health care team, and how to document on the patient chart. Each unit within the hospital is a separate activity system. Although certain aspects of practice are shared such as patient care and hospital norms and rules, the performance of clinical activities, the members of the health care team (community) and the nature of their involvement, change depending on the

unit. In the second interview, she shared that the rotation to different units increased her confidence. She had gained contextual experience in the various systems throughout the hospital, which she felt would be an asset when she applied for full-time status [*Second interview*].

Emma's challenges in beginning practice pertained to skill and knowledge with a specific client population and knowing what to do with the patient:

I think one of the hardest ones, I started working in neurology at the end of the summer and I think I still don't feel that my clinical skills are quite there, like my understanding, I don't have a lot of experience with that population, I never had any experience before going in so it's just learning and I mean, I haven't even really had a patient who was really, really spastic and I don't know if I would know what to do with them or feel comfortable moving them and knowing what was okay to do with them and stuff. And so that's still an area sometimes that I find quite stressful particularly because I feel that my knowledge of what they are going through and what I should be doing with them is not there. [*Initial interview*].

Emma was comfortable with the more typical cases, however when faced with more complex or complicated patient problems, she experienced difficulty. For example, she felt able to complete a cognitive screen (assessment) with a patient because she had access to the resource manuals on how to administer tests. However, if a patient required treatment or intervention such as a cognitive re-training program, she was not comfortable with this aspect of occupational therapy practice [*Initial interview*]. A standardized assessment is a mediational tool to guide the therapist, however it does not provide a means to conceptualize and manage a patient's multiple, complex needs in a non-linear fashion.

Emma identified that she was unprepared for some of the practical, hands-on aspects of occupational therapy, such as how to assess a patient's ability to bathe or shower, how to

teach patients different types of transfers, and how to assess a patient's function in meal preparation activities:

I mean I had never even done a shower assessment, prior to coming to work here and so it was how exactly do you go about doing a shower assessment and where are the things that I need to do a shower assessment and really making sure the first time you do it, you want to be sure that everything is safe. *[Initial interview]*.

Emma stated that beyond the initial training, there was little opportunity to work alongside another occupational therapist. This was attributed to limited time because of busy patient caseloads:

Emma: Like I can ask, but it's getting that hands-on, like what would I do specifically or I remember that the therapist that I'm working with, she said "oh do you want to set up a cognitive re-training program that the OTA can follow through with?" and I had no idea really what that would consist of, so I asked her, but still have never done it yet and wouldn't be overly comfortable the first time that I did that.

Darene: But would she be able to help you with that or?

Emma: It would be guiding, I mean it wouldn't be hands-on again, it would be, "these are the things that you could do and here are the resources" and I would have to kind of fiddle my way through it I guess. *[Initial interview]*.

In the second interview, Emma expressed that she had access to an experienced occupational therapist on the orthopedic unit, but this was primarily for assistance to transfer a patient or assistance related to some aspect of equipment. Emma described this support as similar to what an OTA would provide:

It would be like if I needed somebody for a two-person transfer and for the life of us neither of us could find somebody else, so we would go in together...But it wouldn't be typically for support on whether I'm doing the right thing. *[Second interview]*.

Learning to practice also involves trial and error in which understanding and skill are advanced through participation in culturally defined activities (Rogoff, 1995). Members of the health care team expect the occupational therapist to be the expert in certain clinical areas such as transfers or assistive devices (e.g. foot drop splints). However, because Emma did not have experience in these areas, there was a discrepancy between what others expected of her and what she was comfortable in knowing and doing.

### ***Personal Agency in Learning***

Emma's primary way to learn in the hospital context was by asking questions. She stated "one of the biggest challenges is access to patients and patient information, knowing how they're doing that day" [*Second interview*]. Asking questions of other professionals and the ward clerk enabled her to gain the information she needed for her assessment or treatment plan. Emma also learned by asking for assistance, most often from physiotherapists regarding a jointly shared activity involving a patient, such as getting the patient out of bed. The comfort level in asking for assistance from other disciplines depended on the unit she was working on: "I find there are certain floors where we collaborate a lot more than other floors so it depends on where you're working" [*Initial interview*].

As a new graduate it is acceptable to "not know" and to ask a lot of questions. Emma stated that if she were an older therapist or an experienced therapist, she would not be able to "get away with this" [*Observation, Tuesday October 30, 2007*]. There appears to be a tacit workplace norm that accepts asking questions as part of learning to practice. This norm shapes the "interactions of subject and tools with the object" (Russell, 2002, p. 71). Learning in practice involves being able to ask questions, which may be viewed as more acceptable when one is a beginning practitioner rather than an experienced therapist.

I think I typically, I'm not afraid to ask, because, I prefer that I ask rather than having something go wrong and so I ask a lot I think and I typically find whatever therapist is around. But that's one of the nice things about working in the hospital there's a lot of therapists around [*Initial interview*].

Emma often paged another occupational therapist or the OTA to share her thoughts, ask questions and problem-solve. "And like you can't get that hands-on mentoring quite as much but ...there's at least somebody to talk to" [*Initial interview*]. Similar to the other participants in the study, Emma learned practical knowledge and skills from the OTA, primarily in the area of equipment for patients. The OTA has the situated experience of working with diverse patient populations throughout the hospital [*Second interview*]. They are familiar with a number of different activity systems and are therefore a valuable resource to the occupational therapist that may be working on a unit for the first time.

Dialogue with colleagues was an important mediational tool for Emma's learning. In her journal entry, she described a situation in which she felt she had engaged in joint problem-solving with a physiotherapy colleague. They encountered a patient and their family who they felt were disruptive during an education class for patients awaiting surgery. Both Emma and the physiotherapist tried to engage the patient and family in the session with little success. They later brought this situation to their clinical manager:

As a team, we brainstormed possible steps which could be utilized to re-direct the client's focus and reduce the level of noise. We felt that it was important to remain respectful and utilize the least aggressive strategies as possible. Since the meeting, we have developed a protocol which is to be utilized in the future when/if similar situations present themselves. [*Journal entry, June 25, 2008*].

Emma developed clinical reasoning skills by seeing a number of patients with similar diagnoses and presentations (Geoffrey, 2006). During one observation session, Emma expressed that she felt there was something vague about a patient she was working with and

therefore decided she would not try to transfer the patient on her own [*Observation, April 2, 2008*]. She shared that she had recently seen a few patients with a similar history of alcohol abuse and this cued her that there may be other functional issues of concern. Experiential knowledge enabled her to recognize patterns in her interactions with patients and helped her to formulate a hypothesis and plan of action. Day-to-day interactions with patients allowed her to connect theoretical knowledge with practical clinical situations. Over time, her confidence in clinical reasoning increased. In her journal, Emma described an experience in which she provided a tilt wheelchair (power wheelchair) to a medically fragile patient. The patient had very limited sitting tolerance. The nurse felt that a different type of chair would be more appropriate for the patient. Emma described her clinical rationale for recommending the wheelchair. She also consulted with the physiotherapist who agreed with her decision:

Speaking with the physio made me realize that my initial clinical judgment was correct; however, I did not have the confidence to express myself to the nurse...This experience allowed me realize that I need to be able to stand up and voice my clinical reasoning to other inter-professional members. I also recognized that slowly my clinical reasoning skills are developing and that gradually I am becoming more competent with making judgment calls regarding patients. [*Journal entry, November 14, 2007*].

Learning the role of occupational therapy in psychiatry was a challenge for Emma. She did not have fieldwork experience in facilitating patient groups however she was responsible for this aspect of treatment. She did not have the opportunity to observe and work alongside an occupational therapist with expertise to afford the support and feedback she desired. She felt that this situation influenced her confidence. She was unable to obtain validation that her actions with patients were correct. She said she struggled with “knowing exactly how to run the groups,” how to engage patients, and target the group to their needs and level of function [*Second interview*]. Learning from another occupational therapist would have enabled Emma

to make connections between the therapist, their actions, and the forms of mediation used in patient care. This support would also provide a context to allow her to reflect on her own practice and know “whether I’m doing it right or not because I don’t have a baseline to judge it against” *[Second interview]*.

I noted that throughout our observations, Emma rarely took notes when meeting with a patient and did not use an assessment form to guide her. Emma’s previous clinical fieldwork experience in orthopedics enabled her to know how to obtain a history of the patient and the questions to ask. She had internalized an occupational therapy script that shaped her interactions with patients (Boag-Munroe, 2004; Spouse, 2001). In the second interview, Emma described how she was more flexible in her assessment, often following the patient’s line of thought and what they deemed as important to share with her. This is an example of building on knowledge gained through everyday participation in practice.

Structured learning opportunities did not appear to play a significant role in Emma’s learning. She attended medical Grand Rounds and lunch hour education sessions, but had to take time off without pay to attend conferences or workshops held outside of the hospital. As mentioned with Jennifer, this presents a barrier to participation and learning among casual workers:

As far as like learning days, I signed up for mental health because I am working in inpatient psychiatry now and there is a one day course in November but it is more difficult because you have to take the day off without pay because we’re casual staff so there isn’t any funding for that for casual staff. There are things during lunch hours and things like that that you are allowed to go to but as soon as it is a full day conference, we are not. *[Initial interview]*.

### ***Space for Learning***

On the orthopedic unit, informal collaboration occurred in the rehabilitation charting room where occupational therapists, physiotherapists (PT), physiotherapy assistants (PTA), and OTA/PTA students gathered. This room is distinct from the nurses' station and provides a space for collaboration unique to therapists:

It's really like, we're just a huge team, so and we have, typically where we chart, it's almost a nursing station, so it is pretty busy and...we have OT, PT, the PT assistants. We all almost have one room that we are always in, so we're always there, so we hear everything, kind of. And we are talking to each other all the time so that helps. *[Initial interview]*.

This dialogue provided a more comprehensive understanding of the patient than can be obtained from reading the patient chart. It also assisted Emma in knowing what to expect when she met with a patient for the first time and in setting caseload priorities *[Second interview]*.

On-the-spot collaboration often occurred on the unit, in the corridors, and at the nurses' station. This provided a means for Emma to learn about patients and their needs, the involvement of other team members in patients' care, and treatment priorities. Emma frequently discussed patients with physiotherapists and social workers with whom she felt there was "good collaboration" *[Second interview]*. During one session, a social worker informed Emma that a patient's daughter asked to be present during the occupational therapy bathing assessment. Emma noted this request in the Kardex and informed the social worker that it would be possible for the daughter to attend. Emma also often consulted with home care staff and other team members to plan a safe discharge for a patient. This is an example of boundary-crossing and working together to negotiate the hospital and community-based systems.

In the second interview, Emma identified that the nurse manager played a significant role in creating a collaborative team atmosphere which includes how team-based care is carried out and the roles and responsibilities of health professionals in patient care. On some units for example, social workers and physicians “play a significant role and the other team members are kind of removed, I would say” *[Second interview]*.

Discussions about patients also occurred in team rounds. Emma stated that when she worked on different units she did not usually attend rounds where members of the health care team discussed patients, either because these meetings were not held on the days she was assigned to the unit or because it was the responsibility of the full time therapist *[Initial interview]*. However, Emma acknowledged that rounds were important for keeping informed about patients’ progress and contributing to continuity of patient care. The communication in rounds also assisted her in setting priorities among patients, based on information received from the team:

Like yesterday I was looking after the floor and we got 9 new consults and we still had consults that we hadn’t seen from the previous week. So you try to figure out from those 9 patients which ones need to be seen because they are a priority because they are risk of skin breakdown or because they are a priority because they might go, leaving the hospital the next day or two. *[Initial interview]*.

The occupational therapy lunch room was an important physical space for seeking advice about patients from other occupational therapists. For example, Emma asked other therapists how they conducted a kitchen assessment. Based on this discussion, she then proceeded to carry out an assessment on her own. In the hospital context there is little opportunity for hands-on guidance or assistance from an experienced occupational therapist. Talking about what treatment would involve with an experienced therapist is the primary source of learning support. Verbal discourse is an important means for learning from

experienced therapists. Through talking aloud (interpersonal speech), the beginning practitioner can identify questions, problem-solve and “internalize the dialogue (intramental)” (Spouse, 2001, p. 519). Learning takes place by “processing such experiences on these two levels, the social (intermental) and the cognitive (intramental)” (Spouse, 2001, p. 519).

### ***Patient Stories in Teaching and Learning***

Similar to the other participants, story-telling occurred during the observations with Emma. Typically an observation session began with Emma providing me with a brief history of the patient(s) we were about to see and sharing what she planned to do with each person. Afterwards, she shared her clinical impressions and her next steps such as the additional patient information she required, whom she needed to consult with regarding a patient, and/or her treatment goals.

Patients taught Emma about their treatment and discharge plans, and their function. Therefore they are important members of the team contributing knowledge to assist the occupational therapist in their assessment. Patients often know when they will be assessed by another member of the team, and the plan for transfer to another facility such as a rehabilitation setting or a chronic care facility. During one of the observations, Emma assessed an older gentleman with cancer [*Observation, February 13, 2008*]. The patient’s story taught Emma about his difficulty managing at home prior to admission to hospital. He described the length of time it took him to complete his bathing, dressing and morning routine. Emma asked the patient if he was considering another place to live such as a seniors’ residence. The patient said he would be agreeable to this. Emma then asked the patient if she could see him stand up from the Geri chair (geriatric chair) and try to put on his pants.

However the patient stated it was not a good day because he was not feeling well and was very tired. After the session, Emma mentioned that she did not like to push patients to do an activity that they do not feel ready or able to do. For Emma, the patient's story influenced the occupational therapy intervention. She shared that other therapists did press their patients to participate in therapy. I mentioned that perhaps her approach was respectful of the patient and consistent with client-centredness.

Emma also learned about services in the community and equipment from patients, particularly patients who had been living with their disease or illness for some time and were aware of what was available:

So that patient taught me that, like what services are available. Sometimes they teach you about the services that are available to them or equipment that they use. Especially patients who have had... like their disease isn't new, I find that sometimes, they are more familiar with services, especially in the community, and what works for them. They know their equipment, they know what they need more than what we know what they need because they are just so familiar with themselves. *[Initial interview]*.

Patients also taught Emma about how an illness affected their physical function such as sensation or movement, and the assistance needed for transferring:

And just patients who are open to describing what, I mean you can have somebody with Guillain Barré and some of them have no feeling and some of them have full feeling and so I've learned a lot from patients who are willing to talk about that and you can ask them. Sometimes you know if you can ask them where their sensation is and what they have, sometimes you know that it is a touchy subject to get into too much but, there's one's like that, yah I ran into the odd time. It's hard to remember the experiences, but you definitely do learn from them. *[Initial interview]*.

The patient's story helped Emma to focus on certain issues with the next patient and helped her identify the patients' needs:

Or sometimes, they'll make comments about their experience in the hospital or their care and what their needs are and so then when you see the next patient, it kind of opens up your eyes to a broader or maybe it makes you key in and look at certain things. *[Initial interview]*.

### ***Learning from the Patient Chart***

Emma stated that the patient's patient chart was significant in her learning. There appeared to be a substantial amount of time devoted to reading charts in preparation for seeing patients, and documenting assessment findings, treatment plans, progress notes and discharge plans. Similar to Jennifer, Emma always consulted the chart prior to seeing a patient. She read other health professionals' notes such as medicine, social work, and neuropsychology, with a particular emphasis on physiotherapy to learn about patients' function in mobility and transfers. The chart also mediated learning about medical terminology and correct wording. It provided a narrative of how different team members arrived at identifying patients' goals:

That's a huge one, I would say the medical charts. I know that when I first started working, every time I was on a new floor, one of the first things I would do is pick up a chart ... [of] the therapist that typically covers that floor. I would read their notes to see how they went through things, because each floor is different and even though you are looking at the same things, the way that you look at them are slightly different, maybe. And just everyone charts differently...we have standards as to how we are supposed to chart and how we are supposed to file our notes, but things are still different. *[Initial interview]*.

During one of the observation sessions with Emma, we spent the majority of the 2 hours together at the nurses' station while she charted. I noted the number of medical abbreviations she used when charting, ↑fx (increased function), pt. ø OT (patient refused occupational therapy) *[Observation, April 11, 2008]*. When I asked her how she learned the medical terminology, she replied that it was through reading team members' notes and through participation in day-to-day practice:

Each service has their different language. You start to see the same things over and over again. You ask people, you look online. [*Second interview*].

I also observed how quickly she reviewed the chart, flipping back and forth through the different sections to obtain information about a patient. She did not always have the time to sit and read each entry in its entirety, but scanned the chart. She became skilled at being able to pull the relevant information from the text. The patient's chart is a form of medical discourse that is learned by reading other therapists' notes. Occupational therapists also receive feedback on their documentation through a yearly audit that is conducted by occupational therapy peers.

Emma expressed that the patient chart was the primary means of communication not only for other staff but also among occupational therapists who shared the same caseload. This was the situation when she provided coverage on a unit for a full-time therapist. The Kardex which is a documentation system is another important means of communication at *Hospital A*. It contains a synopsis of occupational therapists' patient notes and "kind of notes to ourselves" [*Initial interview*]. The Kardex follows patients when they are transferred to a different unit therefore it is a mediational tool to assist occupational therapists in sharing information with each other. In addition to the hard copy forms of documentation, Emma accessed the hospital computer system that contains professionals' dictated reports, lab results, and information about patients' upcoming medical tests. She typically logged onto the computer at the beginning of her day to determine patients' status, such as whether they were transferred to another floor, discharged, or perhaps deceased.

The content and type of medical documentation varied according to context, which presented a challenge to boundary-crossing between different sites of River Valley Medical Centre:

Our initial assessment and our discharge assessments are the same, but even things like our consults here, always come on yellow paper and I'll write notes on yellow paper and the notes out there [*Hospital B*] are on yellow paper but the consults come on white paper, so, when you are going through a chart you are looking for that yellow paper and you don't find it. [*Initial interview*].

Emma rarely used manuals or resource binders to mediate learning due to limited time:

And we do have manuals and kits everywhere but unfortunately it's hard to find the time to sit down and actually read through the information. Often it is speaking to someone and maybe they will tell you, well read this section or read this part because there is just not time to search for everything on your own. [*Initial interview*].

### **Workplace Constraints**

Similar to Jennifer's story, limited occupational therapy resources were a barrier to participation and learning. In Emma's context, there were only 2 OTAs for the hospital (one at 5 days per week, and one at 2 days per week). Therefore, while she preferred to have an OTA provide support, she relied on other members of the health care team to assist in patient care. For example, when Emma met with a patient that required the assistance of two people to get them out of bed, she was unable to do this herself. So typically Emma conducted her assessments with a physiotherapist. The physiotherapists often had an assistant with them so the physiotherapist was able to get the patient out of bed.

I mean every time I want to do an ADL assessment I couldn't ask him to come. I'll ask [the OTA] to adjust a wheelchair and he'll help to transfer the patient for that. But if a patient is a two times assist I can't ask him to help me get the patient to the toilet to assess whether they can get on and off. [*Initial interview*].

This situation was not reciprocal. The physiotherapists have an assistant therefore they are not dependent on the occupational therapist for their assessment. Consequently, the physiotherapist assumes a greater role in certain aspects of patient care that fall under the domain of the occupational therapist. In the following excerpt, Emma describes how the

physiotherapist takes the lead in directing patient transfers. This situation constrains professional identity and confidence:

I would say that is a huge decrease in confidence for myself because they take the lead and then you feel like you're almost playing, like, an assistant role [Second interview].

This power differential between the two professions was also revealed in Emma's comments regarding how the orthopedic surgeons ask the physiotherapist about a patient's progress [Observation, January 23, 2008]. If the physiotherapist reported that the patient was able to climb stairs, then they were able to be discharged from hospital. The occupational therapist's perspective is one in which the patient must be able to do so much more than stairs to enable them to return home. A person needs to be able to participate in their daily occupations such as self-care, household management, driving, banking, and groceries. The paradigmatic challenge is to have occupational therapy's voice heard in a medically focused system. The historical context of River Valley Medical Centre values a smooth and quick patient discharge and some team members viewed occupational therapy as "prolonging a discharge plan" [Second interview]. This perspective is attributed to not only a difference in occupational therapy's philosophy, but also the division of labor in the hospital. It takes longer for occupational therapists to respond to a referral for services due to limited staffing resources.

The status of casual worker limited continuity with patients and created a time constraint within Emma's practice. There is a hospital policy requiring completion of initial patient assessments within 48 hours [Second interview]. This was a challenge to attain when she worked on the orthopedics unit, two non-consecutive days per week. A patient was often discharged before Emma had a chance to see them again. Assessments of patients that

remained on the unit were disjointed because of a lapsed period between occupational therapy sessions. This required time to again build rapport with a patient and review information from the previous session [*Observation, February 13, 2008*].

### ***Client-centredness as a Value and Norm of Practice***

Emma presented herself to clients in a manner that was very calm and respectful. For example, when seeing a patient one-day following their total hip replacement, the patient reported feeling nauseous [*Observation, November 8, 2007*]. Emma asked them if they felt well enough to proceed with the occupational therapy assessment. She often asked patients if they felt they could participate in occupational therapy at the time, and if not, she would return to see them later in the day. Respect for the person was also demonstrated in Emma's communication with family members. Emma focused on the patient and primarily directed her questions to the patient, rather than the family [*Observation, February 6, 2008*]. Emma adopted an approach in her communication with patients in which she would bend down so that she was at the patient's eye level or below. This posture conveyed to the patient that she was approachable and shared responsibility with them in their care.

Emma stated that she always practiced self-care (dressing, bathing) and transfers with a patient so that they were both aware of the patient's abilities and limitations. The patient's report of how they carried out an activity was not sufficient. Emma shared that a patient had to actually do the activity because "otherwise I cannot write on the chart that they can do it" [*Observation, November 19, 2007*]. This demonstration of performance is required for her to determine a patient's readiness for discharge and the equipment needs or community resources required. This is an example of shared responsibility between the client and therapist, both learn about the client's abilities through participation in activity.

### ***Emma's Recommendations***

When asked what can be done to facilitate the transition from university to practice, Emma found that the opportunity to ask questions of fellow occupational therapists and team members was most important to her learning. Emma felt that she was able to seek advice and guidance from others “informally” in the staff office, lunch room and on the unit.

I present a case and I say “this is what I’m doing. What else would you have done? What could I do?” *[Second interview]*.

In addition to the clinical support she received, the social relationships she developed also provided her with emotional support in this practice context.

While she agreed that time devoted to meet with other occupational therapist to review and reflect on specific patient cases may be helpful, she emphasized the importance of immediate feedback from colleagues:

You need to be able to get the information right then because maybe you’re having questions as to whether you’re doing the right thing. *[Second interview]*.

She recommended a designated time to observe an experienced occupational in their interactions with patients, as an important strategy to learn about practice with different patient populations.

## **Cross-Case Analysis**

A cross case analysis was conducted to understand the complex, interrelated, and also distinct aspects of the participants' learning experiences. The analysis revealed common themes in how the occupational therapists learned to practice and the forms of mediation used to support their participation in the workplace. There were shared perspectives regarding the constraints to learning in the hospital context, although the negotiation of these constraints and the personal agency in learning were unique to each participant. Their membership in different activity systems created discourses, actions and interactions particular to the unit where they worked.

## ***Workplace Affordances***

The acute hospital context in the present study afforded opportunities for the participants to engage in social practice and to access support for learning. The occupational therapists learn through participation in their community of work practice. In this active process of learning, knowledge is constructed through questioning, seeking validation, collaborating with other health professionals and occupational therapists, and engaging in the discourses and practices of client care. Asking questions is a primary strategy for learning, enabling the participants to gather the required information about a client as well as build rapport with colleagues. The participants had varying levels of comfort in asking questions and seeking guidance from others. For example, in my initial contact with Elizabeth she did not hesitate to use these forms of support, whereas Amy became more comfortable in questioning only after working at the hospital for a few months. This reflects the personal agency of the participants and the unique sociocultural perspectives and life experiences they bring to the workplace.

Questioning is sometimes “qualified by [their] need to ask” when they felt unsure (Smith, 2006, p. 163) for confirmation or validation of their actions or decisions. For Amy, validation was critical to her confidence and learning. She sought this support from other team members such as the social worker or physiotherapist, and would often discuss her ideas with the OTA as part of the clinical reasoning process. Similarly, in the second interview Elizabeth described how sitting down with another member of the team to discuss the decisions they made regarding a client helped validate her thinking processes. Dialogue with occupational therapy colleagues also provided validation and enhanced the participants’ clinical problem-solving skills. For example, in both the initial and second interviews Jennifer discussed the value of talking out loud her treatment recommendations for a client with another occupational therapist and how this fulfills the need to “know that you’re doing the right thing” [*Second interview*]. The participants shared that there was little opportunity to receive hands-on guidance from, or observe the actions of an experienced occupational therapist. Therefore dialogue is an important mediational means to participate effectively in practice. The following excerpt illustrates the value of interpersonal speech in learning:

When a case is tricky it helps me to talk it over out loud with another OT or another team member. I sometimes ask myself what another OT would do on another unit and it helps me to plan. [*Elizabeth, Journal entry*].

The occupational therapists learned where and with whom they could engage in problem-solving. Heather described how she learned where to go for help; “there are certain people I’ll tend to ask because of their experience and because of their willingness to brainstorm” [*Second interview*].

The occupational therapists most frequently learned from physiotherapists and social workers. In the observation sessions I noted that the participants often carried out client assessments with physiotherapists and problem-solved complex client cases with them. They also learned practical skills from physiotherapists such as how to transfer a client. The following journal entry from Elizabeth captures this form of learning:

I was able to learn a lot by doing joint assessments with the physio. Things like how to move the IV tubing and poles, how to work the bed, where to position the chairs, how/when to contact the nurses are all things that I observed. It was also good to review transfer techniques together and practice the transfers that I had not done since school.

Social workers have a holistic perspective of clients which contributes valuable information to the occupational therapists' assessment and treatment. In the second interviews, Amy, Emma and Heather emphasized how social workers' knowledge of community programs, resources and funding, was particularly helpful in developing discharge plans for clients. In this sense, social workers enable boundary-crossing between hospital and community contexts.

For all of the participants, the OTA was a critical support for developing practical skills and for brainstorming ideas. Elizabeth described how the OTA helped her to break down a clinical problem into steps, using their experience from working with different clients and occupational therapists throughout the hospital. They bring the knowledge of "what works" to the problem-solving dialogue with the participant [*Second interview*]. The OTA supported the participants' engagement in practice through actions such as following through with a treatment program designed for a client and through the use of artifacts that mediate patient care. The OTA knows the physical artifacts of practice (medical equipment such as wheelchairs, seating cushions, and assistive devices) and how they can be adapted to

meet clients' needs. The participants felt that they learned from the OTA's experiential knowledge and technical skills. They also believed that limited OTA resources constrained some aspects of patient care and reduced occupational therapy's autonomy. Emma describes how this situation requires her to depend on the physiotherapist (PT) or physiotherapy assistant (PTA) when working with clients:

Because it would be great if – right now the OTA's primarily equipment related, just because we're so short, and it would be great to have them on the floors so we could use them in our transfers and everything because often we're relying on either the PT or the PTA to go in with us. *[Second interview]*.

In this particular workplace context, collective activity and individual actions were constantly being negotiated to achieve the goal of enhancing the health of clients. There is a historically constituted physical, social and emotional space where members of the community can engage in the interactions and relationships needed for successful assessment and treatment of clients. Collaboration with other health professionals occurred spontaneously in the nurses' station, hospital hallways, and occupational therapy staff office and lunch room. These are primary spaces for learning about clients through spoken and written language. There was a receptivity in these spaces to questioning, sharing information, and problem-solving. Team rounds were also a significant part of the discourse of the acute care hospital and mediated occupational therapists' construction of clinical knowledge. These meetings involve communicating information about clients, discussing work flow such as admissions and discharges, and sharing knowledge and practices. In particular, the participants found that they learned valuable medical information from physicians in these meetings including medical terminology, the meaning of different symptoms and investigations, interventions to address illness and disability, and client safety or ethical

issues. The exchange of information about clients' status and progress provided the occupational therapists with a holistic perspective of the client and helped them identify priority areas for treatment:

I think having a better picture and making sure everyone's on the same board ...has the same picture, and we can better discuss discharge plans or what are the issues...so definitely more collaboration and, I think, more effective treatment for the patients probably. [*Emma, Second interview*].

Similarly, in the second interview Amy shared that “listening to the conversation, the lingo of the doctors, how the flow of the process works, really helps” in her learning. The dialogue in team rounds builds on the participants' knowledge gained from reading the patient chart and from informal collaboration among team members at the nurses' station, in the client's room and in the hospital corridors. For all of the participants, the patient chart was a critical mediational artifact for learning about clients. It provides a narrative of the client's medical history, communicates health professionals' impressions and actions, and guides the occupational therapists actions. This was illustrated during an observation session with Amy where she met with an older lady who had fallen in the bathroom on the ward. Amy read all pertinent aspects of the chart and then consulted with the client's nurse, the client and their family to try to piece together the client's story and the nature of the fall. [*Observation, April 4, 2008*].

In the present study, clients mediated occupational therapists' learning through their interactions and actions. Clients' participation in the therapy encounter is not formally structured for learning, rather knowledge is constructed in the therapists' engagement with clients in everyday practice activities. This learning was not in the participants' awareness until attention was directed towards these experiences (Eraut, 2004). We discussed how this form of learning may be related to a client-centred approach to practice, a core aspect of their

occupational therapy education. The participants expressed that a valuable learning for them concerned the importance of asking the client about their perspective:

I guess that they usually know best, like ... I definitely had a lot of time during work where I would be like, oh wow, that's so obvious. Like why didn't I ask them in the first place? ...if you are fitting a wheelchair or a splint or that sort of thing, just, they do know what feels most comfortable. *[Jennifer, Initial interview]*.

For all of the participants, clients scaffolded the occupational therapist's learning by offering information or asking questions which expanded the therapist's knowledge of the client's abilities and problems. The participants also developed practice skills which may be more general such as therapeutic communication or more specific such as how to assist a client in transfers or when to refer a client to another health professional. For example, in an observation session with Heather, she completed a cognitive assessment with a 90 year old woman who was admitted for pneumonia. The woman was aware that she had memory problems and was concerned about her living arrangements. The client asked Heather if she could see a social worker to discuss community supports such as meal delivery services. Heather agreed to make a referral to social work. The client's understanding of her own needs informed Heather's actions.

In my field notes I often wrote how clients helped direct the occupational therapist's assessment by expanding on topics or presenting new ones, talking about the effect of their illness on their function, and sharing their expectations regarding their care. Their stories included the history of their illness and previous treatments, how they managed their daily activities prior to admission to the hospital, and the support they believed they would need upon discharge. From clients' story-telling, occupational therapists learned how individuals

cope with illness or disability. The client's voice contributed to the occupational therapy assessment and shaped the development of the therapist's intervention plan.

Clients also helped the occupational therapists make the link between scientific concepts and everyday concepts (Vygotsky, 1986). Knowledge of medical conditions, theories and principles of practice learned in university, are applied to clients' illness experience. In one of my observation sessions with Jennifer she administered a cognitive screening to a client and commented that even though she knew the diagnosis, she did not know how it would affect the client's function. Jennifer shared that she did not expect the memory problems that the client demonstrated on the cognitive assessment. Clients also provided validation regarding the occupational therapists' clinical decision-making. For example, Heather described how a client's feedback regarding a pressure-relieving cushion, provided her with confirmation that she made the right equipment choice for him. [*Journal Entry, July 31, 2008*]. The data reveal that the occupational therapists' learning is mediated by and embedded in their relationship with clients.

### ***Workplace Constraints***

There were differences in the nature of collaboration across units in the hospital. These differences relate to the historicity of the activity system including how labor is divided among health professionals, time demands, resources, expectations for, and contributions to, patient care. In the second interview, Emma described how nurses on one unit were responsible for discharge planning with minimal input from occupational therapists. This restricted the opportunity to decide and act together towards clients' care and discharge plans. Similarly, the medical language is unique to each patient unit. When the participants were assigned to a new unit they were challenged by the different medical discourse used to

describe clients' conditions, and communicate results of laboratory tests and treatment plans. There was not a formal means for learning medical discourse. Participants learned this primarily through reading patient charts and looking for the intended meaning of the text, and through interactions with colleagues.

High caseloads and limited occupational therapy staffing were common workplace constraints experienced by the participants. These restrict the scope of occupational therapy practice, the visibility of the profession, and access to participation in client care. Elizabeth's comment illustrates how the contribution of occupational therapy to patient care is often limited by insufficient OTA resources in the hospital.

Just like time constraints, at times he [the OTA] is busy seeing other people and certain things I think need to be seen, to be done quicker, which is a prioritization but he has already committed time to go see other therapists. There are a lot of things that he can't do that he could do....like ADL [activities of daily living] retraining, you know, like basic rehab plans in terms of when people are waiting in the hospital for their next destination. *[Second interview]*.

Physiotherapy often regulated occupational therapy participation. This was restrictive such as performing aspects of treatment which fall within the scope of occupational therapy, or expansive such as initiating referrals to occupational therapy. A power differential was observed between occupational therapy and physiotherapy on some of the units. In addition, occupational therapy's role on some of the patient units was limited because of the type of illnesses or medical conditions. On orthopedics for example, many of the diagnoses affect clients' mobility which is the focus of physiotherapy. Therefore there is an unequal contribution to client care between occupational therapy and physiotherapy. Two of the participants described physiotherapy as the "dominant" profession based on the nature of their involvement with clients, and their ability to respond quickly to referrals and to see all

of the clients on a unit. There were fewer occupational therapy resources. This situation negatively affected the occupational therapists' confidence as illustrated by Jennifer's comment in the second interview:

I think a lot of times I feel that OT is totally undermined and that people just don't ask you for your opinion because they don't, they just don't think of it. They just automatically ask physio or they don't think you'll know.

The paradigmatic conflict between occupational therapy and medicine is another workplace constraint. In health care, medicine is afforded a high level of respect, status, and power (Griffin, 2001). Medicine is the dominant profession in the hierarchy of health professions (Townsend, 1998). The philosophy, theory and language of occupational therapy are not consistent with a medical model paradigm (Wilding & Whiteford, 2007) and as a result, occupational therapy is "outside the mainstream of current power holders" (Miller, 1992, p. 1017). This power dynamic limited occupational therapy's involvement in patient care and recognition of the profession's contribution to the health and well-being of patients. The participants' ability to exercise power and influence was constrained by the sociocultural and historical structures of the acute care context.

### ***Personal Agency in Learning***

The participants demonstrated a strong personal agency in seeking opportunities to participate in what the workplace afforded individuals for learning. Rotation to different units throughout the hospital characterized their practice. Four of the five participants viewed rotation as an opportunity for learning. In the second interview Emma reflected on her initial weeks of work in which she was assigned to different units throughout the hospital. While this was difficult she felt that it contributed to learning about different systems within the hospital:

I'm familiar with the floor and, so, rather than being completely inexperienced on that unit two years into my career, I have some familiarity with it. I know some staff and know how the unit is, a little bit so that I have some confidence going in. *[Second interview]*.

Amy also shared that working on different units throughout the hospital allowed her to develop knowledge in diverse areas, "because then I am not narrowing my scope" *[Second interview]*. Similarly, Heather discussed the possibility of changing to the neurosurgery unit and while she was nervous about this proposition because "I wouldn't know what to do" she felt that "if you're in one place, you could be missing out on other learning opportunities" *[Second interview]*.

The participants demonstrated agency in seeking opportunities to work alongside others with different levels of expertise. This was frequently observed in actions such as the occupational therapist and physiotherapist assessing a client together, and the occupational therapist problem-solving with the OTA and consulting with a client's nurse. In the second interviews, two of the participants highlighted the need for self-responsibility in finding assistance and guidance in work activities because a formal means of support did not exist:

I think if you're not the personality type to go and seek assistance, then no. Because if I, I mean when I first started they were very good, you know, at asking. But I mean learning doesn't happen in one month, two months. *[Amy, Second interview]*.

I think it's there [support] if you look for it. You have to ask for it. But it's there. Mostly, there are people who will make time for you, some more than others... But as long as you're willing to ask questions and if you demonstrate learning, I think people are pretty patient with you. *[Heather, Second interview]*.

This aligns with Edwards' (2005a) concept of "responsive professional practice" which involves "knowing what you can and can't do and knowing where to go for help" from other practitioners (p. 178).

Wenger (1998) proposed that learning is “an experience of identity” because it involves transformation of “who we are and what we can do” (p. 215). The participants’ ability to articulate the potential value of occupational therapy illustrates their appropriation of their professional identity and increased confidence in their role (Wilding & Whiteford, 2008). Elizabeth’s journal entry illustrates self-assurance in advocating for occupational therapy’s contribution to patient care:

Over the past nine months at the hospital I’ve noticed a lot of growth in my leadership and communication skills. I’m not as nervous about certain scenarios and I have a lot more confidence when working with others. I find I am very able to defend my findings and suggestions and really advocate for OT and for myself...I notice this by having other team members coming to ask me questions about patients. *[July 17, 2008]*.

The occupational therapists’ behaviour regarding advocacy for their role and the division of tasks influenced the boundaries of power. For example, participants’ deferral to physiotherapy to take the lead in evaluating a client or decide on a client’s readiness for discharge, constrained the representation of occupational therapy. Conversely, participants’ actions such as engaging an OTA to help with assessing a client or following through with treatment raised the visibility of occupational therapy on the different units.

In summary, the workplace affords access to participation in practice through mediational means, relationships with members of the community, and the norms and values of the system. The occupational therapist determines if and how they will participate in what is afforded to them, demonstrated by their agency such as questioning, advocating for their role, and problem-solving with colleagues. The cross case analysis also reveals that there are common constraints to participation and learning experienced by the participants. However, their actions enabled them to shape their learning by challenging and negotiating these constraints.

## CHAPTER 6. DISCUSSION

The findings of this research help us understand how workplace affordances and constraints, and individuals' agency shape beginning occupational therapists' participation and learning through work. There are complex relations and interactions among the components of the activity system engaged in the object of patient care. The division of labor, the artifacts involved in mediating activity, and the rules of the community shape the occupational therapists' participation and therefore, learning in practice. Activity theory provides an integrative, conceptual framework to understand how knowledge is co-constructed and distributed across this particular hospital system. Russell (2002) proposes that activity theory "assumes that individuals are active agents in their own development" (p. 67) but also recognizes that individuals act in environments with others and with shared tools. These environments may constrain or afford learning. I will discuss the research findings using the concepts of affordances, agency, and constraints to provide a basis for understanding how learning proceeds in this particular workplace. These concepts are not distinct in actual practice, but are interwoven in the performance of work activities. The implications for understanding the hospital context as a learning environment and for developing a workplace pedagogy in this community of practice will then be elaborated. I will begin by discussing the nature of occupational therapy practice situated within the River Valley Medical Centre, as a means to understand the historicity of the system and the nature of patient care activities.

## **Background Information**

Occupational therapists are concerned with people's ability to engage in the activities of daily life or occupations that provide purpose and meaning, contribute to identity, and allow self-expression (Christiansen, 1999). These daily life activities are often taken for granted until a disease, illness, injury or disability limits a person's ability to do what is important to them. In this acute care context, occupational therapists provide assessment and treatment of individuals who are limited in their ability to perform occupations by physical injury or illness, emotional or social dysfunction, or the aging process. In collaboration with other members of the health care team, occupational therapists maximize clients' independence and assist in facilitating a safe discharge from hospital. In some situations, clients may be discharged to their home environment with or without community supports or transferred to another health facility for further investigation, treatment or rehabilitation.

At the beginning of the research study, the length of time that the five participants had been practicing as an occupational therapist varied from one month to 17 months. Two of the five participants worked in community practice and one worked in an acute hospital prior to working at River Valley Medical Centre (Appendix L). The job status for all of the participants was classified as casual throughout the duration of the data collection period.

The occupational therapists in the present study were fairly autonomous in their practice. At the same time, there was interdependence within the community as they worked with other health professionals in the object of patient care, with shared activities, values and artifacts. The activities of practice were characterized by complexity, multiplicity and intensity (Billett, 2001b). I observed that clients referred to occupational therapy were acutely ill and had multiple health problems. Many of the clients were older adults who were

often referred to occupational therapy for “failure to thrive.” I was not familiar with this term, however one of the participants explained that it meant that the person was having difficulty functioning in a number of different aspects of daily life. For example, some older adults had respiratory problems, cognitive impairment, or had experienced frequent falls or sustained a stroke. They experienced challenges in managing occupations at home such as their personal care, household activities, meal preparation and driving. Adults of varying ages who were hospitalized on other units of the hospital such as the orthopedic, medical-surgical, cardiac care, intensive care or trauma units also presented with multiple medical problems. In these contexts, clinical decision-making is influenced by “compounding variables” (Billett, 2001b, p. 23) such as clients’ complex medical needs, missing or incomplete information, or conflicting clinical perspectives which require negotiation with the client and with other team members to determine a course of action.

Boundary-crossing is a key feature of practice in this hospital context. When they first began their job at the hospital, all of the participants worked on a number of different units on the same day or within the same week. After a few months, two of the participants continued to work on a number of different units throughout the hospital, whereas three of the participants were assigned to their respective units for a period of time ranging from 3 months to one year. Despite these different patterns of engagement in work activities at their hospital sites, all of the occupational therapists were required to cross boundaries between hospital and community contexts to provide patient care. This engagement in multiple activities and different activity systems is characteristic of polycontextuality and requires practitioners to quickly seek out knowledge resources, ask questions and obtain the information needed to engage in work activities (Tuomi-Gröhn, 2003). The various

communities of practice “demand and afford different, complementary but also conflicting cognitive tools, rules and patterns of social interaction” (Engeström, Engeström, & Kärkkäinen, 1995, p. 319).

Changing patient units within the hospital context required the participants to learn the medical discourse unique to each unit which allowed them to make sense of medical problems and their management. They also needed to learn professional boundaries (Le Maistre & Paré, 2004), the division of labor, the relationships among coworkers, and the scope of practice of each activity system. The object of patient care on units such as medicine, geriatrics and intensive care for example, demanded frequent communication and collaborative actions among team members. Physicians were very visible on these wards and this presence provided an opportunity for the participants to learn about diagnoses, medical procedures, investigations and treatments. This expertise was not accessible on some of the other units, where physicians’ involvement was less intense. They appeared on the unit mainly to admit and discharge clients, monitor their status, and respond to a consult or urgent request.

Negotiating the boundaries between hospital and community contexts presented opportunities for learning as the occupational therapist and home care case manager often collaborated regarding clients’ needs. The participants frequently referred clients to home care for services such as nursing, meal delivery, and assistance with personal care, to ensure a safe discharge from hospital. The case manager is knowledgeable about the structure, activities, roles and norms of the community and guided the participants’ learning through the use of questioning and sharing information resources. I observed that this guidance commonly occurred during structured meetings such as team rounds and also during on-the-

spot collaboration at the nurses' station. Interaction between hospital and community activity systems is supported by the shared object of patient care and draws "upon distributed expertise" (Daniels & Warmington, 2007, p. 385) to understand the client's situation and develop a discharge plan. Respect is a key feature of this collaboration. One of the participants noted that home care case managers were respectful of occupational therapists' professional opinion and judgment regarding clients' needs for discharge from hospital. At the same time, members of the team were aware that home care services needed to be in place prior to discharging a client from hospital. This highlights the collaborative actions between members of the different communities of practice.

The participants acknowledged that their assigned caseload was tenuous and could change depending on staffing issues and patient care needs at a systems level. This is the nature of the status as a casual employee. All of the participants desired permanent status at the hospital. While they perceived rotation to different units as challenging, their receptivity to change in their assigned caseload afforded an opportunity for development and continuity in the workplace (Hökkä, Rasku-Puttonen, & Eteläpelto, 2008). The occupational therapists in the present study were required to develop and resituate their knowledge as they crossed boundaries of the different activity systems involved in the object of patient care. The affordances provided by the workplace shaped the occupational therapists' learning through the "kinds of activities and the direct and indirect guidance that" the participants accessed (Billett, 2002, p. 36). These workplace affordances will now be discussed.

## **Workplace Affordances**

In the present study, I sought to understand how occupational therapists make meaning and how they come to know and act in the workplace context. This “coming to know in different situations” (Edwards, 2005b, p. 59) cannot be separated from participation in practice. The context in which the transformation from an intermental social plane to an intramental psychological function, is critical to understand learning (Eun, 2008). This “social situation of development” recognizes the relationship between the learner and the social practice (Vygotsky as cited in Chaiklin, 2003, p. 47). Billett (2001c) uses the term “knowing in practice” to describe the mutual relationship between the affordances of the social practice and individuals’ thinking and acting (p. 449). In this sense learning is conceptualized as expanding participation in a particular community with its history, artifacts, rules, norms, and values (Fenwick, 2008a; Lave & Wenger, 1991; Rogoff, 1995). This suggests the dynamic and situated nature of knowing (Schön, 1987). Learning processes, connections with others in the community and work experiences comprise the occupational therapists’ “sense of belonging and underpin the nature and extent of subsequent learning” (Fuller, Hodkinson, Hodkinson & Unwin, 2005, p. 51). Therefore in terms of development, it is important to understand how the invitational qualities (Billett, 2001b) or affordances of the workplace shape how individuals learn and what they learn.

In the present study, the primary affordance for learning was access to participation in workplace activities. The workplace, River Valley Medical Centre, invited and supported the participants’ learning (Billett, 2001b). The occupational therapists’ actions and interactions within different activity systems contributed to their “construction of knowledge for and through work” (Smith, 2006, p. 158). Contu and Willmott (2003) propose that an individual’s competency in a community of practice is demonstrated by their ability to “read

the local context and act in ways that are recognized and valued by other members” (p. 285). In this workplace setting, the participants’ position of “legitimate peripherality” (Lave & Wenger, 1998, p. 36) empowered them to participate fully in practice activities. The concept of legitimate peripherality does not suggest a physical space in a community of practice but signifies access and connections to activities, artifacts and relationships. There was a sense of belonging in this setting, legitimized by the structures of the hospital such as the multidisciplinary approach to patient care, the allocation of occupational therapy services to different units, and the participants’ membership in the health care team. Membership in the community enabled the occupational therapists to carry out assessment and treatment activities with clients, consult with team members, and problem-solve challenging tasks as part of practice (Eraut, 2004). These work activities were often performed without direct guidance from more experienced occupational therapy colleagues. In one of my meetings with the Discipline Specific Leader (OT) she commented that there was an expectation that the participants would seek support as needed and find a way to “fit” with the acute care team to which they were assigned. In my initial field note entry I wrote that I needed to learn how the hospital’s culture defined this concept of ‘fitting with the team.’ My interpretation was that it described the participant’s willingness and ability to jointly solve problems embedded in practice (Edwards, 2005a). This capacity to engage in work practice was demonstrated by accessing resources and supports for learning including asking questions; seeking guidance, observing and engaging in the discourses of patient care; learning from the patient chart and team rounds; and learning from clients. I will now discuss each of these workplace affordances.

### ***Asking Questions as a Strategy for Learning***

The acute hospital context is characterized by complexity, uncertainty and time sensitivity (Hoffman & Donaldson, 2004). The nature of clients' conditions is often ill-structured with multiple factors impacting on health professionals' clinical decision-making (Smith, Higgs, & Ellis, 2008). These "indeterminate zones of practice" (Schön, 1987, p. 7) are a fundamental aspect of the hospital context. Making decisions about client care involves multiple components including theoretical knowledge (medical conditions, applicable research evidence, treatment methods), situational factors (the client's home environment or discharge setting, hospital policies), and practitioner's sense of agency in identifying and seeking relevant information from team members or other sources (Smith, Higgs, & Ellis, 2008). What strategies do occupational therapists use to make meaning of these complex phenomena? In the present study, asking questions was a primary strategy for learning among all of the participants. Questioning is an inherent aspect of critical thinking in which the inquirer explores a problem, integrates information from different sources and decides on a course of action (Petress, 2006). Kienzler (2001) proposes that "questioning assumptions," actively seeking diverse voices and considering alternative perspectives, encourages collaborative problem-solving among different disciplines. Questioning and critical reflection are central to adult learning (Brookfield, 1991; Jarvis, 2004), which is viewed as sense-making and knowledge construction (Merriam, 2008).

In the medical literature, questioning is a means of information seeking or knowledge seeking behaviour (Dawes & Sampson, 2003; Weinberg, Ullian, Richards, & Cooper, 1981) and a search for evidence related to decision-making about patient care (Law & Baum, 1998; Sackett, Rosenberg, Muir Gray, Haynes, & Richardson, 1996; Taylor, 2007). There appears to be limited research directed specifically at the use of questioning situated in the day to day

practice of occupational therapy. An article by Brown, Bannigan and Gill (2008) discussed a constructivist approach to address the complexity of health issues embedded in practice. They reviewed different categories of questions based on the Socratic method of questioning (Paul & Elder, 2006 as cited in Brown et al., 2008), which can be used to gather information about an issue and to foster critical thinking. These categories include questions of clarification; questions to identify assumptions, perspectives, and evidence behind decisions; and questions to explore the implications of decisions. Through an “exploration of the relationships between elements of a given issue” the therapist develops reflective skills to understand clinical problems (Brown et al., 2008, p. 208). The ability to question is viewed as consistent with a client-centred philosophy of practice, which seeks to understand the many contextual and individual factors that influence a client’s performance in daily life activities. Practice from a client-centred perspective “privileges the individual client’s values and perspective over unquestioning conformity to social norms of belief and behaviour” and aligns with constructivism (Brown et al., p. 207). A focus on the individuality of the person and their goals throughout the occupational therapy process, contrasts with a traditional prescriptive or biomedical approach to understanding health and illness (Sumsion, 2006).

In the present study, asking questions allowed the participants to gather the required information about a client, learn about and from other professionals’ knowledge and perspectives, and reflect on clinical problems. These decision-making and thinking processes comprise clinical reasoning defined as “the process used by practitioners to plan, direct, perform and reflect on client care” (Schell & Schell, 2008, p. 5). There is a significant body of research on clinical reasoning which is viewed as the essence of practice embedded in professional autonomy, accountability and responsibility (Higgs & Jones, 2008). This type of

reasoning enables practitioners to make sense of unfamiliar or complex situations and act on a problem (Neistadt, 1996; Schön, 1987). Questioning or reflective inquiry is an essential aspect of clinical reasoning and fundamental to acting in clinical practice (Brown, Bannigan, & Gill, 2008; Higgs & Jones, 2008; Schell, 2008). As such, in the dialogue of questioning, occupational therapists learn how to make decisions to benefit their clients, despite the uncertainty of the clinical situation.

New practitioners have permission to ask questions and share what they do not know because of their peripherality. Egan and Jaye (2009) suggest that the “challenges of early clinical experience frequently centre on legitimacy” and whether the new practitioners have the support of coworkers (p. 116). In the present study members of the team demonstrated a willingness to respond to the participants’ inquiries. This openness is characteristic of the space for learning afforded by the hospital context. In Eraut’s (2007) study of new graduates in engineering he describes this receptivity as an “ask anyone culture” (p. 415) which encourages information seeking. This requires relationships characterized by trust, and an understanding of the norms of the community including knowing when and knowing how to ask questions. Over the months of practice at the hospital, the occupational therapists developed their questioning and clinical reasoning skills. They learned to seek answers to complex clinical problems that did not have ready-made solutions (Tuomi-Gröhn, 2003). Asking questions and seeking information are important proactive, learning activities (Eraut, 2007) which are encouraged in this practice context.

### ***Seeking Guidance, Observing, and Engaging in the Discourses of Patient Care***

As noted earlier, the participants in the present study encountered complex problems requiring clinical judgment that is developed through everyday professional experience (Higgs & Titchen, 1995). They actively sought guidance to scaffold the practical knowledge and skills which they needed to be able to act in the workplace context. The nurses' station was the primary space for collaboration and communication where health professionals consulted regarding patient care, received caseload assignments, and accessed textual information in the patient chart or other forms of clinical documentation (lab results, x-rays). Ward clerks, nurses, orderlies, physiotherapists, occupational therapists, social workers, home care case managers, and physicians shared this space. Fenwick (2008a) proposes that the notion of space and how this is enacted has a "critical influence on work learning" (p. 24). For the participants in the present study, the act of being physically present on the unit and in the nurses' station afforded an opportunity for them to learn and consult about clients, as different health professionals go about their activities in these spaces. The occupational therapists' presence in this community supported their ongoing engagement in practice. In their dialogue with members of the team, the participants often identified clients that could benefit from occupational therapy yet had not been referred. They then requested a referral to provide services, thus promoting their participation in patient care. The nurses' station afforded learning and created opportunities for the construction of knowledge. The participants' capacity to listen to and engage in medical discourse, and initiate involvement with clients contributed to intersubjectivity with other clinicians (Sheehan, Wilkinson, & Billett, 2005). John-Steiner (2000) views intersubjectivity as a way of "experiencing the world in similar dimensions, processes and content" (p. 158). In this community of practice, intersubjectivity was manifest in the members' shared purpose and focus (Rogoff, 1990).

This attribute contributes to collaboration among team members where there is a joint purpose, shared experiences, artifacts and rules (John-Steiner, 2000).

By talking with colleagues and observing their actions, listening to and engaging in the discourses of patient care, the participants explored and reflected on the critical aspects of a clinical situation. They learned about different team members' perspectives and gained understanding to carry out activities of practice. While many interactions occurred spontaneously or informally at the nurses' station, the hospital corridors and clients' rooms were also critical spaces for learning. In these spaces, the occupational therapists learned primarily with and from physiotherapists, nurses, occupational therapy assistants (OTAs), and social workers. These professionals provided different sources of expertise. Physiotherapists most often shared medical aspects about a client such as the meaning of a diagnosis, the expected course of an illness and the results of investigations such as laboratory tests. They also talked about clients' performance and progress in physiotherapy and their expected function in mobility to allow discharge from hospital. I observed that the occupational therapist and physiotherapist often met with a client together to perform aspects of assessment such as the determination of a client's function in transfers, or for intervention such as positioning a client in a wheelchair. I believe that this collaboration allowed the therapists to problem-solve, learn from each others' tacit knowledge (Eraut, 2007) and develop knowledge and skills for clinical practice.

Nurses also shared medical information about clients and provided the participants with an update of clients' progress and plans for discharge. This dialogue which occurred formally in team rounds or informally at the nurses' station or at a client's bedside, often influenced the occupational therapists' course of action with a client. Participants also

learned about hospital equipment from nurses such as devices and monitors used in patient care (electrocardiograms, blood pressure monitors, and ventilators). This was most notable in the ICU where the equipment is specialized for the care of people who are seriously ill or injured. Nurses were also a resource for learning about the norms and procedures of a particular unit such as patient care plans, protocols for admission and discharge from the unit, and patient safety practices (such as infection control).

Occupational therapy assistants were a valuable support for learning practical knowledge which links theory and practice. The OTAs have tacit knowledge developed through experience in working with many different clients and occupational therapists throughout the hospital. They scaffolded the occupational therapists' learning by asking questions about the client or clinical situation, and by engaging in problem-solving. This dialogue was critical to the participants' learning. The OTA however, does not have the theoretical knowledge base to interpret clients' symptoms or dysfunction, the contributing factors to their problem, the precautions to treatment, and the prognosis or outcome (CAOT, 2007; Schell & Schell, 2008). However, due to staffing constraints the OTAs are more accessible and the participants were comfortable in seeking their advice and working with them. This feature of the activity system influenced what the participants learned. I often wrote in my field notes that the participants seemed to rely on the OTA for guidance and direction in how to proceed with treatment for a client particularly in the selection, adaptation or fitting of a wheelchair or other type of equipment or assistive device. There is a real need for the participants to understand the meaning and functional implications of a diagnosis, and know the rationale underlying their decisions and actions. This is the basis for decision-making and therapeutic intervention (Slater & Cohn, 1991). The OTA is able to link

a problem with a solution, which reflects the routines and habits of the activity system and the medical paradigm of the practice setting. This does not consider the complex and unique aspects of the person, their illness, disability or injury, and their context (Schell & Schell, 2008). This requires knowing how to use the relevant information and evidence and how to prioritize clients' issues. I will discuss strategies to support occupational therapists' development of clinical reasoning in the Implications for Practice (Chapter 7).

Social workers helped the occupational therapists mediate the boundaries between hospital and community systems by sharing their knowledge of community agencies. They guided the participants in understanding the social and economic resources available to support clients and families. This knowledge influenced the occupational therapists' decisions and actions regarding discharge planning.

The participants most often learned from occupational therapy colleagues in the occupational therapy staff office or lunch room. As noted earlier, these were valued spaces for learning because they afforded an opportunity to talk with peers and more experienced occupational therapists about clients, problem-solve, and receive advice and guidance. The participants desired to know if their interpretations of situations and experiences were consistent with accepted ways of understanding within the profession and hospital context (Higgs & Titchen, 1995). All of the participants discussed the importance of, and need for feedback on their practice from occupational therapy colleagues. In the context of medical education, Ende (1983) suggests that without feedback, mistakes are not corrected and learners are left with uncertainty regarding their performance, contributing to a "sense of being adrift in a strange environment" (p. 778). Receiving feedback is viewed as essential to a valuable learning experience (Sheehan, Wilkinson, & Billett, 2005).

While validation of the therapists' knowledge is important, it is essential to view knowledge as dynamic in which the individual reflects and questions "knowledge of the field" so that it is meaningful to them (Higgs & Titchen, 1995, p. 522). The participants valued an opportunity to talk about and reflect on their clinical skills with their senior therapist. Considering Vygotsky's zone of proximal development, the senior therapist helped the beginning practitioner make links between their existing knowledge and the practices of the hospital context (Spouse, 1998). In this community of practice, dialogue "is the essential condition of knowing" (Wells, 2000, p. 57) and the primary mediational means to engage in workplace activities. The occupational therapists also expressed the desire to have an appraisal of their performance early on in their employment to identify strengths, areas for improvement, and to reflect on their learning goals. The participants' suggestions for feedback were consistent with Eraut's (2007) recommendations for both "short-term, task-specific, feedback as well as longer-term, more strategic, feedback on general progress" to assist in the learning process (p. 416). Feedback regarding the occupational therapists' performance is a learning strategy that leads to increased confidence and involvement in activities of practice (Sheehan, Wilkinson, & Billett, 2005).

### ***Learning from the Patient Chart and Team Rounds***

In this community of practice, the patient chart is a critical form of discourse which mediates the shared object of patient care. The chart is a "legal document and source of evidence" that records procedures, decisions, plans and treatments (College of Occupational Therapists of Ontario, 2008, p. 1). At River Valley Medical Centre the problem oriented medical record or POMR (Weed, 1969) is used to organize client information according to diagnoses or problems. The chart contains a profile of the client, their medical history, laboratory and physiological investigations, and assessments by each health professional

(Harvard-MIT Division of Health Sciences and Technology, 2003). A problem list is generated and members of the health care team document their plans and progress notes by problem. A case narrative is constructed which reveals “embedded accounts, descriptions and opinions” (Atkinson, 1999, p. 98). The resultant story is a valuable artifact to mediate occupational therapists’ learning. By reading through the chart, the participants learned from other health professionals’ knowledge and from their clinical reasoning process. Team members’ entries revealed their interpretation of the client’s problem and their planned intervention. Eraut (2007) describes the medical chart as an archive of material for learning and a significant source of professional knowledge which can scaffold therapist’s existing knowledge. The chart assisted the participants in learning about the causes and management of different illnesses and diseases, patient risk factors, and the system of providers involved in patient care such as home care agencies, nursing homes, and rehabilitation services. Participants preferred to read the chart prior to meeting with a client. The participants searched the chart for cues to help them develop a clinical picture of the person, and this provided a foundation for conducting their occupational therapy assessment. The co-constructed narrative of the client enabled occupational therapists to access the “collective knowledge, experiences and judgement” of different members of the health care team (Hobbs, 2007, p. 63). This is critical for the participants in the present study who because of their casual status, were often covering for another therapist on a unit and needed to quickly gather the information to participate in patient care activities.

The Kardex is another valuable artifact to mediate patient care. This documentation system which contains the client’s problem list, treatment goals and the actions towards these goals, was primarily used by occupational therapists at one hospital site. They maintained

notes on the back of the Kardex with important contact information and a list of a client's medical equipment and assistive devices. The Kardex is a shared artifact among different activity systems in the hospital. It accompanies a client if they are transferred to another unit and therefore provides a vital communication function between therapists.

Team rounds are another important affordance for learning about practice. The objective of discussing cases in team rounds is “to tell the patient's story.... The narrative helps the healthcare team make sense of the patient's situation and provide safe, effective care” (Sokol, 1999, p. 571). In this hospital environment, rounds were held in a meeting room and not at the patient's bedside as commonly observed in ward rounds. Depending on the unit, a physician or nurse manager chaired the meetings and set the order in which each client's case would be reviewed. Members of the team shared the responsibility for recording colleagues' verbal reports on the patient chart. I observed that team rounds were an important means for learning about clients, other health professionals' perspectives and ways of doing activities. I also noted that members' interactions also involved social talk which can enhance working relationships and promote collaboration. There were barriers to the occupational therapists' participation in rounds, which I will discuss in the section on workplace constraints. However, all of the occupational therapists felt that these formalized meetings contributed to their construction of clinical knowledge and to their understanding of patient care and outcomes.

### ***Learning from Clients***

In the initial interviews, I asked each of the participants the following question: what is the role of clients or patients in your learning? This question was met with hesitancy because I believe they conceptualized knowledge as something that they developed in school or

through formalized courses or workshops. Learning from clients was not recognized or was not in the therapist's awareness because attention had not been directed towards these experiences (Eraut, 2004a). When I connected my interview question to a client-centred approach to practice, a core aspect of their occupational therapy education, their responses reflected learning about the importance of asking the client about their perspective.

Clients helped the therapists understand how an illness, disease, injury or surgery affected a person's function. With experience of seeing clients with similar problems, the participants were able to identify recurring themes or patterns which assisted in the clinical reasoning process (Unsworth, 2001). The participants also talked about learning practical skills in their interactions with clients such as adaptive approaches to dressing or bathing. The occupational therapists also developed strategies for communicating with clients such as explaining their assessment, providing options for participation in therapy, and negotiating interventions or discharge plans (Schell & Schell, 2008). Through participation in practice, they also learned about their own communication patterns.

I believe that a critical aspect of learning from clients pertained to the humanistic elements of the illness experience such as how people coped with illness, their resiliency and their determination. I often observed clients offer information to the therapist about their ability to perform activities, their concerns regarding discharge from hospital or the roles that they needed to carry out at home such as caring for a spouse who was ill. This knowledge helped the occupational therapist understand the client's values, goals, and priorities. Clients also scaffolded the participants' learning by asking them questions about treatment and care plans. I believe that learning from clients embedded in the day-to-day activities of practice, is an area that has not been explored in the health professional research. I was able to find

evidence of clients' involvement in teaching health professionals clinical and communication skills in the classroom and in practice, however these learning approaches were formalized or structured (Bleakley & Bligh, 2008; Farrell, Towle, & Godolphin, 2006; Kurtz, Silverman, & Draper, 2005; Ramani, 2003; Spencer, 2003). In the present study, clients were viewed as an integral part of a workplace community of practice, consistent with an activity theory framework. They mediated occupational therapists learning through their interactions and actions. Learning about, from and with clients is an inseparable part of doing occupational therapy. I argue that learning from clients is a dimension of client-centred practice that requires further study.

There have been a number of publications on client-centredness that have guided occupational therapy practice in Canada and internationally, beginning with the Guidelines for the Client-centred Practice of Occupational Therapy (Department of National Health and Welfare, and CAOT, 1983), Occupational Therapy Guidelines for Client-centred Practice (CAOT, 1991), Enabling Occupation (CAOT, 1997) and Enabling Occupation II (Townsend & Polatajko, 2007). These texts which describe occupational therapy concepts and models of practice focus on how the therapist can apply a client-centred approach and the competencies required to do so. The Canadian Model of Occupational Performance and Engagement (CMOP-E) positions the concept of “enabling engagement in everyday living” as a core competency of occupational therapy (Polatajko et al., 2007, p. 27). Enablement comprises a number of complex skills which occupational therapists use in the practice process including adapt, advocate, collaborate, educate, consult and engage. Townsend et al. (2007) propose that educating clients may involve practicing or demonstrating occupations to allow them to “transfer their learning to their own home, work or other environment” (p. 124). I believe

that this language reflects cognitivist ways of thinking about learning. The discourse of client-centred practice has been uni-directional in the sense that it focuses on how the knowledge and skills of the therapist can enable the client to perform their daily life activities. The discourse has not explored what the therapist learns from the client in the therapeutic relationship. If we conceptualize knowledge from an activity theory framework then we understand knowledge as distributed in a community of practice. Clients as part of this community, contribute their perspectives and understandings to work on goals that are meaningful to them (Edwards, 2007). The occupational therapist builds on this learning from clients in subsequent interactions with other clients.

The relationship between the client and occupational therapist in the enabling occupation process is characterized by collaboration and participation. However while the definition of collaboration proposed by Townsend et al. (2007) includes the concepts of sharing power and talents, mutual respect, and acknowledgement of others, they caution that collaboration is “problematic given that occupational therapy is a profession, which by definition operates hierarchically in a top-down manner based on the priority given to professional expertise over client experience” (p. 120). I propose that John-Steiner’s (2000) definition of collaboration as the “interdependence of thinkers in the co-construction of knowledge-among partners and in small groups” (p. 3) is more applicable to a client-centred philosophy. This recognizes that both client and occupational therapist learn through their actions and connections with each other (Wenger, 1998). In their relationship, it is not only the client that is enabled to perform their occupations, but the therapist is also enabled to participate in practice. This is consistent with activity theory and the notion of expansive learning in which new patterns of activity emerge in the activity system (Engeström, 2004).

As such, we need to elaborate on how participation with clients in the day to day activities of practice, situated in context, mediates occupational therapists' knowing. This is a new direction for client-centred occupational therapy.

In summary, the occupational therapists in the present study were active in seeking sources for understanding and learning through work. Their agency in engagement in workplace practices and knowledge construction will now be discussed.

### **Personal Agency in Learning**

Billett (2004) proposes that learning through work involves the negotiation between affordances and constraints and individuals' agency. Agency can be defined as the "personally mediated practice of constructing knowledge" (Smith, 2006, p. 168). Smith uses the term epistemic agency to capture the knowledge gained through individuals' "purposeful engagement in and direction of their workplace learning" (p. 158). In sociocultural theory the forms of mediation and the agent cannot be viewed as separate elements in human action (Wertsch, 1998). In the following discussion, I will endeavour to highlight the interaction between the participants and the mediational means which shape their learning, in reference to the workplace affordances discussed previously.

Making a transition from student to practitioner requires "the construction of new knowledge, identities, ways of knowing, and new positions of oneself in the world" (Tuomi-Gröhn, & Engeström, 2003, p. 28). In their initial months of practice at the hospital, the participants needed to understand an unfamiliar system with distinct activities, mediational means, division of labor, norms and rules. They expressed the need for practical clinical skills particularly in the areas of equipment such as wheelchairs and transfers. They also lacked knowledge in how to administer different types of assessments and interpret the

findings and translate this into a clinical picture of the client. For two of the participants, their position at the hospital was their first job, so their fieldwork placements provided them with the majority of their practical experience. Three of the participants had previous work experience prior to beginning at the hospital. The occupational therapists' prior learning, values, beliefs and life experiences shaped how they learned through work (Smith, 2006). Wells (2000) proposes that the knowledge and skills which people use to solve problems are based on their past experiences of participation in similar situations with others, and the extent to which they have "appropriated the practices, tools, motives, and values" of the community (p. 55). The participants were able to draw on their understandings developed in other clinical situations to mediate interpretations of this new practice context (Edwards, 2007).

The participants applied agency by taking pertinent knowledge from (Eraut, 2004b) their academic and clinical contexts where it was constructed, and resituating their knowledge and skills to understand and act in the workplace. This underscores the importance of what the therapist brings to their new community of practice (Fuller, Hodkinson, Hodkinson, & Unwin, 2005). The participants shared the perspective that their university education prepared them for knowing how to use various tools and resources to learn about a particular diagnosis, problem or treatment. They understood how to search for evidence to inform clinical decision-making, although they acknowledged that there was limited time in their work day to find and use the most current information (Coster, 2008). I believe that their need to quickly access knowledge motivated them to collaborate with colleagues in the joint object of patient care. Their personal agency was evidenced in being proactive in finding and establishing relationships with knowledgeable colleagues (Eraut,

2007). For example, when the participants encountered difficulty in determining priorities among the client referrals they received, they consulted with the physiotherapist or social worker on the team who provided guidance in this aspect of practice. Similarly, the participants negotiated the challenges of working on many different units by seeking out those with expertise including team members, the OTA, and the ward clerk. The opportunity to have courses in their university education with other health disciplines such as medical students and physiotherapy students, helped the participants learn how to communicate with members of the team in the hospital setting. This experience contributed to the participants' development of relational agency or the "capacity to align one's thoughts and actions with those of others in order to interpret problems of practice and to respond to those interpretations" (Edwards, 2005a, p. 169-170). Interactions with colleagues in the day to day activities of practice supported the occupational therapists' ways of knowing. This process of engagement and alignment with others contributed to the participants' belonging to the community and to their identity formation and learning (Cavanagh, 2008; Daley, 2002; Wenger, 1998). Thus, the "lived experience of participation" is a process of learning to be an occupational therapist (Egan & Jaye, 2009, p. 114).

An individual's agency is evidenced in the ways in which they participate in work activities. In the present study, the occupational therapists were motivated to engage in work activities and workplace affordances for learning (Billett, 2001b). Their casual status enabled "early independent practice" (Billett, 2006, p. 37), as they negotiated different activity systems throughout the hospital. Their desire for permanent status required them to be responsive and adaptable to changes in their work assignments and to demonstrate the ability to practice competently. The occupational therapists demonstrated their agency by

questioning, using the tools of practice, learning by trial and error, problem-solving with colleagues and advocating for their role. They learned to find their way and to make sense of the artifacts, activities, structures and processes that they encountered in their workplace. They immersed themselves in the physical, emotional and social space afforded by the hospital for collaboration.

The notion of collaboration aligns with the concept of relational agency (Edwards 2005a). Relational agency allows health professionals to work together and expand the object of patient care “by bringing to bear the sense-making of others” to a clinical problem or situation (Edwards, 2007, p. 5). As newcomers to the hospital, the participants’ peripheral position necessitated that they exercise personal agency by engaging in workplace activities and collaborating with different people. They learned that their workplace held the knowledge and skills of a community, and also could provide them with the support needed to make sense of its history (Lave & Wenger, 1991). The participants created and seized opportunities to dialogue with others and this language was a primary mediational tool for learning (Vygotsky, 1986). The process of talking out loud to gather, analyze and integrate information related to patient care was an important means of guidance and validation. This discourse supported the therapists’ clinical reasoning and decision-making skills. Medical discourse therefore involves not only disciplinary knowledge but also a “distinctive way of approaching and analyzing medical problems” (Hobbs, 2007, p. 42).

In summary, a strong form of agency is vital for professional practice in a complex hospital system. In the present study the occupational therapists had the capacity to recognize and seek the resources they needed to support their participation in work practice. They learned how to situate themselves (Fenwick, 2008a) in the hospital, how to perform the

activities that were acceptable in the culture, and how to promote occupational therapy and themselves. Their participation in everyday practices enabled them to make meaning and this engagement constitutes learning (Billett, 2004).

### **Workplace Constraints**

In this present study, the workplace imposed certain constraints to the occupational therapists' learning. These were embedded in the activity system(s) of the hospital and reflected the activities, artifacts, norms, expectations and ideas of the sociocultural practice. I will now discuss the primary constraints discovered in this research and how they regulated occupational therapists' learning.

### ***Time Sensitivity***

The current health care workplace is a highly contested environment requiring complex professional knowledge and skills. There is an intensity to work practice in the acute care hospital context. Clients are more acutely ill and they move through the system more rapidly than in previous years (Hoffman & Donaldson, 2004). The notion of time sensitivity (Hoffman & Donaldson, 2004) is a contextual constraint that results in higher caseloads, reduced opportunity to explore topics in depth with clients, and decreased time for reflection. The participants in the present study needed to act quickly to assess clients, provide treatment, and make recommendations. Their assignment to different units throughout the hospital on the same day or in the same week heightened the need to act in a timely manner. In this context, the teams were as Jaye and Egan (2009) note, "inherently unstable" and provisional, changing from shift to shift, and existing for only a brief time" (p. 113). The participants negotiated this constraint by accessing resource people and information sources that could provide them with timely guidance and answers. The findings of the present study are similar to Hoffman & Donaldson (2004) who explored the influence of context on

medical residents and students' learning in the clinical environment. They found that in time sensitive situations such as those involving high acuity patients and high patient caseloads, learners relied on experienced colleagues for information. The spaces for collaboration comprised contexts where patient care was conducted, including hospital corridors and teaching rounds. Similar findings were reported in Dawes and Sampson's (2003) systematic review of 19 studies that explored information seeking behaviour of physicians in different practice settings. Their results indicated that limited time is a key factor in the type of information seeking behaviour used by physicians. The physicians most frequently consulted with colleagues and used print material to answer questions in clinical practice, suggesting "the need for available, accessible and applicable information resources at point-of-care settings" (p. 14). The notion of "point-of-care" underscores the need for learning support situated in the context of practice.

### ***Employment Status***

The participants' status as a casual worker affected their learning and the continuity of care for clients. As a casual worker who may be assigned to a unit for a period of weeks or months, they knew that their schedule could change at the last minute depending on the need in the hospital. Some of the participants expressed that just when they began to feel competent with the medical conditions, language, or equipment unique to each unit, they were rotated. As a result, they were not confident in some aspects of patient care such as complex transfers and therefore they deferred to physiotherapy and nursing colleagues to assume the lead in these areas. This restricted the occupational therapists' participation in activities and therefore their learning. Sometimes, the participants were required to work 1 or 2 days on a unit providing coverage for the regular or permanent therapist assigned to the unit. An important aspect of their day then involved writing detailed notes of their treatment

goals, activities, and outcomes, to hand over clients back to their colleague. Many tasks were left uncompleted because of clients' medical status, their appointments with other disciplines or services, and system issues such as caseload demands. The participants often were unable to follow through with some patient care activities because of their own schedule, which left them returning to the same unit one or two days after initially seeing a client. Eraut (2004a) describes this as the "constant problem of picking up the threads" (p. 257), a common aspect of professional practice. The occupational therapists negotiated this constraint by discussing clients with colleagues and reading the patient chart, to gather the most current and relevant information to understand the clinical situation. This enabled them to identify and act on priority areas for the client (Daley, 1999).

Power relations and status can restrict learners' full participation in a community of practice (Contu & Willmott, 2003; Griffin, 2001; Sebrant, 2008). In the present study, employment standing was a barrier to structured learning opportunities. The participants' casual status restricted their access to learning activities such as workshops or courses. There is a contradiction between beginning practitioners' need for learning clinical knowledge and skills and the limited opportunities afforded to casual workers to attend continuing education events. When I began the research, the casual workers were not paid their salary when attending workshops nor did they receive funding to cover the costs of a workshop or course. Near the completion of the data collection period, one of the participants shared that a decision had been made to provide casual staff with one education day per year, the same as allotted to permanent staff. This would cover their salary and a portion of the costs of a professional development workshop. Some of the participants assumed the cost of attending courses, while others chose to seek opportunities offered at the hospital during their lunch

hour. This primarily consisted of attending in-services or Grand Rounds where physicians or other members of the team presented a clinical case or intervention. However, for the most part, the participants did not attend professional development activities.

### ***Paradigmatic Conflict***

Occupational therapy practice is based on a model which seeks to understand the whole person in relation to what they do, what they value, and the environments in which they live. This is in contrast to the medical model “where facts are described and phenomena are reduced to component parts to describe, explain and predict” human behaviour and functioning (Higgs & Titchen, 1995, p. 523). This paradigmatic conflict is evident in the discourse of patient care and what “counts as knowledge” (Fenwick, 2008a, p. 22). In the hospital setting, written texts such as the patient priority guidelines and the patient chart control the work practices and relationships among team members (Fenwick, 2008a). A discipline’s documentation on the patient chart reflects their domain of concern, philosophy of patient care and the boundaries of power. The language of occupation and enablement is not as valued in the acute care context as the language of medicine. As a result the participants felt that their notes on the patient chart were often not read by other disciplines. This situation influenced the object of patient care. In one example, a participant documented their assessment which stated that a client was able to dress and bathe independently. In team rounds, nursing staff apparently had not read the occupational therapist’s entry on the chart and reported that the client needed assistance for these aspects of personal care. As a result there was a contradiction in how these two professions viewed the client’s readiness for discharge from the hospital. Another participant negotiated the discrepancy in power among disciplines by communicating clinical information in several different means to ensure that occupational therapy’s contribution to patient care was visible and relevant (Griffin, 2001).

These methods of sharing information included talking with team members, writing on the patient chart and on the Kardex system, and when appropriate, using a pictogram placed by the client's bedside (such as how to apply a patient's foot splint, or how to transfer a patient).

Team rounds are another form of discourse which revealed the division of labor among team members, as well as notions of power and workplace hierarchies. This was manifest in the order in which disciplines were asked to speak about their involvement in patient care, which typically followed a medical hierarchy beginning with a report from a physician, followed by reports from a nurse, physiotherapist, occupational therapist, social worker, dietitian and lastly, a home care case manager. The participants' engagement in rounds varied according to the norms of the unit (the expectation of staff attendance, the value assigned to health professionals' contributions), the urgency of clinical problems, and the participants' availability and time. The occupational therapists' contribution in team rounds on the rehabilitation unit for example, was more valued than on units such as medicine or surgery where occupational therapy was less involved with patients. The discourse of the hospital which emphasized remedying the client's medical problem, also constrained the occupational therapists' participation in team rounds. Occupational therapists are concerned with a client's ability to do what is important to them and preparing them for a safe and independent discharge home. This is in contrast to the other team members' discussion of bodily systems, organs, dialysis schedules, and medication. In addition, clients are seen by physicians, nurses, physiotherapists, social workers, and often home care case managers as part of the routine of patient care. However not all clients are referred to occupational therapy. Therefore the therapist may not have known a number of clients who were discussed at team meetings and therefore could not contribute to the team's dialogue. This was a

barrier to the occupational therapists' participation in patient care. This situation also restricted clients from potentially benefiting from occupational therapy intervention.

### ***Historicity of the System***

An important historical aspect of the system was limited occupational therapy staffing at the different hospital sites. This constrained the scope of occupational therapy and the recognition of the profession. There was limited opportunity for the participants to do treatment because of high caseloads, productivity expectations and the emphasis on discharging clients within expected time-frames. Their priority was to assess the clients referred to occupational therapy. They did however endeavour to incorporate treatment where possible. The participants engaged the OTA when feasible to carry out treatment programs with clients. This illustrates the participants' agency in working within the constraints of the system to contribute to patient care and to promote the value of occupational therapy services in this context. As noted earlier, the occupational therapists expressed the value of learning from the OTA and the support they provided for their practice. However, insufficient OTA resources limited the scope of occupational therapy involvement with clients.

The increased number of physiotherapists compared to occupational therapists assigned to a unit is another workplace constraint. This disparity and the discourse of the acute care context which emphasizes medical diagnoses and treatment, contributed to a power differential between the two professions. Physiotherapy's power was revealed in team meetings for example, where they were often more knowledgeable than the occupational therapists about clients. Physiotherapists were more involved with clients and were "in the know" (Billett, 2001b, p. 25). There were fewer occupational therapists which limited their

access to clients. This situation also contributed to occupational therapy's reliance on physiotherapy for some patient care activities such as transfers. This power difference was also demonstrated in the participants' capacity to assess clients and to contribute to patient care. They discussed how physiotherapy performed aspects of occupational therapy practice with clients because of this situation. In my observation sessions I often noted that clients were too fatigued from their physiotherapy session to be seen by occupational therapy. The participants in this study negotiated this constraint and exercised their agency for learning by developing collaborative relationships with their physiotherapy colleagues. Physiotherapists were knowledgeable resources to support the participants' learning about the medical aspects of patient care, prognoses, and interventions. The occupational therapists asked questions and obtained information from physiotherapists, and read their assessments in the patient chart to mediate their understanding of clients.

I often observed that physiotherapists assisted the occupational therapists by identifying clients who needed to be seen urgently, or by highlighting problems that required immediate attention. While this may help the occupational therapist deal with time-sensitive issues, the physiotherapist uses a different lens to assess and understand clients. This may actually constrain occupational therapy's participation in patient care. Edwards (2007) suggests that "our actions are elicited by our interpretations of the object and by the ways of engaging with the object" (p. 7). An occupational therapist will view clients differently than a physiotherapist or a physician for example, because the social practices, concepts, and interpretations of each discipline are unique. This results in different forms of engagement with clients. It can also contribute to an enriched understanding of the client and their goals as team members collaborate in the object of patient care.

As discussed in the section on workplace affordances, occupational therapists learn from their participation with clients in the day to day activities of practice. Clients share their knowledge of their health condition, their lived experience, and “can sensitize health care providers about the issue and challenges” they face (Bennett & Baikie, 2003, p. 105). I observed however, that the client’s story was often not explored in depth. The participants limited their evaluation to asking questions, focusing on obtaining the information required by the hospital priority guidelines, the occupational therapy assessment template, and the norms of the system. Essentially, high risk areas which are medically based, not occupationally based, need to be addressed by members of the team. In one of my meetings with the DSL (OT) she explained that the emphasis is on the clients’ length of stay and getting clients in and out of hospital as soon as possible. How does this cultural norm constrain occupational therapist’s learning? I believe that when the participants restricted or redirected the clients’ expression of their concerns, they missed opportunities to gather important information from clients. In my field notes, I wrote how I found it difficult when the therapist “seems to just start asking the client questions without asking them about them, their surgery, their life, their occupations (essence of OT). Need to address building the therapeutic relationship in health communication. Perhaps this is a reflection of the culture of the acute care setting.” I decided to ask some of the participants how they thought their occupational therapy assessment would change, if they asked clients to tell their story. While they felt this approach would be meaningful to clients and might yield valuable information, they expressed concern about the increased time it would require.

Research on health communication in medicine indicates that physicians often pursue a problem without knowing if this is the most important to the client and without exploring the full range of the client's concerns (Beckman & Frankel, 1984; Marvel, Epstein, Flowers, & Beckman, 1999). This form of interaction is likely based on time constraints and financial pressure to maintain high client caseloads (Langewitz, Denz, Keller, Kiss, Ruttimann, & Wössmer, 2002). However, clients may not be comfortable or willing to express their concerns at the beginning of their interactions with health professionals. Changes in health and problems in every day life activities are a consequence of disease, illness, injury, and the aging process. When clients are given the time to tell their story, they reveal important personal and contextual information that may influence their care path. Stories allow us to understand what is meaningful to a client and also "tell us how the person makes meaning" (Hamilton, 2008, p. 145) the essence of occupational therapy practice.

During one of my initial observations sessions with a participant I noted that she asked a client about their previous paid work and leisure occupations. The older woman talked in depth about her job prior to retirement and her hobbies of fishing, painting and crocheting. She also described her efforts to take control of her health and the health of her husband who was also quite ill. The client's narrative provided insight into her life revealing not only her valued occupations but her determination and initiative. The occupational therapist focused on the client's experience of occupational change and the meaning the older woman derived from her caregiver and creative roles. My learning from this observation session led me to question how to support therapists' occupational focus in the hospital system. Occupational therapists can elicit stories from clients to learn about their values and norms, their abilities and limitations, and their home, work and community contexts. The occupational therapists

in the present study sought their clients' perspective regarding their health and function, and recognized clients' choices in decision-making and the strengths they brought to the health interaction. These features of client-centred practice are clearly linked to engagement in story-telling (Hamilton, 2008). I believe however, that the participants could enrich their use of "occupational narrative" (Hamilton, 2008, p. 136) to enhance their understanding of the client and their participation in therapy (Sumsion & Law, 2006). Story-telling is consistent with an occupational paradigm, emphasizing clients' goals for engagement in what is important to them, and what they desire and need to do as part of their life roles. A change in the interactions within the activity system will be required to allow a new emphasis on occupational narrative including the norms (how client assessment is performed), mediational artifacts (telling one's story), and division of labor (between client and therapist). This is illustrative of Engeström's (1999a) notion of opening up opportunities in an activity system to create transformations and innovations in the system. Occupational therapy concerns people's roles. The client is "somebody's wife, mother, grandmother....There is a whole life, history and story" (Mangan, 2004, p. 23) which can unfold if the client is allowed the opportunity. I will return to clients' stories in the Implications for Practice (Chapter 7), and in the Conclusion (Chapter 8).

In summary, the participants in this study did not appear to be deterred by the constraints in the work setting. This suggests that they have a strong sense of agency in accessing workplace activities and support for their learning (Billett & Pavlova, 2005). Dialogue with occupational therapy colleagues helped to construct their identity as an occupational therapist through guidance, problem-solving, and validation. A connectedness to team members arose from the experiences of working together in the shared object of

patient care. All of the participants learned through engagement in the everyday activities of practice mediated by team members, clients, and the artifacts afforded by the community. It is through the 'doing' of occupational therapy within their particular workplace context that constituted their learning.

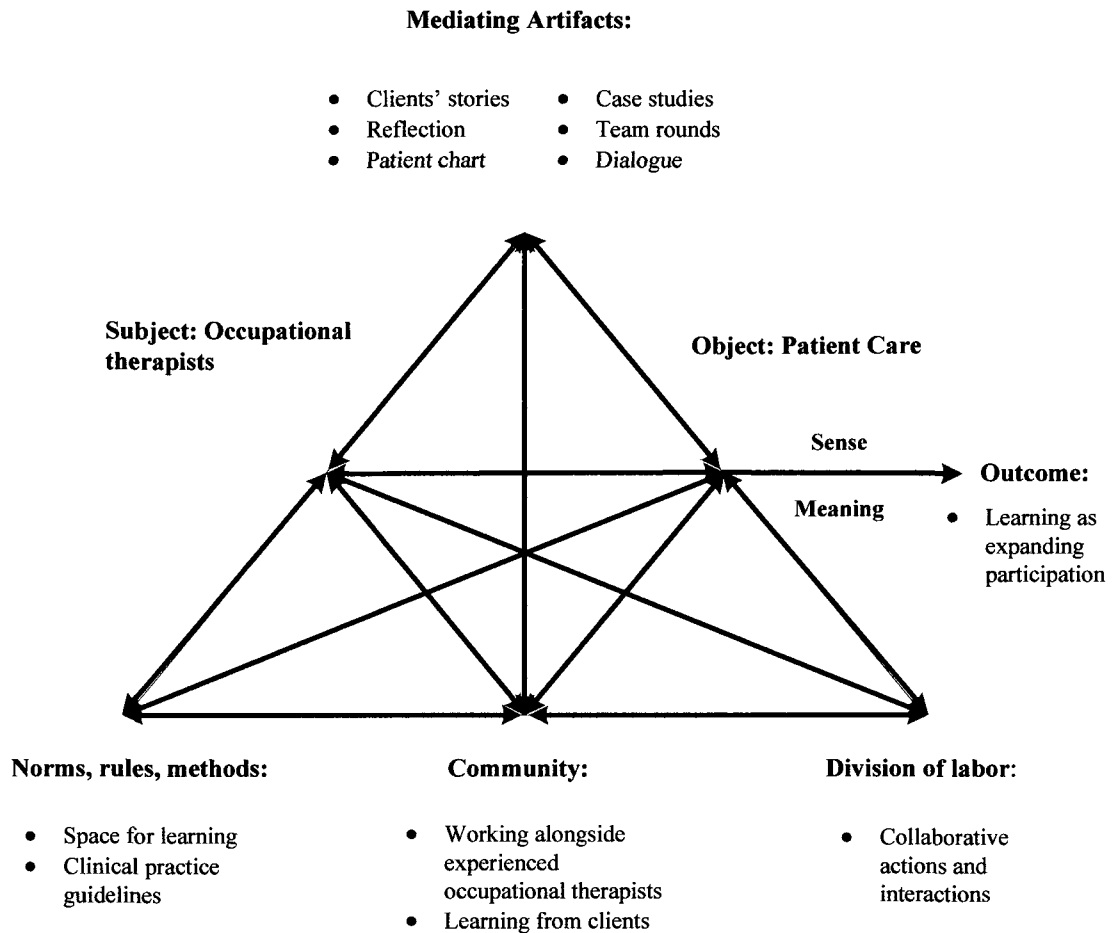
## CHAPTER 7. IMPLICATIONS FOR PRACTICE

In this chapter I will proceed to discuss the implications for practice based on the findings of the present study. I will articulate a conceptual framework for understanding how learning occurs in practice and the pedagogic means to support occupational therapists' engagement in work. I will use activity theory as the framework to present a workplace learning curriculum situated in the health care context. This conceptualization responds to the urgent call for the identification and elaboration of principles and practices to support the critical role of learning through participation in work (Billett, 2006). It also incorporates Lave's (1990) notion of a learning curriculum that describes how work activity is organized to enable workers' access to the knowledge needed to sustain a particular practice. A workplace learning curriculum considers the subjects of learning, what needs to be learned, how best to support this learning, and the influence of social, cultural and historical factors in learning (Engeström, 2001).

The proposed workplace learning curriculum recognizes that the acute care hospital context, like all activity systems, is a dynamic and multivoiced system. The participants in the present study brought their own experience to the workplace and the hospital had its own history revealed in its rules, norms, and artifacts (Engeström, 2004). There were many individuals and groups (health care teams) which shared the object of patient care, and their knowledge and skill were distributed in the unique activity system of each patient unit and hospital site. Therefore, the workplace affordances, constraints, and individuals' agency will influence the enactment of the learning curriculum and ultimately will depend on the local community of practice. The proposed pedagogic practices need to be situated in the day-to-day activities of the actual work setting (Billett, 2000).

Activity theory provides us with an understanding of the complexity of patient care, how work is organized in an acute care hospital context and the notion of participatory practice as critical to occupational therapists' learning. The artifacts, norms, roles and division of labor within the activity system mediate the learning of occupational therapists. I believe that these mediating forms are the foundation of a workplace learning curriculum. My conceptual framework of pedagogic practices is the *Workplace Learning Model for Occupational Therapy* (Figure 3). This builds upon Figure 1, which is a Model of an Activity System in Health Care, to incorporate strategies and interactions to assist beginning practitioners in learning to practice. It is important to highlight that the proposed pedagogic practices are not separate aspects but weave together in the "actions and interactions within the activity system" (Hung & Chen, 2002, p. 249). This weaving together of context also aligns with Engeström's (2004) concept of knotworking or how members in a community come together and join their different expertise to collaborate.

**Figure 3. A Workplace Learning Model for Occupational Therapy<sup>6</sup>**



In Figure 3, the subject is the occupational therapist. The object of the occupational therapist's work is the clients in the acute hospital context. The occupational therapist's participation in patient care is mediated by physical and psychological artifacts including the patient chart, assessment methods, treatment materials and equipment, and dialogue with colleagues. The community comprises health professionals, clients, and other members of the work setting who also mediate the occupational therapist's learning. The division of labor determines the roles of different health professionals and their domain of concern within the

<sup>6</sup> Adapted from: Engeström, Y. (2001). Expansive learning at work: Toward an activity theoretical reconceptualization. *Journal of Education and Work*, 14(1), 133-156.

hospital setting. Finally, the norms, management structures, procedures and rules of the hospital regulate the occupational therapist's actions and interactions within the system (University of Helsinki, 2009).

In Table 1, I have listed the workplace pedagogic practices according to the basic structure of an activity system. It is important to recognize that there is overlap among these practices because of the fluidity of context and the distributed nature of cognition.

| Table 1. Workplace Pedagogic Practices Based on the Structure of Human Activity |                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Subject: Occupational Therapists</b>                                         | <ul style="list-style-type: none"> <li>Participation in practice</li> <li>Personal agency</li> <li>Prior learning, values, beliefs, life experiences</li> </ul>                                                                                                                                                                                                                                                                    |
| <b>Mediating Artifacts</b>                                                      | <ul style="list-style-type: none"> <li>Case studies, evidence-based practice, clinical practice guidelines</li> <li>Dialogue, asking questions</li> <li>Team rounds</li> <li>Clinical skills sessions</li> <li>Working with experienced occupational therapists</li> <li>Hands-on assistance</li> <li>Reflection</li> <li>Clients' stories</li> <li>Occupation-focused practice</li> <li>Structured learning activities</li> </ul> |
| <b>Object: Patient Care</b>                                                     | <ul style="list-style-type: none"> <li>Provide client-centred care</li> <li>Address clients' occupational performance problems</li> </ul>                                                                                                                                                                                                                                                                                          |
| <b>Division of Labor</b>                                                        | <ul style="list-style-type: none"> <li>Collaborative actions and interactions with occupational therapy peers, experienced colleagues, other health professionals</li> </ul>                                                                                                                                                                                                                                                       |
| <b>Community</b>                                                                | <ul style="list-style-type: none"> <li>Space for learning</li> <li>Establishing collaborative relationships</li> <li>Learning from clients</li> <li>Working with experienced occupational therapists</li> </ul>                                                                                                                                                                                                                    |

| Table 1. Workplace Pedagogic Practices Based on the Structure of Human Activity                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Community (continued)</b><br>Interprofessional learning<br>Professional practice meetings                                                                                                                                            |
| <b>Rules and Norms</b><br>Space for learning, context encourages participation, questioning, shared problem-solving<br>Organizational support for structured learning activities<br>Clinical practice guidelines<br>Performance reviews |

### A Workplace Learning Model for Occupational Therapy

Figure 3 illustrates the components of the *Workplace Learning Model for Occupational Therapy (WLMOT)* and highlights a few pedagogic practices from Table 1. In this model, there are many potential relations within the activity of patient care. The pedagogic practices are not separate aspects but overlap. For example, working alongside experienced occupational therapists may be both an artifact for learning and an aspect of the community. Similarly, clients are an integral part of the community and their stories are mediational artifacts for learning. This illustrates the dynamic and interwoven nature of the strategies for learning. In an activity system, there is constant movement among the nodes of the activity (Engeström, 1999c). It is important to emphasize the complex mediational configuration of the *WLMOT*.

The following pedagogic practices are not discussed in order of importance, but begin with the foundation of the *WLMOT* as a space for learning and proceed to mediating processes including artifacts, aspects of the community, and norms and rules of the activity system. The occupational therapist's perspective and personal agency (Engeström, 1993) is the focus of the *WLMOT*. The object of patient care is inherent to the activity system and

integral to the model. Therefore, the subject and object are not addressed as separate entities in the following discussion.

### ***Space for Learning***

In my conceptualization, space for learning is not a separate social structure, but is represented by a weaving together of mind, artifacts and community which gives meaning to action (Cole, 1996). In Figure 3, this is represented by the blue background which situates learning in the workplace. The mediating processes are illustrated by the arrows. In the present study, there was a physical, emotional and social space that encouraged participation in social practice and access to others for learning. This suggests the importance of fostering a workplace atmosphere that encourages questioning, shared problem-solving and reflection among health professionals. This was a critical aspect of the workplace community I studied. I believe that this space for learning was communicated as a norm of practice at the hospital in the codified mandate as a teaching hospital. It was also developed through the occupational therapists' participation in activities of practice. They sought out colleagues with whom they were comfortable to ask questions. Through interaction with health professionals with different knowledge and experience, the participants were able to go beyond their existing level of development (Vygotsky, 1978). Therefore, establishing collaborative relationships with team members and fellow occupational therapists is vital for developing clinical knowledge and knowledge about the systems involved in patient care (such as home care services) which is distributed among members of the workplace community. Collaboration also provides "emotional scaffolding" which John-Steiner (2000) describes as a "safety zone within which" confidence, support, and helpful feedback are practiced between partners (p. 128). A receptivity to collaboration should be encouraged in the spaces where different health professionals work together (nurses' station) and in the

spaces where occupational therapists meet such as the staff office and lunch room. These opportunities for communication contribute to the development of mutual respect and trust facilitating the sharing of information (Eraut, 2002). Senior therapists can also promote a climate where asking questions and shared problem-solving are norms of practice for all therapists, regardless of experience. At a broader systems level, activities that are interprofessional in nature such as Grand Rounds or workshops are important means for mutual learning, dialogue and co-construction of knowledge. Interprofessional learning may foster intersubjectivity or shared understandings (Holstein & Gubrium, 2005; Sheehan, Wilkinson & Billett, 2005). As John-Steiner (2000) notes, intersubjectivity, and similar values and goals foster cooperation among those engaged in a joint purpose.

### **Case Studies**

Participants suggested that a beginning practitioner might benefit from having a group of therapists with whom they could ask questions, obtain different perspectives and use different knowledge sources to learn about clinical practice. One strategy to support this learning is through the presentation of case studies. Occupational therapists working on different units and with varying levels of expertise review complex cases together and discuss how they proceeded with the client assessment, identified goals and implemented treatment. In this collaborative peer learning, occupational therapists share their thinking aloud enabling other learners to “internalize the dialogue (intramental), identify questions and problem-solve” (Spouse, 2001, p. 519). Therapists tell their clients’ stories and through this dialogue they share their clinical reasoning skills with others. Their representation of understanding can also be expressed in many other forms such as a journal, or a visual representation of the therapist’s decisions and actions. These strategies also encourage therapists to reflect on their own practice, learning through the support and advice of fellow

practitioners. For beginning practitioners, meetings to discuss client cases are a means to help them develop understanding, clinical competence and a sense of belonging in the workplace (Hargreaves & Fullan, 2000).

Another important aspect of the case study meetings is to support occupational therapists' use of evidence to inform clinical decision-making. There is limited time during the work day to access and read research related to occupational therapy practice. Therefore the sharing of evidence in the case study meetings would be a valuable mediational means for learning. Sessions specifically devoted to using evidence may also support therapists' ability to integrate research into their practice. A number of models for the process of evidence-based occupational therapy have been proposed (Rappolt & Craik, 2003).

Continuing education such as the development of research skills, "structured reflection, case application and peer consultation" are critical to therapists' understanding and utilization of research (Rappolt & Craik, 2003, p. 272). The development of knowledge-translation summaries, and clinical practice guidelines in different practice areas (Cusick & McCluskey, 2000) are strategies that can address the time constraint facing occupational therapists' research utilization.

### ***Team Rounds***

Team rounds are another critical means to promote collaboration, learn about the medical discourse of practice, construct clinical knowledge and contribute to the understanding of patient care and outcomes. In the hospital context, there is "constant construction and renegotiation within the activity system" to achieve the object of patient care (University of Helsinki, 2009, p. 2). Coordination among health professionals is facilitated through ongoing informal collaboration and through the formal structure of

medical rounds. Team rounds enable analysis of clinical situations and “reflection-in-action” as members share their perspectives to work on practice problems (Schön, 1987, p. 26). Team members learn from one another, share medical knowledge and information about community resources, and learn how to accomplish patient care in this practice context (Hoffman & Donaldson, 2004). Practitioners’ participation in team rounds is an important aspect of the *WLMOT*.

### ***Clinical Skills Sessions***

A program of learning sessions which link theory and practice would support the development of skills required for practice such as wheelchair seating, transfer techniques, hand therapy programs and the use and interpretation of different occupational therapy assessments. Participants in the present study stated that while they had learned some of these skills in school, the context of work changed how knowledge and skills were enacted. They expressed the importance of hands-on experience coupled with guidance in learning about treatment materials and equipment, such as the features of different types of wheelchairs and how to adjust them. This highlights how using the tools involved in subject-object activity, enables the occupational therapist to gain comfort with them. While manuals are helpful, access to a colleague who can explain and demonstrate practice skills is critical to learning. The objectives and content of the clinical skills sessions should be based on occupational therapists’ identified learning needs and goals.

### ***Working with an Experienced Occupational Therapist***

The opportunity to dialogue with an experienced colleague regarding professional practice is an important means to support learning. Participants desired time to discuss aspects of patient care such as clinical problems and functional implications, as well as system issues such as caseload distribution and team functioning on a patient unit.

Discussion of clients can help learners develop clinical reasoning skills and validate their thinking and actions related to patient care. This guidance can bridge the boundaries between the occupational therapists' existing knowledge and their "knowledge-in-waiting" (Spouse, 1998, p. 264). Participants in the present study recommended structured time such as meeting for one hour on a weekly basis with an experienced therapist. They emphasized that the value of this learning needs to be recognized at a systems level to become a norm of practice. They were reluctant to seek advice of fellow therapists if it took away from their colleagues' time to see clients.

An opportunity to observe and work alongside an experienced occupational therapist in their interactions with clients is an important strategy to learn about practice with different clinical populations. This is particularly critical when transitioning to the workplace from university or from another work context, and when beginning to work on a new patient unit. Crossing boundaries requires the occupational therapist to develop and resituate learning in different contexts (Griffiths & Guile, 2003). This can be facilitated by guided participation in the daily activities of practice. An experienced occupational therapist can mediate understanding of the discourse of patient care in a new activity system and can support the learners' confidence and ability to assume complex client responsibilities.

### ***Hands-on Assistance***

Patient care activities that require the physical assistance of another person are common in the acute care context. The assistance from another occupational therapist or an OTA for certain aspects of assessment and treatment, such as client transfers and wheelchair seating is an important aspect of the *WLMOT*. An activity structure that allows therapists to have support from their own discipline can contribute to the development of confidence,

professional identity and to recognition of the profession in the workplace. It also enables occupational therapists to assume their role in patient care and not defer to other health professionals for aspects of the occupational therapy scope of practice.

### **Reflection**

In the present study, the participants were not aware that their participation in day-to-day practice constituted learning. This aligns with Higgs and Titchen's (1995) belief that practitioners make complex clinical decisions and judgments without being mindful of their actions. This tacit knowledge "may remain hidden if practitioners do not reflect upon or document their everyday practice" (p. 527). Reflection is the "process by which an experience is brought into consideration, while it is happening or subsequently" (Gamble, Chan, & Davey, 2001, p. 122). Reflection is an active process of making meaning from experience and is central to professional learning (Smith, 2001). It is therefore a key component of the *WLMOT*. Reflective practice can be facilitated by maintaining a journal or agenda with notes, questions or thoughts about a work experience and knowledge gained. Talking with colleagues can help therapists problem-solve, consider alternative actions, and bring understanding to their experiences (Smith, 2001). Colleagues' responses which may include advice, explanations, descriptions or questioning, allow what Schön (1987) terms "reflection-in-action" (p. 163). This form of reflection allows practitioners to construct situations of practice and "a professional way of seeing their world" (p. 36). Reflection is necessary for building knowledge, and integrating research into clinical practice (Rappolt & Craik, 2003). Talking about experiences with clients and describing the meaningfulness of these situations are strategies to develop reflective practice centred on learning from clients.

The importance of creating spaces for collaboration among occupational therapists cannot be overemphasized. These spaces afford opportunities for beginning practitioners and experienced therapists to talk about practice, seek opinions, and engage in reflection (Wenger, 1998). This is particularly important in a program management structure where occupational therapy departments do not exist and occupational therapists are supervised by other health professions. In these systems, there may be a loss of professional identity and unity that is provided by a departmental structure. Shared spaces can mitigate “isolation from colleagues in the same profession” (Miller & Solomon, 2002, p. 450). The opportunity for mutual engagement in reflection benefits the workplace community by contributing to a shared history of doing practice and talking about practice.

### ***Clients’ Stories***

A new emphasis on occupational narrative is proposed. Learning activities should address how to gather, understand, and use clients’ stories as an essential aspect of the occupational therapy process. Clients’ narratives capture their experience of being ill, their participation in daily occupations and their goals for treatment. Therapists can seek narratives in the clinical interview process such as by asking clients “for stories about past challenges and the person’s responses to them” (Hamilton, 2008, p. 145). Narratives can also become apparent through different standardized occupational therapy assessments such as the Canadian Occupational Performance Measure, which seeks to understand clients’ perspective of their problems in daily life activities and their goals for therapy (Law, Baptiste, Carswell, McColl, Polatajko, & Pollock, 1998). Hamilton (2008) proposes that story making and story analysis are part of clinical reasoning and are therefore fundamental in guiding therapists’ decisions and actions. I believe that the opportunity for clients to share their story is important in building a therapeutic relationship with their occupational

therapist, and in therapists' understanding of clients' personal experiences and what is meaningful to them. This observation forms the basis for building story-telling into the workplace curriculum.

### ***Occupation-Focussed Practice***

The profession of occupational therapy can be empowered through discourse that clearly expresses the philosophy, values, beliefs and knowledge of the profession. Changing the language of practice from an emphasis on activities of daily living or function to an emphasis on occupation can strengthen professional identity, recognition and representation in the workplace (Wilding & Whiteford, 2008). This is important for clients who can benefit from occupational therapy services, for therapists to secure access to learning through participation in practice, and for employers to ensure that there are adequate resources to provide services. Seeking clients' stories is an important strategy to emphasize the relationship of occupation to health and the unique contribution of occupational therapy to client care. In written texts such as assessment forms and treatment plans, the use of occupation-based language will place the client's ability to do what is important to them, in the foreground. The patient chart is a critical mediational tool for learning from and about, other professionals' perspectives and ways of doing practice. It communicates to others the domain of concern for occupational therapy and can legitimize "what counts as knowledge" (Fenwick, 2008, p. 22). The occupational therapist's role in client care should be clearly articulated to ensure that their expertise is recognized and used by other members of the team. The development of scripts such as assessment templates using the language of occupation can help shape interactions with clients and team members, their actions, and the nature of these relationships.

Staff sessions devoted to discussing how therapists introduce and describe occupational therapy to clients and team members, and how they talk about their practice can enhance occupational therapists' awareness of their professional identity and their confidence in explaining their role in the hospital (Wilding & Whiteford, 2008). These sessions may include learning about and practicing effective "written and verbal communication skills to document patient goals, notes, and reports" (Walker, 2001, p. 234). The case study meetings described earlier can also provide an opportunity to articulate the value of occupational therapy in client care. Willey (1987) proposes that perceived expert power is the most significant source of power for a professional. A discourse of occupation which clearly communicates the role of the occupational therapist in the health care system and their expertise is an important source of power (Griffin, 2001). The development of skills in assertiveness, negotiation, and lobbying can assist occupational therapists to position themselves in the sociocultural and political systems in which they work (Griffin, 2001). These skills can be supported in formal education sessions, or through participation in work practice, hospital committees and involvement in other forms of representation. Therefore, occupation-focused practice is a means to empower individual therapists and the profession at large.

### ***Structured Learning Activities***

Structured learning activities such as courses and workshops provide an opportunity for learning from and with other health professionals, who may not otherwise share perspectives and experiences because of the situated nature of practice. This highlights the importance of connecting different activity systems in learning about and doing patient care (Engeström, 2001). Similarly, Wenger (1998) suggests that the value of education sessions or classroom-based instruction "often resides as much in its community-building potential as

in the pedagogical” objectives of the curriculum (p. 250). Structured learning sessions are an important artifact to construct knowledge about practice. They are a means for occupational therapists to build upon their learning inherent in participation in practice (Wenger, 1998) and may be viewed as another form of learning through participation (Fuller, Hodkinson, Hodkinson, & Unwin, 2005). Education sessions can be spread over a period of time allowing learners “to embed his or her knowledge in practice” between sessions (Quick, Forsyth, & Melton, 2007, p. 472). Strategies such as professional practice meetings to share knowledge with colleagues can also assist occupational therapists in implementing their new learning in the workplace and in developing their professional identity in the community (Daley, 2002). Finally, organizational support including time, encouragement and financial compensation to attend structured learning opportunities needs to be provided for therapists. This support is a critical norm and procedure of the *WLMOT*.

### ***Performance Review***

Feedback is an important strategy to support learning. Occupational therapists in the present study requested both formal and informal methods of feedback. A structured performance review within the first few months of beginning work would provide validation for therapists and enhance their “motivation, confidence and disposition to learn” (Eraut, 2002, p. 7). Chart Stimulated Recall (CSR) is another formal measure of performance which assesses clinical competence (Salvatori, Baptiste, & Ward, 2000). CSR is already in place at the hospital but is not used consistently across units and hospital sites. The CSR method begins with a selection of charts of clients from the occupational therapist’s caseload. An interview is then conducted with the therapist during which the evaluator stimulates the therapist’s recall of their clients and how they managed their care (Salvatori, Baptiste, & Ward, 2000). The information gathered from the interview is used to evaluate the therapist’s

knowledge, skills and behaviours including theory, assessment and intervention, program evaluation, and critical thinking. This formal measure of performance may be used in collaboration with informal methods of feedback such as dialogue and observation. Dialogue with a senior therapist can promote a beginning practitioner's reflection on their learning goals and provide them with direction for improvement in practice. Finally, a peer review process in which peers observe their interactions with clients and other members of the team would be another method to provide feedback on practice (Ilott & Kenyon, 1997).

### **Weaving Together the Contexts of University and the Workplace**

Many of the above implications for practice can be incorporated into the academic curriculum to facilitate boundary-crossing between the university and the workplace. I will highlight some of these implications:

1. The language of occupation should be clearly articulated in all aspects of the occupational therapy curriculum. Opportunities for students to practice presenting their role, articulating their scope of practice and describing their interventions and therapeutic tools are recommended (Kinn & Aas, 2009). Students should also have the knowledge and skills to position themselves to gain influence and power in the workplace (Griffin, 2001). It is suggested that educational programs include components to promote awareness of organizational cultures and policies, and develop leadership skills, assertiveness, and conflict resolution.
2. The critical role of clients in occupational therapists' learning can be emphasized in clinical fieldwork placements and in classroom activities. Client involvement in the university curriculum is consistent with client-centred and occupation-based practice. Story-telling can be used to learn about clients' unique perspective of their occupations,

the influence of personal and contextual factors on engagement in occupations, and how they find meaning in life.

3. Interprofessional learning in which health professional students work together to solve clinical problems, can create the basis and space for collaboration in the workplace context. A range of shared learning activities, thinking and dialogue is necessary to develop mutual understanding and appreciation of other domains of expertise (John-Steiner, Weber, & Minnis, 1998). Learning about professional roles and scope of practice can overcome tensions or conflicts that can undermine collaboration.
4. Finally, similar to the findings of my Masters research, occupational therapy students should be encouraged to seek out support for their learning within the context of their workplace when they begin to practice (Toal-Sullivan, 2003). This support may come from peers and experienced occupational therapists, as well as other members of the community of practice.

In summary, the *Workplace Learning Model for Occupational Therapy* provides a framework for learning, comprising pedagogic strategies to support beginning practitioners' ways of knowing. I believe that this model is also relevant for learning among experienced therapists, individuals returning to practice after a period of absence and those who have changed the activity system in which they work. Consistent with sociocultural theories of learning, experienced and less experienced occupational therapists benefit from the social interactions embedded in purposeful activity, leading to development (Eun, 2008). The thread that weaves the proposed curriculum together is participation in the situated day-to-day activities of the workplace community. Participation can be understood as the "process

of appropriation of meanings and thus learning to be” (Hung & Chen, 2002, p. 248) an occupational therapist.

## CHAPTER 8. CONCLUSION

I will begin this concluding chapter with my reflections as a qualitative researcher and what I have learned through my participation in this present study. While these understandings have personal meaning and inspiration, I believe that they may also provoke thought and discussion among other occupational therapists. I will then explore the study's contributions to research and conclude with opportunities for future research. I hope that the findings of this present study are a means to shape change in the profession in 1) how we support occupational therapists' transitions from university to practice and transitions in other changed contexts, 2) how we support occupational therapists' learning in the workplace, and 3) how we value and recognize clients' contribution to our learning.

It is important to revisit Billett's (2002c) position on workplace learning at the beginning of this concluding chapter. Billett proposed that the requirements for workplace performance are constructed in a particular community and are "not a general attribute of the vocation" (p. 86). This was the sociocultural lens through which I tried to understand the participants' actions and interactions embedded in the activity systems in which they participated. I made three primary assumptions in my research which influenced my interpretations, representations and perceptions of the social world which I studied (Van Maanen, 2004). The first assumption was that learning in university and learning in the workplace are "fundamentally different phenomena" (Hodkinson, 2005, p. 521), requiring beginning practitioners to learn new knowledge and skills in a different context. I found however, that while the transition from university to practice is challenging, my participants assumed responsibility for their learning and were able to re-situate their knowledge, construct new understandings and mediate the demands of these different contexts (Griffiths

& Guile, 2003). The second assumption was that learning involves collaborative relationships with others in the workplace including health professionals and clients. I expected that beginning practitioners would learn about some of the activities, artifacts, norms, rules, and division of labor from other members of the health care team. I believed, however, that the participants would develop occupational therapy knowledge, skills, attitudes and a sense of identity from members of the same profession. This assumption was based on research findings (Hummell & Koelmeyer, 1999; Parker, 1991; Toal-Sullivan, 2003), and my clinical experience and values. However, the study findings revealed that there was little opportunity to work alongside and learn from an experienced occupational therapist. The participants problem-solved clinical situations and received advice and feedback from occupational therapists in the staff office and lunch room, and occasionally on a patient unit. The third assumption was that affordances for, and constraints to learning exist in the workplace. While these elements influenced how the participants engaged in the object of patient care, they exercised personal agency in developing and finding strategies to support their learning, and negotiate many of the workplace constraints.

### **Researcher Reflections**

Journal writing is a critical mediational means for my learning, allowing me to reflect on my experience as a qualitative researcher. I began keeping a researcher journal in September 2005 and continue to maintain this journal as I write my dissertation. Journal writing allows me to explore my thoughts, emotions and experiences, and know myself as both an inquirer and a participant in the study (Lincoln & Guba, 2000). As a form of reflective practice (Boud, 2001), the journal is a means to work with complex ideas and concepts, and develop understandings from my data and the research literature. It also allows me to record ideas and learnings from the discussions I have with colleagues including other

occupational therapists, the DSL (OT), fellow PhD students, as well as my Committee members.

My entry prior to my first day of on-site observations, I wrote about how nervous I felt embarking on the research journey:

Even though I have a lot of years of practice experience behind me, I am being thrown into a context in which I am not at all comfortable. I have never worked in acute care and I do not know anything about ICU, oxygen, and other related equipment in acute care. I am not concerned about relating to the patients at all...It is more the equipment that concerns me, and what do occupational therapists do in this setting? [*Journal entry Tuesday October 30, 2007*].

Initially I was quite surprised by the crowded hospital corridors occupied by hospital staff, medical equipment and nursing supply carts, rendering it difficult to even pass by. I noted that as the months passed, the crowded hospital corridors no longer had an impact on me; the lack of patient privacy however, still did. On my first day of observation I wrote that “I was surprised by patients’ vulnerability and lack of privacy.” [*Journal entry November 1, 2007*]. Health professionals’ assessments of patients including personal questions, are held at the bedside at a normal volume of speech despite the fact that anywhere from 1 to 3 other patients, as well as other hospital staff are in the same room. Throughout the study, I remained cognizant of the lack of privacy for patients.

As I began the observation sessions with the participants, I felt uncomfortable in the shared spaces of patient care such as the nurses’ stations, patients’ rooms, and team rounds. When Jennifer detected my hesitancy to enter the nurses’ station, she told me that this is where she talked most with colleagues and that I should join in, which I did. [*Journal entry November 1, 2007*]. I was surprised that my presence was rarely questioned by hospital

employees. On my first day of observation with Amy I attended team rounds on the orthopedic unit and wrote the following journal entry:

I was amazed that when the nurse manager came into the room and took the binder from the physio and then began to lead the meeting, that she looked at me, but just continued on. Like there was an assumption that I belonged there; perhaps because it is a teaching hospital and they are used to many different students/professionals coming and going. Instantly, it was like I was not even there so my observation was quite unobtrusive as I had so hoped for. *[November 6, 2007]*.

As I gained confidence in my role as researcher and became familiar with the hospital routines and contexts, my knowledge as an occupational therapist enabled me to focus on the commonplace situated activities of practice (ten Have, 2002). I was a member of the community being studied and this afforded an acceptance by hospital staff and by clients. The study participants introduced me to team members as a researcher and as an occupational therapy colleague. The hospital name badge which I wore also signified my professional membership in the hospital environment.

Throughout the data collection process, I had many experiences which confirmed for me the embedded nature of learning to practice. The activity of patient care is based in the unique historical, cultural, and social context of the River Valley Medical Centre. As a researcher, it was through my participation that I was able to develop meanings and understandings of the activity system(s) I was studying. Initially the nature of the medical conditions, type of services, tools of practice, division of labor, and rules which shaped the activity of patient care, were unknown to me. For example, many of the medical terms and abbreviations used by the participants when writing on the chart or talking about patient care were unfamiliar when I began the observation sessions. Over time, I learned some of the medical terminology however when I began on a new unit with a participant, I needed to

learn a different discourse specific to that patient population. I often wrote in my journal about my lack of knowledge about different aspects of patient care such as types of assessments, medical equipment, functional implications of a particular diagnosis or surgery, or the “larger collaborative activity systems” (Engeström, Engeström, & Kärkkäinen, 1995, p. 320) such as home-care, long-term care facilities, and community support services. Many times I felt as if I was a new graduate learning how to practice in an unfamiliar context. I believe that I learned alongside the participants through our dialogue about clients and the situated activities of practice:

Yesterday when Jennifer asked me about sensation testing for patients, I realized I did not know the answer to her questions. It has been many years that I have administered such a test. So, when I thought that I would be mentoring them ((the participants)), they are teaching me. I feel like their OT student! This is definitely a surprise learning for me. I guess I do ask questions that may encourage them to reflect or consider a different perspective with a patient. [*Observation January 16, 2008*].

I realized that posing questions and sharing my observations were forms of guidance to scaffold participants’ learning. Sometimes this took the form of asking the participants to explain what they were doing with a client and why, or to describe a client that we would be seeing together. Questioning was a means to foster reflection and critical thinking. This dialogue allowed me to gauge their understanding and knowledge about a clinical situation. In the second interview, I asked the participants what they had learned through their participation in the research study. Heather shared that it helped her realize her strengths and where she needed guidance:

And I think that, that just helps you figure out, you know, where you still need to ask questions and keep going that way. And I think, I was learning from you throughout it, too, because especially early on when you would, you would, you know, at the end you’d say, well, can I ask a question? Yeah, yeah. And then you would ask and I’d be, like, oh, that was a good question.

You know. So that, that almost was a little bit of mentoring in the background  
[*Second interview*].

Similarly, Emma commented that the feedback I provided was part of a mentor's role:

And to bounce some ideas off of you. So in some ways you act as somebody else, just as another OT on the team would, because I'm able to bounce ideas and have new ideas presented as well. [*Second interview*].

This excerpt highlights how socially constructed discourse allows communication of a "specific view of the work world" (Barley & Van Maanen, 1984, p. 299) by members of the same profession. Talking about practice provided the participants with support. This echoes the findings of Spouse (2001) who noted that the dialogue between student nurse and practitioner was critical to the learning process. New professionals may have the required theoretical knowledge but require assistance from experienced practitioners to apply this knowledge to practice (Spouse, 2001). Similarly, McInstry (2005) found that beginning occupational therapists valued advice and feedback provided by a more knowledgeable practitioner. Eraut's (2004a) research with midwives and nurses revealed that "in order to use a scientific concept in a practical situation it had to be transformed or resituated" to fit the context and this required creative problem-solving and insight which comes from experience (p. 256).

An important learning for me concerned the norms and rules of the hospital and how these mediate patient care. The meetings with the DSL (OT) were critical to understanding the history of the hospital and the tensions that existed within this activity system (Engeström, 2001). A significant tension concerned limited occupational therapy staffing and recognition of the profession's role in patient care. The DSL (OT) advocated for additional staffing to senior management to no avail. She informed me that the hospital was operating

beyond its' capacity and as a result, the organization emphasis was placed on reducing patients' length of stay:

Getting patients in and out ASAP. The perception is that occupational therapy delays patients' discharge, because occupational therapists focus on what people need to do to get home and it is more than their ability to walk. *[Journal entry February 18, 2008]*.

The DSL (OT) shared that approximately 15% of clients referred to occupational therapy are not seen prior to discharge from the hospital. High caseloads also reduce the type of occupational therapy involvement with each client. Therapists follow patient care priority guidelines which were developed to screen referrals and alleviate some of the workload pressure. Occupational therapy is often limited to assessment of clients, with little opportunity for treatment. Physiotherapy is more prominent and valued on many units, not only because of their degree of involvement with clients but also because there are more physiotherapists working on the unit than occupational therapists. The DSL (OT) perceived that senior management supported more staffing resources for physiotherapy because they "get patients out of bed which is associated with discharge from hospital." *[Journal entry February 18, 2008]*.

I noted a similar recurring theme in my journal entries concerning the power differential between occupational therapy and physiotherapy. I observed that the participants did not have the same access to participation in patient care, as physiotherapists. This was a constraint to the occupational therapists' learning (Billett, 2001c). Wilding and Whiteford (2007) argue that many of the difficulties occupational therapists have in trying to describe their profession "can be traced back to a fundamental paradigmatic clash between biomedicine and occupational therapy" (p. 191). The resulting different discourses and their relationship to power was a significant learning for me.

Finally, this study affirmed for me the importance of having a solid foundation in core medical knowledge for occupational therapy practice. I was quite often surprised that the participants did not seem to understand the medical diagnosis or condition and its implications on a client's ability to do what was important to them. This information in addition to other knowledge and skills enables an occupational therapist to evaluate a client, determine priority of needs, and decide on a course of action. Tomlin (2008) describes the therapist's ability to use theoretical knowledge about human beings, illnesses, and disease processes to guide decision-making, as part of the clinical reasoning process. Scientific knowledge and evidence, clinical experience and knowledge of the client as a person, are used to guide the occupational therapy process. This knowledge helps the therapist construct an understanding of the patient and helps identify treatment goals and priorities.

While the participants at times may not have known how to proceed with a clinical situation, they cared for their clients with empathy and dignity. They sought to understand a client's feelings and experiences, and were respectful of the person. I learned that this ability for therapeutic communication became the core skill that the occupational therapists relied upon. They would problem-solve and discover ways to learn the other information and skills they needed for patient care. I felt that all of the participants exemplified a client-centred philosophy of practice.

## Contributions to Research

I believe that this study contributes to current research concerning how beginning occupational therapists learn to practice, the interaction of affordances, constraints and personal agency in workplace learning, and how clients mediate occupational therapists' learning. These contributions will now be highlighted.

I began this study with the overarching research question, "How can we support beginning occupational therapy practitioners' transition into the work context and their learning within a community of practice?" Some of the findings of this present study are similar to those reported by other researchers concerning the experience of transition, congruence between expected and actual clinical practice, and access to support and supervision from experienced colleagues (Greensmith & Blumfield, 1989; Hummell & Koelmeyer, 1999; Miller, Solomon, Giacomini, & Abelson, 2005; Parker, 1991; Rugg, 1996, 1999; Tryssenaar, 1999). The participants' negotiation of the boundaries between activity systems of the hospital, and between the hospital and the community are similar to the findings of Engeström, Engeström & Kärkkäinen (1995). Increasingly, the work of health professionals and their discourse consist of interconnected actions across disciplines and organizations (Engeström, Engeström, & Kerosuo, 2003). The shared object of patient care, and artifacts including language and tools of practice mediated the different contexts. In the time sensitive context of River Valley Medical Centre which involved acutely ill, complex clients and high caseloads, participants relied on experienced colleagues for information, which echoes the findings of Hoffman and Donaldson (2004). A program management structure reduced the opportunity for the participants to work alongside, observe, or model experienced occupational therapists. Similarly, Morley, Rugg and Drew (2007) found that because of the loss of traditional occupational therapy departments in the United Kingdom,

support for new practitioners was “often provided by senior colleagues from a different profession” (p. 250).

I am not aware of research which has explored how occupational therapists learn, from a sociocultural paradigm. Specifically, Engeström’s (2001) third generation activity theory provided a valuable means to both conceptualize and understand the multiple voices and perspectives of interacting activity systems with the shared object of patient care. This present study revealed that occupational therapists make meaning, and come to know and act in the workplace context through participation. Smith emphasizes that “it is this ‘doing’ something within the requirements and particularities of a job that is the learning” (p. 158). The primary affordance for learning in this study was access to participation in the activities of practice. One of the major aspects that have been overlooked in the workplace literature concerns the importance of learning from other health professionals and how much this is appreciated by beginning practitioners (McInstry, 2005, p. 139). In the present study, the occupational therapists constructed knowledge through their actions and interactions with members of the workplace community. They learned primarily with and from physiotherapists, nurses, social workers, and occupational therapy assistants. The participants’ agency in learning was revealed in seeking support and guidance and collaborating with others in the object of patient care. They observed colleagues, performed aspects of client assessment together, and engaged in shared problem-solving and decision-making. This highlights the collaborative nature of health care and supports the current emphasis in research, education and practice on interprofessional learning. Asking questions to learn about aspects of practice and to problem-solve clinical situations emerged as a

critical strategy for making meaning among beginning practitioners. This finding contributes to the limited research on the role of questioning, embedded in the routines of practice.

Boundary-crossing was a critical feature of practice, requiring participants to learn the activities, artifacts, rules, and division of labor unique to each system. This present study illustrates how health care today concerns not only treating clients but it is also “increasingly about reorganizing and reconceptualizing care across professions” and contexts (Engeström, 2004, p. 158). There were a number of interconnected activity systems including patient units, hospital sites, and the community. I was able to focus on the individual experiences and perspectives of five occupational therapists, and also the collective processes involved in learning. Context was not only a mediating factor in the individual therapists’ learning but “entwined with it” (Fenwick, 2008b, p. 235) and integral to the construction of meaning and understanding (Cole, 1996). The findings of the present study elaborate on the notion of space and how it is enacted in workplace learning (Fenwick, 2008a). The hospital context afforded a social, cultural and physical space for learning. For the participants, there was a sense of belonging legitimized by their profession and by allocation of occupational therapy services to different patient units throughout the hospital. The participants’ membership in the hospital community allowed them to consult with team members, access tools of practice, and participate in the activities of patient care. The nurses’ station was the primary space for collaboration and communication among health professionals. The occupational therapy office and lunch room were important affordances for problem-solving clinical situations with members of the same profession.

This research recognizes the critical role of discourse in the participants' construction of knowledge. Dialogue with other health professionals, occupational therapy colleagues, and clients shaped occupational therapists' actions and knowing in practice. The written language of the medical record mediated their understanding of clients, the rules and norms of practice, and the roles of team members. The chart was a pivotal artifact to help the occupational therapist make sense of their world and guide them in how to proceed or interact with clients. The role of the patient chart in learning illustrates two important principles of activity theory; the multivoicedness which is carried in the community's artifacts, and the "history of the medical concepts, procedures and tools employed and accumulated" in the hospital context (Engeström, 2001, p. 137). While the patient chart is a valuable support for learning, I believe that it also constrains the discourse of occupational therapy in the hospital context. The texts of the chart are written according to the problem-oriented medical record (Weed, 1969) which signifies the authority of medicine. Medicine is the dominant profession and occupational therapy aligns their language and their services based on diagnoses, problems and areas of service. I also noted that the participants gathered a great deal of the information for their occupational therapy assessment from other health professionals' notes on the patient chart. I believe that occupational therapists need to gather information for their assessment from an occupational perspective, which cannot be found in the writings of other team members. Each health professional sees different meanings in the object of patient care based on their profession's epistemology. This learning became the source for a focus on occupation as one of the implications for practice emanating from this study. There is a critical need for studies of how the occupational therapy profession can use language to consolidate the profession's identity and enhance recognition of occupational

therapy with clients, the public, employers, funding bodies, and government. I will discuss this further in the section on future research.

In the present study, I explored the influence of power on the participants' learning and participation in their community of practice. Learning opportunities were influenced by the allocation and distribution of power in the hospital including the hierarchical position of different health professions, philosophical differences in the professions, the recognition and value attributed to occupational therapy, and staffing resources. The organizational culture and management structure also influenced the occupational therapists' engagement in practice. The concept of power in the workplace and its influence on the ways occupational therapists' participate in social practice is an important contribution to research. Power dynamics is very relevant to our understanding of the affordances and constraints to learning experienced by occupational therapists in this study.

An important contribution of the present study is the elaboration of the role of clients in health professionals' learning and what we mean by client participation. Clients supported the learning of beginning practitioners. Participants developed therapeutic skills and knowledge of the effects of illness or injury on a client's well-being and ability to engage in meaningful occupations. I believe that a critical aspect of learning from clients concerned the humanistic aspects of the illness experience, which involved an awareness and understanding of people's resiliency and capacity to overcome obstacles and losses. I observed however, that the client's story was often not explored in depth. The occupational therapists asked their clients a series of questions to address priority problem areas and the supports needed for discharge from hospital.

These interactions were regulated by the norms and rules of the hospital setting which mediate between the therapist and client, and how care is conducted. While the occupational therapists in this present study respected their clients' choice in therapy and sought their clients' perspective regarding their health and ability to return home, the person's story was often overlooked. This finding has important implications for how to incorporate story-telling in occupational therapy educational programs and in clinical practice. I will discuss this as an opportunity for further research.

The term mentoring has not been used in this dissertation because I believe that this does not help us understand what is being learned and how best to support this learning in the workplace. Rather this present study advances Billett's (2004) notion of a workplace learning curriculum, which assumes that learning is a "consequence of participation in social practices" (p. 316). Clinical practice is the curriculum (Egan & Jaye, 2009), and there are many artifacts for learning inherent in the practices and routines of the workplace. The concept of curriculum considers the localized structure of workplace activities including the objectives, division of labor, norms, and tools of practice. I used Engeström's activity theory to conceptualize pedagogic practices and the notion of space for learning (Billett, 2004). The proposed *Workplace Learning Model for Occupational Therapy* reflects the importance of mediation through artifacts and the distributed nature of human cognition among a system comprising health professionals, clients, and activities. In this perspective, collaboration contributes to the co-construction of knowledge among members of the community. Finally, the creation of a new model reflects Engeström's (2004) notion of expansive transformation in activity theory. Learning and development is reconceptualized to allow a "wider horizon of possibilities" to support beginning practitioners' learning (Engeström, 2004, p. 150).

## Future Research

Limited understanding of occupational therapy by clients, other health professionals and the public, positions occupational therapy at a “political disadvantage” in the current competitive health care climate (Wilding & Whiteford, 2008, p. 180). A related problem is the ongoing debate about the domain of the profession; whether it is about enabling occupation, activity or function (Golledge, 1998a, 1998b; Toal & Henderson, 2004). A common language to describe key concepts including occupation, participation, and occupational performance, does not exist in theory or practice. When seeking to understand these concepts, one is faced with definitions that are vague and confusing. For example, Townsend et al. (2007) advance that enabling is the core competency of occupational therapy. Enabling is defined as, “what occupational therapists actually do--and draws on an interwoven spectrum of key and related enablement skills, which are value-based, collaborative, attentive to power inequities and diversity, and charged with visions of possibility for individual and/or social change” (Townsend & Polatajko, 2007, p. 367). The concept of enabling is used in its own definition. This language is unclear and does not help us make meaning of this important occupational therapy competency. Similarly, occupation is defined as “a set of activities that is performed with some consistency and regularity; that brings structure and is given value and meaning by individuals and a culture” (p. 369). In the literature, occupation, activity and task are not consistently defined, nor are the relationships among these constructs (Golledge, 1998a, 1998b). The lack of an agreed upon vocabulary to address the domain of concern for the profession places occupational therapy at risk. It creates confusion about the profession and misunderstanding by clients, other health professionals, the public, funding organizations and governmental agencies (Polatajko et al., 2007). There is a critical need to develop consistent, clear language and constructs to allow

occupational therapists to make sense of their practice and to make it accessible to those who want to know about the profession or who may benefit from occupational therapy. Research is needed to articulate a common language that reflects occupational therapy practice, and explore how this important tool can be used to empower the profession (Griffin, 2001).

Wilcock (as cited in Molineux, 2004) suggests that occupational therapists do not fully understand the concept of occupation, because they have not valued the philosophy of the profession. There are however, windows of opportunities to return to the foundational principles of occupational therapy. Research from within the profession and outside of the profession supports an emerging paradigm of occupation (Molineux, 2004). This may encourage the profession to re-engage with their philosophical roots concerning the occupational nature of human beings and the contribution of occupation to health. The World Health Organization's (WHO) policies over the past 30 years have increasingly advocated the "importance of what people do, how they experience and feel about what they do" and the health promoting and well-being outcomes of participation in meaningful, daily activities (Wilcock, 2007, p. 6). I believe that this view presents an opportunity for occupational therapy to advance an occupational paradigm which builds upon a medical paradigm to enhance people's health (Wilcock, 2006). An expanded paradigm recognizes medicine as a critical part of the foundation for occupational therapy practice in understanding disease, illness and disability, and then embraces a unique understanding of the occupational needs of people (Wilcock, 1999). With the influential direction of the WHO, the occupational therapy profession can shape its future by returning to its philosophical beliefs about occupation. The language of occupation can be used to strengthen professional identity and representation, and transform power relations in the contexts of

practice (Townsend, 1998; Wilcock, 1999; Wilding & Whiteford, 2008). This will require a strong commitment to use the discourse of occupation in education, practice, policy and research. This is necessary to communicate the profession's scope of practice and contribution to clients' health, at a time when other professions are perceived to be "encroaching upon the domain of occupational therapy practice" (Wilding & Whiteford, 2008, p. 180). It is a time for action. Research is recommended to explore the use of occupation-based language and its role in advancing the profession's heritage and philosophical base (Molineux, 2004) building on the work of Wilding and Whiteford (2007, 2008). Research to understand how occupational therapists enact an occupational perspective of health in settings based on a medical epistemology, is needed. This knowledge will help us understand how the profession can develop strategies to negotiate workplace affordances and constraints, with the objective of advancing the discourse on occupation, engagement and client-centred practice.

The research indicates that transition from student to practitioner is often characterized by shock, role uncertainty, angst, and high levels of stress (Rugg, 1996, 1999; Sutton & Griffin, 2000; Tryssenaar & Perkins, 2001). The first year of practice "is the most critical time for new staff to adjust into their professional role and to flourish in their chosen career" (Morley, 2006, p. 232). Support and supervision from experienced colleagues have been identified as the critical factor to assist occupational therapists' transition from student to practitioner (Hummell & Koelmeyer, 1999; Toal-Sullivan, 2003) and ability to engage in their clinical roles (Cusik, McIntosh, & Santiago, 2004). While this present study contributes to knowledge of how beginning occupational therapists learn, there is a need for greater understanding of how the workplace can enhance learning among not only beginning

practitioners but those who are at different stages of their career. As well, the effectiveness of different pedagogic practices requires further exploration. The DSL (OT) has expressed interest in ongoing collaboration to support professional practice for occupational therapists at River Valley Medical Centre. An exciting future study would be to further develop and pilot some of the implications for practice discussed earlier in the *Workplace Learning Model for Occupational Therapy*.

Most of the studies of the clients' perspective and the practitioners' perspective of a participatory approach to health care have used quantitative methodologies and have not observed "what actually occurs in the reality of practice" (Cahill, 1998, p. 122). In the present study, I was able to share the occupational therapists' practice and gain an understanding of their experiences "interpreted against the background of" the hospital setting (Engeström, p. 2001, p. 136). There is a need for further ethnographic methodologies and action research to explore how occupational therapists learn through engagement in work. This is particularly important in the hospital context for two reasons. Firstly, hospitals (including general, rehabilitation hospitals, and mental health facilities) are the primary employer for 46% of occupational therapists in Canada (Canadian Institute for Health Information, 2008). Secondly, enculturation into practice is rendered more difficult "where the working environment itself is undergoing rapid extensive change" (Morley, Rugg, & Drew, 2007, p. 243), as is the current situation in Canadian hospitals. In the acute care context in particular, there has been little documentation about the employment of new graduates and why beginning occupational therapists choose acute care for their first position (Cusik, McIntosh, & Santiago, 2004). Studies of workplace learning are also needed in other settings where occupational therapists are employed; community, private practice, schools

and industry (Canadian Institute for Health Information, 2008). This information can provide guidance for occupational therapy managers and experienced staff to develop strategies to understand and support beginning practitioners' needs (Cusik, McIntosh, & Santiago, 2004).

While client-centred and patient-centred care is an international healthcare priority, medical education in general does not provide meaningful engagement with clients (Bleakley & Bligh, 2008). In addition, the discourse of client-centred practice in occupational therapy has been uni-directional in the sense that it focuses on how the knowledge and skills of the therapist can enable the client to participate in their daily life activities. It is critical to elaborate on how participation with clients in the day to day activities of practice, mediates occupational therapists' knowing. In particular, further studies of clients' stories and their role in understanding human occupation are needed. Fleming and Mattingly (2008) state that the occupational therapist's desire to know, 'who is this client?' is essentially a narrative question. Seeking a client's unique life story provides a framework for understanding the meaning of a client's illness or disability in relation to their sociocultural history, and their values and beliefs (Christiansen & Baum, 2005). In an academic setting, clients can be invited to share their stories with students. Knowing a client and situating their story with students' existing theoretical and clinical knowledge can help students develop therapeutic communication skills and clinical reasoning skills (Jensen, Resnik, & Haddad, 2008). In both academic and clinical practice settings, clients' stories help us understand what is important to the person and what treatment goals are important to them. The view that stories play an important role in understanding a client's life represents a shift from a biomedical to an occupational perspective (Jonsson & Josephsson, 2005). Research is needed to understand the use of stories as a mediational artifact in occupational therapy education and practice.

This knowledge will also help to address a critical gap in our understanding and practice of client-centredness, which is strongly claimed to be a core philosophy of occupational therapy (Canadian Association of Occupational Therapists, 1997; Sumsion, 2006a; Sumsion, & Smyth, 2000; Townsend, & Polatajko, 2007). Story-telling set in an ethos of collaboration, can “help us construct the meaning of an occupation” to a client (Bass-Haugen, 2005, p. 128) and keep occupation at the forefront of occupational therapy practice.

Effective in 2008, a professional master’s degree (non-thesis degree) in occupational therapy became the required credential to practice in Canada (Canadian Association of Occupational Therapists, 2008). We do not know how the change from a bachelor’s to a master’s degree influences occupational therapists’ perceived preparation and competencies for practice. Education specific to occupational therapy has been reduced from 4 years to 2 years. I believe that participation in the university community of occupational therapy enables students to begin to form an identity particular to the profession. As discussed, occupational therapy is a profession which has some unique challenges concerning role identity, recognition and domain of practice. Importantly, how does the change in educational requirements and time engaged in learning to be an occupational therapist shape enculturation into the profession? This is an area fruitful for further research.

### **Limitations of the Study**

I will now conclude with the limitations of the present study. There were two important biases that emerged during the research. The first concerned my belief that occupational therapists need to have a solid foundation in medical terminology, pathology and the implications of disease and illness on an individual’s function. My second bias was that I believed that participants needed to focus on obtaining an occupational history and profile of

their clients. I felt that the personal narrative of the clients was often overlooked in the context of acute care practice. Occupational performance and engagement, the core domain of occupational therapy, was not emphasized. These assumptions and biases shaped what I saw in the field and the emerging narratives (Van Maanen, 2004).

This study was conducted in an acute-care university affiliated hospital, comprising 3 different sites. Learning through work based on activity theory, emphasizes that learning is the product of engagement in the activities and social practices of the culture. Learning is also embedded in a historical and political context, characterized in part by funding constraints, limited staffing resources and high patient turnover. Therefore how occupational therapists learned through work situated in the activity system of River Valley Medical Centre, may not be indicative of learning situated in other occupational therapy practice settings. However, the findings may possibly inform similar large acute hospital contexts.

The research was carried out with a small sample of convenience, employed in one type of practice setting. The occupational therapists who volunteered to be involved in this study may have desired support from an experienced occupational therapist or may have wanted to advance knowledge of how the profession can support beginning practitioners' learning. Their unique backgrounds, experiences, beliefs, values and goals reflected in their stories, influenced their agency to learn. This personally mediated construction of knowledge may not provide insight into other occupational therapists' learning in different practice settings. Because all of the participants in the present study were women, the findings do not help us understand the experience of beginning practitioners who are male. As well, the sociocultural and historical context of the participants' education at Canadian universities may not be applicable to occupational therapists' education in other countries.

My approach to this present study involved reflexivity or “knowing the self within the processes of research” (Lincoln & Guba, 2000, p. 183). I tried to be aware of my representations and how this affected not only my interpretations of the data but also the texts that I wrote. In my writings, I endeavored to balance the participants’ perspectives, voices and concerns (Lincoln, & Guba, 2000). During the data collection, I sought to understand how I might be influencing the participants’ action and interactions when I accompanied them in their practice. This is an important issue because I assumed the roles of researcher, participant and participant-observer in the study. While I did not engage in direct patient care activities, I did guide and scaffold the occupational therapists’ learning by asking questions, sharing observations, and problem-solving. This may have influenced the nature of the occupational therapists’ participation in practice and the study findings. My experience as an occupational therapy clinician, educator, and director with the national professional association, influenced the data collection and analysis. As a result, I may have overlooked important themes or issues. I may also have made assumptions regarding the meaning of aspects of the occupational therapists’ practice such as the rationale behind their activities with clients. This could affect my interpretation of the data. However, the relationship I developed with each of the participants enhanced the study by allowing me to have a special, close insight into how they learned to ‘be’ an occupational therapist.

In conclusion, this study enhances our understanding of how beginning occupational therapists learn to practice in the workplace. I was humbled by the opportunity to share the practice of the five occupational therapists that participated in this study and learn along with them. Without their openness and willingness to share their experiences, this study would not

have been possible. Their caring, respectful approach with clients, and their desire to make a difference in their clients' lives, will remain the essence of my research experience.

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## **APPENDIX A. Recruitment Text**

### **Title of the study:**

Workplace Pedagogic Practices: Understanding Learning among New Graduates in Occupational Therapy.

### **Student investigator:**

Darene Toal-Sullivan  
Faculty of Education  
University of Ottawa  
145 Jean-Jacques Lussier

### **Supervisor:**

Dr. Raymond Leblanc, Ph.D  
Professor, Faculty of Education  
University of Ottawa  
145 Jean-Jacques Lussier—LMX 476

### **Description of Research**

The purpose of this research is to learn how to support beginning occupational therapy practitioners' transition from school to work and their learning within a community of practice. The objectives of the study are to understand how beginning occupational therapists learn in the workplace, the practices which support the development of knowledge among new therapists, and the role of clients in therapists' learning.

The findings of this research may inform employers about ways to support the learning of new practitioners and other therapists who are in the process of transition (such as therapists returning to practice after a period of absence, and internationally trained therapists). The findings will inform employers, practitioners, educators and regulators about how to help health professionals develop the knowledge and skills required to practice in a safe and ethical manner, and how to enable organizations to retain qualified, experienced staff for patient care.

The research will also inform the development of supportive learning practices to facilitate the process of transition from school to work.

## **Selection Criteria**

Participants for the study will comprise of beginning practitioners which are defined as therapists with less than one year of clinical experience. New practitioners who are unfamiliar with the hospital context and/or with their assigned patient population, or those who feel that they need support for their learning may wish to participate. Five to seven participants are required for the study.

## **Invitation to Participate**

You are invited to participate in the above-mentioned research study. This research study will be conducted in English. Your participation will involve the following activities:

- a) Three, one hour in-person interviews with the researcher, at approximately two month intervals during the six month study. The interviews will be conducted in the workplace in a private location outside of work hours. You will be asked questions pertaining to your learning experiences, how you learn the knowledge and skills to practice occupational therapy and the workplace opportunities and barriers to learning. The interview sessions will be tape recorded.
- b) Documentation in an electronic journal throughout the study to reflect on your learning in practice. The journal will provide an opportunity for you to dialogue with the researcher and document critical interactions which contribute to your learning. You will determine the frequency of journal entries based on the occurrence of your significant learning experiences.
- c) Observation by the researcher of your work interactions in the following activities: team rounds, client-therapist interactions, and therapist-therapist interactions. The on-site observations will be held for a period of 3 hours, once per week, for a period of six months. The observations will be rotated throughout the day and days of the week to capture the diversity of work activities and interactions, therefore the frequency of observations in which you will be involved will be determined as the study progresses. It will depend on factors such as the number of participants in the study, hospital routines and therapists' schedules.

If you are interested in participating in this research, please contact Darene Toal-Sullivan by telephone

Thank you for your consideration.

Sincerely,

Darene Toal-Sullivan, M.A. (Ed.), OT Reg. (Ont.), OT ( C )

## APPENDIX B. Consent Form

### **Title of the study:**

Workplace Pedagogic Practices: Understanding Learning among New Graduates in Occupational Therapy.

### **Student investigator:**

Darene Toal-Sullivan  
Faculty of Education  
University of Ottawa  
145 Jean-Jacques Lussier

### **Supervisor:**

Dr. Raymond Leblanc, Ph.D.  
Professor, Faculty of Education  
University of Ottawa  
145 Jean-Jacques Lussier—LMX 476

**Invitation to Participate:** I am invited to participate in the above-mentioned research study conducted by Darene Toal-Sullivan. This research is under the supervision of Dr. Raymond Leblanc.

**Purpose of the Study:** The purpose of the study is to learn how to support beginning occupational therapy practitioners' transition from school to work and their learning within a community of practice. The objectives of the study are to understand how occupational therapists learn in the workplace, the practices which support the development of knowledge among new therapists, and the role of clients in therapists' learning.

**Participation:** My participation will consist of three, one hour in-person interviews during the six month study: 1) at the beginning of the study, 2) at midpoint of the study, and 3) at the end of the study. The interviews will be conducted in my workplace in a private location outside of work hours. I will be asked questions pertaining to my learning experiences, how I learn the knowledge and skills to practice occupational therapy and the workplace opportunities and barriers to learning. The interview sessions will be tape recorded. I will also be asked to maintain an electronic journal throughout the study to reflect on my learning in practice. The journal will provide an opportunity for me to dialogue with the researcher and document critical interactions which contribute to my learning. I will determine the frequency of journal entries based on the occurrence of my significant learning experiences.

I will also be observed during the following work activities: team rounds, client-therapist interactions, and therapist-therapist interactions. The on-site observations will be held for a period of 3 hours, once per week, for a period of six months. The observations will be rotated

throughout the day and days of the week to capture the diversity of work activities and interactions, therefore the frequency of observations in which I will be involved will be determined as the study progresses. It will depend on factors such as the number of participants in the study, hospital routines and therapists' schedules.

**Risks:** I understand that this research deals with very personal information. The interview questions, electronic journals, and observation of my interactions with other therapists and with clients, may cause me to feel uncomfortable by drawing attention to my own learning needs and how I learn. Also, challenges I face in my day-to-day practice, conflicts or tensions among colleagues and within the hospital system may emerge. I have received assurance from the researcher that every effort will be made to minimize these occurrences by focusing on opportunities and support for learning in the work context. I understand that the time required to participate in this study may be a potential inconvenience for me.

**Benefits:** My participation in this study will contribute to evidence of professional learning which is required by my provincial occupational therapy regulatory organization. The researcher will provide me with documentation of my participation for my mandatory learning portfolio. The research study may help create opportunities to share and discuss my learning needs, interests, and other issues with colleagues. Collaboration with colleagues may help me learn how to solve the complex problems of patient care and clinical practice. The findings of this research may inform employers about ways to support the learning of new practitioners and other therapists who are in the process of transition (such as therapists returning to practice after a period of absence, and internationally trained therapists). The findings will inform employers, practitioners, educators and regulators about how to help health professionals develop the knowledge and skills required to practice in a safe and ethical manner, and how to enable organizations to retain qualified, experienced staff for patient care. As well, I understand that my participation will contribute to the development of educational strategies in my workplace which may assist both me and my colleagues in our practice.

**Confidentiality and anonymity:** I have received assurance from the researcher that the information I will share will remain strictly confidential. I understand that the information gathered during this research will be used only for the purpose of this study as documented above. All identifying information will be eliminated from the research thesis and all publications to protect my anonymity. Anonymity of my participation in this research cannot be protected in my workplace because my participation will be visible to other employees and to the organization.

No identifiable information will leave The Ottawa Hospital. The Ottawa Hospital Research Ethics Board may review your relevant study records, under the supervision of Darene Toal-Sullivan for audit purposes.

**Conservation of data:** Tape recording and transcriptions of interviews, electronic journals, the researcher's field notes from the on-site workplace observations and interviews, and other data collected will be kept in a secure manner, stored in a locked file cabinet in the researcher's private office located at

The data will be kept in a secure manner for 15 years after termination of the study. A copy of the data will be kept in the office of Dr. Raymond Leblanc, Supervisor. Dr. Raymond

Leblanc and the principal investigator will be the only researchers who will have access to the information.

**Compensation:** I will receive a compensation of \$175.00 to use towards a professional development activity of my choice. The compensation will be payable at the completion of the study, or, if I withdraw from the study, it will be payable at that time.

**Voluntary Participation:** I am under no obligation to participate in this research and if I choose to participate, I can withdraw from the study at any time and/or refuse to answer any questions, without suffering any negative consequences. If I choose to withdraw, all data gathered until the time of withdrawal will be stored in a locked file cabinet in the researcher's office.

**Acceptance:** I, \_\_\_\_\_ (*Name of participant*), have read and understand the above description of the research on this 3-page consent form. I agree to participate in the above research study conducted by Darene Toal-Sullivan of the University of Ottawa, Faculty of Education, which is under the supervision of Dr. Raymond Leblanc. I understand that the data collected will be used to fulfil the requirements for the PhD (Ed.) thesis.

If I have any questions about the conduct of the research project, I may contact the researcher or her supervisor at the numbers and addresses listed on the first page of this consent form.

If I have any questions regarding the ethical conduct of this research study, I may contact the Protocol Officer for Ethics in Research, University of Ottawa, Tabaret Hall, 550 Cumberland Street, Room 159, Ottawa, ON K1N 6N5 Tel.: 613-562-5841 Email: [ethics@uottawa.ca](mailto:ethics@uottawa.ca) or the Chairperson of the Ottawa Hospital Research Ethics Board at

I am aware that there are 2 copies of this consent form, one of which is mine to keep.

Participant's Name:

\_\_\_\_\_  
Participant's

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Investigator's Name:

\_\_\_\_\_  
Investigator's

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(Revised Oct 26/07)

## **APPENDIX C. Patient Information Sheet**

**Title of the study:** Workplace Pedagogic Practices: Understanding Learning among New Graduates in Occupational Therapy.

### **Background of Study**

This research study is a requirement for a PhD in the Faculty of Education at the University of Ottawa.

### **Purpose and Design**

The purpose of this research is to understand how to support new occupational therapists in their change from school to work. There is little known about how new therapists learn to practice their profession and how activities, people, and interactions within a hospital may influence learning. We also do not know the role of patients in therapists' learning.

This study will involve five to seven occupational therapists with less than one year of clinical experience. The therapists will be interviewed and will keep an electronic journal. They will be observed in meetings with other health professionals and as they work with patients.

### **Study Procedures**

I am being asked to participate in this study by allowing the investigator to observe the occupational therapist as he/she works with me. I do not need to do anything special. The investigator will take notes of what she observes during my therapy. The investigator may ask me questions to help her understand something that happened or something that was said. I can refuse if I am not comfortable with the investigator observing me or if I am not comfortable with a question.

This study will be conducted at the hospital. The number of times that I will be seen by the investigator will depend on my occupational therapist; and the type, frequency and length of my therapy program. The investigator will be at the hospital one day per week. Depending on the day, I may or may not see the investigator.

### **Length of Study**

The study will last for six months.

### **Possible Risks**

I may choose not to answer any questions the researcher asks that make me uncomfortable. This will not affect the quality of care that I receive at The Ottawa Hospital.

**Benefits of the Study**

My participation may help inform the hospital about how to support new therapists' learning, so that they can have the knowledge and skills they need to provide safe and quality patient care.

**Withdrawal from the Study**

If I choose to participate, I can withdraw from the study at any time without any impact on my care.

**Confidentiality**

I understand that this research deals with personal information. The information gathered during this research will be used only for the purpose of this study. All results of the study will be kept confidential. I will not be identifiable in any publications or presentations resulting from this study. All information which leaves the hospital will be coded with a study number and I will not be identifiable by name. No records bearing my name will leave the Ottawa Hospital. The Ottawa Hospital Research Ethics Board may review your relevant study records, under the supervision of Darene Toal-Sullivan for audit purposes.

**Voluntary Participation**

I am under no obligation to participate in this research and if I choose to participate, I can withdraw from the study at any time and/or refuse to answer any questions without providing the investigator with a reason. My decision will not affect my care that I receive at the Ottawa Hospital at this time, or in the future.

**New Information about the Study**

If any new information about the study becomes available that might affect my willingness to participate in the study, I will be informed as soon as possible.

**Questions about the Study**

If I have any questions about the conduct of the research project, I may contact the investigator or her supervisor at the numbers and addresses listed on the last page of this consent form.

If I have any questions about my rights as a research subject, I may contact the Chairperson of the Ottawa Hospital Research Ethics Board at \_\_\_\_\_ or the Protocol Officer for Ethics in Research, University of Ottawa, Tabaret Hall, 550 Cumberland Street, Room 159, Ottawa, ON K1N 6N5 Tel.: (613) 562-5841 Email: [ethics@uottawa.ca](mailto:ethics@uottawa.ca)

**Consent**

I have read this Patient Information Sheet (or have had this document read to me), and have had an opportunity to ask the investigator any questions I had about the study.

My questions and/or concerns have been answered to my satisfaction and I agree to participate in this study. If I decide at a later stage in the study that I would like to withdraw my consent, I may do so at any time.

A copy of the Information Sheet will be provided to me should I want to review the information at a later date, if I need to contact someone about the study or my participation in the study, or simply for my records.

Participant's Name: \_\_\_\_\_

Participant's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Investigator's Name: \_\_\_\_\_

Investigator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Student investigator:**

Darene Toal-Sullivan  
Faculty of Education  
University of Ottawa  
145 Jean-Jacques Lussier

**Supervisor:**

Dr. Raymond Leblanc, Ph.D.  
Professor, Faculty of Education  
University of Ottawa  
145 Jean-Jacques Lussier  
LMX 476

## **APPENDIX D. Letter of Information for Hospital Employees**

**Title of the study:** Workplace Pedagogic Practices: Understanding Learning among New Graduates in Occupational Therapy.

### **Background of Study**

This research study is a requirement for a PhD in the Faculty of Education at the University of Ottawa.

### **Purpose and Design**

The purpose of this research is to understand how to support new occupational therapists in their change from school to work. There is little known about how new therapists learn to practice their profession and how activities, people, and interactions within a hospital may influence learning. We also do not know the role of patients in therapists' learning.

This study will involve five to seven occupational therapists with less than one year of clinical experience. The therapists will be interviewed and will keep an electronic journal. They will be observed in meetings with other health professionals and as they work with patients. Hospital employees may be observed during the following work activities: team rounds, client-therapist interactions, and interactions with the participants.

### **Length of Study**

The study will last for six months.

### **Benefits of the Study**

Participation of unit employees may help inform the hospital about how to support new therapists' learning, so that they can have the knowledge and skills they need to provide safe and quality patient care.

### **Withdrawal from the Study**

Hospital employees who choose to participate can withdraw from the study at any time and/or refuse to answer any questions.

### **Confidentiality**

All results of the study will be kept confidential. Employee information will remain confidential; employees will not be identifiable in any publications or presentations resulting from this study. The Ottawa Hospital Research Ethics Board may review relevant study records, under the supervision of Darene Toal-Sullivan for audit purposes.

## **APPENDIX E. Data Collection Strategies and Time Frame**

A table indicating the strategies and time frame for collection of the data used in this study is presented on the following page.

| DATA COLLECTION STRATEGIES AND TIME FRAME |                      |                     |                      |                      |                    |                    |                     |                    |                    |                     |                     |                     |  |
|-------------------------------------------|----------------------|---------------------|----------------------|----------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|---------------------|---------------------|--|
|                                           | Oct<br>2007          | Nov<br>2007         | Dec<br>2007          | Jan<br>2008          | Feb<br>2008        | Mar<br>2008        | Apr<br>2008         | May<br>2008        | Jun<br>2008        | Jul<br>2008         | Aug<br>2008         | Sep<br>2008         |  |
| PARTICIPANT                               | <i>Month<br/>1</i>   | <i>Month<br/>2</i>  | <i>Month<br/>3</i>   | <i>Month<br/>4</i>   | <i>Month<br/>5</i> | <i>Month<br/>6</i> | <i>Month<br/>7</i>  | <i>Month<br/>8</i> | <i>Month<br/>9</i> | <i>Month<br/>10</i> | <i>Month<br/>11</i> | <i>Month<br/>12</i> |  |
| Emma                                      | Initial<br>Interview | On-site Observation |                      |                      |                    |                    |                     |                    |                    | Journal             |                     |                     |  |
|                                           |                      | Journal             |                      |                      |                    |                    | Second<br>Interview |                    |                    |                     |                     |                     |  |
| Jennifer                                  | Initial<br>Interview | On-site Observation |                      |                      |                    |                    |                     |                    |                    | Journal             |                     |                     |  |
|                                           |                      |                     |                      |                      |                    |                    | Second<br>Interview |                    |                    |                     |                     |                     |  |
| Amy                                       | Initial<br>Interview | On-site Observation |                      |                      |                    |                    |                     |                    |                    |                     |                     | Journal             |  |
|                                           |                      |                     |                      |                      |                    |                    | Second<br>Interview |                    |                    |                     |                     |                     |  |
| Heather                                   |                      |                     | Initial<br>Interview | On-site Observation  |                    |                    |                     |                    |                    | Second<br>Interview | Journal             |                     |  |
|                                           |                      |                     |                      |                      |                    |                    |                     |                    |                    |                     |                     |                     |  |
| Elizabeth                                 |                      |                     |                      | Initial<br>Interview |                    |                    | Second<br>Interview |                    |                    | Journal             |                     |                     |  |
|                                           |                      |                     |                      | On-site Observation  |                    |                    |                     |                    |                    |                     |                     |                     |  |
| Meetings with<br>DSL (OT)                 | Meeting              |                     |                      | Meeting              | Meeting            |                    | Meeting             | Meeting            |                    |                     |                     |                     |  |
| Researcher<br>Journal                     | September 2005       |                     |                      |                      |                    |                    |                     |                    |                    |                     | →                   | January 2010        |  |
|                                           |                      |                     |                      |                      |                    |                    |                     |                    |                    |                     |                     |                     |  |

| Strategies:                  |
|------------------------------|
| 1) Interviews                |
| 2) Observation & Field Notes |
| 3) Journals                  |
| 4) Meetings with DSL (OT)    |
| 5) Researcher Journal        |

## **APPENDIX F. Certification of Ethical Approval**

# Université d'Ottawa University of Ottawa

## SOCIAL SCIENCES AND HUMANITIES RESEARCH ETHICS BOARD

### CERTIFICATION OF ETHICAL APPROVAL

This is to certify that the University of Ottawa Social Sciences and Humanities Research Ethics Board (REB) has examined the application for ethical approval for the research project **Workplace Pedagogic Practices: Understanding Learning among New Graduates in Occupational Therapy (File # 01-07-02)** submitted by Darene Toal-Sullivan and supervised by Raymond Leblanc of the faculty of Education. The members of the REB found that the research project met appropriate ethical standards as outlined in the Tri-Council Policy Statement and in the Procedures of the University of Ottawa Research Ethics Boards, and accordingly gave the research project a Category Ia (Approval).

This certification is valid for one year from the date indicated below.

\_\_\_\_\_  
Catherine Paquet  
Protocol Officer for Ethics in Research  
For the Chair of the Social Sciences and Humanities REB  
Peter Beyer

August 22, 2007  
Date

## **APPENDIX G. Therapist, Site, and Clinical Service Observed**

The hospital sites and clinical services observed for each participant are shown on the following pages.

| THERAPIST, SITE, AND CLINICAL SERVICE OBSERVED |                        |                             |                                                                     |                                                         |                                          |                                |                                   |
|------------------------------------------------|------------------------|-----------------------------|---------------------------------------------------------------------|---------------------------------------------------------|------------------------------------------|--------------------------------|-----------------------------------|
| Month                                          | Occupational Therapist | Site                        | Clinical Service                                                    | Number of patients seen with the occupational therapist | Team Rounds, Family Conferences Observed | Number of hours of observation | Total Observation Hours per month |
| November 2007                                  | Amy                    | SITE B                      | Orthopedics<br>Medicine/Surgery                                     | 4                                                       | Team Rounds, Orthopedics                 | 6.5                            |                                   |
|                                                | Jennifer               | SITE B                      | Orthopedics<br>Medicine/Surgery                                     | 4                                                       |                                          | 4                              |                                   |
|                                                | Emma                   | SITE A                      | Orthopedics                                                         | 4                                                       |                                          | 4                              |                                   |
|                                                |                        |                             |                                                                     |                                                         |                                          |                                | <b>14.5</b>                       |
| December 2007                                  | Amy                    | SITE B                      | ICU                                                                 | 3                                                       |                                          | 2                              |                                   |
|                                                | Jennifer               |                             | Short-term rehabilitation<br>Orthopedics                            | 2                                                       |                                          | 2                              |                                   |
|                                                | Heather                | SITE A                      | Orthopedics                                                         | 2                                                       |                                          | 2                              |                                   |
|                                                |                        |                             |                                                                     |                                                         |                                          |                                | <b>6.0</b>                        |
| January 2008                                   | Amy                    | SITE B                      | Medicine/Surgery<br>Short-term rehabilitation<br>ICU<br>Trauma Unit | 12                                                      |                                          | 6.5                            |                                   |
|                                                | Jennifer               | SITE B                      | Short-term rehabilitation<br>Orthopedics                            | 3                                                       |                                          | 4                              |                                   |
|                                                | Emma                   | SITE A                      | Orthopedics<br>Psychiatry                                           | 2                                                       |                                          | 3                              |                                   |
|                                                | Heather                | Moved to SITE B from SITE A | Geriatric Assessment Unit (GAU)<br>Orthopedics                      | 3                                                       |                                          | 2                              |                                   |

| THERAPIST, SITE, AND CLINICAL SERVICE OBSERVED |                        |        |                                                         |                                                         |                                          |                                |                                   |
|------------------------------------------------|------------------------|--------|---------------------------------------------------------|---------------------------------------------------------|------------------------------------------|--------------------------------|-----------------------------------|
| Month                                          | Occupational Therapist | Site   | Clinical Service                                        | Number of patients seen with the occupational therapist | Team Rounds, Family Conferences Observed | Number of hours of observation | Total Observation Hours per month |
| January 2008<br>(continued)                    | Elizabeth              | SITE A | Cardiac Care Unit<br>(CCU)<br>Nephrology                | 1                                                       |                                          | 2                              |                                   |
|                                                |                        |        |                                                         |                                                         |                                          |                                | 17.5                              |
| February 2008                                  | Amy                    | SITE B | Medicine/Surgery<br>ICU<br>Trauma Unit                  | 6                                                       | Team Rounds<br>Trauma Unit               | 7                              |                                   |
|                                                | Jennifer               | SITE B | Short-term<br>rehabilitation<br>Orthopedics             | 1                                                       |                                          | 2                              |                                   |
|                                                | Emma                   | SITE A | Orthopedics,<br>Psychiatry                              | 8                                                       |                                          | 5                              |                                   |
|                                                | Heather                | SITE B | GAU<br>Medicine/Surgery                                 | 3                                                       | Family<br>conference                     | 4.5                            |                                   |
|                                                | Elizabeth              | SITE A | Neurology/Thoracics<br>Awaiting Placement<br>Unit (APU) | 6                                                       |                                          | 6                              |                                   |
|                                                |                        |        |                                                         |                                                         |                                          |                                | 24.5                              |
| March 2008                                     | Amy                    | SITE B | Medicine/Surgery<br>ICU<br>Trauma Unit                  | 2                                                       | Team rounds<br>Trauma Unit               | 4                              |                                   |
|                                                | Jennifer               | SITE B | APU<br>Short-term<br>rehabilitation                     | 7                                                       |                                          | 4.5                            |                                   |
|                                                | Emma                   | SITE A | Orthopedics                                             | 2                                                       |                                          | 2                              |                                   |

| THERAPIST, SITE, AND CLINICAL SERVICE OBSERVED |                        |                      |                                                      |                                                         |                                             |                                |                                   |
|------------------------------------------------|------------------------|----------------------|------------------------------------------------------|---------------------------------------------------------|---------------------------------------------|--------------------------------|-----------------------------------|
| Month                                          | Occupational Therapist | Site                 | Clinical Service                                     | Number of patients seen with the occupational therapist | Team Rounds, Family Conferences Observed    | Number of hours of observation | Total Observation Hours per month |
| March 2008<br>(continued)                      | Heather                | SITE B               | GAU<br>Medicine/Surgery                              | 3                                                       |                                             | 4.5                            |                                   |
|                                                | Elizabeth              | SITE A               | Neurology/Thoracics                                  | 3                                                       |                                             | 1.5                            |                                   |
|                                                |                        |                      |                                                      |                                                         |                                             |                                | <b>16.5</b>                       |
| April 2008                                     | Amy                    | SITE B and<br>SITE A | Medicine/Surgery<br>ICU<br>Trauma Unit               | 4                                                       |                                             | 3.5                            |                                   |
|                                                | Jennifer               | SITE B               | Short-term rehab                                     | 2                                                       |                                             | 2                              |                                   |
|                                                | Emma                   | SITE A               | General surgery<br>Orthopedics                       | 7                                                       |                                             | 7                              |                                   |
|                                                | Heather                | SITE B               | Short-term<br>rehabilitation                         | 2                                                       |                                             | 2                              |                                   |
|                                                | Elizabeth              | SITE A               | Nephrology,<br>Hematology<br>General medicine<br>CCU | 4                                                       | Team Rounds<br>Nephrology                   | 4                              |                                   |
|                                                |                        |                      |                                                      |                                                         |                                             |                                | <b>18.5</b>                       |
| May 2008                                       | Amy                    | SITE B and<br>SITE A | Medicine/Surgery<br>ICU<br>Trauma Unit               | 2                                                       |                                             | 2                              |                                   |
| Completed<br>observations                      | Jennifer               | SITE B               | Short-term<br>rehabilitation                         | 4                                                       | Team Rounds<br>Short-term<br>rehabilitation | 4                              |                                   |
| Completed<br>observations                      | Emma                   | SITE C               | Joint Replacement<br>Clinic                          |                                                         |                                             | 2.25                           |                                   |

| THERAPIST, SITE, AND CLINICAL SERVICE OBSERVED |                        |        |                                |                                                         |                                            |                                        |                                   |
|------------------------------------------------|------------------------|--------|--------------------------------|---------------------------------------------------------|--------------------------------------------|----------------------------------------|-----------------------------------|
| Month                                          | Occupational Therapist | Site   | Clinical Service               | Number of patients seen with the occupational therapist | Team Rounds, Family Conferences Observed   | Number of hours of observation         | Total Observation Hours per month |
| May 2008<br>(continued)                        | Heather                | SITE B | Medicine/Surgery               | 1                                                       |                                            | 1.5                                    |                                   |
|                                                | Elizabeth              | SITE A | Nephrology<br>General Medicine | 3                                                       |                                            | 2                                      |                                   |
|                                                |                        |        |                                |                                                         |                                            |                                        | <b>11.75</b>                      |
| June 2008<br>Completed observations            | Amy                    | SITE B | Medicine/Surgery               | 3                                                       | Family conference                          |                                        |                                   |
| Completed observations                         | Heather                | SITE B | GAU<br>Orthopedics             | 3                                                       |                                            |                                        |                                   |
| Completed observations                         | Elizabeth              | SITE A | Nephrology<br>CCU              | 5                                                       |                                            |                                        |                                   |
|                                                |                        |        |                                |                                                         |                                            |                                        | <b>10.5</b>                       |
| <b>TOTALS</b>                                  |                        |        |                                | <b>Total number patients= 121</b>                       | <b>5 team rounds, 2 family conferences</b> | <b>Total observation hours= 119.75</b> |                                   |

| Occupational Therapist | Total Observation Hours |
|------------------------|-------------------------|
| Amy                    | 34.0                    |
| Emma                   | 23.25                   |
| Jennifer               | 22.5                    |
| Heather                | 20.5                    |
| Elizabeth              | 19.5                    |
| <b>TOTAL</b>           | <b>119.75</b>           |

## **APPENDIX H. Observation Guides for Site Visits**

Three guides were used in recording data gathered during site visits. These guides are provided on the following pages.

## OBSERVATION GUIDE FOR SITE VISITS

Occupational Therapist: \_\_\_\_\_

Site/Unit: \_\_\_\_\_

Date: \_\_\_\_\_

### TEAM ROUNDS

| Activity Theory Analysis                                                                                                                                | Observations |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>Mediating tools/artifacts</b> e.g. occupational therapy equipment, narratives, medical charts, case studies, language                                |              |
| <b>Subject:</b> individuals or group engaged in activity                                                                                                |              |
| <b>Object:</b> actions or focus of team rounds                                                                                                          |              |
| <b>Division of labor:</b> actions among community members e.g. between professionals and specialties, writing on the medical chart, leading the meeting |              |
| <b>Community/context</b>                                                                                                                                |              |
| <b>Norms, rules</b> e.g. client caseload, hospital policy                                                                                               |              |
| <b>Outcome:</b> What do beginning therapists learn through team rounds?                                                                                 |              |
| How do beginning therapists engage in interdisciplinary team rounds?<br>Reporting of patients' status/progress                                          |              |
| How do relationships among team members shape participation? (e.g. workplace hierarchies, cultural practices)                                           |              |
| Strategies to assist beginning therapists' participation                                                                                                |              |
| What are the barriers to participation?                                                                                                                 |              |
| Other:                                                                                                                                                  |              |

## OBSERVATION GUIDE FOR SITE VISITS

Occupational Therapist: \_\_\_\_\_

Site/Unit: \_\_\_\_\_

Date: \_\_\_\_\_

### CLIENT-THERAPIST INTERACTIONS

| Activity Theory Analysis                                                                                           | Observations |
|--------------------------------------------------------------------------------------------------------------------|--------------|
| <b>Mediating artifacts</b> e.g. occupational therapy equipment, narratives, medical charts, case studies, language |              |
| <b>Subject:</b> individuals or group engaged in activity                                                           |              |
| <b>Object:</b> actions or focus of client-therapist interactions                                                   |              |
| <b>Division of labor:</b> between client and therapist                                                             |              |
| <b>Community/context</b>                                                                                           |              |
| <b>Norms, rules</b> e.g. clinical practice guidelines                                                              |              |
| <b>Outcome:</b> What do beginning therapists learn through client interactions?                                    |              |
| <b>Client's contribution to the therapists' learning</b>                                                           |              |
| Personal narrative (history of illness, disability)                                                                |              |
| Identifying needs/goals                                                                                            |              |
| Clarifying questions                                                                                               |              |
| Problem-solving                                                                                                    |              |

| Activity Theory Analysis                                                          | Observations |
|-----------------------------------------------------------------------------------|--------------|
| Demonstration of function (e.g. how the patient transfers from wheelchair to bed) |              |
| How do the interactions hinder learning?                                          |              |
| How do the interactions promote learning?                                         |              |

### OBSERVATION GUIDE FOR SITE VISITS

Occupational Therapist: \_\_\_\_\_

Site/Unit: \_\_\_\_\_

Date: \_\_\_\_\_

#### THERAPIST-THERAPIST INTERACTIONS

| Activity Theory Analysis                                                                                                                                                                                                                                                       | Observations |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>Mediating artifacts</b> e.g. patient record, computer program. What are the roles of language and artifacts in learning? (e.g. medical chart, scope of practice, medical equipment) e.g. occupational therapy equipment, narratives, medical charts, case studies, language |              |
| <b>Subject:</b> individuals or group engaged in activity                                                                                                                                                                                                                       |              |
| <b>Object:</b> actions or focus of therapist-therapist Interactions                                                                                                                                                                                                            |              |
| <b>Division of labor:</b> between therapists                                                                                                                                                                                                                                   |              |
| <b>Community/context</b>                                                                                                                                                                                                                                                       |              |
| <b>Norms, rules</b> e.g. occupational therapy regulatory guidelines                                                                                                                                                                                                            |              |

| Activity Theory Analysis                                                                       | Observations |
|------------------------------------------------------------------------------------------------|--------------|
| <b>Outcome:</b> What do beginning therapists learn through interactions with other therapists? |              |
| <b>Opportunities to participate in work activities:</b>                                        |              |
| Access to guidance                                                                             |              |
| Observation of practice                                                                        |              |
| Discussion of patient care                                                                     |              |
| Modeling                                                                                       |              |
| Scaffolding                                                                                    |              |
| Engaged in problem-solving (being questioned and asking questions)                             |              |
| Evidence of collaboration                                                                      |              |
| Strategies to develop beginning therapists' understanding                                      |              |
| Strategies to enable beginning therapists to learn for themselves                              |              |
| How beginning therapists respond to supportive guidance?                                       |              |
| How is the teaching-learning labor divided in the community (Russell, 2002)                    |              |
| What are the barriers to participation?                                                        |              |

### Observation Guide References:

Billett, S. (2002). Toward a workplace pedagogy: Guidance, participation, and engagement. *Adult Education Quarterly*, 53(1), 27-43.

Engeström, Y. (2001). Expansive learning at work: Toward an activity theoretical reconceptualization. *Journal of Education and Work*, 14(1), 133-156.

Fenwick, T. (Ed.). (2001). *Sociocultural perspectives on learning through work*. San Francisco, CA: Jossey-Bass.

Russell, D. R. (2002). Looking beyond the interface. Activity theory and distributed learning. In M. R. Lea & K. Nicoll (Eds.), *Distributed learning: Social and cultural approaches to practice* (pp. 64-82). London: Routledge.

Sheehan, D., Wilkinson, T. J., & Billett, S. (2005). Interns' participation and learning in clinical environments in a New Zealand hospital. *Academic Medicine*, 80(3), 302-308.

## **APPENDIX I. Initial Interview Guide**

The following is an interview guide which contains the topics and issues related to the contextual learning experiences of beginning practitioners. These questions will form the basis of the **initial semi-structured interview** with each of the participants. The questions for the second and third interviews will be developed from the content of the transcripts from previous interviews, journal entries and on-site observations.

### **Contextual Questions:**

1. Please describe the setting in which you work.
2. What do you like about working in this setting?
3. Tell me about your first months of practice.
4. What has the transition from student to new practitioner been like for you?
5. What facilitated your adaptation to your working environment?
6. In order to ease the transition from university to the workplace, what could the university have done differently?
7. What beliefs, values and attitudes about occupational therapy did you bring to the workplace?

### **Topics and Issues:**

8. What learning did you bring from university to the workplace?
9. How did your clinical fieldwork experience influence your preparation to practice?
10. How did you begin to develop your competencies to practice?
11. How do you learn the knowledge and skills to practice occupational therapy on your ward/program/service?
12. What types of learning do you value?

13. Think about your practice last week: tell me about one activity that helped you learn to do something new.
14. How do health professionals learn to practice in your organization?
15. What are you learning through work?
16. Where do you learn the most?
17. Please describe the role of clients in your learning.
18. What materials or tools help you learn? (e.g. client's medical chart, occupational therapy assessment tools, treatment plans).
19. What access to learning opportunities do you have throughout the hospital? Beyond the hospital setting?
20. What helps you to carry out your day-to-day activities as an occupational therapist?
21. What are some of the challenges you face in doing your work activities?
22. Please provide an example of a situation at work in which you did not have access to the learning support you required? What was the consequence(s) for your learning?
23. Please give an example of how you and your colleagues helped each other learn to do some aspect of occupational therapy assessment or treatment.
24. Tell me about a memorable learning experience for you. What did you get out of this experience?
25. How has your involvement in the day-to-day activities of work, changed since you started to practice?

## APPENDIX J. Journal Directions

Research about learning in the workplace is challenging because it is largely invisible and often taken for granted or not recognized as learning (Eraut, 2004). An electronic journal is a means to assist in awareness of one's own learning.

In your journal please reflect on the following:

**How has your ability to practice at River Valley Medical Centre changed since you started working at the hospital?**

The summary below may be helpful to you in thinking about your learning. (Note: not all descriptors are specific to only one heading, but this is an attempt to try to categorize **what** you have learned and **how** you have learned it).

### Aspects of Learning in the Workplace

#### Task Performance

- Occupational therapy skills
- Collaborating with others
- Joint planning and problem-solving
- Communicating with team members
- Planning your activities
- Solving problems
- Making decisions
- Modifying your plans because of changing conditions
- Delegating to others (e.g. OTA)

#### Personal Development, Awareness and Understanding

- Ability to learn from experience
- Leadership
- Handling ethical issues
- Coping with unexpected problems
- Setting priorities
- Judgment

#### Knowledge

- Knowing what you might need to know
- Trial and error
- Learning how to use relevant theory in different practical situations
- Accessing formal knowledge (manuals, journals, internet, workshops)
- Asking questions
- Seeking expert help

### **Additional Information**

The number of journal entries is your personal choice.

Your journal entries will be kept confidential; I am the only person who will read them. All identifying information will be eliminated from the research thesis and all publications to protect your anonymity.

Thank you very much.

Darene

Darene Toal-Sullivan, M.A. (Ed.), OT Reg. (Ont.), OT ( C )  
PhD Candidate

### **References for Journal Directions**

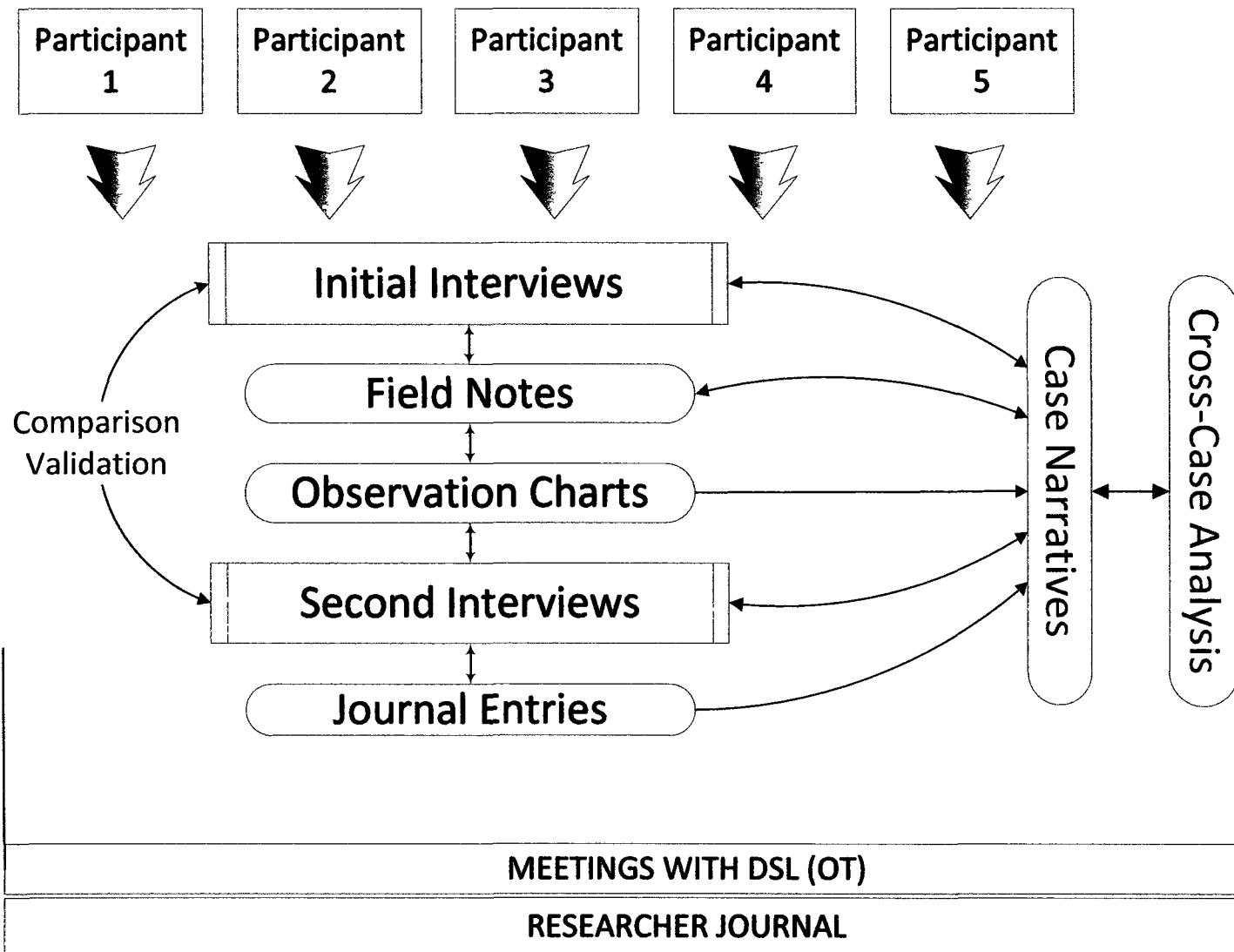
Eraut , M. (2004). Informal learning in the workplace. *Studies in Continuing Education*, 26(2), 247-273.

The Centre for Education and Work. (2008). *Workplace Informal Learning Matrix (WILM)*. Retrieved June 4, 2008 from <http://www.wilm.ca>

## **APPENDIX K. Data Analysis Process**

A diagrammatic representation of the data analysis process is provided on the following page.

# DATA ANALYSIS



## **APPENDIX L. Participants' Background**

A summary of the education and clinical experience of each participant is provided on the following page.

| PARTICIPANT BACKGROUND: EDUCATION AND CLINICAL EXPERIENCE |                                                                                                            |                                         |                    |                              |                   |                                                                   |                                                      |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------|------------------------------|-------------------|-------------------------------------------------------------------|------------------------------------------------------|
| Therapist                                                 | University Education                                                                                       | Years of occupational therapy education | Date of graduation | Date of hire at the hospital | Initial Interview | Months employed at the hospital, at the time of initial interview | Total months practicing at time of initial interview |
| <b>Emma</b>                                               | Master of Science, Occupational Therapy (2007)<br><br>Bachelor of Science, Occupational Therapy (2006)     | 5                                       | June 2007          | June 11, 2007                | October 30, 2007  | 5                                                                 | 5                                                    |
| <b>Heather</b>                                            | Master of Science, Occupational Therapy (2007)<br><br>Bachelor of Science, Kinesiology (2004)              | 2                                       | September 2007     | October 30, 2007             | December 5, 2007  | 1                                                                 | 1                                                    |
| <b>Elizabeth</b>                                          | Master of Science, Occupational Therapy (2006)<br><br>Bachelor of Science, Human Kinetics (Honours) (2004) | 2                                       | September 2006     | October 29, 2007             | January 7, 2008   | 2                                                                 | 16                                                   |
| <b>Jennifer</b>                                           | Bachelor of Science, Occupational Therapy (2006)                                                           | 4                                       | June 2006          | June 21, 2007                | October 25, 2007  | 4                                                                 | 17                                                   |
| <b>Amy</b>                                                | Master of Science, Occupational Therapy (2006)<br><br>Bachelor of Physical Education (Honours) (2004)      | 2                                       | October 2006       | June 11, 2007                | October 31, 2007  | 4                                                                 | 13                                                   |