LEARNING TOGETHER: APPLYING SOCIO-CULTURAL ACTIVITY THEORY TO COLLABORATIVE CONSULTATION IN SCHOOL-BASED OCCUPATIONAL THERAPY

by

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A thesis submitted to the Faculty of Education

In conformity with the requirements for

the degree of Doctor of Philosophy

Queen’s University

Kingston, Ontario, Canada

(September, 2011)

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Abstract

Socio-cultural activity theory (SCAT) was used to examine the nature of collaborative working in a case study of school-based occupational therapy (SBOT) in Ontario. Collaborative consultation has been widely adopted in SBOT practice. However, we know little about the impact of collaboration for students and lack understanding about how the organization of SBOT service contributes to collaborative working among educators and occupational therapists. Grounded in theoretical understanding about the distributed nature of group learning, SCAT was used as a conceptual and analytical tool in this study to describe SBOT collaborative consultation from multiple stakeholder perspectives.

The research took place in two phases. Phase One involved case study research to describe SBOT for three students with disabilities from multiple stakeholder perspectives. Data were gathered using a combination of observation, document analysis, and interviews involving participants directly involved in the delivery of SBOT with each focal participant. SCAT provided a framework for describing the nature of joint effort. Dilemmas emerging from incongruence between elements in the activity system were identified and described. Common characteristics in two cases enabled cross-case analysis to also identify features of collaborative working that facilitated educational programming and outcomes for students with developmental disability.

In Phase Two, program administrators participated alongside service recipients and service providers in a series of focused discussion workshops to reflect on case study findings and prioritize areas for program improvement. Developmental Work Research
methods were used within a participatory action research approach to facilitate organizational learning among stakeholders. Engagement of stakeholders supported program administrators in critically examining decision-making for the delivery of SBOT service in the region studied. Combining practice-driven dilemmas with conceptual tools of analysis enabled a multiple-perspective understanding about the social, cultural, and historical work practices that have influenced collaborative interactions in SBOT practice and led to the development of principles for improving how work is shared. Program administrators used their shared understanding to propose a new model for delivering SBOT services.
Co-Authorship

Michelle Villeneuve (i.e., Villeneuve, M.) is the PhD candidate. The study proposals were developed with guidance from her academic supervisor Nancy L. Hutchinson (i.e., Hutchinson, N.). Michelle Villeneuve conducted all of the literature reviews, data collection, data analyses, and writing for this dissertation. In manuscript B, Nancy Hutchinson contributed to the cross-case analysis of findings by supporting the analysis through peer debriefing. Nancy Hutchinson also contributed by editing of Manuscript B in preparation for submission for publication. Overall, Michelle Villeneuve was responsible for 100% of the material in this thesis.
Acknowledgements

This project could not have been accomplished without the support of many people. Most instrumental in assisting me with the design of this dissertation was my thesis supervisor Nancy Hutchinson. I thank Nancy for her interest and enthusiasm for the topic, and for providing ongoing guidance with the design and execution of the study. I want to thank her most of all for the significant time she shared to support my learning: It is through her mentorship that I have grown into a researcher. I also thank my thesis advisors Lyn Shulha and Rosemary Lysaght for their commitment, insights, and gentle nudges that always stretched my thinking and ultimately contributed to the quality of this thesis.

I would like to acknowledge the support provided by the Social Sciences and Humanities Research Council of Canada (SSHRC) through a Canada Graduate Scholarship (SSHRC Award Number 767-2007-0270). This award allowed me to dedicate three years of full-time study to this educational pursuit. I also want to thank Elsie Culham, Margaret Jamieson, and my colleagues at the School of Rehabilitation Therapy, Queen’s University, who supported me in my leave to pursue doctoral research and who continue to be my research mentors in the fields of rehabilitation science and disability studies.

This research was accomplished with the support and active engagement of the Participatory Action Research (PAR) Team. Although they cannot be named, their commitment and contributions to this research are illustrative of their dedication to providing “needs-based” services that support students with disabilities and their
families. I wish to thank every member of the PAR team for their devotion to this project and for accommodating their busy schedules to actively participate at every stage. I also thank each of the organizations for their support of this research by providing their employees with the time and opportunity to contribute.

There are many others who contributed as participants in this research. I thank them for giving of their time and for sharing their perspectives. I would like to thank Alisha, Connor, Jacob, their families, educators, education assistants, administrators, therapists, and case managers for allowing me to be a part of their experience throughout a whole year at school. I would also like to acknowledge the important insights provided by the service recipients and service providers (that cannot be named) who participated in Phase Two of this research. Their enthusiasm and commitment to working effectively with students and families is unmatched.

I would also like to thank Philomene Kocher whose attention to every administrative detail supported data collection during Phase Two of this research, and who I relied upon as a critical friend. Technical aspects of this research were also supported by Marlene Sayers, who completed all of my data transcriptions and by Sharon David, who helped me to format the final dissertation for submission. I want to thank them for their incredible attention to detail, their professionalism, and their kind words of support along the way.

I would like to acknowledge and thank librarians, Paola Durando and Brenda Reed who assisted me in the early development of my literature search strategy. I am grateful for their supportive efforts. Paola is also to be acknowledged for her support in conducting a cited reference search for Manuscript A prior to publication.
There were a number of informal advisors along the way namely, Donna and Bud Villeneuve, Djenana Jalovcic, Darko Krzinaric, Catherine Donnelly, Priscilla Ferrazzi, Peter Christie, Patricia Minnes, and Tom Schreider. These people celebrated every small success with me along the way. They valued and supported this educational pursuit with interest.

Finally, I want to acknowledge my daughter, Ella, who tolerated my preoccupation with this dissertation even when she simply wanted to go swimming or read a book together. She has taught me to observe silently and appreciate the poetry of life.
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List of Abbreviations

CCAC  Community Care Access Centre
CM    Case Manager
COTA  Community Occupational Therapists and Associates
DWR   Developmental Work Research
EA    Education Assistant
IBI   Intensive Behavioural Intervention
IEP   Individual Education Program
IPRC  Individual Placement Review Committee
JK    Junior Kindergarten
M     Parent (mother)
OT    Occupational Therapist
PAR   Participatory Action Research
PCCC  Providence Continuing Care Centre
RA    Research Assistant
RET   Regular Education Teacher
SBOT  School-based Occupational Therapy
SCAT  Socio-cultural Activity Theory
SEA   Special Equipment Amount
SET   Special Education Teacher
SHSS  School Health Support Service
SK    Senior Kindergarten
SLP  Speech Language Pathology

VP  Vice Principal
Chapter 1

General Introduction to the Studies that Comprise the Dissertation
Consultation is promoted as best practice for school-based occupational therapy (SBOT) service delivery. SBOT places emphasis on collaboration among educators and occupational therapists to support the integration of therapy strategies into educational programming for students with disabilities, through shared expertise (Bazyk & Case-Smith, 2010; Bundy, 1995). Although collaborative consultation has been widely adopted at the policy level, we know little about the impact of collaboration for students and we lack understanding about how current service delivery supports collaborative working among health providers and educators. Coordination of SBOT services is a complex process involving multiple stakeholders across health and education sectors (Deloitte & Touche, 2010). However, the policy framework provides little guidance about how to achieve multi-agency cooperation. Although methods for accessing SBOT vary across Canada, all service provision relies on coordination between health and education sectors. This dissertation research was conducted in Ontario where SBOT is administered through the Community Care Access Centre (CCAC) in the school board’s district. Funded by the Ministry of Health and Long Term Care, the CCAC contracts with provider agencies to provide SBOT service for students at school through the School Health Support Service (SHSS) program.

Collaborative consultation is defined as an interactive problem solving process, enabling people with diverse expertise to generate creative solutions to mutually defined problems (Idol, Nevin, & Paolucci-Whitcomb, 2000). While there is significant research on the nature of collaboration, the literature provides limited understanding of factors that facilitate collaborative interactions between educators and occupational therapists for the
provision of SBOT. Instead, emphasis has been placed on barriers to collaboration (Villeneuve, 2009). While many challenges to the integration of therapy strategies in education contexts have been addressed through the introduction of practice guidelines that promote collaboration (Bundy, 1995; Giangreco, 1995), limited research is available concerning the implementation of these guidelines in SBOT practice. Currently, program administrators must make decisions about the organization and delivery of SBOT services in the absence of clear evidence surrounding SBOT collaborative consultation practice (King et al., 2000; Reid, Chiu, Sinclair, Wehrmann, & Naseer, 2006).

This problem is not unique to occupational therapy. Limited empirical data on the process and outcomes of collaboration has spurred debate concerning the role of collaboration in the special education (Erchul, 1999; Gutkin, 1999a, 1999b, 2002; Witt, 1990) and interprofessional collaboration literature (Paul & Peterson, 2001; Zwarenstein & Reeves, 2006). Research is needed to understand the specific ways in which collaboration contributes to educational programming and outcomes for students with disabilities. Advancing collaborative consultation practice also requires theoretical understanding about the critical features of collaborative working (Clark, 2006; Gutkin, 2002). This knowledge will support program administrators in critically examining decision-making for the delivery of SBOT services in their districts.

**Purpose**

This dissertation applied group learning theory to investigate collaboration in a case study of school-based occupational therapy service delivery in one region of Ontario. Socio-cultural activity theory (Engeström, 2008) offered a conceptual
framework for describing the relationship between collaborative working and desired outcomes from multiple stakeholder perspectives. The overall aim of this research was to facilitate shared learning among stakeholders in order to generate principles of effective SBOT collaborative consultation practice. Throughout this research, emphasis was placed on uncovering practices that facilitate or impede collaborative working.

The research took place in two phases. Phase One involved case study research to describe SBOT for three students with disabilities (focal participants). Data were collected over eight months using a combination of observation, document analysis, and interviews involving all participants directly involved in the delivery of SBOT with each focal participant. This resulted in description of SBOT in three diverse case studies, from multiple stakeholder perspectives. In Phase Two, program administrators participated alongside service recipients and service providers in a series of focused discussion workshops (facilitated by the researcher) over a three-month period to reflect on the case studies and to prioritize areas for program improvement. Combining practice-driven dilemmas with conceptual tools of analysis supported multi-agency learning, culminating in the development of shared principles to improve collaborative working in the delivery of SBOT services. Program administrators used their learning to propose a new service delivery model for SBOT practice.

Findings from this research respond to two key recommendations made in a recent School Health Support Services Program Review by the Ontario Ministry of Health and Long Term Care (Deloitte & Touche, 2010). These recommendations included, (a) enhancing cross-sector collaboration to deliver school health support
services that optimize expertise and resources, and (b) developing new models of service delivery in schools. Grounded in ideas about the distributed nature of group learning, socio-cultural activity theory facilitated the study of collaboration in SBOT practice by examining the contextual factors that influenced how work was shared. Conceptual understanding about factors that facilitate collaboration was refined through successive application of the of socio-cultural activity theory in each phase of this study. Emergent understandings about the critical features of collaborative working were used, iteratively, to support my own actions of engaging with stakeholders to facilitate shared learning about SBOT collaborative consultation practice. This research advances theoretical understanding about the nature of collaboration and generates evidence of the relationship between organizational learning and improved service delivery, consistent with participatory approaches to integrated knowledge translation (Graham et al., 2006).

This dissertation consists of three manuscripts. The purposes of these investigations were, respectively:

1. To synthesize and critically appraise the research literature on school-based occupational therapy collaborative consultation,
2. To describe the nature of joint effort in school-based occupational therapy service delivery for two students with developmental disabilities, and
3. To facilitate shared learning among stakeholders about successful school-based occupational therapy collaborative consultation practices to enable program administrators responsible for the organization of school-based occupational therapy services in one region of Ontario to envision new ways of working.
**Research Questions**

Corresponding with each of the three manuscripts, the central research questions addressed were:

1 (a). How does school-based occupational therapy collaborative consultation practice contribute to educationally relevant programming for students with disabilities?

1 (b). What factors facilitate collaborative interactions between educators and occupational therapists?

2. What is the nature of joint effort in school-based occupational therapy service delivery for students with developmental disabilities?

3 (a). How can developmental work research and appreciative inquiry be used to facilitate shared learning among stakeholders in a case study of school-based occupational therapy services?

3 (b). What is the nature of shared learning among participants?

**Description of the Study Context**

Working within a participatory action research paradigm, this dissertation examined a case of SBOT service delivery in one region of Ontario. The case was bounded by: the local CCAC; one school board in the region served by the CCAC; and two provider agencies, each under a contract with the local CCAC to provide SBOT service through the SHSS program.

This research incorporated a multiple embedded case study design to examine SBOT for three students with disabilities. In an effort to represent the breadth of
occupational therapy service in schools, focal case study participants were selected from each of the following categories: (1) developmental disability; (2) physical/multiple disability; and (3) mild motor disability. These categories were chosen to capture the diversity of students with disability who are referred for occupational therapy services at school. These categories also reflect the eligibility criteria for the local SHSS program outlined in the guidelines of the participating CCAC. Each case study was unique and therefore not representative of all students with disabilities. Cases were selected using purposive and convenience sampling so that collectively these case studies represented a wide spectrum of specific characteristics of students who are typically referred for SBOT services. Cases were limited to primary students from junior Kindergarten to Grade four because this is the time when referrals for SBOT are most commonly made. Case studies were limited to students enrolled in the participating school board in this region who had been referred for occupational therapy prior to the start of this study.

Each case study was bounded by: the student and the student’s legal guardian; their classroom placement; educators who were directly involved with school programming; and educators who made decisions on behalf of the student. Each case included the occupational therapist responsible for service provision and the CCAC case manager responsible for administering occupational therapy services through the regional SHSS program in the school board’s district. In selecting cases, consideration was given to ensuring maximum diversity so that each case involved a different case manager, occupational therapist, and educator. Occupational therapists were limited to those
employed by agencies that provided services through the regional SHSS program in the participating school board’s district.

**Overview of Methods**

Following a critical appraisal of peer-reviewed research on SBOT collaborative consultation (which appears in Chapter 2), this study took place in two phases. Phase One involved case study research to provide thick description of SBOT for three students with disabilities (focal participants). In Phase One, data were collected over an eight-month period using a combination of observation, document review, and formal and informal interviews. Interviews were conducted with all participants directly involved in the delivery of SBOT with each focal participant. Detailed field notes were used to capture my experiences of participating in extended observation, immersion, and interaction with participants. Data were analyzed to develop multiple-perspective descriptions of SBOT collaborative consultation for each of the three cases. Phase One resulted in thick description of SBOT for three students from multiple stakeholder perspectives. Individual case descriptions were generated so that they could be shared with stakeholders in Phase Two. Situated in the context of educational programming for each case, the nature of joint effort in the provision of SBOT services was the common characteristic or phenomenon portrayed in each case description.

Two of the cases were categorically bounded by the nature of their educational program. Both of these students, Alisha and Connor, had a developmental disability and they each received alternative education programming to address their special education needs. Alternative education programs are available in Ontario for students who are not
expected to achieve academic criteria set out in the Ontario curriculum (Ontario Ministry of Education, 2004). Teaching methods and support services are used to support such students in their achievement of alternative expectations (e.g., social skill development, communication, self-help, mobility training) within the education setting (Hutchinson & Martin, 2012). In both of these cases, the students were placed in a regular education classroom and received program support from a special education teacher who was responsible for developing their alternative education plan. Both students received support from an educational assistant. These two cases became a target for multiple case analyses (Stake, 2006). The common characteristics in these two cases facilitated cross-case analysis to identify features of collaborative working that facilitated educational programming and outcomes for students who, because of the nature of their developmental disability, received alternative education programming. Cross-case findings addressed a gap in the literature on the nature of SBOT collaborative consultation for students with developmental disabilities. Alisha and Connor’s cases are the focus of the manuscript that appears in Chapter 3 of this dissertation.

The third case involved a regular Grade three student, Jacob, who was referred for occupational therapy to address the impact of his fine motor deficits on the performance of school tasks (e.g., written work). Since over 80% of referrals made by the CCAC are for students with fine motor skill development problems (Reid et al., 2006), Jacob’s case was representative of the majority SBOT service provision in Ontario. Not surprisingly, attention to occupational therapy service for this type of student is reflected in the literature on handwriting and children with mild motor disabilities (e.g., Asher, 2006;
Freeman, MacKinnon, & Miller, 2004; Jackman & Stagnitti, 2007; Missiuna, 2002; Ratzon, Efraim, & Bart, 2007). Descriptive case study findings from Jacob’s case were shared with participants in Phase Two. When considering findings from Jacob’s case, participants often did so to illustrate areas where progress had already been made toward improving how educational services and learning technology supports were organized for students with learning disabilities. The two students with developmental disability, however, became a focus for shared learning among participants about how to integrate therapy strategies into individual education programs in order to achieve learning for students who are not expected to progress according to the Ontario curriculum. Alisha and Connor’s cases illuminated thinking about how to facilitate collaborative interactions between educators and occupational therapists to address “complex” problems. Jacob’s case study served to clarify the need that educators have to gather assessment data in order to “rule out” motor problems in students where a learning disability is suspected. In such cases, educators use SBOT findings to support their decision-making and may benefit from traditional forms of consultation to gather relevant information about a student. Jacob’s case provided an important contrast to the other two cases, enabling educators to differentiate the needs they have for SBOT involvement for students referred for service. For these reasons, specific findings from Jacob’s case are not reported in Phase One, but only integrated into the discussion of findings in Phase Two of this research.

In Phase Two, 13 participants from three stakeholder groups participated in a systematic reflection on findings of all three cases in Phase One. Stakeholder groups were
comprised of, (a) service recipients, including parents and educators (n = 4), (b) service providers including an occupational therapist and two case managers (n = 3), and (c) program administrators from each agency involved in the planning and organization of SBOT in the region studied (n = 6). Purposive and convenience sampling were used to select service recipients and service providers who held the same roles as the case study participants who were interviewed in Phase One. Participants were selected based on the scope of their work and experience with SBOT services in this region. Program administrators held a unique role as members of the participatory action research team as discussed below. Six facilitated focused discussion sessions, each lasting 1.5 hours, were conducted with participants over a three-month period. Phase Two resulted in (a) shared learning among participants about SBOT collaborative consultation, and in (b) the development of recommendations to improve practice. This phase of the research is reported in the manuscript which comprises Chapter 4.

**Participatory Action Research**

It is necessary to acknowledge the non-linear progress I made toward the development of this action research study. The information presented here accounts for my early actions of engaging practitioners in this research. Simultaneously, I immersed myself in a cyclical process of reviewing the literature, sampling methodologies, and reflecting on my past experiences as a school-based occupational therapist. Collectively, these activities supported my interpretation of issues surrounding the implementation of school-based occupational therapy. Herr and Anderson (2005) describe this process of developing a sound action research proposal as “designing the plane while flying it” (p.
My commitment to using participatory action research (PAR) as an approach to this dissertation emerged from action that I took as a researcher, conducting informal interviews with key stakeholders involved with the administration and delivery of school-based occupational therapy. I was interested in the relationship between issues identified in the literature and the provision of occupational therapy services through the School Health Support Service (SHSS) Program, since this is the most common method for obtaining occupational therapy services for school-aged children in the province of Ontario. I wanted to know if the problems identified in my literature review were relevant to the context of service delivery in this region of Ontario. I intentionally sought stakeholder participation at this early stage of problem identification because I wanted my dissertation research to be responsive to the issues influencing the day-to-day delivery of school-based occupational therapy. In addition, I wanted to make sure that my ideas for this research weren’t biased by my past experiences as a school-based occupational therapist, but rather informed by these experiences and driven by current practice.

The scope of action research enables its application in settings where a problem involving people, tasks, and procedures begs a solution (Cohen, Manion, & Morrison, 2000). Action research is founded on the principle that those who experience a phenomenon are the most qualified to investigate it (Herr & Anderson, 2005). Consequently, action researchers work in collaboration with groups or communities of stakeholders who experience the phenomenon being studied. This research employed participatory, appreciative, and empowerment mechanisms to enhance the overall
feasibility, utility, accuracy, and propriety of this research, consistent with the standards for evaluative inquiry (Yarbrough, Shulha, Hopson, & Caruthers, 2010).

As an outsider to the practice of school-based occupational therapy in this community, I made initial contact with administrators and service providers from four organizations involved with school-based occupational therapy service delivery to share my research ideas and to seek their input on the issues from their practical experiences. I contacted individuals at each of the organizations responsible for the planning and delivery of school-based occupational therapy services. At each meeting, I took the opportunity to introduce myself as a PhD candidate in the Faculty of Education at Queen’s University and share with them the purpose of my visit which was twofold: to make them aware of my research interests; and to elicit their input concerning their experiences as stakeholders in the delivery of school-based occupational therapy services.

First, I participated in a monthly meeting of SHSS occupational therapists from one agency who provided SBOT services through a contract arrangement with the local CCAC. Next I met with program administrators from the local CCAC, followed by a meeting with a special education coordinator for a local school board. Finally, I met with administrators from each of the agencies employing occupational therapists. At each of these meetings, I acted as a discussion facilitator by summarizing my findings from the research literature to date and asking stakeholders to provide their interpretation of these findings in light of their day-to-day experiences in the field. These informal interviews led to the identification of a common need for research that would help these key stakeholders to improve the planning and delivery of SBOT services that are dependent
upon a collaborative consultation model of service delivery and coordination across health and education sectors for service provision. All groups were enthusiastic in their response to research on SBOT collaborative consultation services and all were willing to participate in research that would support them in making informed decisions about the organization of SBOT practice in this region.

Although my original intention was to use these meetings to explore my research ideas with administrators and practitioners and to use their input as a gauge of the issues identified in the literature, I discovered that my research ideas “struck a chord” with stakeholders from each of these organizations. The result was that each interview led stakeholders to share their challenges with service planning and delivery. They also shared stories of overcoming the challenges. At each interview, stakeholders described their interest in developing service planning guidelines that addressed complex coordination among all organizations involved in the planning and delivery of occupational therapy in schools. My strategy of connecting with practitioners before designing my research proposal was met with interest and enthusiasm. Rather than merely contributing background information to my research proposal, these interviews set the stage for what evolved into this participatory action research study.

Following these preliminary meetings, I invited program administrators from each agency to participate in this research as members of the participatory action research (PAR) team. Six program administrators agreed to participate in this research. A detailed description of all stakeholders (identified by pseudonyms) is provided in Chapter 4 (Table 6). The roles of PAR team members included:
- Lorraine, senior manager for the local CCAC;
- Sylvia, CCAC supervising manager;
- Deborah, director of rehabilitation services for one agency (Agency A);
- Donna, director of a second agency (Agency B);
- Angela, administrative coordinator of special education services for a local school board; and
- Joan, practice leader and occupational therapy service provider for Agency B.

During the planning of this dissertation research, I worked together with these six PAR team members to: (a) refine the purpose and scope of this research based on the specific needs they identified, and (b) obtain their perspectives on the overall utility of the research design to address their learning needs. PAR team members facilitated recruitment of case study participants for Phase One by sharing information about the research with workers at each of their agencies. I met with PAR team members on three occasions to plan the study and initiate recruitment for Phase One. Each meeting lasted one hour in duration and included member checking through follow-up correspondence to share my summaries of our discussions with the PAR team members and confirm our shared understanding of research decisions.

Following the completion of Phase One, I involved PAR team members once again to plan for Phase Two. PAR team members participated in a one-hour session to identify what they hoped to learn about SBOT by participating in the focused discussion sessions. Once again, PAR team members supported recruitment by sharing information about the research at each of their agencies. In Phase Two, PAR team members
participated alongside service recipients and service providers in facilitated discussions designed to promote shared learning about SBOT collaborative consultation in this region. Finally, PAR team members came together for a final meeting to reflect on what they had learned and to plan for program improvement.

**Conceptual Framework**

The research was informed by theory about group learning and activity theory methodology. The conceptual framework, discussed below, was chosen to support this participatory and action-oriented research design by combining practice-driven dilemmas with conceptual tools of analysis to support program administrators in planning for program improvement. Situated within collaboration theory that identifies pre-conditions, process, and outcomes as three critical issues of collaborative working (Wood & Gray, 1991), this research sought to describe the nature of collaborative working in a case study of SBOT practice. Socio-cultural activity theory was applied to this case study in order to describe the specific ways in which collaborative working contributed to outcomes in SBOT practice. As such, this research contributes to the development of theoretical and empirical perspectives on the processes of collaborative working and the relationship of these processes to outcomes. Specifically, this study adds to the literature on collaboration by offering a multiple perspective understanding about collaborative working across professional and agency boundaries.

Exploration of frameworks to guide the design of this research began with a consideration of collaborative consultation as a service delivery model. Frameworks used to conceptualize SBOT practice emphasized the relationship between goals and
expectations for student outcomes and offered methods of delivering service (e.g., Bundy, 1995; Giangreco, 1995). The available practice models for describing SBOT collaborative consultation emphasize step-wise procedures for integrating occupational therapy into educational programs for students with disabilities. Although these frameworks can support the development of research to address the process of collaboration they are limited in scope because they do not explicitly support description of the pre-conditions and outcomes of joint working. In addition, there is limited research describing the implementation of these practice models to examine the process of collaborative working in schools. The SBOT literature also lacked research describing the depth, quality, and context of collaboration between educators and occupational therapists.

Socio-cultural activity theory offered a framework for describing the domain of collaborative working (or the focus for joint effort), the tools, supports, and routines utilized within the collaborative process, and consideration of the relationship between joint effort and expected outcomes. Considering SBOT collaborative consultation from the perspective of group learning theory enabled explicit attention to the pre-conditions, process, and outcomes of collaboration. Consistent with emergent methods in action-oriented research (Hesse-Biber & Leavy 2008), understanding about factors that facilitate collaboration was developed and progressively refined through application of ideas about distributed cognition within each successive phase of this research.

**Distributed cognition.** Conceptual understanding about the distributed nature of group learning was first used to unpack the definition of collaborative consultation
adopted in this research. Idol, Nevin, and Paolucci-Whitcomb (2000) defined collaborative consultation as an interactive problem-solving process, enabling people with diverse expertise to generate creative solutions to mutually defined problems. From the perspective of social cognition, collaboration is viewed as a social learning process that results in individual and group learning (Hutchins, 1991; Resnick, 1991; Shulha & Wilson, 2003). Emerging understanding from the field of social cognition lends support for the view that collaboration can result in the creation and re-organization of knowledge within individuals and that this knowledge can be shared (or distributed) among collaborators (Derry, DuRussel, & O'Donnell, 1998; Hinsz & Vollrath, 1997; Pea, 1993; Resnick, 1991).

Distributed cognition provides a way of understanding how interaction supports the construction or transformation of what is known by collaborators (Hutchins, 1991). When people share information, they have a common point of reference for building on the knowledge they share (Resnick, 1991). Language plays a significant role in the construction of group learning. For example, language can have a mediating influence on the development of shared understanding when providing information, pointing things out to one another, asking questions, and elaborating each other’s ideas (Resnick, 1991). Research on distributed cognition has also examined of the role of artifacts in supporting the distribution of ideas (Mok, 2008; Pea, 1993).

The benefit of shared meaning making is that each individual contributes different kinds of knowledge to support problem solving (Derry et al., 1998; Hutchins, 1991; Resnick, 1991; Salomon, 1993). Evidence from research on distributed cognition
suggests that having (a) a shared focus for joint effort, and (b) sufficient time and opportunity to develop mutual understanding are critical for collaborators to re-configure knowledge in ways that provide more powerful solutions to problems (Davis, 2004; Derry et al., 1998; Hutchins, 1991; Resnick, 1991). This has implications for SBOT practice because the organization and delivery of the service across health and education sectors challenges opportunities for sustained interaction among educators and occupational therapists.

Studying collaborative consultation practice from the perspective of distributed cognition requires consideration of the depth, quality, and context of collaborative consultation in order to understand the relationship between educator-occupational therapist collaboration and outcomes for students. Emerging understanding about the distributed nature of group learning was used to critically appraise the research on SBOT collaborative consultation.

**Socio-cultural activity theory.** Socio-cultural activity theory (SCAT) offered a robust conceptual framework for investigating the relationship between collaboration and outcomes. Based on the work of Vygotsky, SCAT enables the study of collaboration by examining human activity systems as the unit of analysis (Cole & Engeström, 1993; Engeström, 2000). Vygotsky proposed that human activity happens in a relationship where actions of individuals (subjects) resolve a shared problem, which is the focus of their learning (object), by using tools as mediating means to achieve an outcome (Daniels, 2001). Engeström (2001) expanded Vygotsky’s basic activity system to include social and contextual factors that shape collaborative work. SCAT provides a framework
to support analysis of collaborative practice by considering: (a) the desired goals or outcomes; (b) what is being worked on in relation to the goal; (c) the tools, methods, or approaches used; (d) the community of others who are involved; (e) the rules, routines, and professional conduct that support or constrain practice; and (f) the way in which work is divided (Leadbetter, 2008; Martin, 2008). This SCAT framework appears in Figure 1, adapted from Leadbetter (2008).

**Figure 1.** SCAT used as an analytical tool with key research questions included, adapted from “Learning in and for interagency working: Making links between practice development and structured reflection,” by J. Leadbetter, 2008, *Learning in Health & Social Care, 7*(4), p. 201.

Grounded in ideas about the distributed nature of group learning, SCAT facilitates the study of collaboration in practice by examining contextual factors that influence
interaction among workers within an activity system. SCAT was used as a conceptual framework to guide data collection and analysis to provide thick description of SBOT collaborative consultation from multiple perspectives in Phase One. In Phase Two, developmental work research (Engeström, 2000) and appreciative inquiry (Cooperrider, Whitney, & Stavros, 2003) methods were used to facilitate learning among a diverse group of stakeholders, enabling the development of shared principles to guide program improvement. Phase Two used organizational learning to support multi-agency coordination and interprofessional collaboration among stakeholders.

**Developmental work research and appreciative inquiry.** Developmental Work Research (DWR) is an interventionist methodology used to promote shared learning among workers for the purpose of developing future practice. DWR is an emerging methodology that has been used to understand the role of teamwork to achieve goals (Engeström, 2000). The aim of DWR is to support stakeholders to develop “expansive learning” in workplace settings. Drawing on the notion of distributed cognition, expansive learning occurs when team members are more disposed to use each other’s knowledge to improve practice (Engeström, 2008). In DWR, SCAT is used to support conceptual analysis by representing work practices within an activity system (Daniels, 2008; Engeström, 2000). Incongruence between elements in the activity system is used as a catalyst for reflection and shared meaning making by considering the social, cultural, and historical work practices that have shaped how work is organized and shared (Cole & Engeström, 1993; Engeström, 2008).
The role of the researcher in DWR is to enable a constructive approach to workplace inquiry that supports meaningful visioning for future action, grounded in a shared understanding of the factors that support and constrain teamwork. In DWR the researcher draws on real workplace episodes as a basis for shared learning. The researcher collects “mirror data” through extended observation and interaction with participants in the work setting. Mirror data can include videotaped workplace episodes, stories, and interviews with workers (Engeström, 2000). Following the descriptive phase, the researcher uses mirror data to represent and examine teamwork practices through group discussion with key stakeholders (Engeström, 2000; Leadbetter, 2008). Over a series of focused discussion sessions, the researcher facilitates a multiple perspective examination of the complex interconnections among work activities and workers.

In Phase Two, this study employed appreciative inquiry methods to deepen collective understanding of the work practices within and between agencies that support interprofessional collaboration for the delivery of SBOT services. While acknowledging constraints on practice, appreciative inquiry embraces a philosophy of engaging program stakeholders to recognize successes and draw on strengths as the basis for program improvement (Preskill & Catsambas, 2006). Appreciative inquiry and DWR have in common a systematic approach to participatory inquiry that facilitates generative learning to inform action. Consistent with an action research paradigm, DWR is a change strategy that supports organizational development through group learning and systematic reflection on experiences. DWR has been used to examine health care, social services,
and education practices that rely on inter-agency cooperation and interprofessional collaboration (Engeström, 2008; Leadbetter, 2008; Martin, 2008).

Organization of the Thesis and Overview of the Manuscripts

The remainder of this thesis is organized into manuscripts followed by a general discussion of findings. In the first manuscript, Chapter 2, general concepts about distributed cognition were introduced into the occupational therapy literature. Emerging understanding about the distributed nature of group learning was used to critically appraise the research on SBOT collaborative consultation. The purpose of this critical literature review was to provide policy makers and administrators with direction for critically examining decision-making for school-based occupational therapy services in their districts.

Group learning theory was used to understand critical features of collaboration. Implications for the successful integration of occupational therapy within education settings were discussed in terms of conditions required for collaboration between educators and occupational therapists to thrive. This manuscript was published in the Canadian Journal of Occupational Therapy. It was featured in a special issue on policy where the focus was on providing direction for policy makers and program administrators charged with making decisions about service delivery, in the absence of definitive evidence to support those decisions.

In the second manuscript, Chapter 3, the notion of collaboration as a social learning process was developed through the application of socio-cultural activity theory in the design of case study research. The purpose of this study was to investigate the
critical features of collaboration by examining the expectations of stakeholders and the context of interactions among educators and occupational therapists in practice. Key features of collaborative working within an activity system framework strengthened understanding about collaborative practices that supported educational programming and outcomes for two students with developmental disabilities. Cross-case analysis of findings was used to contribute a deeper understanding about how occupational therapists and educators can adapt their working practices to support collaborative interactions that achieve educationally relevant outcomes for students with developmental disabilities. This manuscript was accepted for peer review by *Qualitative Report* at the time of submitting this dissertation.

In the third manuscript, Chapter 4, DWR was introduced as an interventionist methodology. In combination with an appreciative inquiry approach, DWR was used to facilitate shared learning among stakeholders involved in the organization and delivery of SBOT collaborative consultation services. The overall purpose was to facilitate shared learning among stakeholders in order to generate principles of effective SBOT collaborative consultation practice. Drawing on theories about group learning, the nature of shared learning among participants was examined. This manuscript provided a specific application of SCAT to enable group learning and the development of principles for improving SBOT collaborative consultation practice. This study contributes to the emerging body of knowledge concerning the application of SCAT (Engeström, 2001) to support the development of interprofessional collaboration and multi-agency working through organizational learning.
Chapter 5 provides a general discussion of contribution of the case study findings to our understanding about factors that facilitate collaborative interactions between educators and occupational therapists for the provision of SBOT in the region studied. Findings are considered in light of key concepts developed in SCAT including expansive learning, boundary crossing and co-configuration of work practices, and knotworking (Engeström, 2008).
Chapter 2

A Critical Examination of School-based Occupational Therapy Collaborative Consultation
Introduction

The involvement of occupational therapists as related service providers within the school system has a diverse history within North America. In response to provisions within the Individuals with Disabilities Education Act (PL 108–446) (IDEA, 2004), the United States has advanced practices that require the provision of “related services” by professionals such as occupational therapists within school settings (Case-Smith & Rogers, 2005). Consequently, much of our understanding of the integration of occupational therapy in education settings comes from the work of researchers in the United States (Bundy, 1995; Case-Smith & Rogers, 2005; Dunn, 1990; Giangreco, 1995; Kemmis & Dunn, 1996; Rainforth, 2002; Spencer, Turkett, Vaughan, & Koenig, 2006).

In Canada, school-based occupational therapy services are not legislated. However, occupational therapists have been utilized as a related service for over the past three decades (Graham, Kennedy, Phibbs, & Stewart, 1990; Reid et al., 2006). Across Canada, methods for providing occupational therapy in schools vary. For example, in Ontario, the most common method is through a referral to the School Health Support Services program, normally administered through the Community Care Access Centre (CCAC) in the school board’s district. Currently funded by the Ontario Ministry of Health and Long Term Care, occupational therapy services are contracted and monitored through the CCAC. In contrast, the Ministry of Education administers the school health program in Alberta. There, services for students are accessed through contract arrangements between boards of education and regional school health partnerships. Less commonly, educators can access the services of occupational therapists employed
directly by boards of education (Reid et al., 2006). Regardless of how occupational therapy services are accessed, all service provision relies on coordination between health and education sectors.

Without exception, the literature promotes occupational therapy services for students with disabilities so that they may benefit fully from special education opportunities (Bundy, 1995; Case-Smith & Rogers, 2005; Dunn, 1990; Giangreco, 1995; Spencer et al., 2006). It is accepted practice to seek knowledge and skills beyond those typically held by teachers in order to develop and implement an appropriately individualized education program (Bundy, 1995; Fairbairn & Davidson, 1993; Graham et al., 1990; Rainforth, 2002; Wehrmann, Chiu, Reid, & Sinclair, 2006). Over the past two decades, school-based occupational therapists in North America have increasingly adopted consultation approaches to service delivery in schools (Case-Smith & Cable, 1996; Reid et al., 2006). This is due, in part, to the shift toward inclusive education. Inclusive education practices promote the provision of services and supports so that students with disabilities are served to the optimum extent possible in the general education setting; under the responsibility of a regular education teacher and alongside their non-disabled peers (Hutchinson, 2007; Peters, 2007; Scruggs & Mastropieri, 1996; Slee, 2001; Smith, 1994).

Occupational therapy supports students within the academic environment by addressing educational or functional goals (Case-Smith & Rogers, 2005). Occupational therapy consultation contributes to a range of outcomes that may include: (a) skill development, increasing the student’s ability to meet the expectations of the school
program; (b) capacity building, enabling educators or educational assistants to administer procedures that support the student with skill refinement or maintenance of function; (c) removal of barriers (physical and attitudinal) to support student participation at school; and (d) identification of strategies or technologies that will enable a student to succeed at school despite limitations imposed by their disability (Bundy, 1995; Case-Smith & Rogers, 2005; Graham et al., 1990). Within the context of inclusive education, occupational therapists have strengthened their focus on the educational relevance of their service and shifted emphasis from direct intervention, to providing consultation services that support educators in their work with students (Case-Smith & Rogers, 2005; Fairbairn & Davidson, 1993; Kellegrew & Allen, 1996; Reid et al., 2006; Wehrmann et al., 2006).

Consultation is an approach to service provision in which the consultant, a specialist, assists another person, the consultee, in a problem-solving process with regards to a third individual, the client (Erchul & Martens, 2002; Kampwirth, 2006). School-based occupational therapy consultation has been characterized as collaborative because the interactions between occupational therapists and educators are dependent upon shared expertise, rather than a superior knowledge base of the occupational therapist (Bundy, 1995; Case-Smith & Rogers, 2005). Collaborative consultation is defined as an interactive problem-solving process, enabling people with diverse expertise to generate creative solutions to mutually defined problems (Idol, Nevin, & Paolucci-Whitcomb, 1994).
Although collaborative consultation has been widely adopted in school-based practice, there has been limited research on the implementation of collaborative consultation by occupational therapists and educators (Bose & Hinojosa, 2008). Descriptive reports of school-based occupational therapy services are lacking. Challenges to collaboration between educators and occupational therapists are well documented. Specific challenges can be categorized as follows: (a) ambiguity of roles and expectations among service providers (Coolman, Foran, & Lee, 1998; Coutinho & Hunter, 1988; Fairbairn & Davidson, 1993; McEwen & Shelden, 1995; Nochajski, 2001; Rourk, 1996; Royeen, 1986; Royeen & Marsh, 1988); (b) personnel challenges including professional isolation, heavy caseloads, and personnel shortages (Barnes & Turner, 2001; Powell, 1994; Rainforth, 2002; Whitworth, 1994); (c) pre-service preparation of educators and occupational therapists for collaborative consultation (Barnes & Turner, 2001; Dudgeon & Greenberg, 1998; Fairbairn & Davidson, 1993; Nochajski, 2001; Powell, 1994; Rainville, Cermak, & Murray, 1996); (d) pre-service preparation of occupational therapists to work in school settings (Fairbairn & Davidson, 1993; Nochajski, 2001; Spencer et al., 2006); and (e) educational relevance of occupational therapy recommendations (Kemmis & Dunn, 1996; McDougall et al., 1999).

Disparate models for including occupational therapy in school settings further complicate the fundamental goal of synthesizing input from education and occupational therapy into educationally relevant services for students with disabilities (Fairbairn & Davidson, 1993; Wehrmann et al., 2006). Decisions concerning service provision persist in the absence of a clear understanding of the evidence surrounding school-based...
occupational therapy (King et al., 2000; Reid et al., 2006). While many challenges to the integration of occupational therapy in education settings have been addressed through the promotion of theoretical and practical guidelines to support collaboration (Bundy, 1995; Giangreco, 1995), limited research is available concerning the implementation of these recommendations in practice. How collaboration contributes to the development of educationally relevant programs for students with disabilities remains unclear. This problem is not unique to occupational therapy. Indeed, limited empirical data on the process and outcomes of collaboration has spurred debate concerning the role of collaboration in the special education literature (Erchul, 1999; Gutkin, 1999a, 1999b, 2002; Witt, 1990), and more recently in the literature on interprofessional collaboration among health professionals (Paul & Peterson, 2001; Zwarenstein & Reeves, 2006).

Understanding the specific ways that collaboration between educators and occupational therapists contributes to educationally relevant outcomes for students with disabilities has implications for policy makers and administrators who make decisions concerning the delivery of occupational therapy in school settings.

**Purpose**

This paper synthesizes and appraises the research literature on school-based occupational therapy collaborative consultation practice. The purpose is to provide policy makers and administrators with direction for critically examining decision-making for school-based occupational therapy services in their districts. Questions guiding this review included:
1. How does school-based occupational therapy collaborative consultation contribute to educationally relevant outcomes for students with disabilities?

2. What factors influence collaboration between educators and occupational therapists?

Implications for the successful integration of occupational therapy within education settings will be discussed in terms of conditions required for collaboration between educators and occupational therapists to thrive.

Before presenting a critical appraisal of the research on school-based collaborative consultation, it is first necessary to unpack the complexity of collaborative consultation services. This is especially important because the specific activities of occupational therapists vary with the needs of students, the expectations of educators, and the context of collaboration. Addressing the complexities of collaboration in school settings is essential for resolving the long-standing tension between recommendations for school-based occupational therapists to adopt collaborative consultation as best practice (Bundy, 1995; Case-Smith & Cable, 1996; Reid et al., 2006; Wehrmann et al., 2006) and research showing that occupational therapists continue to employ direct methods of intervention (Bayona, McDougall, Tucker, Nichols, & Mandich, 2006; Fairbairn & Davidson, 1993; Niehues, Bundy, Mattingly, & Lawlor, 1991; Spencer et al., 2006). Substantial concern is raised in the literature regarding the mismatch between models of service delivery and outcomes sought and measured (Bayona et al., 2006; Fairbairn & Davidson, 1993; Spencer et al., 2006). The next section clarifies the relationship between expectations for students with disabilities, service delivery methods, and outcomes of
school-based occupational therapy. This is followed by a review of relevant theory for understanding the nature of collaboration between educators and occupational therapists.

**Outcomes of School-based Occupational Therapy**

Bundy (1995) differentiated among three ways of delivering services in schools (direct, indirect, and consultation) emphasizing that each is associated with different types of outcomes and consequently requires different roles and responsibilities on the part of the therapist. Improved student skill is the primary objective of direct intervention. Outcomes of direct intervention should demonstrate change in the student’s ability to meet expectations of the school program. Through direct service the student receives ‘hands on’ intervention from the occupational therapist, provided either in the classroom or a separate area of the school. Disruption of the student’s participation in the education program during periods of direct treatment by the occupational therapist is considered a significant limitation of direct intervention. As a result, therapists adopting this approach should weigh the cost of interrupted participation in school against the benefit of developing component skills to enable optimal participation in the future.

Outcomes of indirect service should support students with skill refinement or maintenance of function. Indirect service is best delivered through an educational approach where the occupational therapist teaches a procedure to educators who, in turn, administer the procedure with the student. This approach requires therapist skill in assessing the ability of educators to effectively perform the skill and consideration of their own ability to teach the skill in a way that will ensure adequate transfer to the student-teacher interaction. Therapists must be effective in administering the procedure
themselves, so that they can anticipate challenges and address these explicitly in the teaching process. A significant consideration with indirect service provision is the need to repeat the process every time the child changes teachers or classroom placement.

The outcomes of consultation include identifying strategies that will enable students to succeed at school despite limitations imposed by their disability. In stark contrast to direct intervention, the outcome of consultation is change in the human and non-human environment. Providing intervention at the level of environmental change can include adapting the social environment, such as developing strategies for interpreting student behaviour to enable more effective interaction. This may also include supporting the development of helping styles used by adults (Hemmingsson, Borell, & Gustavsson, 2003). Tangible outcomes of consultation may support physical adaptations to the classroom, learning materials, or school facilities. Since educators are the direct recipients of occupational therapy service in a consultation model, the occupational therapist must have pre-requisite skills in communication, interpersonal skills, and building partnerships. In a consultation model, measurement should focus on change in the physical, academic, or social environment (Spencer et al., 2006).

The literature supports a combining of direct, indirect, and consultation approaches in order to effectively meet the diverse needs of students with disabilities at school (Bayona et al., 2006; Case-Smith, 1997; Case-Smith & Cable, 1996; Dunn, 1990; King et al., 2000; Niehues et al., 1991; Wills & Case-Smith, 1996). Blending service delivery approaches is consistent with the special education literature which advocates that collaboration between consultants and educators requires some degree of direct
interaction between the consultant and student to support effective problem solving (Kampwirth, 2006). Bundy’s (1995) conceptualization provides a framework for making unambiguous connections between expectations for occupational therapy involvement and the provision of services in ways that align with those expectations.

**Theory Informing Collaborative Consultation Practice**

Although the research base demonstrating the effectiveness of consultation is not yet secure (Kampwirth, 2006), research on collaborative consultation in the special education and school psychology literature has yielded positive results (Gutkin & Curtis, 1999; Idol et al., 2000). It is acknowledged that collaborative problem-solving is beneficial because it produces solutions that are different than those that individual team members could produce independently (Dunn, 1990; Gutkin, 2002; Idol et al., 2000). However, empirical studies examining the specific ways in which collaboration contributes to problem solving are lacking in the school consultation literature (Erchul, 1999; Gutkin, 1999a; Kampwirth, 2006; Witt, 1990). Similarly, the interprofessional collaboration literature provides mostly descriptive information about the importance of collaboration among health professionals (Clark, 2006; Zwarenstein & Reeves, 2006). Advancing collaborative consultation practice requires the development of a sound theoretical understanding of the critical features of collaboration (Clark, 2006; Gutkin, 2002).

**Collaboration as a social learning process.** Theories of group learning processes are relevant to understanding collaborative consultation. From the perspective of social cognition, collaboration is viewed as a social learning process that results in
individual and group learning (Hutchins, 1991; Resnick, 1991; Shulha & Wilson, 2003). Emerging understanding from the field of social cognition lends support for the view that collaboration can result in the creation and re-organization of knowledge within individuals and that this knowledge can be shared (or distributed) among collaborators (Derry et al., 1998; Hinsz & Vollrath, 1997; Pea, 1993; Resnick, 1991). While learning has traditionally been regarded as a process that resides within individuals (Bishop, 2005), a distributed view of cognition sees learning as shared among individuals and inseparable from context (Mok, 2008).

Distributed cognition provides a way of understanding how interaction supports the construction or transformation of what is known by collaborators (Hutchins, 1991). When people share information, they have a common reference point for communicating with one another and building on the knowledge they share (Resnick, 1991). Not surprisingly, language is thought to play a significant role in the construction of group learning. Resnick (1991) identified a number of ways that language serves as a mediating influence on mutual knowledge construction including; providing information, pointing things out to one another, asking questions, and elaborating each others’ ideas. Language is a medium by which ideas can be distributed among others within a system (Mok, 2008). Ideas can also be distributed in artifacts that result from collaborative interactions (Mok, 2008; Pea, 1993). Tangible evidence of educator-occupational therapist collaboration can be found in diverse products resulting from their cooperative efforts (e.g.; classroom modifications, letters requesting funding for adaptive equipment,
documentation of objectives for student achievement, home programming suggestions, etc.).

Evidence from research on distributed cognition suggests that joint effort has the capacity to foster creativity, resulting in new approaches to understanding and resolving human social problems (Davis, 2004; Derry et al., 1998; Hutchins, 1991; Resnick, 1991). To achieve this end, collaborators require: (a) a focus for joint effort which usually emerges from shared interest in a problem; and (b) sustained interaction, providing time and opportunity to develop mutual understanding that enables collaborators to reconfigure knowledge in ways that provide more powerful solutions to problems (Derry et al., 1998). On a conceptual level, then, collaboration among educators and occupational therapists has the potential to contribute to educationally relevant outcomes for students with disabilities when these conditions are in place. This has implications for school-based practice where both educators and occupational therapists must contend with everyday influences that challenge opportunities for sustained interaction (Barnes & Turner, 2001; Fairbairn & Davidson, 1993; Nochajski, 2001).

From the perspective of distributed cognition, outcomes of collaboration are the result of shared learning and therefore cannot be understood in isolation from the context of interaction. The benefit of shared meaning making is that each individual contributes different kinds of knowledge to support problem solving (Derry et al., 1998; Hutchins, 1991; Resnick, 1991; Salomon, 1993). Shulha and Wilson (2003) describe this in statistical terms as the combining of shared and unique variance in perspectives that leads to a more comprehensive understanding of a problem. This useful analogy helps us to
understand that some of the knowledge between educators and occupational therapists may be redundant (e.g., printing/handwriting) while other knowledge is novel (e.g., curriculum expectations for literacy, influence of motor skill deficits on the production of written work). Joint effort then, allows educators and occupational therapists to pool collective knowledge to develop educationally relevant programming solutions for students with disabilities. Understanding the distributed nature of group learning has implications for school-based occupational therapy practice where educators and occupational therapists work collectively to solve ill-defined problems and where solutions are dependent to a large extent upon the depth, quality, and context of their interactions within school settings (Barnes & Turner, 2001; Fairbairn & Davidson, 1993; Friend, 2000; Nochajski, 2001; Wehrmann et al., 2006). The following appraisal of the research on school-based occupational therapy collaborative consultation will be considered in light of this emerging understanding about collaboration.

**Methods**

A search for peer-reviewed research on the use of collaborative consultation in school-based occupational therapy practice was conducted through a search of relevant databases (e.g., CINAHL (Ovid); ERIC; OTseeker). Search terms related to: (a) children with disabilities in education settings (e.g.: student, disabled); (b) the type of intervention (e.g., collaboration, consultation, school health services, occupational therapy); and (c) outcomes (e.g., individual education plan; motor skills). The search included a manual review of reference lists and a cited reference search of all included studies. Studies were selected if the research examined outcomes of school-based occupational therapy services
and investigated collaborative consultation or consultation service delivery models. Selection was limited to English language articles, published after 1990 since this decade marked the introduction of collaborative consultation models of service delivery in North America (Reid et al., 2006). Studies that did not examine consultation or collaborative consultation services were excluded. Emphasis was placed on studies relevant to the Canadian context.

Six studies were identified that examined outcomes of school-based occupational therapy collaborative consultation (Barnes & Turner, 2001; Bayona et al., 2006; Dunn, 1990; Kemmis & Dunn, 1996; King et al., 2000; Reid et al., 2006). Notably, three of these studies were conducted in southern Ontario (Bayona et al., 2006; King et al., 2000; Reid et al., 2006). A summary of each study is presented, in chronological order, in Table 1. Five studies were identified that examined factors influencing collaboration between educators and occupational therapists (Bose & Hinojosa, 2008; Case-Smith & Cable, 1996; Fairbairn & Davidson, 1993; Nochajski, 2001). Each of these studies has been summarized in Table 2. The reader is encouraged to refer to Tables 1 and 2 throughout the discussion that follows.

**Discussion**

There are a number of limitations to these studies, including the use of very small sample sizes (Bayona et al., 2006; Dunn, 1990; Kemmis & Dunn, 1996; King et al., 2000), lack of control groups (Bayona et al., 2006; King et al., 2000; Reid et al., 2006; Wehrmann et al., 2006), and visit frequencies that exceed those usually provided by occupational therapists in schools (Dunn, 1990; Kemmis & Dunn, 1996). In the studies
by Dunn (1990) and Kemmis and Dunn (1996), the frequency (60 minutes weekly) of collaborative consultation was acknowledged by these researchers to be atypical and considered to be an intense level of interaction. Judging by the repeated reference to these studies, it appears, however, that they have been influential in supporting collaborative consultation as the preferred service delivery model for school-based occupational therapy. Visit frequencies in the studies conducted in southern Ontario are representative of the practice context studied (Bayona et al., 2006; King et al., 2000; Reid et al., 2006). Clear definitions of consultation were lacking in many of the studies reviewed. However, all studies described consultation as a collaborative process between the occupational therapist and educator for the purpose of identifying goals, developing strategies, and monitoring student progress.

**Outcomes of Collaborative Consultation**

All of the studies reviewed in Table 1 focused on evaluating student outcomes, relying heavily on teacher ratings of student achievement. As a result, these studies have begun to document the effectiveness of collaborative consultation in promoting achievement of individualized goals for students with disabilities (Bayona et al., 2006; Dunn, 1990; Fairbairn & Davidson, 1993; Kemmis & Dunn, 1996; Reid et al., 2006). Some studies reported on other outcomes including stakeholder satisfaction with services (Bayona et al., 2006; King et al., 2000; Reid et al., 2006). A consistent finding among these studies concerned the amount of contact that educators had with therapists. In the study by Bayona, McDougall, Tucker, Nichols, and Mandich (2006), teachers were dissatisfied with respect to frequency of contact with the therapist, stating that there was
insufficient time for collaboration and inadequate follow-up by the therapist. Areas of
dissatisfaction in the study by Reid, Chiu, Sinclair, Wehrmann, and Naseer (2006)
included wait time for service and visit frequency. Similarly, in the study by King et al.
(2000), teachers reported that formal meetings were difficult to arrange due to the lack of
a consistent presence of therapists at school.

Consistent with Bundy’s (1995) framework for evaluating outcomes of school-
based occupational therapy services, Reid et al. (2006) assessed the impact of
consultation for teachers. Outcomes evaluated included: (a) occupational therapist ratings
of change in teacher awareness of student needs; and (b) teacher implementation of
occupational therapy strategies (Reid et al., 2006). Results revealed that teacher
awareness of students’ special needs changed in a positive direction, although the results
were not significant. Findings also indicated that the majority of teachers implemented
the knowledge they acquired from occupational therapists. The authors reported a
relationship between implementation of occupational therapy strategies by teachers and
teacher perceptions of positive change in student performance (Reid et al., 2006).
Considering outcomes for teachers is consistent with the view that the largest outcomes
of consultation are in relation to behaviour and attitude changes in the person with whom
the consultant meets (Bundy, 1995; Dunn, 1990; Spencer et al., 2006).

**Relationship between Collaborative Consultation and Outcomes**

All studies lacked detailed descriptions of the interactions between occupational
therapists and educators. In addition, very little information was provided on the products
or artifacts generated as a result of educator-therapist collaboration (e.g., written reports,
task/environment modifications, documentation of programming suggestions, etc.). Four studies reported on student skill development as the focus of collaborative consultation (Dunn, 1990; Kemmis & Dunn, 1996; King et al., 2000). Dunn (1990) found that teacher-therapist collaboration focused primarily on: fine motor, self-care, postural control, and gross motor skills. In this study, collaborators also addressed behaviour management, oral motor control, attention, relaxation, positioning, communication, and coping skills. Kemmis and Dunn (1996) categorized student goals addressed through collaboration into three areas: academic performance, socialization, and activities of daily living. King et al. (2000) provided information concerning productivity goals most commonly addressed by the occupational therapists in their study. These dealt with written communication (e.g., copying from the board, holding a pencil correctly) and classroom productivity (e.g., cutting, coloring, organizing materials, focusing on tasks). Collectively, these studies confirm the diverse focus of school-based occupational therapy for students with disabilities. Two studies provided frequency data concerning the activities of occupational therapists. In these studies, occupational therapists reported that their activities included: providing education; making environmental/task modifications; recommending strategies/resources; and providing home programs (Bayona et al., 2006; Reid et al., 2006). How these intervention activities were selected and the nature of joint effort was not discussed.

Only one study looked specifically at the relationship between team collaborative practices and student outcomes (Barnes & Turner, 2001). Barnes and Turner (2001) found that teacher-therapist collaborative practices were highly variable. Teachers
described participating in mostly informal discussions with occupational therapists. Jointly reviewing progress was the most common collaborative activity with teachers reporting that in 47.5% of cases, they frequently or always reviewed student progress with the therapist. Snell and Janney (2000) suggest that while informal discussions help professionals to evaluate and refine approaches, they are insufficient for creating and planning new solutions. This is consistent with additional findings of Barnes and Turner (2001) that lesser collaborative efforts were noted in several practices including jointly developing goals and objectives (never or rarely in 45% of cases) and including time for classroom collaboration with the occupational therapist (never or rarely in 40% of cases).

Teachers reported that occupational therapists contributed positively to student skill development in a number of academic and non-academic areas. However, elaboration on how occupational therapists contributed to skill development was not provided. Significant positive correlations were found between collaborative practices and teacher perceptions of the contribution of occupational therapy to student skill development (Barnes & Turner, 2001). This study revealed a significant negative correlation between student goal achievement and three collaboration practices (developing goals and objectives; reviewing progress; and participating in team meetings), indicating that as the level of collaboration increased, the number of objectives met decreased (Barnes & Turner, 2001). The authors speculated that increased collaboration may have led to more scrutiny of and accountability for objectives (Barnes & Turner, 2001). Friend (2000) supports the view that true collaboration involves mutual commitment and shared accountability.
The lack of clear descriptions of the consultation process limits the contribution that these studies can make toward understanding the specific ways in which collaboration contributed to the outcomes reported. The school consultation literature has advocated for case study research to better understand the relationship between processes of collaboration and outcomes (Gutkin, 2002; Kampwirth, 2006). To improve understanding of the specific ways in which joint effort contributes to educationally relevant outcomes, future studies should incorporate multiple-perspective descriptions of the depth, quality, and context of interactions among educators and occupational therapists (Friend, 2000). In addition, elaborating on the products of collaboration would provide considerable detail concerning the integration of occupational therapy in education settings.

**Factors Influencing Collaboration**

Findings from five studies provided insight into factors influencing educator-occupational therapist collaboration (Bose & Hinojosa, 2008; Case-Smith & Cable, 1996; Fairbairn & Davidson, 1993; Nochajski, 2001; Wehrmann et al., 2006). Nochjski (2001) used semi-structured interviews to gain insight into the perspectives of educators and therapists toward collaboration. Results revealed barriers that make implementing collaborative consultation problematic, including: lack of time for educators and therapists to meet; lack of a consistent presence of therapists at school; and lack of understanding of how therapy services help students to progress academically. These concerns were echoed in the results of Barnes and Turner (2001). Confusion over what teachers can expect from occupational therapy was also evident in the study by
Wehrmann et al. (2006). Conducted as part of the larger program evaluation by Reid et al. (2006), recommendations included a call for occupational therapists to spend more time clarifying their roles and responsibilities for educators (Wehrmann et al., 2006). Bose and Hinojosa (2008) suggest that occupational therapists must foster collaborative partnerships with educators. Results of in-depth interviews with six occupational therapists revealed that they often assumed the role of expert during their interactions with educators, which served as an impediment to collaboration (Bose & Hinojosa, 2008). However, administrative barriers, within both the education and health sectors, have been found to negatively influence opportunities for both educators and occupational therapists to establish and maintain effective partnerships (Barnes & Turner, 2001; Nochajski, 2001).

Persuasive findings of a study by Fairbairn and Davidson (1993) provide insight into teacher expectations for occupational therapy services. Teachers identified specific responsibilities of occupational therapists as assessing students, providing programming suggestions, recommending adaptive equipment, and acting as a liaison between home and school. However, participants also expressed confusion over the scope of occupational therapy practice in schools. Teachers felt that occupational therapists spent the majority of their time assessing and documenting for the purpose of establishing students’ levels of functioning. What teachers really wanted from occupational therapists was for them to spend more time in program planning and implementation (Fairbairn & Davidson, 1993). To achieve educationally relevant student outcomes, teachers felt that occupational therapists need to develop a greater understanding of the education system
(Fairbairn & Davidson, 1993). Teachers recommended that occupational therapists spend more time working with exceptional students inside the classroom, demonstrating techniques, and sharing their specialized knowledge through participation in programming for students (Fairbairn & Davidson, 1993). Similarly, Case-Smith and Cable (1996) concluded that because trust and rapport take time to establish through consultation, one way that teachers can build trust and knowledge of occupational therapy is by seeing them work with students. In this way, incorporating direct services (provided inside the classroom context) contributes to the effectiveness of collaboration among therapists and educators (Case-Smith & Cable, 1996).

In summary, lack of time for educators to meet with therapists, combined with the itinerant nature of the therapists’ work has been shown to significantly limit opportunities for information sharing (Barnes & Turner, 2001; Bayona et al., 2006; Bose & Hinojosa, 2008; King et al., 2000; Nochajski, 2001; Reid et al., 2006). Consistent with evidence emerging from the field of social cognition, findings from this review of literature remind us that establishing a collaborative climate requires time and mutual investment, and such a climate can only be developed when team members have clearly defined roles and responsibilities (Bayona et al., 2006; Fairbairn & Davidson, 1993; Nochajski, 2001; Wehrmann et al., 2006). Ongoing research is required to understand the expectations of educators and occupational therapists for school-based occupational therapy and the influence of these expectations on collaboration.
Implications for Program Administrators and Researchers

Based on findings from literature reviewed, it appears that there are two fundamental conditions for collaboration between educators and occupational therapists to flourish. First, teachers need a clear understanding of the roles and responsibilities of occupational therapists so that they know what to collaborate on (Case-Smith & Cable, 1996; Fairbairn & Davidson, 1993; Reid et al., 2006; Wehrmann et al., 2006). At the same time, occupational therapists need a definite understanding of school board policies, the curriculum, and the classroom practices of teachers in order to develop educationally relevant approaches to service provision for students (Bose & Hinojosa, 2008; Fairbairn & Davidson, 1993). Second, educators and therapists need sufficient time and opportunity for information sharing (Nochajski, 2001). Encouraging results have demonstrated that when occupational therapists invest in a collaborative partnership with educators, teacher perceptions of the therapists’ contribution to student outcomes increases (Barnes & Turner, 2001; Dunn, 1990; Kemmis & Dunn, 1996; Reid et al., 2006).

Program administrators can facilitate opportunities for collaboration among occupational therapists and educators by adopting flexible approaches to service delivery. Service delivery methods must correspond to the unique needs that educators have for adapting educational programs to enable success for students with disabilities. Optimizing collaborative interactions offers substantial opportunity to combine expertise in ways that support innovative approaches to educational inclusion of students with disabilities (Gutkin, 2002). Adopting participatory and utilization-focused evaluation
methods (see: Preskill & Catsambas, 2006; Stufflebeam & Shinkfield, 2007) that involve stakeholders from both the health and education sectors, in the design of realistic guidelines for service delivery, is crucial. These guidelines must be developed through inter-agency cooperation to ensure that administrative structures within both education and health sectors promote and support opportunities for collaboration (Barnes & Turner, 2001; Fairbairn & Davidson, 1993; Nochajski, 2001).

Bundy’s (1995) framework provides a starting point for the re-examination of occupational therapy service delivery in schools, providing guidance for administrators concerning factors that influence frequency, length, and duration of occupational therapy contact with educators. By focusing attention on expected outcomes (e.g., student skill development, maintenance of function, environmental adaptation), Bundy’s framework can support occupational therapists in school-based collaborative consultation by: (a) engaging with educators to define problems in terms of expectations for the student within the educational context; and (b) negotiating a service delivery approach best suited to achieving those expectations. Used in this way, Bundy’s framework addresses the recommendation that occupational therapists need to be more transparent in the communication of their roles and responsibilities in school-based practice (Barnes & Turner, 2001; Fairbairn & Davidson, 1993; Nochajski, 2001; Wehrmann et al., 2006). Taken a step further, Bundy’s framework can support the identification of appropriate methods for evaluating outcomes of school-based occupational therapy services.

Research describing the specific influence of therapist, teacher, and student variables on successful collaboration is needed (Barnes & Turner, 2001; King et al.,
The theory of distributed cognition provides a basis for more informed and complex thinking about occupational therapy collaborative consultation in schools. Considering collaborative practices from within a framework of distributed cognition has implications for the development of research examining school-based occupational therapy services in ways that provide a more robust understanding of the relationship between educator-therapist collaboration and outcomes of school-based occupational therapy services.
**Table 1**

*Studies Examining Outcomes of School-based Occupational Therapy Collaborative Consultation Services*

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Purpose</th>
<th>Design</th>
<th>Outcomes Evaluated</th>
<th>Key Findings</th>
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<tbody>
<tr>
<td>Dunn (1990)</td>
<td>Compared direct service and collaborative consultation. (Pilot Study)</td>
<td>• N=14 preschoolers (2-6 years): Random assignment to either direct treatment or collaborative consultation conditions</td>
<td>• Teacher assessment of student goal attainment (gauged as met or unmet)</td>
<td>• Both groups achieved just over 70% of their individual education goals.</td>
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<td>• N=6 occupational therapists</td>
<td>• Teacher judgment of whether the occupational therapist contributed to goal attainment</td>
<td>• In the direct treatment condition, children achieved proportionately more goals in 4 out of 6 areas of their goals checklist: Fine Motor/Perceptual; Social/Emotional; Self Help; and Language.</td>
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<td>• N=11 teachers</td>
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<td>• Teachers reported occupational therapy contribution to goal attainment more in the consultation group.</td>
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<td>Kemmis and Dunn (1996)</td>
<td>Compared the efficacy of remedial and compensatory interventions developed through collaborative consultation.</td>
<td>• Convenience sample N=10 students (5-9 years)</td>
<td>• Teacher rating of intervention success (gauged as met or unmet) using criteria established by the teacher-therapist pair.</td>
<td>• Remedial and compensatory approaches were equally effective across performance areas addressed.</td>
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<td>• N=9 teacher-therapist pairs</td>
<td>• Documentation of intervention decisions</td>
<td>• Teacher-therapist pairs selected compensatory interventions more frequently than remedial interventions. Teacher-therapist pairs most frequently selected academic and socialization goals to address through collaboration. Teachers preferred compensatory approaches to support achievement of academic goals.</td>
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<td></td>
<td></td>
<td>• Weekly tracking of goals by teacher-therapist pairs</td>
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<td>• Collaboration facilitated student</td>
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<tr>
<td>Author(s)</td>
<td>Purpose</td>
<td>Design</td>
<td>Outcomes Evaluated</td>
<td>Key Findings</td>
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| King et al. (2000)     | Examined the utility of a school-based program providing occupational therapy, physical therapy, and speech-language pathology (SLP) to children with diverse special needs. | • N=50 students (5-12 years) with mix of diagnoses and problems  
• Single group pre-test – post-test design and six month follow-up  
• N=6 occupational therapists; 6 SLP; 6 physiotherapists | • Standardized measures of functional status  
• Goal attainment scaling:  
  ▪ School productivity  
  ▪ Communication  
  ▪ Mobility  
• Parent/teacher satisfaction with services  
• Therapist intervention checklist | • Statistically and clinically significant improvement in the mean functional status and individual goal attainment of students.  
• Improvements were maintained at follow-up. However, the authors acknowledge that one-third of the students were still receiving therapy services at the time of follow-up data collection.  
• Teachers and parents were highly satisfied with the services received. |
| Barnes and Turner (2001) | Described teacher perceptions of their collaboration with occupational therapists. | • N=40 teachers  
• Descriptive, correlational study using survey instrument and document review | • Percentage of individual educational objectives met  
• Teacher perception of occupational therapists contribution to student skill development  
• Teacher perception of collaboration in 6 areas: | • Collaboration involved informal discussions within classrooms, offices, and hallways. Formal meetings were difficult to arrange due to the inconsistent presence of therapists at school.  
• Teachers reported that occupational therapists contributed to student skill development in academic, |
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<th>Author(s)</th>
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| Explored relationship of team collaborative practices to individual goal attainment of students. | | | § Goal development  
§ Time allotted for collaboration  
§ Monitoring of occupational therapy services  
§ Reviewing student progress  
§ Frequency of meetings | social/behavioural, transitional, home, work/vocational, and pre-academic/prerequisite skills.  
• Significant positive correlations were found between collaborative practices and teacher perceptions of occupational therapy contribution to student skill development.  
• Significant negative correlation between student goal achievement and three collaboration practices (developing goals and objectives; reviewing progress; and participating in team meetings).  
• Further research is required to understand how school districts can foster collaboration among teachers and occupational therapists. |
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| Bayona et al. (2006) | Examined whether written communication and fine motor skills improved with school-based occupational therapy consultation. Assessed the extent to which consultation services were implemented as intended. | • Single group pre-test – post-test design  
• N=23 students (5 – 8 years old)  
• N= 23 parents  
• N=23 teachers  
• N=18 occupational therapists | • Written communication  
• Fine Motor Skills  
• Teacher/Parent satisfaction with services  
• Occupational therapists’ summaries of services and self-ratings their success with service delivery. | • Statistically significant gains on standardized measures of written communication. Discrepant findings on two separate measures of fine motor skills.  
• Teachers reported that there was insufficient time for collaboration and inadequate follow-up by the therapist. Parents expressed satisfaction with the service.  
• Examination of the process of service delivery revealed that therapists deviated from a purely consultative model with 86% providing some direct intervention to students.  
• Therapists perceived their services to be moderately successful. 71% indicated that the greatest barrier to successful services was insufficient visit frequency. |
| Reid et al. (2006) | Assessed the effectiveness of an occupational therapy school-based consultation program for students with | • Single group pre-test – post-test design  
• N=91 students (4 – 10 years) | • Teacher rating of student performance and satisfaction.  
• Teacher awareness of students’ special needs.  
• Occupational therapist ratings of teacher | • Significant positive change in performance and satisfaction scores as rated by teachers.  
• Teacher awareness of students’ special needs changed in a positive direction, but the results were not significant.  
• 80% of teachers implemented |
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<th>Author(s)</th>
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| Reid et al. (2006) continued | fine motor difficulties. | | implementation of strategies.  
- Description of the frequency of consultation activities engaged in by occupational therapists.  
- Teacher/Parent satisfaction | knowledge they acquired from occupational therapists with students.  
- The authors reported a relationship between implementation of occupational therapy strategies by teachers and teacher perceptions of positive change in performance and satisfaction scores.  
- 84% of teachers and 81% of parents rated the service as excellent or good. Areas of dissatisfaction included: wait time for service, visit frequency, and linkage with other community services.  
- These authors concluded that teacher awareness of student needs and implementation of occupational therapy strategies are critical to achieving educationally relevant outcomes for students. |

Articles presented chronologically by date of publication.
Table 2
Studies Examining Factors Influencing Collaborative Consultation

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Purpose</th>
<th>Design</th>
<th>Key Findings</th>
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<tbody>
<tr>
<td>Fairbairn and Davidson</td>
<td>Examined teacher perceptions of the role and</td>
<td>Survey of 103 teachers from two school boards in Ontario. Follow-up</td>
<td>• Teachers identified the specific responsibilities of occupational therapists as: assessing students; providing programming suggestions; recommending adaptive equipment; and acting as a liaison between home, school, and community.</td>
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<td>(1993)</td>
<td>effectiveness of occupational therapy in schools.</td>
<td>interviews with 10 participants.</td>
<td>• Teachers expressed confusion over the scope of occupational therapy practice in schools. Teachers felt that the occupational therapists spent the majority of their time assessing and documenting for the purpose of establishing students’ levels of functioning.</td>
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<td>• Teachers perceived occupational therapists as helping mostly with problems related to physical functioning and indicated their need for support with psychosocial and emotional problems experienced by students.</td>
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<td>Case-Smith and Cable</td>
<td>Determined the amount of time spent in direct</td>
<td>Nationwide survey of 216 occupational therapists in the United States.</td>
<td>• Therapists spent 47% of their time in direct (pull-out) intervention with students and 53% of their time in consultation with teachers or providing services to the child within the classroom. Findings support the view that therapists need to combine direct and indirect approaches to service delivery in schools.</td>
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<td>(1996)</td>
<td>and consultative models of service delivery.</td>
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<td>• Therapists who provided contract services to schools spent 14% more time in direct, pull-out services compared with therapists who were employed by the school system. Authors suggested that this finding may be explained by the fact that contract therapists are often paid for direct services to students and are not reimbursed for time spent in discussions with teachers.</td>
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<td></td>
<td>Explored the attitudes of occupational therapists</td>
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<td>• The model of service delivery selected by therapists may be related to: the therapists’ preference, roles of therapists as defined by the school administration, the background education of therapists, or to the individualized</td>
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<tr>
<td>Author(s)</td>
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| consultative models of service delivery. | needs of students. Additional information is required to interpret findings concerning therapist use of direct and consultation models. | Semi-structured interviews with 51 educators, occupational therapists, physical therapists, and speech and language pathologists. | - Attitudes toward consultation were positive, indicating that they enjoyed opportunities for personal interaction and collaboration with teachers. Therapists valued sharing ideas and enjoyed having an effect on the classroom environment. Respondents did not believe that accountability and evaluation of outcomes were barriers to implementing consultation services. 
- Therapists also valued interactions with students during direct intervention and felt that direct services were important to student outcomes. |
| Nochajski (2001)            | Investigated the perspectives of educators and therapists toward collaboration. | N=52 participants Focus group interviews                                  | - Participants tended to lump together any kind of formal and informal discussion as collaboration, with great variation among respondents in the identification of activities they perceived as collaboration.  
- Only 21% of respondents reported attending monthly planning meetings between teachers and therapists to specifically plan teaching strategies and class activities, and none met more frequently than that.  
- While participants believed collaboration was mutually beneficial for students and team members, Participants identified the following barriers: lack of time for educators and therapists to meet; lack of a consistent presence of therapists at school; and lack of understanding of how the various therapies help students to progress academically. |
| Wehrmann et al. (2006)      | Investigated factors that influence outcomes of occupational therapy consultation from multiple | Focus group interviews                                                   | - Participants perceived occupational therapy as effective in improving performance for students with fine motor difficulties.  
- While participants were generally satisfied with the service, there was confusion about what teachers can expect from occupational therapy.  
- Key suggestions for program improvement included: identifying students needing services earlier; increasing the number and frequency of occupational |
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<th>Design</th>
<th>Key Findings</th>
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<tr>
<td><strong>program</strong> evaluation by Reid et al. (2006)</td>
<td>perspectives (occupational therapy, case managers, teachers, parents).</td>
<td>therapy visits; improving communication among therapists and educators; improving teacher awareness of the roles and responsibilities of occupational therapy, and addressing administrative issues in the health and education sectors.</td>
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</table>
| Bose and Hinojosa (2008) | Explored occupational therapists’ experiences of interacting with teachers and other early childhood personnel in early childhood classrooms (pre-school – grade 2). | N=6 occupational therapists Open-ended, semi-structured, in-depth, face-to-face interviews | • All participants valued collaboration. Specific barriers to collaboration included: lack of time to engage in formal meetings, lack of teacher receptiveness, and failures in communication.  
• Lack of administrative support to enable teachers and occupational therapists to meet left the occupational therapists feeling like it was their responsibility to create time for meeting with teachers.  
• Occupational therapists tended to view their interactions with teachers as successful when teachers were responsive to their recommendations and when teachers acknowledged deference to their advice. Recommendations encouraged occupational therapists to adopt more team problem solving processes rather than individual problem solving. |

Articles presented chronologically by date of publication
Chapter 3

Enabling Outcomes for Students with Developmental Disabilities
through Collaborative Consultation

58
Introduction

Over the past three decades, there has been considerable change in the education of children with disabilities in Canada. Children with disabilities attend inclusive classrooms and are educated alongside their non-disabled peers (Hutchinson & Martin, 2012). Inclusive education practices promote the provision of special education supports and access to services by professionals such as occupational therapists so that students with disabilities are served optimally in regular education settings (Hutchinson & Martin, 2012; Peters, 2007; Scruggs & Mastropieri, 1996; Smith, 1994). In Canada, occupational therapists have been providing services in schools for over three decades (Graham et al., 1990; Reid et al., 2006). This qualitative study describes the work of occupational therapists providing services to two young children with developmental disabilities in school.

Occupational therapy supports students with disabilities within the academic environment by addressing educational and functional goals (Case-Smith & Rogers, 2005). By drawing on both remedial and compensatory strategies, school-based occupational therapy contributes to outcomes that may include: (a) skill development, improving the ability of students to meet expectations of the school program; (b) building capacity in others to deliver programming with students; (c) removal of barriers (physical and attitudinal) to participation; and (d) recommending activity adaptations or technologies as strategies that enable students to succeed at school despite limitations imposed by their disability (Bundy, 1995; Case-Smith & Rogers, 2005; Graham et al., 1990).
Since the 1990s, school-based occupational therapists in Canada have increasingly adopted a consultation model of service delivery (Reid et al., 2006). Consultation emphasizes indirect service to the student and the contribution of occupational therapy knowledge and skills to support teachers with the development of individual education programming for students with disabilities (Bundy, 1995; Giangreco, 1995). School-based occupational therapy consultation has been described as collaborative because the interactions between occupational therapists and educators are dependent upon shared expertise (Bundy, 1995; Case-Smith & Rogers, 2005).

Collaborative consultation is defined as an interactive problem-solving process, enabling people with diverse expertise to generate creative solutions to mutually defined problems (Idol et al., 2000). The adoption of collaborative consultation as a service delivery model coincided with the shift to inclusive education practices. Within this context, occupational therapists strengthened their focus on the educational relevance of their service and shifted emphasis from direct intervention with students to supporting educators in their work with students (Case-Smith & Rogers, 2005; Fairbairn & Davidson, 1993; Reid et al., 2006).

Although collaborative consultation has been widely adopted in school-based occupational therapy practice, there is limited understanding of how collaboration between educators and occupational therapists contributes to educational programming and outcomes for students with disabilities. Villeneuve (2009) conducted a research synthesis to examine: (a) the relationship between school-based occupational therapy collaborative consultation and outcomes for students with disabilities, and (b) factors that
influence collaboration between educators and occupational therapists. Emphasis was placed on research relevant to the Canadian context. Of the eleven studies that met the inclusion criteria, only one was found that examined the relationship between team collaborative practice and outcomes. Findings revealed that the research literature has focused almost exclusively on barriers to collaboration. Outcome studies emphasized student achievement of individualized education goals but lacked clear descriptions of how collaborative consultation contributed to the outcomes reported. To improve understanding of the specific ways in which school-based occupational therapy collaborative consultation contributes to educationally relevant outcomes for students, multiple-perspective description of the depth, quality, and context of interactions among educators and occupational therapists is required (Barnes & Turner, 2001; Friend, 2000; Kampwirth, 2006; King et al., 2000).

**Purpose**

The purpose of this study was to describe the nature of joint effort in two cases of school-based occupational therapy service delivery for students with developmental disabilities. Socio-cultural activity theory was used as a conceptual framework to examine both the expectations that individual stakeholders had for each student and the depth, quality, and context of interactions between educators and occupational therapists in practice. Findings from this study were used to understand features of collaborative working that supported educational programming and outcomes for students with developmental disabilities.
Theoretical Orientation Informing Research on Collaborative Consultation

A significant challenge to studying collaborative consultation is the lack of a sound theoretical framework for understanding the relationship between collaborative interactions and outcomes (Clark, 2006; Gutkin, 2002; Zwarenstein & Reeves, 2006). Theories of group learning are increasingly recognized as relevant for understanding the critical features of collaboration (Villeneuve, 2009). Socio-cultural activity theory (SCAT) (Engeström, 2008) has emerged from an understanding about the distributed nature of learning within teams. SCAT provides a conceptual framework for the study of collaboration by identifying elements within human activity systems that are relevant to shared working (Engeström, 2000). It has been applied in service contexts to examine interprofessional and multi-agency working (Freeman, Miller, & Ross, 2000; Glisson & Hemmelgarn, 1998; Leadbetter, 2008; Lowe & O'hara, 2000; Robinson & Cottrell, 2005). SCAT has also been used to examine collaborative interactions in schools (Dennis, 2004; Leadbetter, 2004; Martin, 2008).

Socio-cultural activity theory. Vygotsky proposed that human activity happens in a relationship where actions of individuals (subjects) resolve a shared problem, which is the focus of their learning (object), by using tools as mediating means to achieve an outcome (Daniels, 2001). Successful learning results from alignment of the appropriate tools with what is being worked on (Martin, 2008). This basic activity system emphasizes individual learning that results from collaborative interactions. For example, an occupational therapist (subject) may provide an education assistant (EA) with instruction in safe lifting and transferring of a student with impaired mobility. In doing so, the
therapist draws on a number of mediating tools to support the EA’s learning (object). These tools may include the equipment being used to transfer the child as well as instructional strategies to scaffold learning such as demonstrating the transfer, providing opportunity for the EA to practice with support and supervision, and reviewing the success of the transfer through reflective feedback.

Engeström (2001) expanded Vygotsky’s basic activity system for the purpose of analyzing learning among team members. SCAT includes social and contextual factors that shape collaborative work (see Chapter 1, Figure 1). By adding three components: (a) the community of others who are involved in the problem; (b) the rules, routines, and professional conduct which support and constrain participants in solving the problem; and (c) the way in which participants share responsibilities in resolving the problem, Engeström’s framework enables analysis of collaboration by examining the influence of human interaction on shared learning (Leadbetter, 2008; Martin, 2008). SCAT places greater emphasis on the wider context, ensuring that due account is taken of how work is usually divided and the rules under which work takes place (Leadbetter, 2008).

**Collaborative working within an activity system.** Engeström (2008) differentiated among teamwork, cooperation, and collaboration within an activity system by considering different types of interactions. Teams are usually comprised of single service professionals grouped for administrative purposes or multi-professional teams working around a child, performing their individual roles and responsibilities according to recognized professional scripts or professional boundaries (Engeström, Brown, Christopher, & Gregory, 1997). For example, the occupational therapist may be working
on the student’s fine motor skill development, the speech-language pathologist on the student’s articulation goals, and the regular education teacher on the student’s reading comprehension. Boundaries are created by practitioner roles and routines, and are defined within professional cultures and historical work practices (Martin, 2008). Team members may work in parallel or liaison without addressing issues that prevent better collaborative working (Engeström et al., 1997). Engeström described this type of work as service coordination.

In contrast, cooperative working involves modes of interaction where team members focus on a shared problem and contribute their knowledge to find mutually acceptable ways of understanding and solving it, interactions between various practitioners can be characterized as cooperative. The critical feature of cooperative working involves practitioners each contributing their professional knowledge to re-conceptualize a shared problem. Engeström suggested that transitions to cooperative working may occur during interactions between various practitioners without explicitly questioning or re-conceptualizing their roles and responsibilities.

Alternatively, Engeström characterized collaboration as interactions in which practitioners focus on re-conceptualizing their own professional roles and responsibilities in relation to their shared focus for joint effort. Shared focus on a problem supports boundary crossing as practitioners develop new understandings about how others work (Martin, 2008). Expansive learning occurs when team members use each other’s knowledge to co-configure their roles to produce new ways of working. Boundary crossing and co-configuration of work practices therefore characterize collaborative
interactions (Engeström, 2000). Consistent with research identifying barriers to collaboration, Engeström’s research on teamwork, across a number of workplaces, suggests that expansive learning is rare in the ongoing flow of daily work actions. Indeed, lack of time for educators and occupational therapists to meet, combined with the itinerant nature of the therapists’ work has been shown to limit opportunity for joint effort (Barnes & Turner, 2001; Bayona et al., 2006; Bose & Hinojosa, 2008; King et al., 2000; Nochajski, 2001; Reid et al., 2006). Research on distributed cognition suggests that sustained interaction is critical for collaborators to develop mutual understanding that enables them to re-configure knowledge in ways that provide more powerful solutions to problems (Derry et al., 1998). This has implications for school-based occupational therapy practice where educators and occupational therapists must contend with everyday challenges to sustained interaction (Barnes & Turner, 2001; Fairbairn & Davidson, 1993; Nochajski, 2001).

Engeström (2008) described knotworking as a facilitator of collaborative working in an activity system. Recognizing that fleeting linkages occur in dislocated and shifting networks among workers, knotworking describes the leadership practices of a key worker that support meaningful interactions among workers to enable generative learning and shared problem solving. Emerging evidence suggests that leadership through knotworking supports expansive learning among collaborators by facilitating information sharing among workers within an activity system (Engeström, 2008; Martin, 2008). However, understanding how the leadership practices of a key facilitator promotes collaborative interactions requires further investigation.
Methods

Case study methods (Stake, 1995) were used to report multiple perspectives concerning school-based occupational therapy collaborative consultation for two students with developmental disabilities in one region of Ontario. Multiple case study analysis (Stake, 2006) was used to identify features of collaborative working that facilitated educational programming and outcomes in each case. Each case study was bounded by the student and the student’s legal guardian, their classroom placement, educators who were directly involved with classroom planning for the student, and educators who made decisions on behalf of the student. Each case included the occupational therapist responsible for service provision and the case manager who authorized school-based occupational therapy service through the regional School Health Support Service (SHSS) program in the school board’s district. Ethical approval was obtained from the University’s Research Ethics Board followed by approval from the participating school board, local Community Care Access Centre (CCAC), and therapy provider agencies. Information and consent forms can be found in Appendix A.

Recruitment

Focal cases, recruited from the participating school board, were selected using purposive and convenience sampling so that the two cases represented a wide spectrum of specific characteristics of students with developmental disability who are typically referred for school-based occupational therapy. Cases were limited to primary students from Junior Kindergarten to Grade four, a time period when referrals are most commonly made. With informed consent first provided by the student’s legal guardian, the first
author contacted the school principal and educators to inform them of the study and to seek their permission to conduct research at their school. In both cases, the primary teacher contact shared information about the research with other involved educators and the education assistant. Recruitment proceeded by contacting the local CCAC and provider agencies to invite participation of the case manager and occupational therapist. The process of inviting participation and obtaining informed consent proceeded in this manner for both case studies.

**Participants**

The two focal participants were Connor and Alisha who attended different schools. Connor was a 6-year old boy with autism. He attended his local community school in the afternoon in a Grade one class placement with withdrawal for “body breaks.” Connor received intensive behavioural intervention (IBI) from IBI therapists at home in the mornings. In Connor’s case, the special education team initiated a referral for occupational therapy services following Connor’s transition from daycare to Grade one. The occupational therapist initiated her assessment and consultation visits with Connor in the second half of Grade one.

Alisha was a 6-year old girl with multiple complex physical and intellectual exceptionalities resulting from a chromosomal abnormality. She was placed in a Senior Kindergarten class at her local community school, which was a full-day, daily program. Alisha attended the special education classroom for one half-hour period daily. Alisha was referred by a clinic-based occupational therapist prior to her transition into Junior
Kindergarten. Alisha had been receiving monthly occupational therapy visits since the beginning of Junior Kindergarten.

Table 3 identifies the roles of participants in each case study. Both students had the support of an education assistant (EA). In both cases, a special education teacher (SET) was responsible for the students’ individual education program (IEP). At each school, a vice-principal (VP) held responsibility for overseeing special education programming for students with identified special education needs. Their role included making requests for educational assistance, facilitating referrals for therapy services, and ensuring that recommended services were in place. In both cases occupational therapists were authorized by the case manager to provide monthly visits at school up to a maximum of 10 visits per school year. In both cases, the student’s mother participated in the research.

Table 3

<table>
<thead>
<tr>
<th>Participants</th>
<th>Connor</th>
<th>Alisha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent (mother) (M)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Educational Assistant (EA)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Special Education Teacher (SET)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Regular Education Teacher (RET)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Vice-Principal (VP)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Occupational Therapist (OT)</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Case Manager (CM)</td>
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</tbody>
</table>

The two cases are representative of school-based occupational therapy collaborative consultation for students who, because of the nature of their developmental disabilities and learning needs, receive alternative curriculum programming and support
from an educational assistant. Alternative education programming is available in Ontario to support the development of alternative expectations for students who are not expected to achieve the outcomes represented in the Ontario curriculum (Hutchinson & Martin, 2012; Ontario Ministry of Education, 2004). For these students, alternative education programming identifies learning objectives and teaching methods to support achievement of the knowledge and skills outlined on an individual education plan. Examples of alternative education expectations can include speech remediation, social skills, mobility training, and personal care programs (Ontario Ministry of Education, 2004).

**Research Questions**

The following questions were used to guide data collection. Each question addresses the relevant constructs from SCAT (Chapter 1, Figure 1):

1. What are the desired goals or educational expectations for the student (outcome)?
2. What is the focus of education and occupational therapy programming for the student (object)?
3. Who sets the focus for occupational therapy involvement (subject)?
4. How is service provided (tools)?
5. Who is involved and how is responsibility shared (community/division of labour)?
6. What supports or constrains educator-occupational therapist collaboration (rules)?
Data Collection

Data consisted of observations, documents, and interviews collected over an eight-month period between November 2008 and June 2009 (Table 4). Observation was used to gather contextual information about the student participating in school programming, including occupational therapy, and captured the nature of interactions among participants. Observations for both cases took place during regular classroom and special education programming, library, gym programming, and included indoor and outdoor activities at recess and drop-off or pick-up by parents. Field notes were used to capture observation data through thick description. SCAT provided a conceptual framework to guide observations. For example, when observing each focal participant in activity, observation data were gathered to describe: (a) what was being worked on; (b) what tools or approaches were being used; (c) who else was involved; and (d) how work was shared. Observations were supplemented with field notes, photo, video, and audio recordings of activities involving the focal participant at school to support accuracy in data collection.

Formal interviews ranged from 35 minutes to one hour and were conducted at a time and place that was most convenient for participants. Interview questions were guided by prior observations and document review using an appreciative approach to inquiry. Appreciative inquiry uses interviewing techniques that emphasize the sharing of stories to enable a participant’s reflection on their experience of a program (Preskill & Catsambas, 2006). Participants were asked to reflect on their expectations for the focal case study participant and their experiences with school-based occupational therapy.
service. Appreciative inquiry is consistent with contemporary approaches to data collection in qualitative studies where participants are treated as active interpreters who construct their realities through discussion, stories, and narratives (Hesse-Biber & Leavy, 2008). Informal interviews were conducted with participants by engaging with them during field visits at school. Document review provided data on goals for the student, learning strategies, and description of occupational therapy involvement. Document review also provided data on the type of information shared between participants in each case study. For example, mid-block and year-end reports were used to share information about occupational therapy services with the case manager and therapy notes were used to share information about occupational therapy with parents and teachers. Table 4 identifies the type of data collected and indicates the number of interviews and observations for each focal participant.

**Audit Trail, Member-Checking, and Credibility**

A log was kept as an audit trail of the research process, documenting the date of each observation, interview, document review, and field note. All interviews were transcribed verbatim with the exception of interviews with the two case managers who did not consent to audio recordings of the interviews. In these two instances, detailed notes were taken during the interview. Interview summaries were provided to each case manager who reviewed them for accuracy. All data were reviewed regularly and reflections on emergent findings related to the research questions were recorded in memos. These memos were intermittently reviewed to support data analysis and description of case study findings.
Table 4

**Case Study Data**

<table>
<thead>
<tr>
<th>Data Collection Methods</th>
<th>Documents Reviewed</th>
<th>Connor</th>
<th>Alisha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Individual Education Plan</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>- Program/Class Schedule</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td><strong>Occupational Therapy Provider</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- SHSS Program Therapy Plan</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>- Formal Assessment Report</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>- School Consultation Therapy Notes (for each visit)</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>- Progress notes (for each visit)</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>- Mid-block Report</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>- Year-end Report</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td><strong>CCAC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Service Request</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>- Functional Intake Assessment</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>- Service Provider Referral &amp; Service Authorization</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td><strong>Interviews (number)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Formal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Special Education Teacher (SET)</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>- Regular Education Teacher (RET)</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>- Vice Principal (VP)</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>- Education Assistant (EA)</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>- Parent (mother) (Mom)</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>- Occupational Therapist (OT)</td>
<td>(1)</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>- Case Manager (CM)</td>
<td>(2)</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td><strong>Informal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- SET</td>
<td>(1)</td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td>- RET</td>
<td>(1)</td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td>- EA</td>
<td>(9)</td>
<td></td>
<td>(9)</td>
</tr>
<tr>
<td>- Mom</td>
<td>(2)</td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>- OT</td>
<td>(6)</td>
<td></td>
<td>(6)</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Field Visits (total)</strong></td>
<td>(9)</td>
<td></td>
<td>(9)</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>(36)</td>
<td></td>
<td>(36)</td>
</tr>
</tbody>
</table>
Consistent with in-depth case study research, thirty-six hours of data collection over eight months enabled data saturation. Data included observation of the focal participant as they participated in many different activities over the duration of the school year. Saturation was reached when the same activity patterns and participant perspectives were repeated and no new data emerged. Combining observation, document review, and interviews facilitated trustworthiness through triangulation of data sources and participant perspectives (Denzin & Lincoln, 2005; Stake, 2006). Drawing on observation data during interviews enabled participants to reflect on events observed and to share their understanding of the situations. During interviews, participants were also encouraged to reflect on documentation of education and occupational therapy services by considering how they used documentation to support programming for the focal participant.

Trustworthiness was enhanced through peer debriefing (Denzin & Lincoln, 2005) with the second author who supported reflection and provided feedback on data collection and analysis methods.

**Data Analysis**

Data were analyzed separately for each case. Case study description began by describing education programming for each focal participant and proceeded by describing the process from initiation of referral for occupational therapy through to providing intervention at school. Observation data supported contextualized description of the following: (a) classroom and school activities, including occupational therapy service for the focal participant; (b) approaches and tools used to implement the activity or service; (c) who was involved in the activity; and (d) how work was shared.
Coding of interview transcripts and documents supported multiple perspective understanding and thick description of the case within an activity system framework by identifying and grouping concepts from each participant’s perspective concerning, (a) desired goals for the student and expectations for occupational therapy involvement, (b) their roles and responsibilities in relation to the focal participant and service provision, (c) how they determined which approaches or tools to use in their work with the student, (d) how work was shared, and (e) factors that supported or constrained practice.

As a significant part of the analysis, each case was written into a narrative to attempt to understand interrelations among components in the activity system and to account for multiple perspective understanding of educational programming and occupational therapy services in each case. To describe the nature of joint effort, findings were diagramed and described using the framework provided by SCAT. Consistent with appreciative inquiry, dilemmas or incongruence among components in the activity system were examined for each case study along with factors that enabled joint effort. This supported the identification of key themes concerning the nature of joint effort in each case study, grounded in a deep contextual understanding of each case from multiple viewpoints. A critical feature of multiple case analysis involves examining what is similar and different in each case in order to better understand the phenomenon being studied (Stake, 2006). In this study, multiple case analysis facilitated examination of the similarities and differences in teamwork while attending to contextual factors that shaped how work was shared. Cross-case analysis of findings from each case study was used to identify and describe features of collaborative working that supported educational
programming and outcomes in this study of school-based occupational therapy collaborative consultation for two students with developmental disabilities.

Findings

Cross-case analysis revealed three themes concerning workplace practices that supported collaboration including, (a) focus for educational programming, (b) communication practices, and (c) leadership practices of educators (Table 5). For each theme, findings are considered for each case and then compared and contrasted between cases in order to illustrate practices that supported collaboration in relation to each theme. This is followed by a discussion of the implications for collaborative consultation. Data sources from interviews are identified by the acronym of the participant interviewed as highlighted in Table 4. Data sources from my observations are identified as field notes. Data from informal interviews with participants are paraphrased and participants are acknowledged by their acronym.

Theme #1: Focus for Educational Programming

The first theme considers the relationship between goals and expectations for the student in the education context and the roles and responsibilities of participants in relation to those expectations.

Shared focus on educational goals drives programming for Connor. In Connor’s case, findings showed that the educators and education assistant (EA) held a shared focus on Connor’s development of “foundation skills for learning” as a key outcome for Connor in Grade one. Foundation skills were identified as “attending to others, following routines and directions from adults, starting and completing tasks,
social communication, and turn taking” (SET). A common script that emphasized, “Connor’s successful inclusion at school,” directed educators in their work with Connor. This shared focus on inclusion was consistent with his mother’s expectation for Connor in Grade one, “To me the most important thing was interaction with peers because he wants to be with other kids” (Mom).

Table 5

**Cross-case Themes**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Connor</th>
<th>Alisha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus for Educational Programming</strong></td>
<td>• Shared focus on educational goals drives programming for Connor</td>
<td>• Professional roles drive programming for Alisha</td>
</tr>
<tr>
<td></td>
<td>• Education goals drive focus for occupational therapy collaborative consultation</td>
<td>• Occupational therapist sets focus for consultation with educators</td>
</tr>
<tr>
<td><strong>Communication Practices</strong></td>
<td>• Interactive communication in groups</td>
<td>• Informal trouble shooting in dyads</td>
</tr>
<tr>
<td></td>
<td>• Making time up front</td>
<td>• Getting information second hand</td>
</tr>
<tr>
<td></td>
<td>• Using documentation to sustain focus for occupational therapy involvement</td>
<td>• Showing how and explaining why</td>
</tr>
<tr>
<td></td>
<td>• Showing how and explaining why</td>
<td>• Showing how and explaining why</td>
</tr>
<tr>
<td><strong>Leadership Practices of Educators</strong></td>
<td>• Leadership of special educator</td>
<td>• The educational assistant is the point person</td>
</tr>
<tr>
<td></td>
<td>• Accountability practices of special education team</td>
<td></td>
</tr>
</tbody>
</table>
Figure 2 identifies the primary responsibilities of Connor’s educators and illustrates how each participant utilized specific tools that were appropriately matched to their unique role in Connor’s alternative education program. For example, the primary role of Connor’s Grade one teacher was to program for the class. When planning her classroom schedule, she took into account Connor’s need for movement based activities and scheduled physical activity, dramatic movement, and dance activities in the afternoons when Connor was present at school (field note). She utilized these activities along with the daily classroom activities to monitor Connor’s ability to initiate and follow classroom routines (e.g., lining up for recess and gym, handing in agenda, getting ready for snack). The Grade one teacher shared information about Connor’s performance with the special education teacher who held primary responsibility for reporting on his progress at school.

The special education teacher, who was responsible for programming Connor’s alternative curriculum goals, created an IEP that specifically addressed “social communication skills” to encourage Connor’s interaction with his peers (SET). The special educator recognized the important role of Connor’s peers over the long term and worked closely with the EA to include structured interaction with peers as a key component of Connor’s education program (e.g., “circle of friends”). Together they expected that their efforts toward building peer interaction would contribute to the development of a “good strong advocacy group” that could support Connor throughout his school years. Involving peers was, therefore, seen as an important part of developing Connor’s “foundation for success at school” (field note).
When working directly with Connor, the EA consistently utilized sign language, visual and verbal prompting, and peer modeling to promote Connor’s interaction with adults (e.g., Grade one teacher, gym teacher/coach) and peers. Repeated field observations revealed that the EA was constantly “on the hunt for things that made Connor tick.” The EA reported that with a better understanding of Connor’s “genuine interests” she could “capitalize on those interests,” and involve his peers in activities to
support peer interaction (field notes). For example, when she discovered Connor’s interest in puzzles, the EA immediately involved two of Connor’s classmates in putting together simple puzzles with him at recess. The EA used the activity to support Connor’s focused attention to the task, eye contact with peers, and turn taking consistent with his IEP goals (field note).

Together with the special education teacher, the VP was responsible for tracking the implementation of IEP goals, services, and supports provided to Connor in the school setting (e.g., coordinating education assistants for Connor and another student, making a referral for occupational therapy services). They used regular formal meetings with the special education team and informal communication with the EA to monitor Connor’s progress. The VP pointed out the importance of Connor’s participation not only in the Grade one program, but also in whole school activities such as regular assemblies and school concerts. Postponing an initial occupational therapy assessment visit because it conflicted with the holiday concert rehearsal was illustrative of the emphasis that Connor’s educators placed on his full participation as a member of the school community.

**Connor’s education goals drive the focus for occupational therapy consultation.** By the end of term one, Connor’s educators felt better prepared to develop “pre-academic learning expectations” for Connor’s performance in the Grade one program (field note). Consistent with the focus on Connor’s development of foundation skills for learning, the special education teacher relied on the occupational therapist’s contribution to support her with programming specific pre-writing activities that the EA
could implement with Connor in the Grade one program to support his “development of foundational hand skills, tool use (e.g., pencils, tongs), and beginning prewriting” (SET; Occupational therapist (OT) documentation) (Figure 2).

**Professional roles drive programming for Alisha.** In contrast to Connor’s case, findings revealed that each of Alisha’s educators, including the EA, placed emphasis on different expectations that they had for Alisha. Rather than developing goals and expectations based on Alisha’s role as a Senior Kindergarten (SK) student, educators were directed by their individual roles and responsibilities. This influenced how Alisha’s education program was implemented in practice, how her progress was measured or gauged by each of her educators, and how recommendations made by the occupational therapist were used. Figure 3 represents the goals of each participant involved in Alisha’s case. The dotted lines connected by two-way arrows illustrate the relationship between the specific goals and the roles and responsibilities of each participant as they utilized the tools and approaches specific to their work with Alisha.

**Occupational therapist sets focus for consultation with Alisha’s educators.** In contrast to the role that Connor’s special education teacher played in setting the focus for occupational therapy consultation, grounded in Connor’s education goals, educators in Alisha’s case expected the occupational therapist to contribute to Alisha’s individual education program in a broad way by making “equipment recommendations” and providing them with “occupational therapy goals” for Alisha’s alternative education program (VP; SET; RET; EA). It was left to the occupational therapist “to set the focus” of each visit, whether it was “following-up on Alisha’s use of the switch” to access the
computer in the special education classroom or “checking how Alisha managed grasping different materials” (OT).

Figure 3. Professional roles drive programming for Alisha.

On her monthly visits, the occupational therapist used a “pull-out model of service delivery,” working directly with Alisha in the library while the EA observed. The occupational therapist reported that these 1:1 sessions were primarily intended to “model for the EA how to work with Alisha” (OT). During these sessions, the occupational therapist used her own materials to model a variety of fine motor activities for Alisha’s
EA. The occupational therapist used her knowledge of motor development “to challenge Alisha to do different things with her hands” (OT).

Determining where to focus recommendations evolved over the school year as the occupational therapist became more familiar with Alisha’s abilities. As a result of her monthly discussions with the EA, the occupational therapist gained insight into the EA’s challenges implementing fine motor suggestions with Alisha in the classroom context (e.g., “Alisha puts everything in her mouth”; “Alisha is not interested in coloring” (EA)). By the end of Alisha’s Senior Kindergarten year, the occupational therapist acknowledged that some of the pre-writing materials she recommended earlier in the year (e.g., pylon shaped crayons) were “not well matched” to Alisha’s “sensory motor stage” of development (OT). It was at this time that the occupational therapist explicitly re-defined her focus and articulated her goal, “For Alisha to use her hands together and engage in exploratory fine motor activity for a longer period of time” (OT).

**Theme #2: Communication Practices**

The second theme considers the nature of communication practices among participants. Informal communication practices in Alisha’s case are contrasted with more formal channels of communication in Connor’s case. A key support factor in Connor’s case was that participants made time up front to support information sharing and ensure that everyone was “on the same page.” Both cases illustrated that when occupational therapists took time to show how to implement strategies and explain how they contribute to student outcomes, educators were able to integrate the therapy strategies within the context of educational programming.
Informal trouble-shooting in dyads. Although educators recognized the need for direct communication and formal planning in groups, communication practices among participants in Alisha’s case were characterized by informal trouble-shooting in dyads and indirect communication. During informal hallway conversations, the occupational therapist engaged in what she described as “on the spot problem solving” in an effort to respond to issues raised by the EA (e.g., “[Alisha] just doesn’t seem interested in anything that’s visual motor, what ideas or strategies do you have?”). Impromptu interactions between the special education teacher and occupational therapist focused on follow-up concerning equipment recommendations (e.g., “Had it arrived yet?”, “What equipment do educators feel is still needed?”). For example, one “follow-up visit” prompted the special education teacher to share his concern about judging when “Alisha is accurately hitting the switch to make choices on the computer” (field note). The occupational therapist used her knowledge of Alisha’s postural control to suggest an alternate placement of the switch so “she must intentionally reach for it to indicate a choice” (field note).

The Senior Kindergarten teacher and EA both identified the importance of having “a formal time to talk about occupational therapy” and to identify whether “[Alisha] has achieved any of the goals.” The Senior Kindergarten teacher recognized the need for “direct” information sharing in order to be “on the same page” and accountable for Alisha’s goals (RET). The EA elaborated to suggest that, “ideally, all of Alisha’s health and education providers would meet together to develop an integrated plan” (EA). In the absence of formal meetings, the occupational therapist found that she was “Constantly
trying to figure out the best way to provide services, what do they need from me? Where do I fit into this?” (OT).

**Getting information second hand.** Alisha’s teachers got information about the occupational therapist’s work with Alisha through indirect means including, “reading the therapy note left at the school” (SET). Alisha’s educators relied on the EA as intermediary to address their questions with the occupational therapist (e.g., “What is the safe progression from lying to sitting?”) (RET). Both the special educator and Senior Kindergarten teacher expressed great interest in having opportunities “to see how the occupational therapist works with Alisha” in order to “contextualize the therapy goals for Alisha” reporting, “Often I don’t know what it means because I wasn’t there. The EA can show me, but that’s second hand” (SET). The lack of direct communication with the occupational therapist influenced the degree to which educators could support the EA in implementing fine motor programming (SET; field note; RET; EA).

**Showing how and explaining why.** During her sessions with Alisha, the EA observed while the occupational therapist demonstrated how to work with Alisha (multiple field observations). Without feedback on how she might implement similar activities in the context of the senior kindergarten program, the EA was left feeling “overwhelmed” with the concern that she “wasn’t doing anything right” (EA). During one occupational therapy session, the EA did have the opportunity to practice working with Alisha while receiving supportive feedback from the occupational therapist. On this occasion, the occupational therapist took Alisha to the “sensory room” in the special education classroom because “the library was busy.” Rather than working directly with
Alisha, the occupational therapist instructed the EA on “how to encourage Alisha’s reach and grasp” while the EA worked directly with Alisha (OT). For example, the occupational therapist suggested that the EA hold balls in different positions to encourage Alisha to look for and grasp the ball while maintaining her balance. When observing how difficult it was for Alisha to let go of the ball, the EA shared her concern about Alisha’s performance at desk work in the Senior Kindergarten classroom, “I find sometimes she gets the reach process, but then she forgets to let go.” The occupational therapist responded to this by offering a strategy to support Alisha’s successful release of objects, “If she has a ledge like that (pointing to the edge of the toy), that can help give her the stability.” The EA held the toy up to touch Alisha’s wrist and observed her successful release of the ball (field note).

In contrast to her usual pull-out sessions with Alisha, the occupational therapist used only one activity during this session, the goal was made explicit for the EA who had repeated opportunity to practice with Alisha, and the activity involved materials available to the EA at school. The occupational therapist also gave significant feedback to the EA after every trial and answered a specific question the EA asked about Alisha’s release of objects. Since the session occurred in the special education classroom, Alisha’s special education teacher was able to observe part of the session and received direct instruction from the occupational therapist on how to implement reaching and grasping strategies (field note). On a follow-up visit, it was this activity that was reportedly being used with Alisha on a regular basis (field note).
**Interactive communication in groups.** In contrast to communication practices in Alisha’s case, communication among participants in Connor’s case were characterized by interactive communication in groups (field notes). Connor’s educators and occupational therapist took time to share information so that program recommendations generated through group discussion would target Connor’s development of foundation skills for learning. Participants in Connor’s case used documentation as an opportunity to record and track program recommendations (field note). Innovative use of documentation served to sustain communication among Connor’s educators and occupational therapist despite the lapse of time between visits.

**Making time up front.** Making time up front to ensure that everyone was “on the same page” was characteristic of how the special education teacher worked with everybody involved in Connor’s school program including Connor’s mother, the occupational therapist, and the EA (field notes). She took the bulk of the initial assessment visit to discuss Connor’s strengths and needs in great detail with the occupational therapist (field note), “the more detailed and in-depth meeting is really helpful for being clear on what our goals are together” (SET). Similarly, the special education teacher used the case conference as an opportunity to engage the occupational therapist and Connor’s mother in joint goal setting about Connor’s development of foundation skills for learning. She used the occupational therapist’s “general recommendations” to identify specific pre-academic learning activities for Connor to work on at school. As the occupational therapist shared her assessment findings, the special education teacher “jumped in” to elaborate on some of the therapist’s
observations by sharing illustrative stories of Connor’s performance in the school context. The special education teacher and occupational therapist built on each other’s descriptions of Connor’s performance to generate activity suggestions and strategies that would encourage Connor to use his hands. They also involved Connor’s mother in assessing the utility of their suggestions based on her experience of what had been successful at home and at daycare. Emphasis was placed on activities that the EA could work on with Connor in the context of his Grade one program (field note).

**Using documentation to sustain shared focus.** At Connor’s case conference, the special education teacher noted each recommended activity in the margins of the occupational therapist’s assessment report. At the end of the case conference, she used these notes in her role as “summarizer,” to review the expectations and activity suggestions that had been decided on (case conference). Three weeks after the case conference, the special education teacher referred to the notes she had made on the occupational therapy assessment report, during her consultation with the occupational therapist, to ensure that they hadn’t missed anything from their plan (field note). Her notes prompted her to gather tools from the special education classroom that could be used by the EA to implement specific activities with Connor in the Grade one class. She also used the therapist’s report to record materials brought by the occupational therapist for trial use with Connor (e.g., fidget toys, wrist weights) and to remind her to follow-up with the EA on Connor’s success with these resources (field note).

Similarly, the occupational therapist used her therapy update notes to share information with Connor’s mother and educators about Connor’s development of pre-
writing skills. Therapy notes reviewed the focus of the occupational therapy consultation visit and, despite their brief nature, encouraged future interaction concerning the success of each recommendation. The therapy update notes provided a focus for educator-occupational therapist consultation from one visit to the next, allowing them to monitor the success of specific strategies and track Connor’s progress in the development of pre-writing skills.

*Showing how and explaining why.* During her monthly visits, the occupational therapist spent half the time with the special education teacher, programming activities for Connor’s development of pre-writing skills and the remainder of the visit monitoring program implementation by Connor’s EA in the Grade one classroom. In both instances, the occupational therapist used her “lens” of fine motor and visual motor development to make specific recommendations. For example, when observing the EA working with Connor on a letter matching activity in the grade one class, the occupational therapist pointed out to the EA, “Did you notice that he switched hands rather than crossing over with his left hand to place the letter?” (field note). The occupational therapist explained how to encourage Connor’s use of his left hand by having Connor “reach for objects at midline and then reach across his body to place the object” (field note). For the remaining activities, the EA practiced this strategy, positioning objects in the centre for Connor to initiate reach, retrieve, and then place them with his left hand. As the EA progressed through a number of visual-motor activities with Connor, the occupational therapist pointed out how Connor was grasping tools and explained how this would translate to the development of “a more mature grasp on writing tools” (field note). The occupational

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therapist often used questions (e.g., “Did you notice…?”) when giving feedback to the EA, which served to encourage dialog about each specific skill that was being targeted by the occupational therapist.

When working with the special education teacher, the occupational therapist showed how to implement specific visual motor strategies and explained why they would support Connor’s development of pre-writing skills. For example, the occupational therapist explained the relationship between the developmental sequence of visual motor integration and Connor’s ability to copy the letters in his name (field note). Together they sequenced visual motor integration activities that the EA could try with Connor (field note). The special education teacher came prepared for discussions with the occupational therapist by collecting resources from the special education classroom and working with the occupational therapist to identify activities that would “progress Connor from his current level of skill development” to the next expected stage (SET; field note). Immediately following her consultation with the occupational therapist, the special education teacher organized the newly developed resources into a “kit” for Connor’s EA and delivered them to the Grade one classroom. She instructed the EA in how to use the materials with Connor during desk work in the grade one program and explained that they would, “report back to the occupational therapist on her next visit” (field note).

In reflecting on her work with Connor’s educators, the occupational therapist stated, “If I explain why I have suggested a certain activity, if I help them to understand how something works, they just run with it” (OT). Through their consultation with the occupational therapist, the special education teacher and EA expanded their repertoire of
tools that could be used to support Connor’s development of foundation skills for learning.

**Theme #3: Leadership, Responsibility, and Accountability Practices**

The final theme illustrates the importance of leadership and responsibility practices of educators to ensure the integration of therapy strategies in the student’s educational program.

**Leadership of Connor’s special education teacher.** The special education teacher played a pivotal leadership role in Connor’s case by facilitating communication among the various service providers, integrating recommendations into Connor’s IEP, and gathering resources necessary to implement learning strategies. Accountability practices in Connor’s case included regular formal meetings with the special education team to monitor the impact of programming on Connor’s development of foundation learning skills (VP).

Connor’s EA was not involved in any planning meetings of the special education team. Nor was she included in the case conference. When formal meetings took place, the EA was expected to be working with Connor. However, the special education teacher took responsibility for communicating with the EA about Connor’s IEP, including goals and strategies that were developed through consultation with the occupational therapist. The special education teacher saw it as her responsibility to “supply all the supports in terms of record keeping” and to ensure that the EA “has the appropriate resources” for working with Connor (field note).
The special education teacher regularly analyzed Connor’s performance based on specific expectations for his learning skills. She consistently injected activity ideas to support the EA in working with Connor, and she involved the EA in decisions about adapting materials and activity ideas based on her working knowledge of Connor’s capabilities. Frequent contact with the EA enabled the special educator to regularly monitor Connor’s performance and adapt support for the EA. In this way, the special educator demonstrated her leadership and responsibility for successful implementation of the learning strategies outlined on Connor’s IEP.

**Accountability practices.** The special education team in Connor’s case was comprised of the VP and the school’s two special education teachers. Regular special education team meetings, chaired by the VP, provided formal opportunities to “review the IEPs for all students with identified special education needs” (VP); “We do an update on their profile. If we have questions or concerns, we discuss what the next steps will be” (VP). The special education teacher was responsible for “reporting back to the special education team on Connor’s progress” (field note; SET). Formal meetings served an accountability function, allowing the VP to “track what needs to be done or what progress has been made” (VP). Consistent with the philosophy of making time up front, planning meetings of the special education team took place “every month at the beginning of the school year” when the focus was on establishing realistic goals and expectations. After that, meetings were reduced to “every other month” for monitoring progress (VP).
The EA is the point person for Alisha. Participants in Alisha’s case acknowledged that responsibility was placed on the EA to “have an understanding of Alisha” and to make decisions about Alisha’s program (VP), “The programming really ends up going through the EA and that would be everything from toileting to outside at recess time to what they do at carpet time” (SET). The EA confirmed, “I take the suggestions of the occupational therapist, physiotherapist, special education teacher, and speech-language pathologist and try to make a schedule that fits [Alisha’s] goals determined by those professionals. In the end though, it’s fully my decision what I do with her and when we do it” (EA). Participants in Alisha’s case did not participate in any formal planning meetings. Informal meetings were rare, with participants relying on the EA to integrate information into programming for Alisha.

Discussion and Implications

Characteristic features of collaboration that were described by participants as the “ideal” in Alisha’s case were demonstrated in the practice routines of participants in Connor’s case. The following discussion emphasizes key concepts about group learning from SCAT to illustrate how themes emerging from this cross-case analysis supported shared focus for joint effort and sustained interaction among collaborators. These concepts include co-configuration, boundary crossing, expansive learning, and knotworking (Engeström, 2008). Implications of findings for collaborative consultation practice are discussed.

Findings from Alisha’s case are consistent with Engeström’s notion of service coordination where team members work in parallel to provide service for the child. Since
participants did not develop shared goals for Alisha’s participation and achievement in her Senior Kindergarten program, interactions were limited to exchanges that served to support coordination of individual responsibilities. Transitions from service coordination to cooperative working occurred during informal interactions between the occupational therapist and each of Alisha’s educators. Consistent with Engeström’s characterization of cooperation, participants in Alisha’s case shared knowledge to re-conceptualize specific dilemmas during “on-the-spot trouble shooting” without explicitly defining how to work with one another. Transitions to cooperative working were also observed between the occupational therapist and EA following a succession of monthly consultation visits. Sustained interaction over the duration of the school year appeared to support the occupational therapist and EA in cooperative working, resulting in the eventual improvement of fine motor goals. Together these incidents provide evidence that when educators and occupational therapists come together to resolve shared dilemmas, they engage in cooperative working aimed at supporting student achievement. These findings are contrasted with Connor’s case where participants took time up front to establish goals through interactive communication that influenced decisions about how to best deliver occupational therapy services from the outset.

Frequent, ongoing contact among participants (e.g., informal hallway conversations) facilitated cooperative working among team members in Connor’s case. Transitions from cooperation to collaboration were evident during formal planning meetings. It was during these meetings that participants drew on each other’s knowledge for the purpose of developing novel learning activities and adapting learning materials to
support Connor’s learning goals. From the perspective of SCAT, formal planning meetings enabled Connor’s educators and occupational therapist to engage in negotiated partnerships in order to customize programming for Connor through distributed expertise (Engeström, 2008). The case conference also provided an opportunity to include Connor’s mother as an active contributor in this process. In Connor’s case, all participants valued “making time up front” to establish shared goals. “In-depth” meetings to plan for Connor’s alternative education program were common in the practices of the special education team and these routines extended to their work with the occupational therapist. Cross-case findings are consistent with previous research indicating that while informal discussions help professionals to evaluate and refine approaches, formal information sharing is necessary for creating and planning new solutions (Barnes & Turner, 2001; Snell & Janney, 2000).

Findings from Connor’s case are consistent with Engeström’s (2008) notion of “expansive learning” which occurs when team members are more disposed to use each other’s knowledge to develop unique solutions to shared problems. Formal communication practices supported what Engeström described as boundary crossing, which occurs when team members develop new understandings about how others work and use this knowledge to determine how to engage with each other. Participation in formal planning at Connor’s case conference resulted in the occupational therapist determining how to best deliver services to support Connor’s pre-academic learning (i.e., “getting the resources to the right people”). The occupational therapist recognized the contributions of Connor’s mother and special educator and adjusted her typical approach
to service delivery (i.e., “direct work with Connor”) to facilitate the integration of occupational therapy recommendations into Connor’s educational program by “showing how and explaining why.” Similarly, the special education teacher developed ways of working with the occupational therapist that enabled her to integrate therapy recommendations to adapt materials (available in the school context) for use in Connor’s alternative education program. These findings are consistent with Engeström’s premise that expansive learning can result in “co-configuring” or re-conceptualizing professionally scripted roles and responsibilities to produce new ways of working together (Engeström, 2008). Sharing specialized knowledge through participation in classroom programming and demonstrating techniques is supported by research examining teacher expectations of occupational therapy services. Previous research findings suggest that occupational therapists can facilitate the achievement of educationally relevant outcomes by engaging with educators in the classroom (Case-Smith & Cable, 1996; Fairbairn & Davidson, 1993).

Expansive learning was facilitated in Connor’s case through the dynamic use of documentation to sustain a shared focus for occupational therapy involvement from one consultation visit to the next. Findings are consistent with the notion that artifacts can support the distribution of ideas generated by team members (Mok, 2008). In Connor’s case, the notes made by the special educator directly onto her copy of the occupational therapy assessment report facilitated formal planning and commitment to implementation of recommendations generated at the case conference. Similarly, the occupational therapist used documentation to extend opportunities for interactive communication. In
contrast, participants in Alisha’s case used documentation to simply account for what took place during occupational therapy visits acknowledging, “It doesn’t become the most meaningful document that anybody’s going to look at” (OT).

Previous research has called upon occupational therapists to foster collaborative partnerships with educators by clarifying their roles and responsibilities in education settings (Bose & Hinojosa, 2008; Wehrmann et al., 2006). However, findings from this study suggest that educators themselves can play a pivotal role in supporting a shared focus for collaborative interactions with occupational therapist by taking the time to share information about educational expectations for the student. Findings from Connor’s case suggest that taking time up front to establish meaningful educational goals that support participation and achievement of students with developmental disabilities can lead to the timely and productive integration of occupational therapy knowledge into the student’s program and classroom routines. Findings from both cases suggest that when occupational therapists demonstrate how to implement their recommendations and explain the relationship to student goals, educators are better prepared to implement recommendations with students in the context of their education program and classroom routines. These findings are consistent with Leadbetter (2004) concerning the contribution of artifacts as mediators of collaboration between educational psychologists and teachers. Occupational therapists can further support educators with their implementation efforts by using materials and resources available in the school setting.

Both cases illustrate that educator-occupational therapist interaction was influenced by the available time and opportunity to meet. In Connor’s case, the special
education teacher took leadership and responsibility for Connor’s alternative education program by acting as a “knotworker” to support communication and implementation across all participants. In this role, the special education teacher liaised with the special education team, the EA, and the occupational therapist to ensure that all the pieces came together into an integrated program for Connor. To do this effectively, the special education teacher involved herself in a process of understanding the perspectives and contributions of each individual and acted as the key link between the administration and implementation of Connor’s school program. In Connor’s case, the special education teacher was adept at boundary crossing, drawing on her sophisticated understanding of each individual’s contribution to Connor’s educational program. This allowed the special educator to adapt her level of support depending on her understanding of both the strengths and needs in each part of the system. Leadership and responsibility of Connor’s educators was critical to the successful implementation of occupational therapy recommendations at school. Recognizing educators as key facilitators of inclusion for students with developmental disabilities may address concerns raised by Bose and Hinojosa (2008) that school-based occupational therapists tend to assume the role of expert in school settings. It also raises questions about the role of CCAC case managers in the organization and delivery of school-based occupational therapy services. Aside from authorizing occupational therapy visits at school, the case manager was not involved with school-based occupational therapy services. Further research is needed to understand the roles and expectations of case managers in the delivery of occupational therapy services at school.
Accountability practices inherent in the rules and routines of Connor’s special education team provided the structure within which the special education teacher could forge necessary linkages among team members to ensure alignment of services and supports with expected outcomes. It was from within this network of accountability that responsibility among participants was shared. Leadership and accountability practices were not apparent in Alisha’s case which served to reinforce service coordination as the default approach to service delivery. Without a shared focus for Alisha’s program, the occupational therapist was left to set the focus for occupational therapy involvement and “figure out” the “best way to provide services.” Findings reveal the importance of educational leadership in the utilization of support services for the development of individualized education programming for students with developmental disabilities. Results are consistent with SCAT which suggests that collaborative teamwork is enhanced when there is alignment between the focus for joint effort and how work is shared (Engeström, 2008). This has implications for the organization and funding of school-based occupational therapy visits to ensure that educators and occupational therapists have time up front to engage in information sharing and program planning.

**Conclusion**

Socio-cultural activity theory was used as a framework to study educator-occupational therapist collaboration across two multiple-perspective case studies of school-based service delivery. Cross-case findings contribute understanding about how occupational therapists and educators can adapt their working practices to support collaborative interactions grounded in the expectations that educators have for student
performance. Findings illustrate that having a shared focus for joint effort combined with formal opportunities for interactive communication can support collaborative effort by enabling transitions from service coordination to cooperative working and expansive learning. Findings also illustrate how leadership and accountability practices of educators support planful integration of occupational therapy recommendations into meaningful programming for students. This qualitative study illustrates the power of socio-cultural activity theory for describing the relationship between collaboration and outcomes for students in education contexts.
Chapter 4

Learning Together for Collaborative Working: Developing Shared Principles
for School-based Occupational Therapy Practice
Introduction

The policy context in Ontario has led to the adoption of consultation as a service delivery model for school-based occupational therapy (SBOT) practice (Deloitte & Touche, 2010). The literature cites limited funding for special education, large caseloads, and shortages of occupational therapists as factors supporting the adoption of consultation as a service delivery approach (Fairbairn & Davidson, 1993; Reid et al., 2006). However, the emergence of inclusive education practice in schools has also been influential in supporting the shift from direct intervention with students to consultation with educators (Case-Smith & Rogers, 2005; Fairbairn & Davidson, 1993; Kellegrew & Allen, 1996; Reid et al., 2006; Wehrmann et al., 2006).

Despite the promotion of consultation as best practice, there is long-standing tension in the literature between recommendations to adopt collaborative consultation in SBOT practice and research showing that occupational therapists continue to employ direct methods of intervention (Bayona et al., 2006; Fairbairn & Davidson, 1993; Niehues et al., 1991; Spencer et al., 2006). Program administrators are faced with making decisions about the organization and delivery of SBOT services in the absence of a clear understanding of the evidence surrounding SBOT collaborative consultation practice (King et al., 2000; Reid et al., 2006). A recent School Health Support Service (SHSS) Program Review in Ontario, Canada identified that of all children referred for speech and language pathology, occupational therapy, physiotherapy, and nursing at school, occupational therapy serves the greatest proportion of children (approximately 50%). The review identified varied interpretations concerning the mandate of the program and
recommended clarifying the scope of direct and consultation services provided in schools and enhancing collaboration across sectors for the delivery of therapy services. This study addresses a key recommendation from the Review that called for the development of shared principles across stakeholder groups to enhance collaborative relationships needed for effective program implementation (Deloitte & Touche, 2010).

SBOT consultation service emphasizes indirect service to the student and the contribution of occupational therapy knowledge and skills to support teachers with the development of individualized education programming and strategies for teaching students with disabilities (Bundy, 1995; Giangreco, 1995). SBOT consultation is characterized as collaborative because the integration of strategies to support educational programming for students with disabilities involves sharing of expertise between educators and occupational therapists (Bundy, 1995; Case-Smith & Rogers, 2005). Collaborative consultation is defined as an interactive problem-solving process, enabling people with diverse expertise to generate creative solutions to mutually defined problems (Idol et al., 2000).

This paper reports the second phase of a participatory action research study examining school-based occupational therapy (SBOT) collaborative consultation services in one region of Ontario. Phase One used case study methods to describe SBOT services for three students with disabilities from multiple stakeholder perspectives. Following the Phase One, stakeholders from each of the agencies involved in the planning and delivery of SBOT services in this region came together to participate in a systematic reflection on the case study findings. Program administrators participated alongside program providers
and service recipients in a series of facilitated workshops led by the researcher. Facilitating a shared focus for participation and sustained interaction among these key stakeholders supported the identification of principles that could be used to guide future planning and decision making about the delivery of SBOT services in the region studied.

**Literature Review**

Research conducted in the United States has been influential in the promotion of collaborative consultation as best practice (Villeneuve, 2009). However, it is important to recognize that the policy framework and service delivery context differ substantially between the United States and Canada. In the United States, the Individuals with Disabilities Education Improvement Act (PL 108-446) (IDEA, 2004) legislates the provision of occupational therapy services that are organized and delivered through departments of education. In Canada, SBOT services are not legislated and methods for accessing and providing occupational therapy in schools vary (Deloitte & Touche, 2010; Villeneuve, 2009). The most common method of accessing SBOT services in Ontario is through the School Health Support Service (SHSS) program. The SHSS program is funded by the Ministry of Health and Long-Term Care and administered regionally through local Community Care Access Centres (CCAC). Regulated under the Home Care and Community Services Act (HCCSA) (Regulation 386/99) (HCCSA, 1994), the provision of SBOT relies on cooperation between health and education sectors. Coordination of services across multiple stakeholders is necessary to achieve benefits for students with disabilities (Deloitte & Touche, 2010). However, the policy framework
provides little guidance about how to achieve multi-agency cooperation and interprofessional collaboration in the provision of SBOT services.

Much of our understanding about the integration of occupational therapy in education settings comes from the research conducted in United States (e.g., Bundy, 1995; Case-Smith & Rogers, 2005; Dunn, 1990; Giangreco, 1995; Kemmis & Dunn, 1996; Rainforth, 2002; Spencer et al., 2006). An emerging body of research has examined SBOT collaborative consultation services relevant to the Canadian context (e.g., Villeneuve, 2009). However, limited research has addressed the relationship between educator-occupational therapist collaboration and outcomes for students across North America. Indeed, only one study was found that looked specifically at team collaborative practices and student outcomes (e.g., Barnes & Turner, 2001). Studies have focused on teacher satisfaction with occupational therapy services (Bayona et al., 2006; King et al., 2000; Reid et al., 2006) and teacher rating of student achievement of individual goals (Bayona et al., 2006; Dunn, 1990; Fairbairn & Davidson, 1993; Kemmis & Dunn, 1996; Reid et al., 2006). A comprehensive review of the literature yielded little or no description of the collaborative consultation process (Villeneuve, 2009). However studies addressing teacher perceptions of SBOT service delivery revealed that teachers want to collaborate with occupational therapists in order to develop programs for students and to learn techniques that can be implemented in the classroom setting (Fairbairn & Davidson, 1993; Case-Smith & Cable, 1996). Consistent with the notion of collaborative consultation as an indirect service to students, recent research has begun to address the impact of SBOT collaborative consultation on teachers (e.g., Reid et al., 2006).
The available research provides limited understanding of factors that facilitate collaborative interactions between educators and occupational therapists. Instead, emphasis has been placed on barriers to collaboration (Villeneuve, 2009). Lack of a clear understanding concerning the roles and responsibilities of stakeholders involved in SBOT has been identified as a significant challenge to collaboration (Barnes & Turner, 2001; Case-Smith & Cable, 1996; Fairbairn & Davidson, 1993). Understanding who is involved and how work is shared is critical to research examining the effectiveness of SBOT collaborative consultation. Studies that provide descriptive information on both the process and outcomes of collaboration are vital to the decision-making practices of program administrators who hold responsibility for the organization and delivery of SBOT services.

**Purpose**

Using appreciative inquiry (Cooperrider et al., 2003) and Developmental Work Research methods (Engeström, 2000), the overall purpose of this study was to facilitate shared learning among participants in order to generate principles of effective SBOT collaborative consultation practice. Drawing on theories about group learning, the nature of shared learning among participants was also examined. Using a case of SBOT in one region of Ontario, this study contributes to the emerging body of knowledge concerning the application of socio-cultural activity theory (Engeström, 2001) to support the development of interprofessional collaboration and multi-agency working through organizational learning.
Methodological Approach

Developmental Work Research (DWR) is an interventionist methodology used to promote shared learning among workers for the purpose of developing future practice. DWR is an emerging methodology that has been used to understand the role of teamwork to achieve goals (Engeström, 2000). It has been used in to examine health care, social service, and education practices that rely on inter-agency cooperation and interprofessional collaboration (Engeström, 2008; Leadbetter, 2004; Leadbetter, 2008; Martin, 2008). The aim of DWR is to support stakeholders to develop “expansive learning” in workplace settings. Drawing on the notion of distributed cognition, expansive learning occurs when team members are more disposed to use each other’s knowledge to improve practice (Engeström, 2008). In DWR, socio-cultural activity theory (SCAT) is used to support conceptual analysis by representing work practices within an activity system (Daniels, 2008; Engeström, 2000).

Based on the work of Vygotsky, SCAT enables the study of collaboration by examining human activity systems as the unit of analysis (Cole & Engeström, 1993; Engeström, 2000). Vygotsky proposed that human activity happens in a relationship where actions of individuals (subjects) resolve a shared problem, which is the focus of their learning (object), by using tools as mediating means to achieve an outcome (Daniels, 2001). Engeström (2001) expanded Vygotsky’s basic activity system to include social and contextual factors that shape collaborative work. SCAT provides a framework to support analysis of collaborative practice by considering: (a) the desired goals or outcomes; (b) what is being worked on in relation to the goal; (c) the tools, methods, or
approaches used; (d) the community of others who are involved; (e) the rules, routines, and professional conduct that support or constrain practice; and (f) the way in which work is divided (Leadbetter, 2008; Martin, 2008) (see Chapter 1, Figure 1). Incongruence between elements in the activity system is used as a catalyst for reflection and shared meaning making by considering the social, cultural, and historical work practices that have shaped how work is organized and shared (Cole & Engeström, 1993; Engeström, 2008).

The role of the researcher in DWR is to enable a constructive approach to workplace inquiry that supports meaningful visioning for future action, grounded in a shared understanding of the factors that support and constrain teamwork. In DWR the researcher draws on real workplace episodes as a basis for shared learning. The researcher collects “mirror data” through extended observation and interaction with participants in the work setting. Mirror data can include videotaped workplace episodes, stories, and interviews with workers (Engeström, 2000). Following the descriptive phase, the researcher uses mirror data to represent and examine teamwork practices through group discussion with key stakeholders (Engeström, 2000; Leadbetter, 2008). Over a series of focused discussion sessions, the researcher facilitates a multiple perspective examination of the complex interconnections among work activities and workers.

This study employed appreciative inquiry (Cooperrider et al., 2003) to deepen collective understanding of the work practices within and between agencies that supported interprofessional collaboration for the delivery of SBOT services. While acknowledging constraints on practice, appreciative inquiry embraces a philosophy of
engaging program stakeholders to recognize successes and draw on strengths as the basis for program improvement (Preskill & Catsambas, 2006). This study emphasized the first three stages of the appreciative inquiry process: (a) identifying and describing organizational practices that work well, (b) envisioning the processes that would work well in the future, and (c) prioritizing processes that would work well (Coghlan, Preskill, & Catsambas, 2003). Examining the detailed planning and implementation of new ways of working, the final phase of appreciative inquiry, was beyond the scope of this study.

Appreciative inquiry and DWR have in common a systematic approach to participatory inquiry that facilitates generative learning to inform action. Consistent with an action research paradigm, DWR is a change strategy that supports organizational development through group learning and systematic reflection on experiences.

Method

This section begins with a description of two groups of participants and the nature of their participatory involvement in this study. Specific DWR procedures employed in this study are then described in detail in four sections. The first section describes procedures used to plan with key stakeholders in order to develop a shared focus among program administrators for learning about SBOT. This is followed by a description of the specific procedures employed to facilitate each focused discussion session. These procedures are organized according to the three stages of appreciative inquiry emphasized in this research, namely (a) identifying, (b) envisioning, and (c) prioritizing.
Participants

This study received ethical clearance from the University’s research ethics board and from each of the participating agencies including: the local Community Care Access Centre (CCAC); one school board in the region served by the CCAC; and two agencies, each under a contract with the local CCAC to provide occupational therapy services in schools. Participation in this research was voluntary. All participants provided informed consent to participate and agreed to maintain confidentiality of all individuals and organizations associated with this inquiry. Information and consent forms can be found in Appendix B.

Two groups of participants were involved in this research. Service recipients, including parents and educators (n = 4) and service providers, including an occupational therapist and two case managers (n = 3) comprised the first group of participants. Program administrators from each organization involved in the planning and organization of SBOT service (n = 6) comprised the second group of participants. These two groups served different functions. Participants in the first group provided stakeholder representation of individuals directly involved in the implementation of SBOT service delivery in the region studied. Recruited through purposive and convenience sampling, service recipients and providers held the same roles as participants interviewed in Phase One of this inquiry and they did not participate in Phase One of this research. The second group of program administrators, who have responsibility for how SBOT services are organized and delivered in the region studied, had a unique role in this research as members of a participatory action research (PAR) team. The function of the PAR team in
this research is further described below. Table 6 provides a description of the thirteen participants and their roles.

Table 6
Participation

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>*Participant</th>
<th>Role</th>
</tr>
</thead>
</table>
| **Service Recipients** | Sean | Special education administrator  
Parent of a primary student receiving SBOT services |
| | Nastasia | School-based special education teacher |
| | Nadine | Itinerant special education teacher |
| | Kate | Educational assistant  
Parent of a secondary student who received SBOT services in primary school |
| **Service Providers** | Cindy | Case management supervisor |
| | Cynthia | Case manager for the local CCAC |
| | Janet | Occupational therapist employed by agency A who provided SBOT services through the SHSS Program |
| **Program Administrators (PAR team)** | Lorraine | Senior manager for the local CCAC |
| | Sylvia | Supervising manager for the local CCAC |
| | Deborah | Director of rehabilitation services for agency A  
contracted by CCAC to provide SBOT services |
| | Donna | Director of rehabilitation services for agency B  
contracted by CCAC to provide SBOT services |
| | Angela | A Coordinator of special education for the participating school board |
| | Joan | Practice leader employed by agency B who also provided SBOT services through the SHSS Program |

*All participants are identified with a pseudonym to protect their anonymity.*

As part of preliminary planning for this study, program administrators from each of the agencies involved in the planning and delivery of SBOT services were invited to participate in research that would support informed decision-making about the organization of SBOT practice in this region. PAR team membership was determined in collaboration with administrative representatives at each participating agency. During
preliminary meetings at each agency, administrators and program providers were asked to identify key stakeholders who held primary responsibility for the organization and delivery of SBOT services. At the CCAC, two program administrators were nominated including a supervising manager, responsible for overseeing a team of case managers working in the SHSS program, and a senior manager who had long-term involvement in the development of the SHSS program within the local CCAC. The practice leader was nominated by occupational therapists and program directors from each participating provider agency. This individual was recognized for her experience and leadership roles in SBOT practice in the region. Similarly, special education administrators and teachers at the participating school board nominated the special education coordinator as a key participant because of the breadth and depth of her experience with the delivery of SBOT services in schools and her knowledge of the how special education services are organized for students with disabilities. Directors at each provider agency were invited because of their role in securing and managing the contract arrangements with the local CCAC for the delivery of SBOT services.

**Participatory Engagement of PAR Team Members**

PAR team members were involved at key points throughout the research process to ensure overall feasibility, utility, accuracy, and propriety of this research, consistent with standards for evaluative inquiry (Yarbrough et al., 2010). During the planning stage, PAR team members were involved in refining the scope and purpose of the research, and providing their perspectives on the overall utility of the research design in meeting their learning needs. During preliminary planning, PAR team members agreed that the
research should focus on understanding how SBOT contributes to “needs based” services for students referred. The PAR team agreed that there was a need to share perspectives across agencies about how SBOT was organized and implemented in the region studied. PAR team members committed to being involved in the research as participants themselves during Phase Two of the research design.

During Phase One, PAR team members facilitated recruitment of case study participants by sharing information about the research with workers at each of their agencies. In planning for Phase Two, PAR team members participated in a one-hour session to identify what they hoped to learn about SBOT by participating in the focused discussion sessions. PAR team members also gave feedback to me about strategies for purposive recruitment of service recipients in Phase Two. For example, PAR team members decided that parent involvement should include two different perspectives by including a parent whose child was receiving SBOT services and a parent who could reflect on their experience of having received SBOT in the past. PAR team members supported Phase Two recruitment of service recipients and service providers by sharing information about the research at each of their agencies. In addition to participating in the focused discussion sessions, PAR team members came together for a final meeting to reflect on what they had learned and to prioritize key areas for program improvement. In this meeting, the list of questions developed by the PAR team was used as a catalyst for reflection and discussion. Table 7 summarizes the involvement of PAR team members in Phase Two.
Table 7  
*Structure and Content of the Focused Discussion Sessions*

<table>
<thead>
<tr>
<th>Session</th>
<th>Focused Discussion Topic</th>
<th>Mirror Data</th>
<th>Stage of Appreciative Inquiry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Focusing learning: PAR team members identified what they hoped to learn about SBOT services by participating in the focused discussion sessions</td>
<td></td>
<td>Planning for learning</td>
</tr>
<tr>
<td>(PAR team)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Participants reflected on their own role and experience with SBOT process and procedures</td>
<td>Overview of SBOT process and process and procedures evident across three case studies from Phase One</td>
<td>Identifying organizational practices that work well</td>
</tr>
<tr>
<td>2</td>
<td>Participants connected findings from Alisha’s case to their experiences with SBOT</td>
<td>Key findings and practice dilemmas in the case study of Alisha</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Participants connected findings from Jacob’s case to their experiences with SBOT</td>
<td>Key findings and practice dilemmas in the case study of Jacob</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Participants connected findings from Connor’s case to their experiences with SBOT</td>
<td>Key findings about strategies that facilitated collaboration in the case study of Connor</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Imagining how SBOT could be delivered; Identifying principles for service planning and delivery</td>
<td>Summary of emergent principles generated through focused discussion in focused discussion Sessions 1 - 4</td>
<td>Envisioning practices that would work well</td>
</tr>
<tr>
<td>Reflection</td>
<td>PAR team reflected on principles emerging from focused discussions with stakeholders in light of their original questions generated in the planning session</td>
<td>Summary of findings from Session 5</td>
<td>Prioritizing practices that would work well in the future</td>
</tr>
<tr>
<td>(PAR team)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Procedure

Case study research, conducted in Phase One of this inquiry, resulted in thick description of SBOT for three students with disability who received service through the SHSS Program in one region of Ontario. In an effort to represent the breadth of occupational therapy service in schools, focal case study participants in Phase One were selected from each of the following categories: (1) developmental disability; (2) physical/multiple disability; and (3) mild motor disability. These categories were chosen to capture the diversity of students with disability who are referred for occupational therapy services at school. These categories also reflected the eligibility criteria for the local SHSS program outlined in the participating CCAC policy guidelines. Each case study was unique and therefore not representative of all students with such disabilities. However, cases were selected using purposive and convenience sampling so that collectively, these case studies represented the spectrum of students who typically receive SBOT services. Cases were limited to primary students from Junior Kindergarten to Grade four because this is the time when referrals for SBOT are most commonly made. Each student attended a different school in the school board’s district.

A specific objective of Phase One was to gather information from all stakeholders directly involved in the delivery of SBOT for each case. Each case study was therefore bounded by: the student and the student’s legal guardian; their classroom placement; educators and education assistants who were directly involved with school programming; and educators who made decisions about the student’s program. Each case included the occupational therapist responsible for service provision and the case manager responsible
for administering occupational therapy services through the regional SHSS program in the school board’s district. In selecting cases, consideration was given to ensuring maximum diversity such that the cases involved different case managers, occupational therapists, and educators. Multiple perspective case study descriptions of SBOT service were used in this study as a catalyst for shared learning among participants. Case study descriptions were used in Phase Two to elicit the perspectives of individual stakeholders across multiple agencies about factors that influence how work is shared.

PAR team members were involved in a planning session to identify what they hoped to learn by participating in the focused discussion sessions. Using methods drawn from appreciative inquiry, the focused discussion sessions took place in three parts. Sessions 1 – 4 involved developing a shared understanding of the interprofessional and multi-agency factors that have shaped SBOT service delivery in the region. The emphasis in these four sessions was on identifying organizational practices that work well. Session 5 involved stakeholders envisioning organizational practices that would work well in the future by reflecting on emergent principles for effective SBOT collaborative consultation practice. The final session involved PAR team members reflecting on what was learned and using their new, shared understanding to prioritize key areas for improved service delivery in the future. Table 7 outlines the structure and content of each focused discussion session.

The planning session took place in June 2009 and lasted 1 hour. The remaining sessions took place biweekly between October and December 2009, each lasting 1.5 hours. The basic structure of DWR was utilized across the series of focused discussion
sessions. The fundamental components of DWR utilized in this study included: (a) the use of mirror data describing SBOT services in three case studies; (b) the use of intermediate cognitive tools to represent ideas and potential solutions as they emerged (e.g., key ideas worksheet, diagrams); and (c) the use of activity theory as a conceptual tool to analyze the social and historical practices that have shaped how educators and occupational therapists provide service for students with disabilities.

To enhance trustworthiness of the data, all sessions were audio recorded and transcribed verbatim. A research assistant (RA) supported data collection by performing administrative duties (e.g., attendance, note taking, timing sessions, setting up audio equipment), and recording detailed notes that supported accuracy in data transcription. The research assistant also took on the role of “critical friend” by participating in peer debriefing immediately following each focused discussion session (Denzin & Lincoln, 2005). Memos were used to capture reflections from peer debriefing. Participant data consisted of verbatim transcripts of each focused discussion, key idea worksheets submitted by participants at the end of every session, Bristol board presentations prepared by each of the three small working groups in the fifth session, and reflections from participants on the value of participating in the focused discussions. All of these data collection strategies are further described below. As researcher, I also contributed data through memos, generated after each session and following my debriefings with the RA. Memos captured my reflections on engaging with this group of participants in a process of facilitating shared learning among stakeholders. Due to the iterative nature of DWR,
data analysis was concurrent with data collection and incorporated participatory, appreciative, and empowerment mechanisms as described below.

**Planning with PAR Team for Phase Two Learning**

The planning session began by having individuals share specific questions they had about SBOT services. Through facilitated discussion, I encouraged PAR team members to elaborate on what they hoped to learn. PAR team members were reminded that emphasis would be placed on appreciative learning about what SBOT service delivery looks like when it works well during the focused discussion sessions. I synthesized responses by grouping questions with similar ideas. This resulted in the generation of four key questions. Using member checking, these questions were reviewed with the PAR team to confirm their shared goals for learning about SBOT services. The list of original questions generated by the PAR team and final synthesized questions can be found in Table 8.
Table 8

*Questions Generated by PAR Team Members*

<table>
<thead>
<tr>
<th>Original Questions PAR Team Members Identified During Planning for Phase Two</th>
<th>Final PAR Team Questions for Phase Two Inquiry</th>
</tr>
</thead>
</table>
| • What sort of therapy can occur in the school setting?  
• What is the scope of practice for SBOT service?  
• What supports are available in the school environment to support teachers with implementing therapy strategies at school? | • What is reasonable to expect from occupational therapy in the school context? |
| • What model of service delivery has the best chance of success for the child?  
• If you’re an occupational therapist and you are looking at delivering service, what is the best way to do it?  
• What frequency is needed for service delivery?  
• Should we offer weekly visits or a block of visits?  
• Should we rely on consultation or individual therapy? | • How should SBOT be provided to ensure needs-based service for students? |
| • Are teachers and parents raising the same concerns?  
• What are the greatest challenges for the occupational therapist in meeting needs of families and children in the school environment?  
• What is the rate of acceptance and implementation of occupational therapy strategies by parents and teachers? | • What are the successes with acceptance and integration of occupational therapy recommendations by parents and teachers? |
| • How should goals be described, in terms of function or learning?  
• The mandate of the CCAC is to support a child’s access to their school program so how does SBOT support achievement of this mandate?  
• What are stakeholders’ perceptions of success and goal achievement for students? | • What is the relationship between SBOT service and outcomes for students receiving service? |
Multiple perspective case study findings from the Phase One of this inquiry were shared with participants over the course of four focused discussion sessions, beginning with an overview of the process used to deliver SBOT services in the region studied (Session 1) and followed by a specific examination of SBOT collaborative consultation in each of the three case studies (Sessions 2 – 4). In preparation for each focused discussion, a handout that summarized key case study findings was provided to participants electronically in advance of each session. Handouts used to share descriptive case study findings can be found in Appendix C. I began each session with a brief PowerPoint presentation of descriptive case study findings to elaborate on material provided in the handouts and to answer any questions about the cases. The framework provided by SCAT facilitated presentation of case study findings to describe, (a) goals and expectations of SBOT service, (b) focus of SBOT involvement, (c) tools and service delivery approaches, (d) rules influencing the delivery of SBOT, (e) community of others who were involved, and (f) how work was shared. Participants were asked to reflect on case study findings in light of their own experiences with SBOT and to consider contextual factors within and between agencies that have influenced SBOT practice. Using the case study findings as a catalyst for discussion, participants were encouraged to share stories and narratives to describe their own experiences of successful SBOT practice by reflecting on the mirror data.

Table 7 identifies the case study findings that were used as mirror data for the focused discussion sessions 1 through 4. In the first session, participants were asked to
reflect on their own experiences with SBOT and to identify and discuss processes, tools, and approaches that work well. In the second and third session, dilemmas or incongruence in the delivery of SBOT collaborative consultation were identified as areas for shared learning. In the fourth session, findings from the third case study were used as a catalyst for discussion about strategies that facilitate collaboration. I concluded each session by inviting individual participants to complete a “key idea worksheet,” requesting them to jot down two or three key “take home messages” they felt were important from the discussion. The key idea worksheets were submitted at the close of each session.

**Envisioning Practices that Would Work Well: Session 5**

In preparation for the fifth session, I prepared a handout for participants that summarized key themes emerging from our focused discussion sessions 1 – 4. Through an iterative process of reviewing, open coding, and categorization of the verbatim transcripts and the key idea worksheets from one session to the next, I organized the focused discussion data into key themes or emergent principles to guide SBOT services, using words and illustrative examples that came directly from the participants themselves. Analysis resulted in the generation of 12 emergent principles illustrating organizational practices that work well (Table 9). These themes were stated positively (e.g., “good case conferences”; “meaningful communication”). For each principle, data were organized into (a) participant descriptions of what the principle looks like when it works well, and (b) contextual factors that influence practice. A detailed summary of these 12 emergent principles, listed in Table 9, was provided electronically to participants.
in advance of the fifth session (refer to Appendix D for the detailed summary of emergent principles).

Table 9

*Emergent Principles for SBOT Practice*

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OT has sufficient time up front to complete a thorough assessment. Focus of OT assessment is matched to the needs educators have for programming for student.</td>
</tr>
<tr>
<td>2</td>
<td>Good case conferences allow for shared focus for joint effort and permit two-way interaction among educators and OT to support program development for the student.</td>
</tr>
<tr>
<td>3</td>
<td>OT service is organized on a case-by-case basis to ensure that it is responsive to the needs that educators have for programming for students.</td>
</tr>
<tr>
<td>4</td>
<td>Service methods are matched to educational goals and outcomes for students.</td>
</tr>
<tr>
<td>5</td>
<td>Parents understand the rationale for involving the OT; they understand the approach to service delivery and are invested in OT service.</td>
</tr>
<tr>
<td>6</td>
<td>OT service supports educators with challenges related to educational programming and inclusion. Therapy strategies may support educators to achieve outcomes for students but the goals are education goals.</td>
</tr>
<tr>
<td>7</td>
<td>OT shows educators how to implement specific recommendations and provides opportunity for feedback to ensure successful implementation by designated educators. Educators and therapists assess the success of strategies on achievement of student goals and outcomes.</td>
</tr>
<tr>
<td>8</td>
<td>A key educator holds responsibility for the student’s education program; this includes supporting the educational assistant who holds responsibility for program implementation and being accountable for all pieces of information related to the student’s program, related services, and supports.</td>
</tr>
<tr>
<td>9</td>
<td>Meaningful communication supports educators and therapists in joint effort toward achieving student goals and outcomes in the education context.</td>
</tr>
<tr>
<td>10</td>
<td>Regular classroom teachers are actively involved with OT service.</td>
</tr>
<tr>
<td>11</td>
<td>OT assessment considers the learning environment and service allows for classroom consultation to support implementation of recommendations beneficial to the whole class.</td>
</tr>
<tr>
<td>12</td>
<td>Organization of OT service enables opportunities for OT to contribute their knowledge to support continuing professional development of teachers.</td>
</tr>
</tbody>
</table>
During session five, participants were organized into three small working groups; having representation from each participating agency (Table 10). Each small group was given the handout describing each emergent principle, recipe cards with the emergent principle typed in large font, a large Bristol board, scissors, and markers. Participants were asked to work in their small groups to further categorize the principles using the tools provided. This small group activity in Session 5 supported participatory engagement in reflection on their own learning and provided opportunity for participants to deepen their understanding of effective SBOT collaborative consultation practice informed through interprofessional and multi-agency working.

The following questions were used to facilitate small group discussion and reflection, encouraging participants to engage in their own analysis and refinement of principles that describe effective SBOT practice.

1. How do the principles cluster and what is your rationale?

2. Should some principles be further broken down or combined? How and Why?

3. Are any ideas missing? Add them!

4. What principles are the most important? Explain.

As researcher, I rotated through the three groups to listen to discussions and answer any questions that participants had about the small group task.
Table 10

Session 5 Working Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Multi-agency Representation in Session 5 Working Groups</th>
</tr>
</thead>
</table>
| 1     | Angela: Coordinator of special education for the participating school board  
       | Sylvia: Supervising manager for the local CCAC  
       | Joan: Practice leader employed by agency B who also provided SBOT services through the SHSS Program |
| 2     | Nadine: Itinerant special education teacher  
       | *Cynthia: Case manager for the local CCAC  
       | *Cindy: Case management supervisor from the CCAC  
       | Deborah: Director of rehabilitation services for agency A contracted by CCAC to provide SBOT services  
       | Kate: Educational assistant & Parent of a secondary student who received SBOT services in primary school |
| 3     | Nastasia: School-based special education teacher  
       | Janet: Occupational therapist employed by agency A who provided SBOT services through the SHSS Program  
       | Lorraine: Senior manager for the local CCAC |

Note: Donna, Director of Rehabilitation Services for Agency B and Sean, Special Education Administrator and parent were both absent due to illness on this day.  
*These individuals participated via teleconference in Session 5 and so were organized into the same working group to facilitate communication.

Having participants reflect on the emerging themes generated through my analysis supported accuracy of findings through member checking. Focused discussion in small working groups facilitated learning as stakeholders considered the emergent principles and made decisions about prioritizing processes that would work well. Each group produced their analysis of the emergent principles on a large Bristol board (each of these is reproduced in Appendix E). Following the small group discussion, participants were
brought together to: (a) share their analysis of the principles with the larger group, and (b) consider new learning that emerged from small group discussions. The fifth session concluded by asking participants to reflect on their own learning over the course of the focused discussions and to jot down what they felt was the most valuable thing they had learned from engaging in this process. Their comments are recorded in Appendix F.

**Prioritizing Practices that Would Work Well: Session 6**

The sixth session involved only members of the PAR team. This final session was structured so that the group of program administrators could reflect on their learning about SBOT and draw on their new, shared understanding to consider new ways of organizing SBOT service in this region. At the start of the session, participants were asked to reflect on the questions they originally generated during the planning phase of this study. Facilitated discussion proceeded by having participants consider what they had learned from participating in the focused discussion sessions. Having only program administrators involved in this final session supported PAR team members in transitioning from the envisioning stage of the appreciative inquiry process to considering the overall utility of what they had learned. Participants were encouraged to consider both opportunities for program improvement within and between agencies, and to address the feasibility of organizing SBOT services in a new way.

**Findings and Discussion**

Envisioning practices that would work well emerged from shared learning among participants over the course of six focused discussion sessions. Shared learning facilitated participants to develop principles for improving collaborative working. Principles
clustered into three areas for program improvement, including (a) good case conferences as a collaborative event, (b) time up front for comprehensive assessment, and (c) delivering intervention through supports and services that have impact beyond individual students referred. In the final session, PAR team members used their new, shared understanding to envision a new model for the delivery of SBOT services that would expand SBOT beyond “individual-level” service to include “classroom consultation” for teachers and “system-level support” for groups of educators.

Using the conceptual framework provided by SCAT to facilitate expansive learning, participants addressed dilemmas in the delivery of SBOT service by considering practices that support educators and occupational therapists to develop a shared focus for joint effort and to enable both the time and opportunity for collaborative working. Having participants reflect on the social, cultural, and historical work practices within and between agencies that influenced how work is shared supported a multiple-perspective examination of the complex interconnections among workers and work activities. Within each area of program improvement, expansive learning among participants was illustrated through: (1) the development of a shared understanding about the relationship between desired goals and what is being worked on; (2) expansion of tools or approaches that could be used to achieve desired outcomes; (3) clarification of roles and responsibilities of stakeholders to improve how work is shared; and (4) identification of administrative supports that would improve opportunity for collaborative interactions among those involved in SBOT services. The findings presented below illustrate the nature of expansive learning among participants in each area of program improvement.
Areas of incongruence and expansive learning are illustrated using the framework provided by SCAT that was presented in Chapter 1, Figure 1.

**Good Case Conferences as a Collaborative Event**

Dilemmas with implementing case conferences were raised by each stakeholder group in the first focused discussion. In subsequent sessions, participants deepened their collective understanding about the characteristics of “good case conferences.” The nature of shared learning is presented by considering areas of incongruence, followed by a discussion of expansive learning about case conferences.

**Incongruence in case conferences.** Considering case conferences within an activity system framework enabled participants to consider incongruence in the implementation of case conferences. Areas of incongruence are illustrated with lightening arrows in Figure 4 and discussed below. Case conferences are normally held at the child’s school following assessment by the occupational therapist. The case conference is organized by the CCAC and chaired by the case manager. At the case conference, the occupational therapist “presents their assessment findings, therapy goals, and action plan” to the child’s family and educators. Following “acceptance of the occupational therapist’s recommendations,” the case manager authorizes visits for the occupational therapist to implement the therapy plan at school. At the time of this research, occupational therapists were typically provided with “a block of ten visits” that could be implemented on a monthly basis for the duration of the school year or used by the therapist to provide more frequent visits in a shorter period of time.
As illustrated by the lightening arrows in Figure 4, participants identified incongruence between the object and desired outcome of case conferences by recognizing that pre-determining SBOT recommendations in advance of the case conference precludes opportunity for joint planning based on a student’s individual education needs. Participants identified that the intent of having a case conference is to facilitate shared planning for the incorporation of therapy strategies into the student’s education program. Lightening arrows therefore illustrate incongruence between how case conferences were typically implemented (object) and how work was shared (division of labour). As a consequence of shared learning about the desired outcomes of case conferences, participants re-considered what should be worked on and identified practices that work well. These practices or emergent principles became a foundation for resolving incongruence between supports and the division of labour and are further discussed below by drawing on data that illustrates shared learning among participants about good case conferences.
In Session 1, occupational therapists shared their experiences with “typical case conferences” to consider features of “ideal” case conferences that would increase opportunity for joint sharing of information about the student and their educational program,

Janet Well, I think when the CCAC organizes the case conference, it’s after our assessment has been done and the case conference is looked at as an OT presentation. Here’s our report, here’s our findings, here’s our recommendations, and depending on who is at that meeting and what experience they had at that point with the child, often it’s yes, okay, we’ll
go ahead with these. But we don’t get enough input from other people before that point. A lot of these kids already have IEPs or things put in place that we are not privy to at that point. More information from other people at that point would be great. So I think a case conference where we could present our findings in terms of our assessment data, you know; they’re having trouble with fine motor, but what’s already in place in the classroom? I think that would be quite valuable in setting a plan as opposed to the OT simply saying here’s the plan, does everyone agree.

Joan
At the really good case conferences that actually does happen now, the OT presents and then the school will say we’ve been trying this or what do you think about this, so it becomes more of a sharing, like a total sharing.

Janet
And that would be the ideal, but it doesn’t always happen.

Joan
Yeah, it doesn’t always happen.

During this discussion in Session 1, educators elaborated on the notion of the ideal case conference by considering expectations that educators have for how work is shared when the school holds a case conference. Educators emphasized their perspective concerning the importance of action-oriented planning and assignment of responsibility for action plans as critical outcomes of a “school case conferences,”

Angela
I think that whole concept of what you do with the information from a case conference and from that sharing and collaboration is important. In the SBOT process it states here that “the case manager calls the case conference” and I’ve been in schools where it’s like a CCAC meeting. But when we have case conferences, we try very hard to develop an action plan from the case conference because you want something to come as a result of that sharing. So I think approaching the case conference as a joint sharing where somebody is taking notes and developing an action plan about what’s going to happen and recording those plans.

Nadine
And attaching some names…

Angela
….to the action plans.

Nadine
Yes, that is very important.
Angela Yes, because when you walk away with a to-do list and nobody owns the whole thing.

Nadine Right.

Angela Because with all the time constraints, you have to be careful that it’s a shared approach. Determining actions and assigning responsibility ensures it truly is a collaborative approach.

There was a common understanding among program providers and service recipients that case conferences are most effective when there is meaningful “two-way” sharing of information about the child. Educators felt that SBOT contributes “valuable strategies” to support individual programming for students. Participants agreed that their dilemma was, “just how to incorporate therapy goals into educational programs.” This concern was illustrated in a discussion that took place during Session 2, when participants reflected on dilemmas presented in the case of Alisha,

Joan I think Alisha is a really good example of any child with complex medical and physical needs. Whether it’s right or not, a lot of their program will be based on therapy goals. I know as OTs we’ve discussed this and we don’t always agree that the main goals for the child should be pulled from the OT and PT coming in, although that is a huge part of their program.

Nastasia We’re educators and we’ve had this discussion many times. We are not therapists and we are there for literacy and numeracy skills. We’ve had these discussions as educators. Why am I putting physical therapy goals and occupational therapy goals on an individual education plan? I know it is supposed to be so that they can access the curriculum. So, should the IEP just have education goals on it? The teaching strategies to meet those education goals may be related to occupational, physical therapy suggestions, but shouldn’t my goals be education goals?

Discussing the “educational relevance” of SBOT recommendations allowed educators and occupational therapists to bring their perspectives together to consider this dilemma. Occupational therapists and educators agreed that for students who are not
expected to achieve curriculum expectations, the challenge is to make sure that the focus of “alternative educational programming” is on “learning.” Connor’s case illustrated that when educators have a shared focus on educational goals for the student, therapy strategies can be used toward the achievement of those goals. When reflecting on the findings from Connor’s case during Session 4, participants agreed that the case conference provides the opportunity for a “collaborative event” where educators and occupational therapists can work together with parents to identify specific therapy strategies to support achievement of educational goals for students “like Alisha and Connor.” However, participants recognized that case conferences “are really hard to organize” so that “everyone is at the table who needs to be there.” Having the “right people” in attendance at the case conference was viewed as critical for shared planning,

Janet: I think there’s constraints around who gets to the case conferences as well. The case manager or their team assistant will set up the case conference, sometimes the parents can’t come at that time, sometimes the teacher can’t get out of the classroom, so you might have one representative from the school who doesn’t really work with that child.

Sylvia: Well, that’s part of the issue, trying to set those up and that’s why sometimes it takes a long time to get it set up because you’re trying to get as many people there as you can but sometimes you just can’t get everybody there that really should be there.

When considering the findings in Jacob’s case, however, a new understanding emerged about how educators involve SBOT to support decision-making for students with possible learning exceptionalities. In that discussion, educators identified that when they are in the early stages of investigating possible learning disabilities, SBOT
assessment is just one step in a “process of gathering information” about a child and “ruling out” motor problems,

Nastasia Some of the assessment from my end is rule in, rule out. So the occupational therapy assessment for me would be one that gave me information about whether there is a motor component to this. Is there a reading or writing learning disability? We use the occupational therapy assessment as a starting point to flesh it all out.

Angela I would agree 100% with Nastasia. For the case of Jacob, the situation started as wondering if it was completely a motor issue and then they’ve gone so far as to develop an IEP for reasons that you’ve outlined. But I mean, this is the way to go, right, they’ve started by looking at his motor skills, they find there’s more going on with this kid. What further information do we need? Then the whole consultation process happens with the teacher and the [special educator or VP].

Nastasia So our process is that we’re going to start with OT, then we’re going to go from OT to speech and language, and then we’re going to go from speech and language to clinical. So we may be gathering this information and it may all be coming together by grade three.

It wasn’t until Session 5, when participants were asked to reflect on the emergent principles in their small multi-agency working groups, that these diverse ideas were brought together to support the development of a new, shared understanding about the potential for case conferences to serve different functions. It was during a small group discussion in Session 5 when Group 3 realized that the educator and occupational therapist in their group held different expectations for how information shared at the case conference would be used. In their small working group, the occupational therapist and CCAC administrator returned to the principle about good case conferences as an important idea emerging from the focused discussion sessions. The occupational therapist explained that case conferences provide opportunity for “shared planning” because “everyone is at the table.” However, the special educator clarified that she may not be
ready to plan for a child’s education program at the time of the case conference, “for me, I look at the case conference as a feedback session.” She described that, for some students, the case conference is an opportunity to “learn about the therapist’s assessment findings” and use this information to make decisions about “next steps.” Following the small group exercise in Session 5, I asked Group 3 to share their new learning with the larger group, resulting in the following exchange among participants,

Janet Sometimes teachers just want an assessment because they’re trying to rule out things or they’re trying to hone in on certain things.

Nastasia Yes, the occupational therapist can do their assessment and then go away because I have that piece now and now I need some other things.

Janet So, from the educator’s point of view, what they need from the OT service is not necessarily what we’re offering.

Joan If educators are recommending assessment just to identify or rule out that the child doesn’t have a fine motor problem that can generate a large number of referrals for us.

Nastasia But what are we supposed to do? I’m neither a clinical psychologist nor am I an occupational therapist, so am I supposed to say you don’t need an assessment? I can’t say that.

Lorraine But then we have to capitalize on that so we don’t have a course of 10 visits for something that was “just in case.” We need to be responding to the need for assessment.

Janet So as occupational therapists, you are going in thinking you’re going to develop goals and a treatment plan.

Lorraine Meanwhile…

Janet …they don’t even want all that.

Lorraine Exactly, they didn’t exactly need those additional service authorizations for intervention.
In order to facilitate a deeper understanding about how expectations for SBOT developed, I asked participants to consider historical work practices that led to the assumption, held by program providers (e.g., case managers and occupational therapists), that all students referred for SBOT would receive intervention. One occupational therapist, Janet reported that, “5 years ago, when we got referrals and it came up that there were no fine motor skill problems, we would discharge.” Joan noted that they “got a lot of backlash” from “parents and from schools” when they discharged. Both occupational therapists reported feeling pressure “from parents” whose attitude is, “why bother referring if you’re not going to give us service.” In addition, Janet reported that when occupational therapists offer goals and recommendations at the case conference, “nobody ever says we just wanted the assessment piece and that’s all.” Lengthy discussion ensued about the influence of “block service authorizations” on the expectation, held by both service providers and service recipients, that the SBOT includes a block of intervention for all students referred.

The CCAC Senior Manager, Lorraine, recognized that “authorizing” the same “block of visits” for all students “is not a way to plan for care based on need.” When reflecting on their learning in Session 6, PAR team members re-visited the organizational history behind the CCAC authorizing block visits. Donna, the director at Agency B initiated this discussion by asking, “Where did that come from anyway because that has always been a big issue? Is it just budget?” Participants acknowledged that individual, needs-based programming “morphed over time into block visits.” The most germane points were extracted from a long and intense discussion among program administrators
about how the CCAC made decisions about authorizing SBOT service. The discussion illustrated how, over time, the original intent of providing “needs-based” service planning was replaced by mathematical averaging of service volumes so that the model of service provision became the same for all students referred regardless of their needs.

Lorraine Well no, it’s not just budget but it’s overall service planning and you have to divvy up the pie and you have to come up with some sort of approach, and I mean looking way back at volumes of service utilized in the school program, that was the typical package.

Joan So, it’s monthly. It’s based on monthly visits for a school year.

Donna Ten months of the year.

Angela But there’s some flexibility to authorize more visits when needed, right?

Lorraine Yeah, so considering years past, how many visits did we tend to give? Well let’s design a package that’s reasonable based on this number, you know. And then somewhere along the way that becomes the rule and you lose that vision that some will get 8 and some will get 12; some will get 2 and some will get 20.

Joan When I started 18 years ago, I worked only 3 days a week, but I probably had 15 kids on my caseload, most of them were getting weekly visits all year.

All Yeah.

Lorraine It’s not a criticism but it’s a reality as well that service provider availability sometimes influences the number of visits, when we don’t have providers available we can make do with a certain number of visits but when we have providers, there’s all kinds of things we can do, right? There’s so many influences on how did we ever arrive at this darn block of ten.

**Expansive learning about case conferences.** Using the framework provided by SCAT, Figure 5 illustrates expansive learning about case conferences. Lightening arrows
have been removed in Figure 5 to illustrate congruence between each element of the activity system using the principles identified by participants for improved collaborative working at case conferences. Participatory engagement over a series of focused discussion sessions provided opportunity for participants to draw from the diverse experiences of different stakeholders to first develop and then deepen their collective understanding about elements within the system that influence the conduct of case conferences. By summarizing the impact that the small group exercise in Session 5 had on her own learning, Janet (occupational therapist) shared that she had a better understanding of the role that special educators play in gathering information about children with special education needs. Janet adapted her earlier observation that “educators passively accept my therapy recommendations at case conferences,” by recognizing that “from the educator’s point of view,” teachers are actually engaging in active listening and that “although they may not be ready to act on SBOT recommendations,” they are, “gauging the reactions of parents” and “using information to make decisions about services for children.”

Participants recognized how procedures operating within each agency have influenced expectations for how SBOT would deliver services in school. Opportunity, to discuss how the social, cultural, and historical work practices have influenced how work is shared, illuminated understanding about the expectations that each stakeholder brings to the case conference. Participants expanded their view of case conferences by recognizing that educators can have different expectations of SBOT involvement and that their expectations vary based on individual student needs. Based on their new learning in
Session 5, Group 3 suggested that it would be helpful to differentiate “feedback sessions” from “case conferences.” Participants felt that clarity about what educators need from SBOT for individuals referred would go a long way toward supporting therapists in matching the focus for occupational therapy assessment to the needs that educators have in programming for student learning. CCAC administrators recognized that this would

**Tools**

- SBOT Assessment report with findings; Individual Education Plan; Information about the Class Program/teacher’s expectations/supports & services already in place

**Outcome**

- Identification of therapy strategies that can support educators to achieve learning goals for student and planning service; develop specific focus for OT involvement

**Object**

- Collaborative event: Information sharing; joint goal setting, & program planning

**Case Conference**

**Rules/Supports**

- Action-oriented planning
- Assign responsibility for actions
- Contextualize recommendations to education context
- Shared input about student
- Meaningful two-way communication
- Use SBOT assessment data & info from family & educators to make decisions together

**Community**

- Key educator
- Classroom teacher
- Parent(s)
- Case manager
- Occupational Therapist

**Division of Labour**

- Parents share their hopes/goals
- Key educators share information about the child’s program
- Therapist shares assessment findings
- Together they use this information to plan for how goals can be achieved in education context
- Case manager supports family and educators with system navigation, authorizes SBOT service
- Key educator shares information from planning with other educators/educational assistant

*Figure 5.* Expansive learning about good case conferences.
have an impact on how service is authorized and would ensure that “students who actually need the visits get them.” These discussions resulted in an administrative decision to “adapt the CCAC service request form” so that educators would have the option of requesting “assessment only” when making a referral for SBOT to “rule out motor problems.”

CCAC administrators challenged the standard approach to prescribing a block of visits for all students on the program by recognizing the need for increased flexibility in how service is authorized “based on need.” Occupational therapy providers considered new ways of approaching the case conference, rather than developing therapy goals and recommendations for “presentation” at the case conference, they could use the opportunity to “present findings as data” and engage with parents and educators to develop shared goals that are grounded in expectations that teachers have for the student’s performance at school. Participants recognized that the benefit of the case conference is that it provides a structured opportunity for collaborative planning of how therapy strategies can be implemented to support educational goals and outcomes for students.

**Time Up Front for Comprehensive Assessment**

In Session 5, all three working groups identified “sufficient time up front to complete a thorough assessment” as a critical principle for effective SBOT service delivery. Groups 1 and 3 separated this emergent principle into two key elements: (1) time to complete assessment (a support factor), and (2) matching the focus of assessment with the needs of educators in programming for the student (an outcome factor).
Discussions throughout Sessions 1 to 4 contributed to the development of a shared understanding about factors that influence the occupational therapist’s ability to “gather comprehensive assessment data.” SCAT was used to facilitate reflection about SBOT assessment by illustrating areas of incongruence within the activity system with lightening arrows (Figure 6). This facilitated shared learning among participants as they considered ways to improve assessment practices. Areas of incongruence in SBOT assessment practices are described below, followed by a discussion of expansive learning among participants about how to enable “time up front for comprehensive assessment.”

**Tools**

CCAC Intake Report and School Function Assessment
Standardized and non-standardized assessment;
“pull-out”, assessing child in a quiet area of school;
clinical reasoning to interpret findings & generate a report

**Outcome**

Develop therapy goals and recommendations and action plan for student referred

**SBOT Assessment**

Assessing student and writing report

**Rules/Constraints**

Limited information from educators and family about goals and educational program, services and supports

**Community**

Case manager
Special Educator
Parents
Occupational Therapist

**Division of Labour**

Parent consents to assessment
Educator makes referral for SBOT
Case manager authorizes 2 SBOT assessment visits
Occupational therapist assesses child at school & shares report at case conference

*Figure 6. Incongruence in SBOT assessment.*
Incongruence in SBOT assessment practices. Participant reflection on the CCAC procedures (rules) that direct SBOT assessment practices revealed that occupational therapists are expected to “initiate the assessment within two months of receipt of a referral” and “complete their assessment within two authorized visits.” The SBOT prepares a “formal written report” that includes “the assessment findings, therapy goals, and recommendations.” The occupational therapist is then expected to present their report to educators and parents at the case conference.

Both occupational therapy participants felt that the procedures used for authorizing assessment visits constrain their ability to complete a “quality assessment” within the “billable time.” Billable time was described as “an authorized visit that takes place at the school and is up to two hours in duration.” However, participants recognized that “financial viability” for provider agencies further constrains time available for assessment; employers expect therapists to complete all “visits” within a one-hour time frame so that they can see “an average of four clients per day.” Comparing the more complex needs of Alisha and Connor with those of Jacob was a catalyst for discussing how occupational therapists manage these time constraints. Occupational therapists acknowledged that they rely on “bread and butter kids” to manage their caseload. “You can administer a couple of standardized tests, have teachers complete a checklist, and kind of have it all worked out.” Lorraine the Senior Manager at CCAC recognized that this approach provides a necessary “workaround” so that therapists can meet the needs of students with more complex issues, while still working within the total available authorized visits for students on their caseload, “I think that’s where the expression
comes from the “bread and butter kids.” Those kids that you can do very quickly make up for the complex ones.”

Therapists agreed that SBOT assessment is conducted through a combination of “direct and indirect work.” Program administrators estimated that “each assessment is easily four to six hours intensive, direct time,” which includes individual work with the child and gathering information from special educators, education administrators, or educational assistants. Indirect work includes calls to the parent to obtain consent to conduct an assessment with their child at school, coordinating visits with schools, scoring standardized assessments, and generating a written report. Participants acknowledged that “additional time is necessary for therapists to use assessment findings, along with their clinical reasoning, to come up with goals and recommendations.” Given the nature of SBOT assessment activities, occupational therapists “are pretty hard pressed to gather comprehensive assessment information in only two visits.” Therapists reported that although they would like to “observe the child in the classroom” and “meet with the classroom teacher,” there is usually not enough time or opportunity for these activities.

Since the “mandate” of SBOT services is “to enable a student’s access to and participation in their education program,” participants acknowledged the importance of communication between educators and occupational therapists to develop realistic expectations for the student in the classroom and school context. Therapists reported that, “interacting with classroom teachers is the hardest part because [teachers] just don’t have the time.” Instead of scheduling meetings, therapists reportedly gather information from educators by “catching teachers between classes” or “following teachers around the
playground.” Both provider agencies reported using “a problem identification checklist” that is left for teachers to complete between the two assessment visits as a way of coping with this challenge.

Although participants agreed that “teachers are extremely busy” and that “finding time to meet with classroom teachers” is an “ongoing challenge,” educators pointed out that the itinerant nature of the occupational therapist’s visits and large caseloads are also factors that limit opportunity for educator-occupational therapist interaction because “teachers are not necessarily going to be available at times when the therapist is scheduled to be at the school.” Angela, the special education coordinator added, “some classroom teachers do creatively find time to meet with occupational therapists.” Overall, participants agreed that having only two visits authorized for assessment limits opportunity for collaborative working among educators and therapists. As a result, SBOT assessments are typically completed with “limited input from educators.”

An exchange among participants during Session 2 provided insight into how “time up front” can support therapists in working with families and educators to develop a shared focus for SBOT involvement:

Joan I think one of my best experiences happened probably within the second week of school for a little guy going into SK. What we did in that second week was mom came to the school at a time when both the physio and OT were there and we met together with the special education teacher. The conversation started with mom identifying her goals for her son this year. As we worked through those goals, each of us figured OK, I can do this part and I can work on this. It all went into the IEP. It was an example of something that worked really well. I don’t know in the real world if you ever have time for each child who’s on the program to do that but for me that was a better use of time.
Kate  So doesn’t that go back to where we talked about the perfect case conference?

Joan  Yes, but I wasn’t just talking about when the child first comes on service, but if a child is going to be on long-term, isn’t it nice to know what everybody’s goals are at the start of each year and to figure out how you’re actually going to get there?

Kate  Time and money.

Nastasia  Well, you know what though, time and money well spent!

Cynthia  Yeah.

Nastasia  It’s one of those things, like, you put the money in at the beginning and you may not have as many meetings at the other end.

Nadine  It’s just the logistics so if there’s any way that it could be funneled, more time, somehow more time near the beginning, that’s a fabulous way of doing it.

Joan  I think certainly for some of the more complex kids, but it’s not necessary for every child.

During Session 4, participants used the findings of Connor’s case to reflect on how the current model of authorizing “two assessment visits and one case conference for every child” developed. In Connor’s case, the occupational therapist and special educator “made time up front” to share information about Connor.

Joan  A few years back, if we got referrals for children with autism, they gave us four assessment visits right up front, recognizing that you could not adequately meet all the needs of a child if you were looking for sensory and motor and all of those skills as well. Now it’s just gone back to, pretty much, two assessment visits and one case conference, so you get the three visits. But it was recognized at that time that two assessment visits for a child with autism is much more complex than if you’re just looking at a child’s fine motor and visual motor skills.

Lorraine  I am intrigued by that former model of having up to 4 visits for assessment, in some ways that makes sense to me because if it is truly a
collaborative consultation model, then the assessment is critical because that is what you base recommendations on that someone else will carry out.

Donna  We’re getting back to the point of maybe having more flexibility up front.

Lorraine Yeah, if you got ten visits authorized for the whole school year and you want to use six of them for assessment, go ahead. It’s all a budgeting of visit time. I really don’t like the block visits because it’s not a way to plan for care based on need. That’s not to say that there still won’t be restrictions or limits, but [authorization of service] needs to be determined case by case.

Deborah There’s a real kernel there, I’ve jotted down here whether we could have options for service authorizations.

**Expansive learning about SBOT assessment.** Using the conceptual framework provided by SCAT to facilitate shared learning about SBOT assessment, participants were able to address areas of incongruence by considering assessment practices that have worked well. Figure 7 illustrates participants’ new, shared vision for effective SBOT assessment practices. Envisioning effective SBOT assessment supported expansive learning about the need for time up front that would enable occupational therapists to conduct a comprehensive assessment of both the student and the learning context.

Participants agreed that time and opportunity to meet with families and teachers was critical for SBOT to adequately address the needs that educators and parents have for understanding student performance in the classroom context. This new, shared understanding about the goal of SBOT assessment also led to the expansion of tools required to complete a comprehensive assessment. Time up front would enable occupational therapists to include in their assessment approach: (a) interviews with parents and teachers to better understand expectations that these individuals have for
student performance at school, and (b) observations in the classroom to understand how the learning context influences student performance. Expansion of the activity system for SBOT assessment to align the goals, supports, and tools also enabled role clarification about how work could be shared among those involved in SBOT assessment.

**Figure 7.** Expansive learning about SBOT assessment.
SBOT Service has Impact beyond Individual Students Referred

During Session 5, each of the small working groups 1 and 2 organized emergent principles into two broad categories reflecting how they conceived of SBOT intervention practices that would work well. These categories, discussed below, included (a) individual level service to students, and (b) system level support for educators. While envisioning the expansion of SBOT to include system-level support, participants expressed a firm commitment to continued organization of SBOT services to provide individualized support for students with more complex needs (e.g., students with physical, complex medical, and developmental disabilities).

Individual-level support for students. Considerable learning by participants centered on expectations for how work is shared when providing service for individual students referred for SBOT. Figure 8 illustrates incongruence in the delivery of individual-level service for students and shows a gap in understanding among participants about how work was shared (division of labour). Participants drew from their experiences and reflections on the case studies to clarify the expectations they had of parents and the responsibilities of educators in the delivery of occupational therapy services. Shared learning also led to new insights about the case management role fulfilled by special education teachers. The following section describes learning of participants about the roles of parents, educators, and case managers when providing SBOT services.
**Figure 8.** Incongruence in intervention services.

**Expectations of Parents.** Alisha and Jacob’s cases were catalysts for discussing usual service delivery methods. Participants recognized the importance of combining direct and indirect service delivery methods so that SBOT can support development of individualized therapy strategies, consult with educators about the implementation of therapy strategies at school, and monitor the student’s progress. However, consistent with the findings of Alisha and Jacob’s cases, both occupational therapists acknowledged that they typically “pull the child from class” to work with the student in a separate area of the
school. Following their “pull out” session with the child, occupational therapists “leave a progress note which goes to the family and to the teacher.” “One-way communication” via “therapy notes” was recognized by occupational therapists as their “primary form of communication” with others.

The progress note says, here’s what we’re working on, can we do this in the classroom, can we do some of this at home, and I’ll be back on such and such a date. It’s a consultation but how much interaction you get with the teacher greatly varies. With the older kids it becomes more challenging and the teachers have less time to speak with you, so we provide our information but we don’t always get a whole lot back. (Janet)

When considering “pull-out service,” participants agreed that classroom teachers should not be expected to implement “individualized therapy for the child” at school. “Even with weekly visits,” participants recognized that the occupational therapy intervention at school is “insufficient to develop specific skills.” Consequently, implementation of “OT recommendations” that target skill development typically falls to parents, who are expected to work with their child at home,

The reality is if you do your standardized testing and they have fine motor difficulties and the student is in a Grade 1 or 2 class with no EA support, with a teacher who has 24 other little bodies, really, unless the family can follow up at home, you’re just spitting in the wind. (Joan)

Sylvia, the Supervising Manager at CCAC, reinforced the common view, held by service providers, that “the OT isn’t going to fix it.” However, participants recognized that families often expect that occupational therapists will use their “expertise” to affect change in the child. In contrast, service providers expect parents to demonstrate their
“investment in occupational therapy service” by working with their child on specific skills.

With weekly OT, if there’s nothing happening at home, you’re not really going to see a huge change even if you go in for 8 weeks, if that’s the only intervention, it’s not going to make a difference. Having the parent understand that an OT going in on a weekly basis is not going to affect change, but you often get parents saying the OT’s the expert, what do I know, but that’s why parents need to work with the OT or with the school. We’ll give the guidance but as a parent, you have to be part of the change. (Sylvia)

Mirror data from Alisha and Jacob’s cases illustrated that when therapists work with children one-on-one at school, parents and educators view this as “providing direct intervention” for the child, albeit infrequently. In these cases, parents viewed the therapy note as a way of simply informing them about the visit. In these cases, there was limited collaboration between the occupational therapist, the family, and educators. When reflecting on these findings, the occupational therapists suggested that the intake interview provides an important opportunity for case managers to explain to families that SBOT services are organized as a “consultation model.” Occupational therapists felt that the case manager has an important role in helping families understand what to expect when SBOT is provided for a child at school and developing rapport with parents to engage them in the service. However, educators and parents weren’t entirely clear about the function of the intake assessment or the role of the case manager in the provision of SBOT services,

Kate I recall having a meeting at home. I remember sitting there and the question was, what can we do for you and I just cried and said, “I don’t know.” That was when [the case manager] broke everything down and said this is what we look after, this is what we can do, and that’s when the OT became involved, after the CCAC visit. One thing that happened, I
remember her looking up at the stairs and saying are those difficult and I remember saying yes and it’s just one of those things that I never really thought of but having someone in the house brought that to my attention. But I don’t recall ever that the meeting I had at home ever crossed over to the school, other than the referral for OT.

Researcher What do you mean, crossed over?

Kate Well, whatever was discussed at home, the educators had no idea at that point, right? I don’t know whose fault that was, it might have been mine. I don’t know but I feel that there should have been information shared there too.

Nastasia Yeah, I’m not sure what information is gained by going to visit the parent at their house. I never get a sense of that.

Joan Well you should.

Nastasia Like I don’t know what it’s for, at the house.

The occupational therapists continued the discussion by explaining that the intake assessment is used to gather “background information” and take a “developmental history” from the family. This information is often “summarized in the SBOT assessment report.” The case manager added that in many cases, intake assessments happen “over the phone” or “at the CCAC office” because “parents are at work” and the “volume of referrals” or “distance to the family’s home” means that “it just isn’t feasible to do a home visit.”

Findings illustrated a mismatch between the development of therapy goals that emphasize student skill development and expectations that parents would share in the work by implementing “OT homework” with their child to achieve those goals. The dilemma of matching therapy goals for skill development with a consultative model of service delivery was not resolved during this discussion. However, participants readily
agreed that opportunity for “more meaningful interaction” with families was critical for parents to “understand what is expected of them” and to “be invested” in SBOT service for their child. During Session 5, Group 1 reinforced the importance of family involvement in SBOT by adding “parents” to the two emergent principles: “meaningful communication” and “good case conferences.”

Reflecting on their learning in the 6th Session, PAR team members re-considered the issue of parent involvement in light of perceived constraints present within the educational system. From the health care perspective, Donna felt that “it is important to consider the family’s goals and everybody pulls together on those.” However, she recognized that when considering service provision in the education context, “this has to take into account what the curriculum expectations are.” The coordinator of special education acknowledged that “when teachers follow the Ontario curriculum, they aren’t starting with the parent’s goals.” However, when considering students who are on an alternative curriculum, “we move outside of the Ontario curriculum and we start thinking about other needs for students; we do start with the parent’s goals.” Angela shared that, “parent engagement is one of the Ministry [of Education] expectations.” For students with complex medical, physical, and developmental disabilities then, participants agreed that collaboration between parents and professionals can be fostered by having “parents contribute the goal, and everyone else works together towards that thing.” Participants recognized that developing alternative curriculum goals provides an opportunity for collaborative partnerships with families.
**Responsibilities of educators.** For students who have the support of an educational assistant (EA), participants agreed that it is not uncommon for the EA to have responsibility for integrating therapy recommendations into the child’s educational program. Occupational therapists often consult directly with the EA “because they are the one who is with the student.” Reflecting on findings from Alisha’s case in Session 2, the educational assistant broke a period of silence with her emotional response to this dilemma,

Kate Alisha is not alone, this happens. When I’m reading it, I can think of 16 different kids off the top of my head because that’s the way, it is the way it absolutely works and it’s sad. Like you say, everything revolves around the EA. Obviously Alisha’s whole education revolves around her comfort and her comfort comes from OT. I’m reading this and I’m like wow, this is why I hate my job! Well it is and it’s not, but it’s really nice to see it on paper because wow I like seeing it here because I agree 100% that this is what’s going on.

Nadine And I think you’re right, there is a belief that educators know what is happening and what drives the program, but the reality is that often it is the educational assistants who are involved the closest with the kids and so the communication tends to go through the educational assistant, which is fine, but you risk losing information when it isn’t communicated to the teachers. As a teacher, I have to write the report cards and I have to understand everybody’s assessment of the child.

Joan And I don’t think it’s always fair to be expecting the EA to be able to synthesize all that information, figure it out, even if the OT has explained to them why it would be good to try something or how to try something. I don’t think it always should be left that it’s the educational assistant’s responsibility to be able to then implement that. If you filter the program through the EA on a regular basis, knowing how shaky the system can be, you could take a whole bunch of valuable information and training for one EA, and they get bumped to another school, which means all that information goes, so it’s a quandary.

Kate Well my goodness, what are the class ratios now, I mean they’re huge right? And the teacher is responsible for that. Then you’ve got the VP and
the special educator, all these people who are responsible for so much more. So I can see why the job would fall to the EA who’s with that student all the time.

In contrast, findings from Connor’s case illustrated “ideal” sharing of responsibilities among educators. In their small group discussion during Session 5, Group 1 drew on the discussion of Connor’s case to elaborate on the 7th emergent principle,

7th principle: OT shows educators how to implement specific recommendations and provides opportunity for feedback to ensure successful implementation by designated educators. Educators and therapists assess the success of strategies on achievement of student goals and outcomes.

Group 1 expanded on this principle by differentiating between the roles of teachers and educational assistants: “teachers develop programs” and “educational assistants implement programs.” When discussing findings in Connor’s case, participants agreed that the successful integration of occupational therapy strategies into educational programming resulted from the occupational therapist’s direct collaboration with Connor’s special education teacher who had responsibility for developing Connor’s individual education plan and for monitoring achievement of his learning goals.

Drawing a two-way arrow between the 7th and 8th emergent principles, Group 1 connected their ideas about the responsibilities of educators to the importance of assigning a “key educator” to “act as a contact for SBOT and other services provided for the student at school.” While acknowledging that a key educator would normally be the special education teacher, educators felt that it is important to have “flexibility” in designating a key educator because the role and responsibilities of teachers differ from one school to the next depending on how special education services are organized and the
availability of human resources to support students with disabilities. Using the findings from Connor’s case to reflect on her learning about the different roles of special educators and classroom teachers, one program director noted,

When I first considered the Grade 1 teacher, I thought she was isolated from Connor’s program, but hearing all of the work that goes into collaborating through the work of the special education teacher, I see the value of that one voice considering that the classroom teacher has 24 other kids in the class; that just crystallizes it. (Deborah)

*Case management responsibilities.* During Session 5, Group 3 organized their analysis of emergent principles according to the primary responsibilities of each agency involved in the delivery of SBOT services. As they did this, the group recognized “overlap” in the case management role. When sharing results of their small group analysis, the Senior Manager of CCAC stated that CCAC regards the case management role as “value added” in the delivery of SBOT because case managers support families with “system navigation and service coordination with other sectors.” Educators, however, recognized that special educators “follow exceptional students throughout the course of their schooling.” Consequently, special education teachers fulfill a case management function by helping families to “navigate the school system,”

Janet What was interesting in our small group discussion was that Nastasia said she feels like she’s the case manager for that child and the education system, then you have the case manager coming into the school from the CCAC.

Lorraine We said the potential value added is there by capitalizing on the case manager who is in fact intended to provide some of that support, linking with community supports, respite services, all of those broad things. But that doesn’t necessarily happen and [special educators] actually feel that they have to pull that together for every student.
Special educators provide continuity for the child and their family as they progress between grades and onto secondary school because they coordinate services and supports for the child “from one school year to the next.” Educators remarked about the importance of knowing the family and their particular context in order to be able to provide the targeted support they need. In reflecting on her experience as a parent of a child with a developmental disability, Kate acknowledged the role that the special educator played in helping her to “accept the news” and “understand the impact” that her daughter’s disability would have on her progress at school. She recognized that it was the special educator’s knowledge of the educational system and his understanding of how her daughter was going to fit into it that was a crucial support to her,

Nastasia We are sensitive to the depth of detail about the families. We know the families, know the siblings, probably know the cousins, know the babysitter. I mean we know the whole situation.

Kate That puts me back a lot of years, it puts me back to looking at the special education teacher, we’ll never forget her. She said, “yes, Kate, your daughter has scored in the 1st percentile” and I remember going [sniffing].

Angela It’s a matter of knowing your family, and how they operate. We have some that want to jump into programming and others that take time just to accept it.

Kate As an educator, you can see where this child is going. When the child is in Kindergarten, the parent has to rely on the educator who understands what your child is going to be able to achieve and they can guide you along that path. It isn’t that I knew the teacher well, but that I trusted his experience. He knew the path my child would travel down at school.

By considering the support that families need to navigate the educational system, participants developed a new appreciation for the role of special educators as case managers. Participants suggested that CCAC case managers, who have expertise in
“navigating the health care system,” could work more closely with special educators to improve the integration of health and education services by drawing on each other’s knowledge. CCAC administrators saw a critical “liaison” role for case managers between “services provided at home and at school,” albeit for more medically complex children.

Interestingly, mirror data provided by the three case studies illustrated that the CCAC case managers had a limited role in communicating with families, educators, and occupational therapists. Instead, case manager involvement was limited to authorizing the funding of service provided by the SBOT. During Session 4, service providers discussed, but did not resolve, this quandary based on the findings presented in Connor’s case,

Lorraine Cindy, I’m looking at the last diagram that’s titled communication practices education and health systems, in the bottom right hand corner has the case manager and the only involvement there is listed included contact with mom, just the intake assessment and the case manager contact with the OT was just receiving their reports, the assessment, the mid-year report, and the year-end report. I’m thinking, there’s no other communication at all?

Cindy Oh, I’m thinking that that is exactly what happens unless there are issues, unless something comes up and you know more visits need to be authorized or there’s a change in focus. That’s where the case manager becomes involved. I think at this point in time, that is exactly what happens.

Lorraine But how do those visits get authorized then if there isn’t any other communication?

Cynthia The case manager would authorize the visits at the case conference for the remainder of the school year.

Janet Occasionally the case manager will sit in on one of our sessions.

Joan Every six months, the case manager will come and check in.

Lorraine They’re not really involved in that kind of activity because of this kind of structure then really. I’m very much an advocate for case managers as
value add in this process if they’re utilized properly. If they’re just
authorizing visits, I don’t know that that’s a good utilization, unless
there’s something else that they’re doing, which I’m quite sure there is,
but then based on this, I have a concern…

Deborah  …about what case managers are doing other than authorizing visits…

Lorraine  …their coordination, their collaboration with other sectors. I’d rather see
more focus on that you know with system navigation and service
coordination, that’s what case managers should be spending their time on,
not just saying here’s a block of visits.

Deborah  Well, that’s a really good question.

Although the overlap in case management roles went unresolved, the discussion
did raise awareness among participants about SBOT as a support service provided within
the education context. Because the service is provided to support participation and
achievement at school, participants recognized that a key educator, who is familiar with
the education system, is better situated to support families with navigating the myriad
educational supports and related services available to students.

**System-Level Support for Educators.** Participants described the need for system
level support through SBOT in two ways: (1) consultation with classroom teachers,
enabling them to integrate therapy strategies for individual students into instructional
strategies that can be used with the whole class, and (2) involvement in continuing
professional development for groups of educators. During Session 5, participants drew on
erlier discussions about SBOT practices that work well in order to envision new ways of
delivering SBOT services that provide benefit beyond individual students referred.
Together they brainstormed a number of examples of how SBOT could provide system-
level support,
Joan Well, that brings us back to what we talked about at the very first focus group, that often teachers would like to have access to an OT, not necessarily for a specific child. So I think there is a huge need within education for access to OT for general consultation, not necessarily to correct motor or physical skills.

Sylvia So rather than a referral through [CCAC] for a specific child, a discussion with the School Board…

Angela …for the classroom environment, I think that would be useful, tools to have in the classroom, age appropriate suggestions, developmentally appropriate recommendations, all of that.

Joan All of that kind of stuff for sure, I mean if you get a JK class where you know six of the kids have never handled scissors before, like what’s the best way to set up a very simple pre-scissors or pre-cutting program.

Nadine Yes, embedding motor skills into the literacy curriculum so teachers can see how you can just map a little bit of motor into what they’re already doing.

An exchange among educators during Session 1 illustrated that teachers find it extremely helpful when therapy strategies benefit the whole class.

Angela Some of this stuff is very individualized but so many times when an OT makes a recommendation for one student, it’s good for many in the classroom. Sometimes it may be more helpful to have whole classroom consultation rather than student-specific consultation.

Sean Depending on the student’s needs, we have to build it into the school day. We need to educate as many different EAs as well as teachers so that we implement therapy strategies as good practice for all children.

Angela In some situations, the classroom teacher is once removed from the process and so they’re not going to have that direct conversation with the OT. They’re not going to have that understanding about the sensory piece and the impact on a child’s behaviour. We’re not talking about therapy that happens for 15 minutes a day in a little room, we’re talking about something that is a part of the child’s whole program.
Kate I liked what you said about implementing these things throughout the whole classroom. I remember a teacher who made some changes in her classroom based on the recommendations for one child. I remember a week after, she was like holy cow, did you see the change in the children? And I was like yeah, I did! She had to implement one thing for one student and did it for all and it worked!

Angela Even conducting an environmental assessment of the classroom. I mean giving little tips like where a child’s book is in proximity to where they’re working, considering issues of copying from the chalkboard and where things might be placed. There’s not a teacher in our Board that wouldn’t want that information. They’re going to say wonderful, I want to implement that. It’s about the understanding, it’s about the time.

Lorraine Well, in an integrated model, if you truly have inclusion in the classroom then that makes most sense. It’s not an individual student referral, it’s what is this student’s environment for them to learn in.

During that exchange one program director acknowledged that the challenge of providing service “to benefit the whole class” stems from incongruence between how schools and therapy services operate.

Deborah Janet, you can correct me if I’m wrong, but there’s a lot of tension or dissonance here because the model for therapy in school is a single person model. The CCAC refers to us one child and the OT is responsible for that one child, the OT is not responsible for the entire class and that’s the difference in perspective between the teacher who has a whole class of children that they have to move along a continuum of knowledge and the occupational therapist that carries a caseload where recommendations are for one child in a classroom. I think there’s great value of occupational therapists being in the education system, but that’s not the model that we’re hired under.

Lorraine Does it need to be though? I guess I’m trying to think outside the box.

Joan I know exactly what you’re saying, Deborah, because there was one year that a Principal approached me and asked if I could do some brown bag lunches for the primary, particularly the kindergarten teachers on developing pencil grasp and visual motor development. When we checked with CCAC, CCAC said no we would not be able to bill for that because it wasn’t client specific. So we did do the brown bag lunches but it was
under my employer’s umbrella, not under CCAC. My employer said, yes, we’ll step up to the plate and we’ll give this. There certainly is a huge need for general education across the board for all kinds of classroom strategies. I think a lot of teachers would just soak this up.

Sean

One of the areas where we’re picking up on this is in the use of assistive technology. Just to piggyback on Joan’s idea there because it isn’t necessarily the kids who are identified or the kids who have an OT referral, but kids who struggle in general. We’re providing group education to teachers so that techniques can be implemented with a larger group of kids.

Joan

And I think that at the JK level there’s a huge role for sharing how to set up readiness programming. We have a lot of teachers who will say, you know, that teacher’s college did not show me what to do with these kids.

Angela

We’ve tried and we’ve had success with involving OT in our professional development programs. We’ve had good success in the past, but we’ve done it less and I think it’s a constraint, how they’re getting paid. I don’t know, we get the OT a nice gift and hope for the best. But it is a service that the Board feels is valuable, which I think we do, I think we can all say we do. Another example is the amount of time that occupational therapists spend helping with our accessibility consultation. That’s something I’ve been very involved with in the past. I’ve spent a lot of times in washrooms with OT’s and that is when we really start talking about accessibility and universal design. We need more expertise in these areas and we need to keep this on our radar.

Lorraine

Sometimes it’s that collaborative challenge, there’s nothing to say that when that visit occurs, you can’t have a whole crowd there for that visit, because really you’re sharing the knowledge right, and so it’s a little bit of creativity and it’s a little bit of stretching, but it’s still within the visit, it’s just how do we capitalize on who’s there.

**Tiered model of service delivery.** When reflecting on their learning during Session 6, the PAR team used what they had learned to construct a new model for SBOT service delivery provided through a “tiered system of intervention.” Using the image of a pyramid, the PAR team envisioned “the bottom tier” as “system support to enhance knowledge” through professional development programs for groups of educators. “Then
you’ve got classroom-level as the second tier” to support teachers with “class-wide implementation of therapy strategies that are beneficial to the whole class.” The top tier “is direct service” with “more precise service for a fewer number of students.” Although the PAR team agreed on this innovative approach to organizing SBOT service, they also recognized the constraints of the current funding model for delivering system-level services in schools:

Joan But that doesn’t really follow the school health mandate right now at all.

Angela It doesn’t, but it follows the conversation we’ve had.

Donna Yes, yeah.

Lorraine It definitely speaks to the opportunity.

All It makes sense, it does.

Lorraine There is a different way of doing it, you know we’ve always been so restricted around group therapy and all those kinds of things, but why?

Angela Give those teachers and special educators that are working together in those programs a fundamental understanding of some of those strategies and try those things in terms of fine motor development or whatever we might be talking about, they are going to be less likely to perhaps do 6 referrals in their classroom for a specific issue because maybe they’re going to have a better understanding. It doesn’t mean that the classroom teacher can replace what the OT can do, it means that if the OT is consulting in a more general way…

Lorraine …it’s that concept of good for all necessary for some.

Angela It is.

In their discussion of this new vision, the PAR team wrestled with how to deliver such an approach by considering the success of past approaches implemented by the
CCAC, and by identifying current opportunities across agencies that could support this new vision for service delivery.

Lorraine We had an opportunity once, years past, just by virtue of the way the contract was written. We had opportunity to do some in-service, so we went in and did an in-service with the OTs for a group of special educators and we got so much positive feedback from that, it was so valued and we don’t have a mechanism to do that right now, and that’s, that’s the kind of thing; give everyone those basic strategies and it doesn’t have to be all of this for every student.

Angela And we could fill that bottom and middle tier so nicely with the structures that happen, certainly within our Board. And I’m assuming other Boards too, so you know, including OTs in our Board courses in our special educator in-services with family of school activities that occur.

Lorraine I think there has to be a conscious re-direction, you know, a balancing between those two different approaches because you can’t do it all, but absolutely that is a better way to do it. It drives me crazy to be stuck in this block of ten thing, it goes right back to that.

All Yes, yes.

Lorraine Well, not every student needs ten so let’s have 15 or 20 or 30 for the one who needs it and let’s have a group session for the other 20 that could benefit from that right. We don’t have those structures in place.

Angela And you can’t continue, I assume, I mean I don’t know what your referral rate is, but you can’t continue to have the same number or more individual referrals and do all the other stuff.

Lorraine That’s right exactly, and that’s why we’re stuck.

Angela It has to coincide with less individual referrals if you are meeting those needs in different ways.

Joan Because when you talk about opportunities, I was thinking I have such a nice tool that of course I’ve never been able to use but it’s for OT in a school setting. It’s basically a simple, fast fine motor screening that theoretically you and the classroom teacher would give to a Junior Kindergarten, Senior Kindergarten, or Grade one class as a whole to identify, what we need to address right now so that down the road we
don’t have more problems. I mean there’s lots of tools out there that are already there, it’s not even a matter of reinventing.

Angela See, and I think classroom teachers would embrace that.

Joan I’ve often thought it would be interesting on a PA day, the same way that parents come for a parent/teacher interview, that you could invite any of your Kindergarten or Grade one teachers, because so many times they’ll say could you just look at this or can I talk to you about so and so, so they actually would have like a one-on-one consult with an OT. I think that would be a really good use of time.

Lorraine Yes, as I said, we need to build it back into our contracts.

Sylvia Because right now there isn’t any way to fund it but it’s certainly valuable. It’s the funding mechanisms that make it difficult. When I first worked in homecare, I was employed by homecare as a physio, so if I wanted to go and do a group thing somewhere, that’s fine, I was on salary. So if I needed to go to a retirement home to talk to seniors about fall prevention, I could. And it’s how we fund these things, now that have it tied to an individual child that’s part of our problem.

Sylvia, the supervising manager felt that changing service delivery is “out of our control” because “the funding construct is the same for every CCAC across Ontario.”

However, Lorraine, the senior manager considered an example of “acute ambulatory care clinics” that have changed the model of “nurses going from house to house” to the provision of a “clinic where the patients come to her, as a more efficient use of the service.” She also considered that when the school health program tried group therapy sessions for school-age children in the past, the CCAC had to “exercise creativity” to “find a way around the billing, but we did it.” Participants recognized that consistent access to SBOT was needed across the province but that innovative implementation of service to address regional needs was consistent with the mandate of the CCAC in managing community health care services locally.
Shifting from discussion about opportunities to questions of feasibility, the PAR team considered how a tiered service could address mandates within the health and education sectors and considered the implications for students and their families. The senior leader pointed out that “kids in the top tier fall under a health or a rehab mandate whereas the bottom layers suggest an education system role.”

Joan My fear would be that if it was all education that it would become a much broader approach and we wouldn’t get that individualized service for the kids who need that.

Angela You have to have that there.

Joan The bottom of the triangle would get huge.

Angela But I’m thinking you’re getting referrals that maybe you shouldn’t be getting.

Joan Yes, that they could be dealt with…

All …in other ways.

Joan Yes.

Angela And that would leave room for the intensity of intervention for those kids that we know need it.

Lorraine Which again, if the case managers are well engaged, that’s some of the balancing they should be doing, right, around directing that in-service planning as opposed to us saying well you’ve got ten visits to work with.

Angela considered their proposed approach from the parent perspective,

Angela If I can bring one caution forward, this type of model, from the parent perspective, can look like a nice way of saying less service, that’s my only caution.

Donna humm, humm.
Lorraine Yeah, if your child is going to get service because the teacher went to a group in-service, it’s a very different approach than your child getting service because the OT came to see them.

Angela Yes, because as a parent, my fine motor issue with my child is as important to me as your child’s complex medical needs.

All Yes, that’s right.

Sylvia But I think it’s probably harder, you can’t categorize the complex children because they’re all different; whereas, a lot of children may have handwriting or have similar issues that you can address broadly.

Figure 9 summarizes learning about SBOT service delivery, illustrating how program administrators drew on their learning about SBOT to develop a new model of service delivery. Tools and supports to enable implementation of this new model were proposed. Although beyond the scope of this current study, participants recognized that the next steps involve planning for implementation of this new way of delivering SBOT services.
Implications for the Development of SBOT Services

This study provides illustrative examples of expansive learning as practitioners and program administrators learned from each other and used their shared understanding to improve opportunities for collaborative working. They did this by addressing dilemmas in the delivery of SBOT services and re-configuring work practices within various components of the activity system to address areas of incongruence. Through a process of engaging in shared learning over a series of focused discussion sessions, participants expanded components of the activity system to improve collaborative
working in three key SBOT practices, namely case conferences, assessment, and providing intervention at school. Expansive learning was demonstrated through: (a) improved alignment between *desired goals* and the *object* of SBOT involvement, (b) expansion of *tools* used to achieve desired outcomes, (c) clarification of roles and responsibilities to improve *how work is shared* among stakeholders, and (d) the recognition of *supports* that would improve opportunity for collaborative interactions among those involved in SBOT services. Implications for the development of SBOT collaborative consultation services are considered in light of conceptual understanding, emerging from the field of distributed cognition, about factors that facilitate collaborative working. These factors include, having a shared focus for joint effort and opportunity for sustained interaction among collaborators.

Shared learning about the features of “good case conferences” illustrated the importance of educators and occupational therapists having a shared focus for joint effort as the basis for collaborative working. Rather than merely coordinating time for sharing SBOT assessment findings with educators and parents, engaging in shared planning for the focal student was recognized as an important function of case conferences as a “collaborative event.” As demonstrated in this research, participants readily identified how to re-direct their tools and supports once they established a shared understanding about the desired outcome of case conferences. Understanding case conferences as providing an important opportunity for collaborative planning supported participants to re-configure their roles in relation to this shared goal. Findings from this study show the importance of considering expectations that educators have for student performance at
school. Rather than developing therapy goals and recommendations in advance of the case conference, participants recognized the importance of occupational therapists sharing their assessment findings as data, and working together with educators and families to identify how therapy strategies can be used to achieve education goals. Involving families in defining their hopes and goals for their child was recognized as an important way of supporting meaningful involvement of families in shared planning. This finding supports the notion that formal planning meetings are necessary for collaborators to develop meaningful goals and education plans for students with disabilities (Snell & Janney, 2000).

The limited availability of educators to meet, combined with the itinerant nature of SBOT restricts opportunity for information sharing (Barnes & Turner, 2001; Bayona et al., 2006; Bose & Hinojosa, 2008; King et al., 2000; Nochajski, 2001; Reid et al., 2006). Mirror data from Phase One illustrated the importance of sustained interaction among educators and occupational therapists for collaborative working. When provided with the time and opportunity to develop mutual understanding, trust, and rapport, collaborators can combine their knowledge to achieve greater benefit for the student (Case-Smith & Cable, 1996). However, participants in this study learned that educators and occupational therapists benefit from having sufficient “time up front” for assessment, enabling them to establish a shared focus for collaborative working at the outset. Rather than authorizing more visits, participants recognized that flexible use of the available number of visits would facilitate comprehensive information gathering about student performance in the context of their educational program. Program administrators recognized that time up
front for classroom observation and interviews with teachers and parents is crucial in a consultation model of service delivery because a comprehensive understanding of the student and the learning context forms the basis for collaborative working. This has implications for the authorization of SBOT service in this region. Program administrators in this study recommended changes to how services are authorized so that occupational therapists have more time up front to develop a comprehensive understanding of the student within the context of their educational program.

Research on SBOT has recommended that occupational therapists need to spend more time clarifying their roles and responsibilities for educators in order to decrease confusion over what educators can expect from occupational therapy (Barnes & Turner, 2001; Reid et al., 2006; Wehrmann et al., 2006). However, findings from this study illustrate the importance of also clarifying the roles of educators, parents, and case managers to support shared working for the integration of therapy strategies at school. When considering individual-level service to students in each of the three cases, participants developed a multiple perspective understanding concerning the roles and responsibilities of all stakeholders. Reflecting on their own experiences with SBOT supported participants in clarifying how work should be divided to achieve educationally relevant programming and outcomes for individuals receiving SBOT service. This finding has important implications for the development of collaborative consultation as a model of service delivery for SBOT. Occupational therapists have been cautioned about assuming the role of “expert” in SBOT practice. However, findings from this research suggest that a clear understanding of stakeholder expectations for involving SBOT
Service combined with transparency about how work will be shared can facilitate collaborative practice and combining of expertise to benefit students. This requires both educators and occupational therapists to negotiate their roles and responsibilities in relation to the focus for joint effort in every case. This is especially important given the diverse learning needs of students referred for SBOT services. From the perspective of SCAT, role clarification can be facilitated when team members develop a shared focus for joint effort and engage in negotiated partnerships to re-conceptualize their own contributions in relation to the object of joint effort (Engeström, 2008). The development of goal directed action plans and assignment of responsibility for those actions are organizational practices that can support collaborative planning. Findings from this research support the importance of customizing SBOT collaborative consultation services to the specific needs of educators and reasons for referral.

A key educator can play a central role in developing a shared focus for collaborative working by defining expectations for SBOT involvement that are grounded in the needs of educators to support participation and achievement of students with disabilities at school. In turn, occupational therapists can direct their tools and approaches to address the specific needs that educators have for working with students. In this case study, special education services are organized so that special education teachers have sustained contact with families and teachers as the child progresses from one school year to the next. In the case of the participating School Board in this study, special educators are normally responsible for developing individual education programs and making referrals for services at school. Consequently, they are expected to combine information
from a number of sources to support decision-making about class placement, services, and supports for students with special needs.

Engeström (2008) introduced the notion of knotworking as the leadership practices of a key worker who facilitates collaborative working in an activity system. Engestrom used the image of a knot to describe the work of this key facilitator who ties, unties, and reties seemingly separate threads of activity to support meaningful connections between work activities and workers. Recognizing that fleeting linkages can occur in dislocated and shifting networks of activity, a key facilitator supports meaningful interaction among workers to enable collaborative working (Engeström, 2008). Knotworking has particular relevance to SBOT service delivery because the service is administered across health and education sectors, organized through the coordination of multiple agencies, and delivered itinerantly. Emerging evidence suggests that a key facilitator can support meaningful interaction among collaborators by facilitating information sharing within an activity system (Engeström, 2008; Martin, 2008).

Findings from this research suggest that the key facilitator or knotworker in SBOT practice should be someone who is in a position of having sustained contact with collaborators over time and who can use their understanding of the child in the context of their educational program to support the configuration of services and supports that enable achievement of learning outcomes. Mirror data illustrated that the establishment of coherent learning goals for the child at the outset of SBOT involvement supported the integration of SBOT into classroom programming in Connor’s case.
With the emergence of inclusive education practices, educators have adopted roles and responsibilities for supporting families navigating services and supports for students with disabilities. In this study, participants recognized that special education teachers are optimally positioned to support and sustain a shared focus for joint effort that is grounded in the expectations of students with disabilities as learners. These findings have implications for the role of case manager in SBOT practice. Indeed, study findings pointed to apparent overlap in the expectations of special educators and case managers in supporting families to navigate the myriad supports and services available to students with disabilities. Further research is required to understand how shifts in the role of special educators impact the role of case managers in the delivery of other school health services. This study was limited to the examination of the case manager’s responsibilities in relation to SBOT service provision, however case managers have diverse roles and responsibilities in the coordination of community-based health care services and supports that were beyond the scope of this research.

Findings from this research point to important differences in the ways that educators and occupational therapists work with students. SBOT is organized to provide service to individual students assigned to a caseload. In contrast, educators deliver curriculum programming to a whole class of students. These differences create challenges for integrating child-specific recommendations into classroom and school programming. In this study context, when therapists placed emphasis on direct service to develop specific skills in students, responsibility to work directly with the child shifted to parents who were expected to implement therapy strategies at home. In this study, participants
recognized the need for more meaningful communication with families and the
development of shared expectations for their involvement in SBOT services. These
findings are illustrative of the concern raised in the literature regarding the mismatch
between models of service delivery used in SBOT practice and outcomes for students
(Bayona et al., 2006; Fairbarin & Davidson, 1993; Spencer et al., 2006). Bundy (1995)
differentiated among direct and indirect methods of service delivery for SBOT. She
reported that each method is associated with different types of outcomes and each
approach requires different roles and responsibilities on the part of therapists (Villeneuve,
2009). Consistent with Bundy’s framework, findings from this research illustrate the
importance of starting with expected outcomes for the student and negotiating
appropriate methods of SBOT service provision to meet those expectations.

Using the “necessary for some, good for all philosophy,” participants in this study
distinguished between individual-level service for students and system-level support for
educators in the provision of SBOT. Recognizing that schools provide the context for
SBOT service, participants in this study re-conceptualized how to deliver services in a
way that would better support educators when they are integrating therapy strategies into
classroom learning. Consistent with educational approaches to differentiated instruction
and universal design for learning, educators find it helpful when therapy strategies can be
implemented with the whole class because they provide benefit beyond individual
students referred. This is consistent with earlier research reporting that teachers want
occupational therapists to support them by demonstrating how therapy strategies can be
implemented inside the classroom context (Case-Smith & Cable, 1996; Fairbarin & Davidson, 1993).

Program administrators in this study took these ideas a step further by proposing a tiered model of service provision that matches approaches for SBOT involvement with the expected outcomes (see Figure 9). By differentiating among three levels of service, this new model addresses the long standing tension between recommendations for occupational therapists to adopt indirect approaches that support educators in their work with students and research evidence showing that occupational therapists continue to work directly with individual students (Bayona et al., 2006; Fairbairn & Davidson, 1993; Niehues et al., 1991; Spencer et al., 2006).

School psychologists confronted this same challenge two decades ago. Gutkin and Conoley (1990) proposed the “Paradox of School Psychology,” suggesting that for school psychologists to serve children effectively, they must concentrate their attention and professional expertise on the educators (p. 203). Similar to the occupational therapy profession, school psychologists experienced a shift in practice roles as they moved away from child-centered intervention with children to consultation with educators. Gutkin and Conoley called upon school psychologists to “give psychology away” recognizing that direct intervention was insufficient to meet the demands for service in schools. Indirect service requires consultants to take on new roles as educators and advocates (Bundy, 1995). While professionals may resist taking on these new roles, they are necessary for the integration of supports into the daily lives of children and into the context of their education programs (Bundy, 1995; Giangreco, 1995; Gutkin Conoley, 1990). Twenty
years later, the occupational therapy profession is wrestling with this same shift in service delivery to meet the demands for SBOT service within the context of educational inclusion.

Participants in this study recognized that occupational therapists are well suited to providing indirect service because their professional knowledge emphasizes analyzing the influence of activities and environments on performance. Indeed, the profession is recognized in school-based practice for conducting environmental assessments, adapting learning activities, and recommending equipment, tools, and technologies that can support students despite limitations imposed by their disabilities (Bazyk & Case-Smith, 2010; Bundy, 1995). Findings from this study reinforce that educators value these contributions made by SBOT in schools and are consistent with previous research on teacher perceptions about SBOT service (Barnes & Turner, 2001; Case-Smith & Cable, 1996; Fairbairn & Davidson, 1993).

Future development of SBOT collaborative consultation requires thoughtful consideration of the impact of the service for teachers. Developing a greater understanding of the educational system will support occupational therapists in adapting their roles and responsibilities to the needs of educators, who are charged with the task of providing classroom instruction for students with a range of abilities in inclusive education settings. Findings from this study illustrate that expansive transitions to collaborative working are facilitated when stakeholders develop a shared focus for their collaborative efforts. The principles of effective SBOT collaborative consultation that emerged from this study placed an important emphasis on schools as the context for
service delivery. Rather than organizing service around the responsibilities of occupational therapists, participants developed new ways of working to ensure that the roles and responsibilities of all stakeholders were organized around the needs that educators have to support students with disabilities to learn at school.

**Conclusion**

Occupational therapists have an important role to play in supporting students with disabilities to participate and achieve at school. Over the past 30 years, inclusive education has changed the context for providing that support. Occupational therapists and educators can respond to these changes by developing their roles in ways that support collaborative planning to achieve learning outcomes for students. Although collaborative consultation is promoted as best practice for SBOT, the complex organization of service across health and education has challenged practitioners to shift models of delivery from direct work with students to collaboration with teachers. To date, much of the onus has been placed on occupational therapists to clarify their role in schools. Findings from this study point to the need for all stakeholders to work together to re-configure their roles and responsibilities so that collaborative interactions can contribute to effective programming and outcomes for students with disabilities. Program administrators have an important role to play in supporting the shift to collaborative practice by adopting flexible approaches to service delivery and facilitating opportunities for meaningful communication among those involved in SBOT service delivery.

This research brought together program administrators, program providers and service recipients to learn together to develop collaborative working for the delivery of
SBOT service in one region of Ontario. Systematic examination of the complex interconnections among work activities and workers supported participants in using their new, shared understanding to co-configure new ways of working. Shared learning was facilitated through an interventionist methodology that employed participatory, appreciative and empowerment mechanisms that led to the development of a new model for SBOT service delivery. This study illustrates the power of DWR and appreciative inquiry as methodological tools to promote organizational development through shared learning.
Chapter 5

General Discussion of Findings
Introduction

Using a participatory action research, this dissertation applied SCAT to examine the nature of collaborative working in a case study of SBOT service delivery in one region of Ontario. SBOT places emphasis on collaboration between educators and occupational therapists to support the integration of therapy strategies into educational programming for students with disabilities through shared expertise (Bazyk & Case-Smith, 2010; Bundy, 1995). Theory about distributed cognition was used to understand SBOT collaborative consultation as a social learning process. Collaborative consultation was defined as interactive problem-solving process enabling people with diverse expertise to generate creative solutions to mutually defined problems (Idol et al., 2000). From the perspective of distributed cognition, outcomes of collaboration are the result of shared learning and cannot be understood in isolation from the context of interaction. This Chapter presents a discussion of the findings from this action research dissertation and considers both the theoretical and practical contributions of this research.

Although SBOT collaborative consultation has been widely adopted at the policy level, we know little about the impact of collaboration for students and we lack understanding about how current service delivery supports collaborative working among occupational therapists and educators. Much of our understanding about SBOT comes from research conducted in the United States. Outcome studies reported in the literature on SBOT collaborative consultation emphasize student achievement of individual education goals but lack clear descriptions of how collaboration contributed to the outcomes reported. Studies have focused primarily on teacher satisfaction with
occupational therapy services and teacher rating of student achievement of individual goals. To date, research conducted in the Canadian context has focused primarily on barriers to collaboration in SBOT practice. Emphasis has been placed on reporting teacher perspectives about SBOT service.

This dissertation research contributes to the research literature on SBOT in the Canadian context. Findings from this research report multiple stakeholder perspectives concerning the specific ways in which SBOT collaborative consultation contributes to educationally relevant programming for students with disabilities in a case study conducted in one region of Ontario. Grounded in theoretical understanding about the distributed nature of group learning, SCAT was used as a conceptual and analytical tool in this study to describe SBOT collaborative consultation from multiple stakeholder perspectives. Within each successive Phase of this research, a multiple perspective understanding about factors that facilitate collaboration between educators and occupational therapists was developed through shared learning among stakeholders involved in the planning and delivery of SBOT in the region studied. Facilitation of shared learning among key stakeholders in this research led to the development of a new, shared understanding about SBOT collaborative consultation practice. This chapter discusses the contribution of these case study findings to our understanding about factors that facilitate collaborative interactions between educators and occupational therapists for the provision of SBOT services in the region studied. Specific consideration is given to the way in which a multiple perspective understanding about SBOT practice supported stakeholders to envision new ways of working.
Summary of Findings

The research took place in two phases. Phase One involved case study research to describe SBOT for three students with disabilities from multiple stakeholder perspectives. Data were gathered over one school year using a combination of observation, document analysis, and interviews involving all participants directly involved in the delivery of SBOT with each focal participant. SCAT provided a framework for describing the nature of joint effort by considering: (a) the desired goals or outcomes; (b) what was being worked on in relation to the goal; (c) the tools, methods, or approaches used; (d) the community of others who were involved; (e) the rules, routines, and professional conduct that supported or constrained practice; and (f) the way in which work was divided (see Chapter 1, Figure 1). Individual case descriptions were generated so that they could be shared with stakeholders in Phase Two. These multiple perspective case descriptions of SBOT collaborative consultation practice for each of the focal participants can be found in Appendix C. Dilemmas emerging from incongruence between elements in the activity system were identified and described for the three focal cases. Incongruence in the delivery of SBOT services became the focus for shared learning among participants in Phase Two of this research.

Common characteristics in two case studies enabled cross-case analysis to also identify features of collaborative working that facilitated the integration of occupational therapy strategies into educational programming for students with developmental disability. Key factors that emerged from this cross-case analysis included: (a) having a shared focus for joint effort; (b) meaningful communication practices; and (c) leadership
by a key facilitator who forged the necessary linkages between workers and work activities.

In Phase Two, program administrators participated alongside service recipients and service providers in a series of focused discussion workshops to reflect on case study findings and to prioritize areas for program improvement. Developmental Work Research (Engeström, 2000) and Appreciative Inquiry (Cooperrider, Whitney, & Stavros, 2003) methods were used to facilitate organizational learning among stakeholders. Engagement of stakeholders in this research supported program administrators in critically examining decision-making for the delivery of SBOT service in one region of Ontario. Combining practice-driven dilemmas with conceptual tools of analysis enabled a multiple-perspective understanding about the social, cultural, and historical work practices that have influenced collaborative interactions in SBOT practice and led to the articulation of 12 principles for improving how work is shared. These principles are presented in Table 11.

Principles for improving SBOT emerged from shared learning among service recipients, service providers, and program administrators about practices that support collaborative working for the delivery of SBOT in the region studied. Program administrators used their shared understanding to propose a new model for delivering SBOT services that expanded current service beyond the provision of individual-level support for students referred to include classroom-level consultation for teachers and system-level support for groups of educators.
Table 11

*Principles for SBOT Practice*

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<tr>
<td>1</td>
<td>OT has sufficient time up front to complete a thorough assessment. Focus of OT assessment is matched to the needs educators have for programming for student.</td>
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<td>2</td>
<td>Good case conferences allow for shared focus for joint effort and permit two-way interaction among educators and OT to support program development for the student.</td>
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<tr>
<td>3</td>
<td>OT service is organized on a case-by-case basis to ensure that it is responsive to the needs that educators have for programming for students.</td>
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<tr>
<td>4</td>
<td>Service methods are matched to educational goals and outcomes for students.</td>
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<td>5</td>
<td>Parents understand the rationale for involving the OT; they understand the approach to service delivery and are invested in OT service.</td>
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<tr>
<td>6</td>
<td>OT service supports educators with challenges related to educational programming and inclusion. Therapy strategies may support educators to achieve outcomes for students but the goals are education goals.</td>
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<tr>
<td>7</td>
<td>OT shows educators how to implement specific recommendations and provides opportunity for feedback to ensure successful implementation by designated educators. Educators and therapists assess the success of strategies on achievement of student goals and outcomes.</td>
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<tr>
<td>8</td>
<td>A key educator holds responsibility for the student’s education program; this includes supporting the educational assistant who holds responsibility for program implementation and being accountable for all pieces of information related to the student’s program, related services, and supports.</td>
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<tr>
<td>9</td>
<td>Meaningful communication supports educators and therapists in joint effort toward achieving student goals and outcomes in the education context.</td>
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<tr>
<td>10</td>
<td>Regular classroom teachers are actively involved with OT service.</td>
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<td>11</td>
<td>OT assessment considers the learning environment and service allows for classroom consultation to support implementation of recommendations beneficial to the whole class.</td>
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<tr>
<td>12</td>
<td>Organization of OT service enables opportunities for OT to contribute their knowledge to support continuing professional development of teachers.</td>
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Discussion of Findings

A significant challenge to the study of SBOT collaborative consultation is the limited understanding about how interactive problem solving contributes to generative learning when people collaborate. This case study provides empirical support for collaboration as a social learning process that results in individual and group learning. Findings from both Phase One and Phase Two of this study illustrate Engeström’s (2008) notion of expansive learning within an activity system. Within SCAT, expansive learning contributes to generative learning when team members are more disposed to use each other’s knowledge to develop unique solutions to problems (Engeström, 2008). Engeström proposed that expansive learning requires collaborators to engage in boundary crossing, enabling team members to develop a shared focus for joint effort and to co-configure their roles and responsibilities in relation to the object of shared working. In SCAT, incongruence in work practices precipitates opportunity for expansive learning by questioning or responding to dilemmas and searching for new ways of working. Findings of this case study (Phase One and Phase Two) are discussed through key concepts about the nature of expansive learning as developed in SCAT including boundary crossing and knotworking. The importance of co-configuring roles and responsibilities in collaborative working is also discussed.

In this study SCAT was used explicitly to support a multiple perspective understanding among key stakeholders about SBOT practice. SCAT was used to represent dilemmas in SBOT service within an activity system framework. In Phase Two, Participants drew on their own work experiences to examine areas of incongruence
among components of the activity system and to consider the social, cultural, and historical work practices that influenced how work was shared. Incongruence in the delivery of SBOT services, then, became the object of shared focus among participants in Phase Two. Emphasis was placed on identifying factors that facilitate collaborative working in SBOT practice through systematic reflection on case study findings to facilitate shared learning among key stakeholders about SBOT collaborative consultation practice.

**Cross-Case Findings: Phase One**

Alisha’s case was characterized by service coordination. Participants in Alisha’s case were directed by their individual roles and responsibilities. Connor’s case was characterized by cooperative working among participants who had a shared focus on Connor’s development of foundation skills for learning. In each case, expansive transitions were evident. In the case of Alisha, transitions to cooperative working occurred during informal interactions between the occupational therapist and each of Alisha’s educators for “on-the-spot trouble shooting.” Showing how and explaining why in the context of Alisha’s program, using materials available in the school environment also supported expansive transitions to cooperative working. Similarly, sustained interaction between the occupational therapist and education assistant supported cooperative working as they re-conceptualized challenges that educators had with Alisha’s fine motor manipulation of materials. Findings in Alisha’s case were consistent with Engeström’s (2008) notion that cooperative working can occur between various
practitioners without explicitly questioning or re-configuring their roles and responsibilities.

Frequent, ongoing contact in Connor’s case facilitated cooperative working. Expansive transitions from cooperation to collaboration were evident during formal planning meetings. It was at these times that participants drew on each other’s knowledge to develop novel learning activities and adapt learning materials to support Connor’s learning goals through distributed expertise. In these instances, participants moved beyond the confines of their scripted roles to re-configure new ways of working.

Cross-case findings illustrated the importance of educators and occupational therapists developing a shared focus for joint effort that is grounded in the student’s role. Findings illustrated that having a shared focus for joint effort combined with formal opportunities for interactive communication can support collaborative effort by enabling transitions from service coordination to cooperative working and collaboration. Having sufficient time up front to develop a shared understanding was an important facilitator of collaborative working in this case study. Findings also illustrated how leadership and accountability practice of educators support planful integration of occupational therapy recommendations into meaningful programming for students.

Leadership practices of Connor’s special education teacher supported participants to cross professional boundaries and re-configure new ways of working by supporting meaningful interaction among workers to develop Connor’s foundation skills for learning. Connor’s special education teacher liaised with the special education team, the EA, and the occupational therapist. In her role, Connor’s special education teacher was in
an optimal position to facilitate and sustain interaction among participants, despite limited time and opportunity for collaboration with the occupational therapist. Connor’s case illustrated that the leadership practices of a key worker involves more than taking time to share information with others. Connor’s special education teacher actively worked to understand the perspectives and contributions of each individual and used her role to ensure that all the pieces came together into an integrated program for Connor.

In Connor’s case, the special education teacher was adept at boundary crossing, drawing on her sophisticated understanding of each individual’s contribution to Connor’s educational program. Recognizing that schools provide the context for SBOT services, Connor’s special education teacher effectively used her role to support meaningful interaction among collaborators through information sharing about expectations for Connor as a Grade one student. In the absence of a key facilitator in Alisha’s case, responsibility was left to the EA to be the “point person” and the occupational therapist was left to “set the focus” for each visit. Alisha’s occupational therapist acknowledged that in the absence of any formal planning to understand what educators need from SBOT the occupational therapist found that she was “constantly trying to figure out the best way to provide services.”

Engeström (2008) proposed that re-conceptualizing professional roles and responsibilities in relation to a shared problem is the characteristic feature of collaborative working. Boundaries are created by practitioner roles and routines and are defined within professional cultures and historical work practices (Martin, 2008). Collaboration requires team members to engage in boundary crossing so that they can use
each other’s knowledge to envision new ways of working. Boundary crossing and co-
configuration of roles and responsibilities are therefore characteristic of generative or
expansive learning among collaborators. Engeström described knotworking as a
facilitator of collaborative working in an activity system. He used the image of a knot to
describe the leadership practices of a key facilitator who ties, unties, and reties seemingly
separate threads of activity to support meaningful connections between work activities
and workers. Recognizing that fleeting linkages occur in dislocated and shifting networks
of activity, a key facilitator supports meaningful interaction among workers to enable
expansive learning (Engeström, 2008). Findings from this research illustrate the
importance of boundary crossing in for effective collaboration and demonstrate the
effectiveness of knotworking practices of a key facilitator who can support boundary
crossing in SBOT practice.

Focused Discussion Findings: Phase Two

Over the series of focused discussion sessions in Phase Two, participants
expanded components of the SBOT activity system to improve collaborative working by
resolving areas of incongruence in three key areas, namely: (a) recognizing good case
conferences as an opportunity for a collaborative event; (b) ensuring that occupational
therapists have time up front for comprehensive assessment of the student and their
learning context; and (c) delivering intervention through services and supports that have
impact beyond individual students referred. Expansion of the activity system was
demonstrated in Phase Two as participants resolved incongruence in SBOT practice to:
(a) improve alignment between desired goals and the object of SBOT involvement; (b)
expand tools used to achieve desired goals; (c) clarify roles and responsibilities to improve how work is shared among stakeholders; and (d) recognize supports that would improve opportunity for interactions among those involved in SBOT services.

Emerging research and theoretical understanding suggests that expansive learning is facilitated when team members focus on a shared problem and each contributes their knowledge to find mutually acceptable ways of solving it. Having a shared focus for joint effort supports practitioners in crossing the boundaries that are created by individual professional roles and routines. Boundary crossing, then, contributes to expansive learning as practitioners develop greater understanding about how to work together (Engeström et al., 1997). Boundary crossing can result from a process of shared learning in both horizontal and vertical directions (Martin, 2008). Horizontal learning typically happens between individual practitioners, working at the same level in an organization or service as demonstrated in the case of Connor in Phase One of this study.

In Phase Two, horizontal learning across agencies enabled participants to use their new, shared understanding to envision principles for program improvement. Horizontal learning had a powerful impact as evidenced by the emergent principles for effective SBOT collaborative consultation (Table 11). Each and every principle took into consideration the context of service delivery and re-oriented expectations for collaborative working to address the needs that educators have to support students with disabilities to learn at school. Shifting the focus for SBOT involvement from individual work with students to supporting educators to work effectively with students resulted in corresponding shifts in each element of the activity system. Most notable was the
clarification of roles of other stakeholders involved in SBOT service and in particular, the responsibilities of educators in SBOT collaborative consultation.

Vertical learning was also evident as program administrators used what they learned to develop a new model for delivering SBOT. This new model emphasized indirect service provision and consideration of the impact of SBOT on supporting educators to work with students. The model that emerged provided specific direction for program administrators to develop SBOT by aligning the focus for SBOT involvement with specific outcomes. This is an important consideration when considered in light of recommendations arising from the recent review of the SHSS program in Ontario, which called for the development of shared principles for cross-sector collaboration and new models for providing service in schools (Deloitte & Touche, 2010).

The PAR team’s development of new ways of providing SBOT service (i.e., classroom-level consultation for teachers and system-level professional development for groups of educators) is an illustrative example of the impact of upstream vertical learning on program development. Grounded in a shared understanding about the goals of SBOT collaborative consultation, this new model has the potential to transform SBOT service delivery by developing entirely new ways of organizing and delivering service in schools. Findings from this research are consistent with the idea that expansive learning has the power to transform an activity system into an entirely new system. This new model addresses the long-standing tension in the literature between recommendations to adopt collaborative consultation in SBOT practice and research showing that occupational therapists continue to employ direct methods of intervention. The new model of service
recognizes the contribution of individual-level service to address the specific needs of students through occupational therapy supports and services. However, this model expands the occupational therapy contribution in SBOT practice to include indirect service that enables occupational therapy strategies to have benefit beyond individual students referred. Development of this new model will require consideration of how the funding and administration of SBOT can support these new ways of working.

**Facilitating Boundary Crossing**

In Phase Two of this research, the structure of DWR enabled sustained interaction among participants over a series of focused discussion sessions, allowing the time and opportunity for generative learning to occur. Intermediate cognitive tools (e.g., PowerPoint slides, summary notes of emergent principles) allowed ideas and potential solutions, emerging from the focused discussions, to be captured and re-visited. These representations recorded emergent ideas in artifacts and served to sustain our shared focus from one session to the next.

By design, program administrators, as members of the participatory action research team, participated alongside program providers and service recipients in Phase Two of this research. SCAT proved to be a powerful framework for facilitating a multiple perspective understanding about the delivery of SBOT. Development of a multiple perspective understanding across agencies and professional roles supported boundary crossing in Phase Two of this study. Indeed, when asked to submit what they learned from participating in the focused discussion sessions following Session 5, participants shared that the opportunity to develop mutual understanding to inform how they could
engage with others in the future was a key outcome for them as participants in this research. The following quotes from Phase Two participants (submitted anonymously) illustrate how improved understanding about how others work in the context of SBOT service delivery supported them in re-conceptualization how they can change their practice approach for better collaborative working. For example,

I valued having the opinions of the other key players and getting their point of view, I am now rethinking how my own thoughts, beliefs, and practices influence other key participants and how I may change portions of my practice or approach.

I see the value for students of understanding the other provider/participant’s perspective of the process and what they need from it; and that may be different than what I thought it was.

I learned most from hearing the successes and challenges from different perspectives. Too often we only see things from our own perspective. The importance of collaboration and communication was emphasized and makes me think about how I personally can do a better job within my own role.

Listening to everyone’s perspectives and analyzing data without pre-determined solutions helped us to articulate “principles” and I’m looking forward to the next steps.

Developing a multiple perspective understanding about SBOT practice through boundary crossing helped participants to appreciate “how the whole system works.”

I have learned such breadth and depth about the education system – lots of food for thought, triggers for service delivery refinements, and understanding the system-wide interface. This has been very rich learning.

I learned about the whole process of service provision in the school setting and appreciate the complexity.

DWR sessions were structured according to the first three stages of appreciative inquiry. The first stage, identifying practices that work well, was implemented over four
sessions. These sessions were deliberately organized to afford time up front to develop a multiple perspective understanding about SBOT practice. Trust and rapport among participants was cultivated by emphasizing reflection on mirror data from the vantage of their own experiences with SBOT service. The first four sessions were organized so that participants could focus on developing a comprehensive understanding about practices that work well before moving onto the envisioning stage. At times, it was necessary to remind participants not to solve the dilemmas but rather focus on understanding them. In this way, trust and rapport were established between the participants and myself.

When the nature of expansive learning among these participants is considered in combination with cross-case findings about communication practices that facilitated collaboration in Connor’s case (presented in Chapter 3), “time up front” emerges from this research as an important facilitator of collaborative working. Findings emerging from this research about the nature of collaborative working suggest that innovative problem solving is facilitated when collaborators take time at the outset to develop a shared focus for joint effort. Trust and rapport take time to develop and are important for collaborators to develop mutual understanding that supports problem solving (Case-Smith & Cable, 1996).

Specific facilitation techniques were used to support the development of rapport among participants in Phase Two. For example, at the start of the first discussion, participants were asked to take time for individual reflection and to jot down their ideas about SBOT processes and procedures they felt worked well before sharing their ideas with the larger group. The key idea worksheets also provided participants with the
opportunity to share information anonymously, in writing. Mirror data was used deliberately to facilitate multiple-perspective learning about practices that support collaborative working. Participants were reminded that the overall goal of the session was to identify practices that work well. These regular reminders supported participants in maintaining an appreciative stance when considering the dilemmas in each case study.

First we considered practice dilemmas in the most complex case of Alisha who had physical, medical, and developmental disabilities. This was followed by a discussion of similar dilemmas presented in the least complex case of Jacob with mild motor deficits. Findings from these two cases supported the development of a shared focus on dilemmas or incongruence in the delivery of SBOT and served as the foundation for joint working in the focused discussion sessions. Participants were asked to consider the dilemmas in light of their own experiences with SBOT service. Sharing experiences among participants served to deepen our collective understanding about the dilemmas in each of the three case studies. A multiple perspective understanding about SBOT service emerged from these discussions. Consequently, solutions were formed from a shared understanding among participants about factors within and between agencies that influenced SBOT practice. Finally, participants were provided with mirror data to consider practices that worked well in the case of Connor. Connor’s case reflected many of the ideas that participants had discussed in the first three sessions and consolidated learning about what SBOT looks like when it works well.

It took time for participants to move beyond their individual perspectives and incorporate the perspectives of other stakeholders into their analysis of the dilemmas. In
earlier sessions, exchanges took place primarily among participants from the same agency or stakeholder group. With each successive session, interaction between stakeholder groups and across agencies increased, supporting horizontal learning among participants as they considered the nature of shared dilemmas from multiple perspectives. It is noteworthy that, over time, stakeholders changed where they sat around the table. In the beginning, participants sat primarily in their stakeholder groups. As rapport developed, there was increased mixing among stakeholders.

Sustained interaction over the series of focused discussion sessions supported participants to develop mutual understanding for horizontal learning to occur. Horizontal learning supported participants with aligning goals, supports, and tools to achieve desired outcomes for SBOT involvement (e.g., participants generated rules and expanded tools to support meaningful interaction and joint planning at case conferences). The structure of Session 5 provided a powerful opportunity for participants to reflect on emergent principles for practice by considering how work was shared within and across agencies. Having participants reflect on the emergent principles in small multi-agency working groups deepened multiple perspective understanding about the social, cultural, and historical work practices that influenced how SBOT practices developed. Rather than simply contributing individual stakeholder perspectives, these exchanges supported participatory analysis that deepened understanding across practitioner and program administrator boundaries. When this happened, participants began to re-consider the roles and responsibilities of stakeholders to improve the delivery of SBOT service in schools, not just the rules and tools that support practice. Similarly, when program administrators
came together to reflect on what they had learned over the series of discussion sessions, they moved beyond the original intent of prioritizing areas for program improvement to developing a whole new way of delivering service. Findings from this research are consistent with the idea that expansive learning has the power to transform an activity system into an entirely new system (Engeström, 2008).

In Phase Two of this research, I fulfilled the primary role of knotworker to enable the development of a multiple-perspective understanding about SBOT among participants and with the PAR team in particular. The methodological tools provided by DWR and the stages of appreciative inquiry supported me in this role by attending to the development of a shared focus for learning and meaningful communication as facilitators of expansive learning. While some tools, such as the use of mirror data, intermediate cognitive tools, and the framework of SCAT were delineated by the DWR methodology other facilitation techniques were not prescribed. For example, engaging with the PAR team to generate questions they had about SBOT practice served to support our development of shared focus on the development of principles for effective practice. Involving the PAR team in this way supported cross-sector collaboration through the development of a shared focus for our work together. Similarly, reflecting on emergent principles in small multi-agency working groups was an activity that I developed. Although I recognized that it was important to engage my participants in the analysis of findings emerging from our discussions I also understood that my participants did not have the time or research skills to do this independently. My solution was to conduct a preliminary analysis to generate emerging principles and to facilitate participatory analysis in smaller multi-agency
working groups. The benefit of this exercise was the opportunity for member-checking and participatory engagement in the analysis of emergent findings, informed by multiple stakeholder perspectives. This small group exercise had an important influence on the development of a shared understanding about SBOT practice as participants envisioned practices that would work well. Indeed, it was during this fifth session that participants brought their diverse perspectives together to resolve specific dilemmas (e.g., assessment as rule out and the function of case conferences for some students referred to SBOT).

I was not alone in these tasks. I was supported in my own analysis through the support of my dissertation committee and by my research assistant who helped me to organize each session so that all activities were initiated and completed on time. I drew from appreciative inquiry methods to develop my approach to facilitation and I made this appreciative stance transparent for participants from the outset. I periodically reminded participants that the aim of this research was to develop SBOT collaborative consultation by learning about practices that work well. I believe that this contributed to my development of trust and rapport with the group of participants. I relied on the framework provided by SCAT to represent mirror data in a manner that described SBOT for the three focal participants and identified relevant practice dilemmas. Facilitation then focused on supporting participants to reflect on the findings in light of their own experiences and developing a shared understanding about work practices that have influenced how work was organized and shared. In this way, participants supported the interpretation of findings from Phase One.
Facilitation of these focused discussion sessions required significant attention to detail and demanded iterative analysis of focused discussion findings from one session to the next. Active listening was a critical skill employed during the group discussions. However, active leadership in steering the conversation was also important. The sincere engagement of the study participants was a motivating factor for me. Expectations for participant involvement were clear and sessions were conducted according to the procedures shared with participants at the outset. Participants took the time to acknowledge their appreciation of my deliberate application of procedures (described in Chapter 4) to each of our discussions, sharing that I made it easy for them to contribute productively to the group discussions. Participants openly recognized the importance of this research and expressed appreciation of the opportunity to learn from other stakeholders about the delivery of SBOT in the region studied.

When considering the nature of participation of the PAR team over the course of the focused discussion sessions, it was apparent that PAR team members gradually adopted my facilitation approach and progressively took over the facilitation role by asking probing questions about how SBOT practices developed. In the final session, PAR team members required very little facilitation from me. Following a review of the questions they generated during the planning stage, the PAR team swiftly shifted into using what they learned to propose a new model of service delivery and to consider the feasibility and opportunities of their new approach.
Limitations and Considerations for Future Research

Although the participatory orientation, conceptual framework and methodological tools used in this research proved effective in facilitating a multiple perspective understanding about SBOT collaborative consultation as discussed above, there were also limitations to this research.

The nature of case study research means that findings cannot be generalized to other contexts of SBOT service provision. The three cases selected in Phase One are not representative of all students referred for SBOT. The cases were representative of the types of students who meet the eligibility criteria for SBOT as described in the participating CCAC policy guidelines. However, cases were limited to primary students. Consequently, case study findings did not address SBOT practice for students within the context of intermediate and senior school programs. Additionally, the cases did not address SBOT for students transitioning from primary to secondary school. A study involving older students with disabilities may have identified other dilemmas in the planning and delivery of SBOT collaborative consultation services and the integration of occupational therapy into educational programming for older students.

Future research should address SBOT for intermediate, senior, and secondary students. As program administrators in this region consider the model that emerged from this research and the principles for improved collaborative working, consideration will need to be given to the impact of these new ways of working for older students. Despite this limitation, cases selected in Phase One of this study were chosen because collectively, the case studies represented a wide spectrum of specific characteristics of
students who are typically referred for SBOT. Reflection on case study findings by key stakeholders during Phase Two supported the development of a multiple perspective understanding about SBOT practice by enabling these stakeholders to consider the cases in light of their own experience. These reflections strengthened the analysis of case study findings and interpretation of dilemmas reported in each case study.

Facilitating a multiple perspective understanding for shared learning among key stakeholders in Phase Two required considerable investment of time on the part of the researcher and research participants. Opportunity to engage with stakeholders in focused discussion of case study findings over a three-month duration contributed deeper understanding among stakeholders about the social, cultural, and historical work practices within and between agencies that influenced how work was shared. However, considerable planning and investment of time was needed to implement these focused discussion sessions. Recruiting educators who could be available to participate was the greatest challenge. The support of the participating school board enabled each of the educators to attend the focused discussion sessions. However, I was unable to recruit a regular education teacher because of the time commitment required. While each of the special education teachers and education administrators held prior positions as regular education teachers, they were not engaged in that role at the time of the focused discussion sessions. Having a regular education teacher participating in the focused discussions may have enriched our understanding about the implementation of SBOT collaborative consultation from the perspective of the regular classroom teacher.
Phase Two also required considerable investment of my time in planning, facilitating, reflecting, and analyzing data. Data gathering and analysis was an iterative process that required dedication of time and skills of analysis to analyzing and interpreting focused discussion data from one session to the next. This was necessary to enable participants to engage in a systematic and focused reflection on the nature of SBOT collaborative consultation practice and to use this shared learning to develop principles to improve collaborative consultation.

Using SCAT to support boundary crossing among stakeholders strengthened this research by contributing deep understanding between professional groups and across agencies involved in SBOT service delivery. Facilitating shared learning through DWR and appreciative inquiry methods requires sustained interaction among participants. As an interventionist methodology, DWR relies on a series of focused discussion sessions and sustained interaction among participants over time. In recent years, Engeström has begun to adapt DWR methods to facilitate shared learning among work teams over a shorter duration. Engeström now refers to these sessions as Developmental Change Laboratories that use the same fundamental components of DWR, conducted in a much shorter span of time (e.g., one-day workshop for employees). Researchers wishing to undertake action research to facilitate shared learning may want to consider the advantages and limitations of condensing facilitated focused discussion sessions. Findings from this research illustrated the importance of having time up front and sustained interaction among participants in order to develop a multiple perspective understanding about SBOT and using this shared learning to develop principles for
improved practice. Since DWR and Change Laboratories are emerging methodological tools, research is required across a number of workplace contexts to examine their contribution toward facilitating shared learning among workers. Research describing the contribution of DWR in relation to achieving shared learning is needed. Future development of the methodology as an intervention to promote shared learning will benefit from investigations that also consider the facilitation skills required of the researcher. Detailed description of the procedures outlined in Chapter 4 of this dissertation provides direction for researchers who wish to adopt this methodological approach in similar studies. The next logical step is to evaluate the impact of this research on practice by assessing the implementation of the principles for effective SBOT practice that emerged from this research. Working with program administrators to develop their new model of service delivery would complete the stages of appreciative inquiry in this case study.

**Contributions**

Despite limitations of this research, the development of a multiple perspective understanding about SBOT practice across individual professional boundaries and across sectors involved in the organization and delivery of SBOT is the major contribution of this research. The participatory engagement of stakeholders in each Phase of this research supported the translation of knowledge into practice in the region studied. Following completion of Phase Two, one of the special education teachers who participated in the focused discussions shared that she applied what she learned to her work with occupational therapists, educators, and education assistants by adopting the role of key
facilitator of information sharing. Similarly, program administrators adopted a flexible approach service authorization for SBOT visits at school and removed the requirement that SBOT conduct their assessment in two visits. This change was implemented by the participating CCAC immediately following completion of Phase Two of this research.

Program administrators recognized that the new model for SBOT collaborative consultation practice challenges current mechanisms for funding and administering SBOT services. Ongoing planning and pilot testing is needed to develop these new ways of working by considering the opportunities and constraints within and between organizations to support implementation. My involvement with the PAR team is ongoing.

At the time of submitting this dissertation, we generated a proposal for a Partnership for Health System Improvement Planning Grant submitted to the Canadian Institutes for Health Research (CIHR). This application proposed the use of developmental evaluation to support planning, pilot testing, and early adoption of the new model of service delivery that emerged from this dissertation. The application for this planning grant is currently undergoing peer review with the CIHR.

This dissertation research has contributed to the research literature and to the development of policy for SBOT practice. The critical literature review reported in Chapter 2 was published in the Canadian Journal of Occupational Therapy in a special issue targeted at influencing policy. This manuscript introduced distributed cognition as a conceptual framework into the occupational therapy literature and was used to appraise research on SBOT collaborative consultation. Findings from this review were utilized in the recent Review of the Ontario School Health Support Service Program (Deloitte &
Touche, 2010). Research and practice implications in my manuscript were used in the section of this report on using research evidence to inform practice.

The cross-case analysis of two students with developmental disabilities reported in Chapter 3 was accepted for peer review and is currently in review for publication in Qualitative Report. Case study findings from Phase One of this research were presented at the Canadian Association of Occupational Therapists annual conference (peer-reviewed conference proceedings). I also presented cross-case findings at an invited workshop for the Ontario Society of Occupational Therapists. Both sessions were very well attended, with over 40 participants from SBOT practice, research, and administration in attendance at each session.

Phase Two findings, presented in Chapter 4, are currently being developed into two separate manuscripts for submission for peer review and publication. One manuscript will focus on the DWR and appreciative inquiry as methodological tools to support shared learning and the second will focus on the nature of expansive learning in a multiple perspective case study of SBOT practice.

**Concluding Remarks**

Drawing on emergent methodologies that support stakeholder engagement, this participatory action research dissertation employed continuous cycles of observation and reflection to inform action. New understandings about the critical features of collaborative working were used, iteratively, to support my own actions of engaging with the PAR team, selecting methodological tools, and facilitating expansive learning among participants to develop SBOT collaborative consultation in one region of Ontario. SCAT,
the conceptual framework used in this study, supported the development of a multiple perspective understanding about SBOT collaborative consultation across professional and agency boundaries and led participants to develop new ways of working. This research provides an illustrative example of how academic-practitioner partnerships can support integrated knowledge translation to improve practice.

Case study findings were used to describe the preconditions, process, and outcomes of collaborative working in a case study of SBOT practice from multiple stakeholder perspectives. Findings about the nature of shared learning in this study show the utility of DWR and of appreciative inquiry as methodological tools for facilitating meaningful communication across organizational boundaries. As demonstrated in this study, horizontal and vertical learning led to the development of powerful solutions for program improvement. This study contributes to the growing body of evidence about the distributed nature of cognition by considering the specific ways in which the development of a shared focus for joint effort and sustained interaction among participants fostered expansive learning to improve SBOT service delivery. Findings from this research illustrate the importance of leadership of knotworking practices in facilitating boundary crossing among collaborators. This research makes an important contribution to the conceptual literature on collaboration theory by investigating the process of collaborative working and the relationships between joint working and outcomes for students with disabilities at school. As such, this research was oriented to investigate collaborative working across professional and agency boundaries. Using group learning theory, this participatory and action-oriented research enabled
practitioners to use what they learned to develop SBOT practice in the region studied. Principles of effective SBOT collaborative consultation practice that emerged from this dissertation establish norms for collaborative working through the development of shared rules, supports, and structures. These principles addressed challenges to collaborative practice that crossed professional and agency boundaries and establish preconditions necessary for cross-sector collaboration to develop SBOT practice.
References


*Journal of Continuing Education in the Health Professions, 26*(1), 46-54.
Appendix A

Information and Consent Forms for Phase One
Letter of Information (Legal Guardian)

Title of Research Study: *A Multiple Perspective Examination of School-based Occupational Therapy Services*

Dear Parent/Guardian:

You and your child are being asked to participate in case study research as part of a study examining the delivery of occupational therapy services at school. This research is being conducted by Michelle Villeneuve, a graduate student in the Faculty of Education at Queen’s University under the supervision of Dr. Nancy Hutchinson, Professor. The research has the support of the Community Care Access Centre, the Child Development Centre at Hotel Dieu Hospital, and Kaymar Rehabilitation. Moreover, the research has been cleared by the Queen’s University General Research Ethics Board and approved by the school board.

The purpose of this research is to describe how occupational therapy services are delivered at school and to consider ways to improve school-based occupational therapy services.

Procedure

Your child will be observed by Michelle Villeneuve during their regular participation at school over a period of three months between October and December, 2008 (approximately one day per week). Observations will include interactions between your child and their occupational therapist during regularly scheduled visits at school. Observations will be recorded in the form of field notes made by this researcher. These field notes will describe your child’s participation in school activities and the nature of occupational therapy support for your child’s school program. Michelle Villeneuve will not interfere with your child’s education program or occupational therapy services and your child can ask Michelle Villeneuve not to observe at any time.

You will be asked for permission to allow Michelle Villeneuve to review documentation that provides information about goals and services for your child at school. These documents include:

- your child’s individual education plan (IEP)
- occupational therapy documentation including progress reports, written recommendations to educators, and formal written reports (for example: assessment and discharge notes)
- School Health Support Service (SHSS) program referral and progress reports made by your child’s case manager at the SECCAC

You will be given the option of which documents you give your consent to be reviewed. You will also have the option of choosing not to have any of these documents reviewed.
Michelle Villeneuve will interview you and your child. The interview will take place at a time and location that is most convenient for you. You and your child will be asked questions related to your experiences receiving occupational therapy services at school and will include questions related to you and your child’s expectations for school activities, and your expectations for occupational therapy services. The interview will take no longer than one (1) hour of your time. Interviews will be audio recorded to ensure accuracy of information. However, you will have the option of choosing not to have the interview recorded or to ask for the recording to be stopped at any time during the interview. You and your child will be given the option of not responding to any questions that you are not comfortable in answering.

Michelle Villeneuve will also interview your child’s teachers, case manager, and occupational therapist. These individuals will be asked questions related to their experiences with occupational therapy services for your child and will include questions related to their expectations for your child’s participation at school, and their expectations for occupational therapy services.

**Video and Audio Recordings**
You will be asked for permission to allow Michelle Villeneuve to videotape, audio record, and/or take still (digital) photos of your child participating in their regular classroom and school program and during sessions with their occupational therapist. You will have the option of which forms of recording you and your child are most comfortable with and will be able to request permission to review video or photographs taken of your child at any time. You will also have the option of choosing not to have any of these forms of recording or to withdraw consent for use of video or photographs at any time. You and your child’s confidentiality cannot be ensured if you consent to video or still (digital) photography of your child.

You also will be given the option of consenting to the use of any video or still photography obtained during this research in any publications or professional activities arising from this research study (for example: dissertation publication; presentations at conferences or seminars, publications in academic journals, or university teaching). Video and still photos will only be taken if all other participants involved in the case have also consented to their use. Video and still photography will only be used for the purposes you consent to and will only be used if all individuals involved in the case study have provided informed, written consent for the same use. You can request to review any video or still photos taken of your child at any time.

**Confidentiality**
All information collected about your child will be stored on a password protected computer or in a locked cabinet available only to the Michelle Villeneuve, her supervisor, or her research assistant. If you consent to the use of video or still photos, all recordings that are not used in the development of case descriptions will be destroyed. All information collected about your child will be stored for a period of five years following
the successful oral defense and publication of Michelle Villeneuve’s dissertation study. Only if you provide consent for the use of video or still photographs to be used in publications or professional activities arising from this research will the video or photographs of your child be saved indefinitely.

Due to the nature of data collection and analysis, complete anonymity of you and your child cannot be guaranteed. Replacing your names with pseudonyms during the development of a written case description will protect confidentiality of you and your child. All names of other participants including educators, case managers, and the occupational therapist will also be replaced with pseudonyms. The name of your child’s school and any other identifying information will also be removed during the development of the case description.

The case description of your child will be discussed during group interviews with individuals who are involved in planning occupational therapy services at school. Parents of children with special education needs will also participate in these interviews. These discussions will be led by Michelle Villeneuve. Participants in the group interviews will include:

- parents who have experience with school-based occupational therapy services for their own child;
- educators and education administrators from the Limestone District School Board (LDSB) who have had direct experience with school-based occupational therapy;
- service administrators from the Southeastern Community Care Access Centre (SECCAC) who are responsible for planning and administration of occupational therapy at school;
- senior administrators and occupational therapists from Kaymar Rehabilitation and the Child Development Centre; and
- a research assistant who will record group discussions.

Due to the nature of their role, these participants may be able to identify you and your child, and the context of your child’s school program. These individuals will be required to sign a letter of agreement indicating that they will maintain confidentiality of all participants and their context in all communication with others.

You and your child’s participation in this research are voluntary. If you refuse to participate, it will not affect your child’s education or occupational therapy program in any way. You and your child may withdraw at any time without prejudice to your child’s education or occupational therapy program. If at any time you choose not to participate, any information collected concerning you or your child will be destroyed. If you have consented to video or still photography, you may withdraw consent for use of any video or still recordings at any time.
Please be informed that your participation in this study will depend upon the voluntary agreement of all participants to participate in this study.

There are no known risks to participation in this study and there are no direct benefits. However, it is hoped that information gathered from this study will benefit planners of school-based occupational therapy services through the SHSS program in southeastern Ontario. Results from this study may provide direction for improved planning and delivery of school-based occupational therapy in this region. Results from this study may prove informative for the planning and delivery of occupational therapy through SHSS programs in other regions across Ontario.

**Researcher:**
Michelle Villeneuve, PhD (Candidate), Faculty of Education, Queen’s University
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**Supervisor:**
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For questions, concerns or complaints about the research ethics of this study, contact the Education Research Ethics Board at ereb@queensu.ca or the chair of the General Research Ethics Board, Dr. Joan Stevenson (613) 533 – 6081 chair.greb@queensu.ca.
Consent Form (Legal Guardian)

Title of Research Study: A Multiple Perspective Examination of School-based Occupational Therapy Services

I have read and understood the letter of information for this research study. I have been given sufficient time to consider the information and have had the opportunity to ask questions which have been answered to my satisfaction. I am voluntarily signing this consent form and will receive a copy of this form for my information. I understand the confidentiality measures being taken in this study. If at any time I have further questions or concerns, I can contact:

Researcher:
Michelle Villeneuve, PhD (Candidate), Faculty of Education, Queen’s University
(613) 547 – 9914
mv6@queensu.ca

Supervisor:
Dr. Nancy Hutchinson, Professor, Faculty of Education, Queen’s University
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By signing this consent form, I am indicating that I agree to the participation of my child in this research study as described in the letter of information. I understand Michelle Villeneuve will collect information about my child through extended observation of my child at school and through interviews with my child’s educators, occupational therapist, and case manager. I understand that my child and me will also be invited to participate in an interview expected to last one (1) hour.

I grant permission for the researcher to collect information about my child only under the following conditions:

**AUDIO RECORDINGS:**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>Parent Initial</th>
</tr>
</thead>
<tbody>
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</table>

I grant permission for audiotaped recordings of my child for the purpose of developing case descriptions that will be shared with other participants during focus group discussions. I understand that all identifying information will be removed during the development of these case descriptions to protect the confidentiality of my child and me.
VIDEO RECORDINGS:

I grant permission for video recordings of my child to be used in the development of case descriptions that will be shared with other participants during focus group discussions.

I grant permission for video recordings of my child to be used in any publications or professional activities arising from this research study (for example: dissertation publication; presentations at conferences or seminars, publications in academic journals, or university teaching). I understand that giving permission for video recordings to be used in publications or professional activities means that my child’s confidentiality is no longer protected.

STILL (DIGITAL) PHOTOGRAPHY RECORDINGS:

I grant permission for still (digital) photos of my child to be used in the development of case descriptions that will be shared with other participants during focus group discussions.

I grant permission for still (digital) photos of my child to be used in any publications or professional activities arising from this research study (for example: dissertation publication; presentations at conferences or seminars, publications in academic journals, or university teaching). I understand that giving permission for photos to be used in publications or professional activities means that my child’s confidentiality is no longer protected.

DOCUMENTATION

I grant permission for the researcher to collect information from my child’s Individual Education Plan (IEP).

I grant permission for the researcher to collect information from occupational therapy documentation on my child.

I grant permission for the researcher to collect information from the case manager’s documentation on my child.
By signing this consent, I give Michelle Villeneuve permission to contact my child’s educators, case manager, and occupational therapist to gather information about my child for the purposes described in the letter of information.

I understand that I can withdraw this consent at any time and that all information collected will be destroyed. I understand that if I withdraw consent for use of video or still photography prior to any publications arising from this research, all recorded information will be destroyed. I understand that I cannot withdraw video or still photographs that have already appeared in publications or presentations arising from this research.

Please sign one copy of this Consent Form and return to Michelle Villeneuve. Retain the second copy for your records.

____________________________
Child’s Name (print)

____________________________  ______________________
Parent/Legal Guardian (print)   Relationship to Child

_______________________________  ________________________
Signature of Legal Guardian   Date
Letter of Information (Educators)

Title of Research Study: *A Multiple Perspective Examination of School-based Occupational Therapy Services*

Dear Educator,

You are being asked to participate in case study research as part of a study examining the delivery of occupational therapy services at school. This research is being conducted by Michelle Villeneuve, a graduate student in the Faculty of Education at Queen’s University under the supervision of Dr. Nancy Hutchinson, Professor. The research has the support of the Community Care Access Centre, the Child Development Centre at Hotel Dieu Hospital, and Kaymar Rehabilitation. Moreover, the research has been cleared by the Queen’s University General Research Ethics Board and approved by the school board.

The purpose of this research is to develop case descriptions concerning the delivery of occupational therapy from multiple viewpoints including students, parents, educators, case managers, and occupational therapists. Mr/Mrs. __________________ has already provided consent for their son/daughter ____ (name of child)________ to be a participant. You are being invited to participate because you are an educator who is directly involved with classroom teaching for this child, or you are involved in making decisions that affect school programs and services for this child. Case descriptions will be used in the context of focus group interviews with stakeholders involved in the planning and delivery of occupational therapy services. Stakeholders will also include parents who have experience with school-based occupational therapy services for their own child. Participants in the focus group interviews will include:

- parents who have experience with school-based occupational therapy services for their own child;
- educators and education administrators from the Limestone District School Board (LDSB) who have had direct experience with school-based occupational therapy;
- service administrators from the Southeastern Community Care Access Centre (SECCAC) who are responsible for planning and administration of occupational therapy at school; and
- senior administrators and occupational therapists from Kaymar Rehabilitation and the Child Development Centre.

Michelle Villeneuve will facilitate all focus group discussions. The overall aim of this research is to develop a multiple perspective understanding that will contribute to improved inter-agency collaboration for the planning and delivery of school-based occupational therapy services.
**Procedure**

The following procedure will be used to gather information.

_____(name of child)_______ will be observed by Michelle Villeneuve during their regular participation in classroom and school programming over a period of three months between October and December, 2008 (approximately 1 day per week). Information gathered by observation will support the researcher in describing the relationship between occupational therapy services and the child’s education program. You will have the option of asking Michelle Villeneuve not to observe you at any time.

Observations will be recorded in the form of detailed field notes made by this researcher. These field notes will record situations observed and reflections of the researcher that provide insight into the expectations for ____/(name of child)________ participation at school and the involvement of occupational therapy to support classroom and school programming for ____/(name of child)__________.

Mr/Mrs. ________________ and ______(name of child) ___________ have given their permission for Michelle Villeneuve to collect information using the following methods: __________ audiotape; video; still (digital) photos ______________. You will also be asked for your permission to allow Michelle Villeneuve to videotape, audio record, and/or take still (digital) photos of you while interacting with the child during regular classroom and school programming. You will have the option of which forms of recording you are most comfortable with. You will also have the option of choosing not to have any of these forms of recording.

You will be requested to participate in an interview. The interview will take place at a time and location that is most convenient for you. You will be asked questions related to your experiences with occupational therapy services for this child at school, your expectations for the student’s participation in school programming, and your expectations for occupational therapy services. The interview will take no longer than one (1) hour of your time. Interviews will be audio recorded to ensure accuracy of information. However, you will have the option of choosing not to have the interview recorded or to ask for the recording to be stopped at any time during the interview. You will be given the option of not responding to any questions that you are not comfortable in answering.

To develop case descriptions that accurately reflect the perspective of all individuals involved in the delivery of school-based occupational therapy services for this child, Michelle Villeneuve will conduct interviews with other educators, the child and their parent, the occupational therapist, and case manager. These individuals will also be asked questions related to their experiences with occupational therapy services for this child and will include questions related to their expectations for the child’s participation in school programming, and their expectations for occupational therapy services.
More participants are being recruited than are necessary for this study to enable purposeful selection of three cases that represent a wide spectrum of characteristics of students who are typically referred for school-based occupational therapy services. Participation is restricted to students enrolled in junior kindergarten to grade four because this is a time when referrals for school-based occupational therapy are commonly made. In selecting cases, consideration will be given to ensuring maximum diversity such that each case involves a different case manager, occupational therapist, and educator. Your participation in this research will depend upon the voluntary agreement of all participants to participate in this study.

Following the collection of information, Michelle Villeneuve will construct a case description that represents the viewpoints of all participants concerning the delivery of occupational therapy services for this child. These case descriptions may include videotape or still (digital) photos to support case descriptions if you choose these options. Otherwise, all case studies will be written descriptions.

Due to the nature of data collection and analysis, complete anonymity cannot be guaranteed. Replacing your name with a pseudonym during the development of a written case description will protect your confidentiality. All names of other participants including the student, parent, educators, case managers, and the occupational therapist will also be replaced with pseudonyms. The name of the school and any other identifying information will also be removed during the development of the case description.

Case descriptions will be discussed during focus group interviews stakeholders. Due to the nature of their role, these participants may be able to identify you and the context of the school program for this child. These individuals will be required to sign a letter of agreement indicating that they will maintain confidentiality of all participants and their context in all communication with others.

Your name, and the names of all other participants will be replaced with pseudonyms for any written or verbal presentations of this research including the oral defense of this dissertation study, conference presentations, and any publications resulting from this research. The school and community will be described but not named in any written or verbal presentations of this research.

Your confidentiality cannot be ensured if you consent to information gathering in the form of video or still (digital) photography. If you consent to video or still photography recordings, you will be given the option of limiting the use of these recordings to use in focus group discussions facilitated by the researcher in collaboration with participants. You will be given the option of consenting to the use of any video or still photography obtained during this research in any publications or professional activities arising from this research study (for example: dissertation publication; presentations at conferences or seminars, publications in academic journals, or university teaching). Video and still photos will only be taken if all other participants involved in the case have also consented.
to their use. Video and still photography will only be used for the purposes you consent to and will only be used if all individuals involved in the case study have provided informed, written consent for the same use. You can request to review any video or still photos taken of you at any time.

All information collected from you will be stored on a password protected computer or in a locked cabinet available only to the principal investigator, supervisor, or research assistant. If you consent to the use of video or still photos, all recordings that are not used in the development of case descriptions will be destroyed. All information collected from you will be stored for a period of five years following the successful oral defense and publication of Michelle Villeneuve’s dissertation study. Only if you provide consent for the use of video or still photographs to be used in publications or professional activities arising from this research will the video or photographs of you be saved indefinitely.

Your participation in this research is voluntary. If you refuse to participate, it will not affect you or the child’s occupational therapy program in any way. You may withdraw at any time without prejudice. If at any time you choose not to participate, any information collected from you will be destroyed. If you have consented to video or still photography, you may withdraw consent for use of any video or still recordings at any time.

There are no known risks to participation in this study and there are no direct benefits. However, it is hoped that information gathered from this study will benefit planners of school-based occupational therapy services through the SHSS program in southeastern Ontario. Results from this study may provide direction for inter-agency collaboration to improve the planning and delivery of school-based occupational therapy in this region. Results from this study may prove informative for the planning and delivery of occupational therapy through SHSS programs in other regions across Ontario.

**Researcher:**
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Consent Form (Educator)

Title of Research Study: *A Multiple Perspective Examination of School-based Occupational Therapy Services*

I have read and understood the letter of information for this research study. I have been given sufficient time to consider the information and have had the opportunity to ask questions which have been answered to my satisfaction. I am voluntarily signing this consent form and will receive a copy of this form for my information. I understand the confidentiality measures being taken in this study. If at any time I have further questions or concerns, I can contact:

**Researcher:**
Michelle Villeneuve, PhD (Candidate), Faculty of Education, Queen’s University  
(613) 547 – 9914  
mv6@queensu.ca

**Supervisor:**
Dr. Nancy Hutchinson, Professor, Faculty of Education, Queen’s University  
(613) 533 – 3025  
hutchinn@queensu.ca

For questions, concerns or complaints about the research ethics of this study, contact the Education Research Ethics Board at ereb@queensu.ca or the chair of the General Research Ethics Board, Dr. Joan Stevenson (613) 533 – 6081 chair.greb@queensu.ca.

By signing this consent form, I am indicating that I agree to the participation in this research study as described in the letter of information. I understand that Michelle Villeneuve will collect information through extended observation of a student in my class/school program. I understand that observations will include interactions I have with the student during their educational program and interactions I have with the student’s occupational therapist during their regularly scheduled visits for this student. I understand I will also be invited to participate in an interview expected to last one (1) hour.

I grant permission for the researcher to collect information only under the following conditions:

**AUDIO RECORDINGS:**  
YES NO Initial

I grant permission for audiotaped recordings of me for the purpose of developing case descriptions that will be shared with other participants during focus group discussions. I understand that all identifying information will be removed.
during the development of these case descriptions to protect my confidentiality.

**VIDEO RECORDINGS:**

I grant permission for video recordings of me to be used in the development of case descriptions that will be shared with other participants during focus group discussions.

I grant permission for video recordings of me to be used in any publications or professional activities arising from this research study (for example: dissertation publication; presentations at conferences or seminars, publications in academic journals, or university teaching). I understand that giving permission for video recordings to be used in publications or professional activities means that my confidentiality is no longer protected.

**STILL (DIGITAL) PHOTOGRAPHY RECORDINGS:**

I grant permission for still (digital) photos of me to be used in the development of case descriptions that will be shared with other participants during focus group discussions.

I grant permission for still (digital) photos of me to be used in any publications or professional activities arising from this research study (for example: dissertation publication; presentations at conferences or seminars, publications in academic journals, or university teaching). I understand that giving permission for photos to be used in publications or professional activities means that my confidentiality is no longer protected.

I understand that I can withdraw this consent at any time and that all information collected will be destroyed. I understand that if I withdraw consent for use of video or still photography prior to any publications arising from this research, all recorded information will be destroyed. I understand that I cannot withdraw video or still photographs that have already appeared in publications or presentations arising from this research.
Please sign one copy of this Consent Form and return to Michelle Villeneuve. Retain the second copy for your records.

________________________________________
Name of Educator (print)

________________________________________
Signature of Educator          Date
Title of Research Study: *A Multiple Perspective Examination of School-based Occupational Therapy Services*

Dear Case Manager,

You are being asked to participate in case study research as part of a study examining the delivery of occupational therapy services at school. This research is being conducted by Michelle Villeneuve, a graduate student in the Faculty of Education at Queen’s University under the supervision of Dr. Nancy Hutchinson, Professor. The research has the support of the Community Care Access Centre, the Child Development Centre at Hotel Dieu Hospital, and Kaymar Rehabilitation. Moreover, the research has been cleared by the Queen’s University General Research Ethics Board and approved by the school board.

The purpose of this research is to develop case descriptions concerning the delivery of occupational therapy from multiple viewpoints including students, parents, educators, case managers, and occupational therapists. Mr/Mrs. __________________ has already provided consent for their son/daughter ___(name of child)________ to be a participant in this case study research. You are being invited to participate because you are the case manager who is directly involved planning, administration, and monitoring of occupational therapy services for this child at school.

Case descriptions will be used in the context of focus group interviews with stakeholders involved in the planning and delivery of occupational therapy services. Stakeholders will also include parents who have experience with school-based occupational therapy services for their own child. Participants in the focus group interviews will include:

- parents who have experience with school-based occupational therapy services for their own child;
- educators and education administrators from the Limestone District School Board (LDSB) who have had direct experience with school-based occupational therapy;
- service administrators from the Southeastern Community Care Access Centre (SECCAC) who are responsible for planning and administration of occupational therapy at school; and
- senior administrators and occupational therapists from Kaymar Rehabilitation and the Child Development Centre.

Michelle Villeneuve will facilitate all focus group discussions. The overall aim of this research is to develop a multiple perspective understanding that will contribute to
improved inter-agency collaboration for the planning and delivery of school-based occupational therapy services.

**Procedure**
The following procedure will be used to gather information.

___(name of child)_________ will be observed by Michelle Villeneuve during their regular participation in classroom and school programming over a period of three months between October and December, 2008. Wherever possible, observations will also include case conferences/meetings about this child’s occupational therapy program. Information gathered by observation will support the researcher in describing the relationship between occupational therapy services and the child’s education program. You will have the option of asking Michelle Villeneuve not to observe you at any time.

Observations will be recorded in the form of detailed field notes made by this researcher. These field notes will record situations observed and reflections of the researcher that provide insight into the expectations for _____(name of child)______________ participation at school and the involvement of occupational therapy to support classroom and school programming for this student.

You will be requested to participate in an interview. The interview will take place at a time and location that is most convenient for you. You will be asked questions related to your experiences with occupational therapy services for this child at school, your understanding of the expectations for the student’s participation in school programming, and your expectations for occupational therapy services. The interview will take no longer than one (1) hour of your time. Interviews will be audio recorded to ensure accuracy of information. However, you will have the option of choosing not to have the interview recorded or to ask for the recording to be stopped at any time during the interview. You will be given the option of not responding to any questions that you are not comfortable in answering.

To develop case descriptions that accurately reflect the perspective of all individuals involved in the delivery of school-based occupational therapy services for this child, Michelle Villeneuve will conduct interviews with the child and their parent, educators, and the occupational therapist. These individuals will also be asked questions related to their experiences with occupational therapy services for this child and will include questions related to their expectations for the child’s participation in school programming, and their expectations for occupational therapy services.

More participants are being recruited than are necessary for this study to enable purposeful selection of three cases that represent a wide spectrum of specific characteristics of students who are typically referred for school-based occupational therapy services. Participation is restricted to students enrolled in junior kindergarten to grade four because this is a time when referrals for school-based occupational therapy are commonly made. In selecting cases, consideration will be given to ensuring maximum
diversity such that each case involves a different case manager, occupational therapist, and educator. Your participation in this research will depend upon the voluntary agreement of all participants to participate in this study.

Following the collection of information, Michelle Villeneuve will construct a case description that represents the viewpoint of all participants concerning the delivery of occupational therapy services for this child.

Due to the nature of data collection and analysis, complete anonymity cannot be guaranteed. Replacing your name with a pseudonym during the development of a written case description will protect your confidentiality. All names of other participants including the student, parent, educators, and the occupational therapist will also be replaced with pseudonyms. The name of the school and any other identifying information will also be removed during the development of the case description.

Case descriptions will be discussed during focus group interviews with the participants described above. Due to the nature of their role, these participants may be able to identify you and the context of the school program for this child. These individuals will be required to sign a letter of agreement indicating that they will maintain confidentiality of all participants and their context in all communication with others.

Your name, and the names of all other participants will be replaced with pseudonyms for any written or verbal presentations of this research including the oral defense of this dissertation study, conference presentations, and any publications resulting from this research. The school and community will be described but not named in any written or verbal presentations of this research.

All information collected from you will be stored on a password protected computer or in a locked cabinet available only to the principal investigator, supervisor, or research assistant. All information collected from you will be stored for a period of five years following the successful oral defense and publication of Michelle Villeneuve’s dissertation study.

Your participation in this research is voluntary. If you refuse to participate, it will not affect you or the child’s school program in any way. You may withdraw at any time without prejudice. If at any time you choose not to participate, any information collected from you will be destroyed.

There are no known risks to participation in this study and there are no direct benefits. However, it is hoped that information gathered from this study will benefit planners of school-based occupational therapy services through the SHSS program in southeastern Ontario. Results from this study may provide direction for inter-agency collaboration to improve the planning and delivery of school-based occupational therapy in this region.
Results from this study may prove informative for the planning and delivery of occupational therapy through SHSS programs in other regions across Ontario.

Michelle Villeneuve, PhD (Candidate), Faculty of Education, Queen’s University
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For questions, concerns or complaints about the research ethics of this study, contact the Education Research Ethics Board at erub@queensu.ca or the chair of the General Research Ethics Board, Dr. Joan Stevenson (613) 533 – 6081 chair.greb@queensu.ca.
Title of Research Study: *A Multiple Perspective Examination of School-based Occupational Therapy Services*

I have read and understood the letter of information for this research study. I have been given sufficient time to consider the information and have had the opportunity to ask questions which have been answered to my satisfaction. I am voluntarily signing this consent form and will receive a copy of this form for my information. I understand the confidentiality measures being taken in this study. If at any time I have further questions or concerns, I can contact:

**Researcher:**
Michelle Villeneuve, PhD (Candidate), Faculty of Education, Queen’s University  
(613) 547 – 9914  
mv6@queensu.ca

**Supervisor:**
Dr. Nancy Hutchinson, Professor, Faculty of Education, Queen’s University  
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hutchinn@queensu.ca

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By signing this consent form, I am indicating that I agree to participation in this research study as described in the letter of information. I understand that Michelle Villeneuve will collect information through observation of me during regularly scheduled case conferences and meetings for the student participant involved in this case study research. I understand I will also be invited to participate in an interview expected to last one (1) hour.

**AUDIO RECORDINGS:**

I grant permission for audiotaped recordings of me for the purpose of developing case descriptions that will be shared with other participants during focus group discussions. I understand that all identifying information will be removed during the development of these case descriptions to protect my confidentiality.
I understand that I can withdraw this consent at any time and that all information collected will be destroyed.

**Please sign one copy of this Consent Form and return to** Michelle Villeneuve. **Retain the second copy for your records.**

_______________________________
Case Manager (print)

_______________________________  ________________________
Case Manager Signature   Date
Title of Research Study: *A Multiple Perspective Examination of School-based Occupational Therapy Services*

Dear Occupational Therapist,

You are being asked to participate in case study research as part of a study examining the delivery of occupational therapy services at school. This research is being conducted by Michelle Villeneuve, a graduate student in the Faculty of Education at Queen’s University under the supervision of Dr. Nancy Hutchinson, Professor. The research has the support of the Community Care Access Centre, the Child Development Centre at Hotel Dieu Hospital, and Kaymar Rehabilitation. Moreover, the research has been cleared by the Queen’s University General Research Ethics Board and approved by the school board.

The purpose of this research is to develop case descriptions concerning the delivery of occupational therapy from multiple viewpoints including students, parents, educators, case managers, and occupational therapists. Mr/Mrs. _________________ has already provided consent for their son/daughter ____ (name of child)________ to be a participant in this case study research. You are being invited to participate because you are an occupational therapist who is directly involved with service provision for this child at school.

Case descriptions will then be used in the context of focus group interviews with stakeholders involved in the planning and delivery of occupational therapy services. Stakeholders will also include parents who have experience with school-based occupational therapy services for their own child. A group of stakeholders will be invited as participants in this research study to support a systematic examination of school-based occupational therapy services from multiple perspectives. Participants in the focus group interviews will include:

- parents who have experience with school-based occupational therapy services for their own child;
- educators and education administrators from the Limestone District School Board (LDSB) who have had direct experience with school-based occupational therapy;
- service administrators from the Southeastern Community Care Access Centre (SECCAC) who are responsible for planning and administration of occupational therapy at school; and
- senior administrators and occupational therapists from Kaymar Rehabilitation and the Child Development Centre.
Michelle Villeneuve will facilitate all focus group discussions. The overall aim of this research is to develop a multiple perspective understanding that will contribute to improved inter-agency collaboration for the planning and delivery of school-based occupational therapy services.

**Procedure**

The following procedure will be used to gather information.

___(name of child)_______ will be observed by Michelle Villeneuve during their regular participation in classroom and school programming over a period of three months between October and December, 2008. Observations will also include interactions between you and the child during regularly scheduled visits at school. Information gathered by observation will support the researcher in describing the relationship between occupational therapy services and the child’s education program. You will have the option of asking Michelle Villeneuve not to observe you at any time.

Observations will be recorded in the form of detailed field notes made by this researcher. These field notes will record situations observed and reflections of the researcher that provide insight into the expectations for ___(name of child)________ participation at school and the involvement of occupational therapy to support classroom and school programming for ___(name of child)__________.

Mr/Mrs. ___________________ and ___(name of child)_________ have given their permission for Michelle Villeneuve to collect information using the following methods: _______ audiotape; video; still (digital) photos ___________. You will also be asked for your permission to allow Michelle Villeneuve to videotape, audio record, and/or take still (digital) photos of you while interacting with the child. You will have the option of which forms of recording you are most comfortable with. You will also have the option of choosing not to have any of these forms of recording.

You will be requested to participate in an interview. The interview will take place at a time and location that is most convenient for you. You will be asked questions related to your experiences with this child at school, your expectations for the student’s participation in school programming, and your expectations for occupational therapy services. The interview will take no longer than one (1) hour of your time. Interviews will be audio recorded to ensure accuracy of information. However, you will have the option of choosing not to have the interview recorded or to ask for the recording to be stopped at any time during the interview. You will be given the option of not responding to any questions that you are not comfortable in answering.

To develop case descriptions that accurately reflect the perspective of all individuals involved in the delivery of school-based occupational therapy services for this child,
Michelle Villeneuve will conduct interviews with the child and their parent, educators, and the case manager. These individuals will also be asked questions related to their experiences with occupational therapy services for this child and will include questions related to their expectations for the child’s participation in school programming, and their expectations for occupational therapy services.

More participants are being recruited than are necessary for this study to enable purposeful selection of three cases that represent a wide spectrum of specific characteristics of students who are typically referred for school-based occupational therapy services. Participation is restricted to students enrolled in junior kindergarten to grade four because this is a time when referrals for school-based occupational therapy are commonly made. In selecting cases, consideration will be given to ensuring maximum diversity such that each case involves a different case manager, occupational therapist, and educator. Your participation in this research will depend upon the voluntary agreement of all participants to participate in this study.

Following the collection of information, Michelle Villeneuve will construct a case description that represents the viewpoint of all participants concerning the delivery of occupational therapy services for this child. These case descriptions may include videotape or still (digital) photos to support case descriptions if you choose these options. Otherwise, all case studies will be written descriptions.

Due to the nature of data collection and analysis, complete anonymity cannot be guaranteed. Replacing your name with a pseudonym during the development of a written case description will protect your confidentiality. All names of other participants including the student, parent, educators, and case managers will also be replaced with pseudonyms. The name of the school, your place of employment, and any other identifying information will also be removed during the development of the case description.

Case descriptions will be discussed during focus group interviews with stakeholders. Due to the nature of their role, these participants may be able to identify you and the context of the school program for this child. These individuals will be required to sign a letter of agreement indicating that they will maintain confidentiality of all participants and their context in all communication with others.

Your name, and the names of all other participants will be replaced with pseudonyms for any written or verbal presentations of this research including the oral defense of this dissertation study, conference presentations, and any publications resulting from this research. The school, your place of employment, and community will be described but not named in any written or verbal presentations of this research.

Your confidentiality cannot be ensured if you consent to information gathering in the form of video or still (digital) photography. If you consent to video or still photography
recordings, you will be given the option of limiting the use of these recordings to use in focus group discussions facilitated by the researcher in collaboration with participants. You will be given the option of consenting to the use of any video or still photography obtained during this research in any publications or professional activities arising from this research study (for example: dissertation publication; presentations at conferences or seminars, publications in academic journals, or university teaching). Video and still photos will only be taken if all other participants involved in the case have also consented to their use. Video and still photography will only be used for the purposes you consent to and will only be used if all individuals involved in the case study have provided informed, written consent for the same use. You can request to review any video or still photos taken of you at any time.

All information collected from you will be stored on a password protected computer or in a locked cabinet available only to the principal investigator, supervisor, or research assistant. If you consent to the use of video or still photos, all recordings that are not used in the development of case descriptions will be destroyed. All information collected from you will be stored for a period of five years following the successful oral defense and publication of Michelle Villeneuve’s dissertation study. Only if you provide consent for the use of video or still photographs to be used in publications or professional activities arising from this research will the video or photographs of you be saved indefinitely.

Your participation in this research is voluntary. If you refuse to participate, it will not affect you or the child’s occupational therapy program in any way. You may withdraw at any time without prejudice. If at any time you choose not to participate, any information collected from you will be destroyed. If you have consented to video or still photography, you may withdraw consent for use of any video or still recordings at any time.

There are no known risks to participation in this study and there are no direct benefits. However, it is hoped that information gathered from this study will benefit planners of school-based occupational therapy services through the SHSS program in southeastern Ontario. Results from this study may provide direction for inter-agency collaboration to improve the planning and delivery of school-based occupational therapy in this region. Results from this study may prove informative for the planning and delivery of occupational therapy through SHSS programs in other regions across Ontario.

Researcher:
Michelle Villeneuve, PhD (Candidate), Faculty of Education, Queen’s University (613) 547 – 9914
mv6@queensu.ca
Supervisor:
Dr. Nancy Hutchinson, Professor, Faculty of Education, Queen’s University
(613) 533 – 3025
hutchinn@queensu.ca

For questions, concerns or complaints about the research ethics of this study, contact the Education Research Ethics Board at ereb@queensu.ca or the chair of the General Research Ethics Board, Dr. Joan Stevenson (613) 533 – 6081 chair.greb@queensu.ca.
Consent Form (Occupational Therapist)

Title of Research Study: *A Multiple Perspective Examination of School-based Occupational Therapy Services*

I have read and understood the letter of information for this research study. I have been given sufficient time to consider the information and have had the opportunity to ask questions which have been answered to my satisfaction. I am voluntarily signing this consent form and will receive a copy of this form for my information. I understand the confidentiality measures being taken in this study. If at any time I have further questions or concerns, I can contact:

**Researcher:**
Michelle Villeneuve, PhD (Candidate), Faculty of Education, Queen’s University
(613) 547 – 9914
mv6@queensu.ca

**Supervisor:**
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By signing this consent form, I am indicating that I agree to the participation in this research study as described in the letter of information. I understand that Michelle Villeneuve will collect information through extended observation of a student on my caseload and that these observations will include my interactions with this child and educators during my regularly scheduled visits to provide occupational therapy services for this child at school. I understand I will also be invited to participate in an interview that is expected to last one (1) hour.

I grant permission for the researcher to collect information only under the following conditions:

**AUDIO RECORDINGS:**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>Initial</th>
</tr>
</thead>
</table>

I grant permission for audiotaped recordings of me for the purpose of developing case descriptions that will be shared with other participants during focus group discussions. I understand that all identifying information will be removed.
during the development of these case descriptions to protect my confidentiality.

**VIDEO RECORDINGS:**

I grant permission for video recordings of me to be used in the development of case descriptions that will be shared with other participants during focus group discussions.

I grant permission for video recordings of me to be used in any publications or professional activities arising from this research study (for example: dissertation publication; presentations at conferences or seminars, publications in academic journals, or university teaching). I understand that giving permission for video recordings to be used in publications or professional activities means that my confidentiality is no longer protected.

**STILL (DIGITAL) PHOTOGRAPHY RECORDINGS:**

I grant permission for still (digital) photos of me to be used in the development of case descriptions that will be shared with other participants during focus group discussions.

I grant permission for still (digital) photos of me to be used in any publications or professional activities arising from this research study (for example: dissertation publication; presentations at conferences or seminars, publications in academic journals, or university teaching). I understand that giving permission for photos to be used in publications or professional activities means that my confidentiality is no longer protected.

I understand that I can withdraw this consent at any time and that all information collected will be destroyed. I understand that if I withdraw consent for use of video or still photography prior to any publications arising from this research, all recorded information will be destroyed. I understand that I cannot withdraw video or still photographs that have already appeared in publications or presentations arising from this research.
Please sign one copy of this Consent Form and return to Michelle Villeneuve. Retain the second copy for your records.

________________________________________
Occupational Therapist (print)

________________________________________
Occupational Therapist Signature Date
Appendix B

Information and Consent Forms for Phase Two
Letter of Information and Consent for Focus Group Participants

Title of Research Study: *A Multiple Perspective Examination of School-based Occupational Therapy Services*

Dear ____________________,

You are being asked to participate in a series of group interviews as part of a study examining the delivery of occupational therapy services at school. This research is being conducted by Michelle Villeneuve, a graduate student in the Faculty of Education at Queen’s University under the supervision of Dr. Nancy Hutchinson, Professor. The research has the support of the Community Care Access Centre, the Child Development Centre at Hotel Dieu Hospital, and Kaymar Rehabilitation. Moreover, the research has been cleared by the Queen’s University General Research Ethics Board and approved by the school board.

The first part of this study involved case study research to explore the delivery of occupational therapy for three students from multiple viewpoints including students, parents, educators, case managers, and occupational therapists. The purpose of this next phase of the research is to involve stakeholders in a participatory analysis and interpretation of each case description through a series of facilitated group interviews. You are being invited as a potential participant in these group interviews along with other educators, administrators, and occupational therapists who have experience with the planning and implementation of school-based occupational therapy in this region. Focus group interviews will also include parents who have experience with school-based occupational therapy services for their own child. You have been selected as a potential participant because of your experience with school-based occupational therapy services.

Focus group interviews will be scheduled at a mutually convenient time and location for all participants. Each focus group discussion will be no longer than one and a half (1.5) hours. There will be two group interviews conducted to support analysis of each case description. A total of six (6) group interviews are anticipated. These focus group discussions are expected to take place between January – June, 2009. Michelle Villeneuve will facilitate all group interviews by presenting each case description, facilitating discussion to enable reflection on personal experiences with occupational therapy that resonate from the cases, and encouraging all participants to provide their perspective on the situations presented in the cases descriptions. You do not have to respond to any questions that you do not feel comfortable in answering.

Group discussions will be audiorecorded and transcribed by a research assistant and analyzed by Michelle Villeneuve to reveal common and divergent interpretations made by participants. These findings will be presented to all participants during subsequent group interviews to help raise awareness concerning the multiple perspectives of
stakeholders and to explore possibilities for inter-agency collaboration in delivery of school-based occupational therapy services.

Knowledge generated through collaborative analysis of these case descriptions will be used to support the development of a multiple perspective framework for conceptualizing and implementing inter-agency collaboration for the delivery of school-based occupational therapy.

Due to the nature of data collected through group interview methods, your anonymity cannot be guaranteed. In addition, due to the nature of the case descriptions and your role, you may be able to identify individuals from the case descriptions, and the context of programs or services. Consequently, you will be required to sign a letter of agreement indicating that that you will maintain confidentiality of all participants in any communication with others.

All information collected from you will be stored on a password protected computer or in a locked cabinet available only to the principle investigator, supervisor, or research assistant.

Your confidentiality will be protected by replacing your name with a pseudonym for any written or verbal presentations of this research including the oral defense of this dissertation study, conference presentations, and any publications resulting from this research.

Your participation in this research is voluntary. If you refuse to participate, it will not have any impact on you or the organization where you work. You may withdraw at any time without prejudice. If at any time you choose not to participate, any information collected from you will be destroyed.

There are no known risks to participation in this study and there are no direct benefits. However, it is hoped that information gathered from this study will benefit planners of school-based occupational therapy services through the SHSS program in southeastern Ontario. Results from this study may provide direction for inter-agency collaboration to improve the planning and delivery of school-based occupational therapy in this region. Results from this study may prove informative for the planning and delivery of occupational therapy through SHSS programs in other regions across Ontario.
Researcher:
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(613) 547 – 9914
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Dr. Nancy Hutchinson, Professor, Faculty of Education, Queen’s University
(613) 533 – 3025
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For questions, concerns or complaints about the research ethics of this study, contact the Education Research Ethics Board at ereb@queensu.ca or the chair of the General Research Ethics Board, Dr. Joan Stevenson (613) 533 – 6081 chair.greb@queensu.ca.
Consent (Focus Group Participants)

Title of Research Study: *A Multiple Perspective Examination of School-based Occupational Therapy Services*

I have read and understood the letter of information for this research study. I have been given sufficient time to consider the information and have had the opportunity to ask questions which have been answered to my satisfaction. I am voluntarily signing this consent form and will receive a copy of this form for my information. If at any time I have further questions or concerns, I can contact:

**Researcher:**
Michelle Villeneuve, PhD (Candidate), Faculty of Education, Queen’s University  
(613) 547 – 9914  
mv6@queensu.ca

**Supervisor:**
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For questions, concerns or complaints about the research ethics of this study, contact the Education Research Ethics Board at ereb@queensu.ca or the chair of the General Research Ethics Board, Dr. Joan Stevenson (613) 533 – 6081 chair.greb@queensu.ca.

By signing this consent form, I am indicating that I agree to participation in this research study as described in the letter of information. I understand that Michelle Villeneuve will collect information from me through a facilitated group interview format. I understand that I will be invited to participate in six (6) group interviews between January – June, 2009. I understand that each interview will last one and a half (1.5) hours.

I understand that due to the nature of this study I will be able to identify other participants involved in the group interviews. In addition, I may be in a position to identify individuals presented in case descriptions. As a result I understand that I will be asked to sign a letter of agreement indicating that I will maintain confidentiality of all participants and their context in any communication I have with others. I understand the measures being taken in this study to protect my own confidentiality.

I understand that I can withdraw this consent at any time and that all information collected will be destroyed. I understand that if I withdraw consent all information collected from me will be destroyed.
Please sign one copy of this Consent Form and return to Error! Contact not defined.. Retain the second copy for your records.

__________________________________________
Participant (print)

__________________________________________  ________________
Participant Signature    Date
Letter of Information (Participatory Action Research Team Members)

Title of Research Study: *A Multiple Perspective Examination of School-based Occupational Therapy Services*

Dear _____________________,

As you are aware, Michelle Villeneuve graduate student in the Faculty of Education at Queen’s University, is conducting research examining the delivery of occupational therapy services at school. This research is being conducted under the supervision of Dr. Nancy Hutchinson, Professor. The research has the support of the Community Care Access Centre, the Child Development Centre at Hotel Dieu Hospital, and Kaymar Rehabilitation. Moreover, the research has been cleared by the Queen’s University General Research Ethics Board and approved by the school board.

The first part of this study involved case study research to explore the delivery of occupational therapy for three students from multiple viewpoints including students, parents, educators, case managers, and occupational therapists. The purpose of this next phase of the research is to involve stakeholders in a participatory analysis and interpretation of each case description through a series of facilitated group interviews. You are being invited to participate in these group interviews along with other educators, administrators, and occupational therapists who have experience with the planning and implementation of school-based occupational therapy in this region. Focus group interviews will also include parents who have experience with school-based occupational therapy services for their own child. You have been selected as a participant because of your experience with school-based occupational therapy services.

Focus group interviews will be scheduled at a mutually convenient time and location for all participants. Each focus group discussion will be no longer than one and a half (1.5) hours. There will be two group interviews conducted to support analysis of each case description. A total of six (6) group interviews are anticipated. These focus group discussions are expected to take place between January – June, 2009. Michelle Villeneuve will facilitate all group interviews by presenting each case description, facilitating discussion to enable reflection on personal experiences with occupational therapy that resonate from the cases, and encouraging all participants to provide their perspective on the situations presented in the cases descriptions. You do not have to respond to any questions that you do not feel comfortable in answering.

Group discussions will be audiorecorded and transcribed by a research assistant and analyzed by Michelle Villeneuve to reveal common and divergent interpretations made by participants. These findings will be presented to all participants during subsequent group interviews to help raise awareness concerning the multiple perspectives of
stakeholders and to explore possibilities for inter-agency collaboration in delivery of school-based occupational therapy services.

Knowledge generated through collaborative analysis of these case descriptions will be used to support the development of a multiple perspective framework for conceptualizing and implementing inter-agency collaboration for the delivery of school-based occupational therapy.

Upon completion of this phase of the research, you are also invited to participate in a meeting with other members of the participatory action research team to discuss findings from this study and to seek your feedback concerning the proposed framework. The purpose of this meeting is to consider the potential influence of findings on service planning decisions and to seek your reflections on the participatory and collaborative nature of this research study. This meeting will also help to bring our collaboration in this research to a close. This group meeting will be audiotaped and transcribed. Michelle Villeneuve will use the data from this final meeting to support a systematic and reflective account of research decisions and actions taken in this participatory examination of school-based occupational therapy practice.

Due to the nature of data collected through group interview methods, your anonymity cannot be guaranteed. In addition, due to the nature of the case descriptions and your role, you may be able to identify individuals from the case descriptions, and the context of programs or services. Consequently, you will be required to sign a letter of agreement indicating that that you will maintain confidentiality of all participants in any communication with others.

All information collected from you will be stored on a password protected computer or in a locked cabinet available only to the principle investigator, supervisor, or research assistant.

Your confidentiality will be protected by replacing your name with a pseudonym for any written or verbal presentations of this research including the oral defense of this dissertation study, conference presentations, and any publications resulting from this research.

Your participation in this research is voluntary. If you refuse to participate, it will not have any impact on you or the organization where you work. You may withdraw at any time without prejudice. If at any time you choose not to participate, any information collected from you will be destroyed.

There are no known risks to participation in this study and there are no direct benefits. However, it is hoped that information gathered from this study will benefit planners of school-based occupational therapy services through the SHSS program in southeastern Ontario. Results from this study may provide direction for inter-agency collaboration to
improve the planning and delivery of school-based occupational therapy in this region. Results from this study may prove informative for the planning and delivery of occupational therapy through SHSS programs in other regions across Ontario.

**Researcher:**
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Consent (Participatory Action Research Team Members)

Title of Research Study: *A Multiple Perspective Examination of School-based Occupational Therapy Services*

I have read and understood the letter of information for this research study. I have been given sufficient time to consider the information and have had the opportunity to ask questions which have been answered to my satisfaction. I am voluntarily signing this consent form and will receive a copy of this form for my information. I understand the confidentiality measures being taken in this study. If at any time I have further questions or concerns, I can contact:

**Researcher:**
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By signing this consent form, I am indicating that I agree to participation in this research study as described in the letter of information. I understand that Michelle Villeneuve will collect information from me through a facilitated group interview format. I understand that I will be invited to participate in six (6) group interviews between January – June, 2009. I understand that each interview will last one and a half (1.5) hours. I understand that I will also be invited to participate in an additional meeting to discuss the findings of this research and to provide my feedback. I understand that this meeting is expected to take two (2) hours.

I understand that due to the nature of this study I will be able to identify other participants involved in the group interviews. In addition, I may be in a position to identify individuals presented in case descriptions. As a result I understand that I will be asked to sign a letter of agreement indicating that that I will maintain confidentiality of all participants and their context in any communication I have with others.

I understand that I can withdraw this consent at any time and that all information collected will be destroyed. I understand that if I withdraw consent all information collected from me will be destroyed.
Please sign one copy of this Consent Form and return to Error! Contact not defined.. Retain the second copy for your records.

________________________________________
Participant (print)

________________________________________    _________________
Participant Signature     Date
Letter of Agreement (Focus Group Participants & Research Assistant)

Title of Research Study: *A Multiple Perspective Examination of School-based Occupational Therapy Services*

I understand that due to the nature of this study, I may be in a position to identify individuals presented in case descriptions. In addition, the nature of sharing information through group interviews means that I will be able to identify other participants of the group interviews.

By signing this letter of agreement, I am indicating that I agree to maintain confidentiality of all participants and their context in any communication I have with others.

Please sign one copy of this Letter of Agreement and return to Michelle Villeneuve. Retain the second copy for your records.

________________________________________
Participant (print)

________________________________________  ________________________
Participant Signature    Date
Appendix C

Focused Discussions: Multiple Perspective Examination of School-Based Occupational Therapy Services
Schedule & Plan

<table>
<thead>
<tr>
<th>Date</th>
<th>Discussion Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 7</td>
<td>• Multiple Perspective Case Study Research - Background Information&lt;br&gt;• Focused discussion - your role and experience with SBOT Processes and Procedures</td>
</tr>
<tr>
<td>October 21</td>
<td>• Case Study #1 - Presentation of Key Findings&lt;br&gt;• Focused discussion - connect findings to your experience</td>
</tr>
<tr>
<td>November 4</td>
<td>• Case Study #2 - Presentation of Key Findings&lt;br&gt;• Focused discussion - connect findings to your experience</td>
</tr>
<tr>
<td>November 18</td>
<td>• Case Study #3 - Presentation of Key Findings&lt;br&gt;• Focused discussion - connect findings to your experience</td>
</tr>
<tr>
<td>December 2</td>
<td>Focused discussion&lt;br&gt;• Imagining how SBOT could be delivered&lt;br&gt;• Recommendations for service planning</td>
</tr>
<tr>
<td>December 16</td>
<td>Participatory Action Research Team&lt;br&gt;Focused discussion&lt;br&gt;• Reflection on recommendations emerging from focus group discussions</td>
</tr>
</tbody>
</table>

Consultation: An approach to service provision in which the consultant, a specialist, assists another person in a problem-solving process with regards to a third individual, the client (Erchul & Martens, 2002; Kampwirth, 2006).

Collaborative Consultation: An interactive problem-solving process that enables people with diverse expertise to generate creative solutions to mutually defined problems (Idol et al., 1994).

School Health Support Service – OT Program Flow Chart

<table>
<thead>
<tr>
<th>Activity</th>
<th>Role</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identified need for OT service</td>
<td>Varied (e.g., teacher, special educator; clinical psychologist; parent; etc.)</td>
<td>• Varied (e.g., transition planning; IPRC; IEP)</td>
</tr>
<tr>
<td>Referral to CCAC</td>
<td>VP completes referral</td>
<td>• Verbal consent from family (telephone or in person)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• CCAC Service Request form/Guidelines for School Health Referrals</td>
</tr>
<tr>
<td>CCAC processes referral</td>
<td>Administrative</td>
<td>?</td>
</tr>
<tr>
<td>CCAC processes referral and CM completes intake assessment</td>
<td>Case Manager&lt;br&gt;• Determines eligibility&lt;br&gt;• Sends referral to OT provider;&lt;br&gt;• Authorizes 3 visits (2 for assessment, 1 for case conference)</td>
<td>• CCAC SHSS Eligibility Policy (based on Reg. 494/00 Long Term Care Act, 1994)&lt;br&gt; • Service Authorization Form&lt;br&gt; • Client Information Referral Form&lt;br&gt; • Service Provider Referral Form&lt;br&gt; • Copy of Service Request Form&lt;br&gt; • Functional Assessment School Form&lt;br&gt; • Authorization to Collect, Use, &amp; Disclose Personal Health Information Form (Health Care consent Act)</td>
</tr>
<tr>
<td>OT Provider processes referral</td>
<td>Administrative</td>
<td>?</td>
</tr>
<tr>
<td>Activity</td>
<td>Role</td>
<td>Tools</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>----------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| **OT picks up referral within 2 months and initiates assessment** | OT calls                                    | • Family to obtain verbal consent to initiate OT assessment at school  
• School to schedule gain entry/schedule first visit                 |
|                                              | OT assessment                                | • OT Chart/File Notes                                                 |
|                                              | OT                                           | • Clarifies reason for referral with educators and collects relevant information  
• Sends initial assessment report to CCAC outlining goals/action or intervention  
• Schedules & completes second assessment visit  
• Calls CCAC to inform cm that a case conference can be scheduled  
CCAC Technical Assistant schedules case conference | • Varied (e.g., observation; interview; standardized assessment; checklists; etc.)  
• Assessment/Re-Assessment Service Provider Report  
• OT Chart/File Notes |
|                                              | Formal assessment report writing              | • Formal OT Assessment Report                                         |
|                                              | OT                                           | • The reason for referral  
• Assessment methods  
• Findings  
• Recommendations  
• Goals for OT involvement |
|                                              | Case conference                              | • Formal meeting at school  
• Formal OT Assessment Recommendations  
• Service Authorization form  
• OT Chart/File Note |
|                                              | OT                                           | • Shares assessment findings with those invited to case conference (typically includes VP; special educator; parent; case manager)  
• Recommends frequency of visits required to implement recommendation  
• Requests verbal consent from family to provide service to their child at school  
• Schedules first Intervention visit with school  
Case manager  
• chairs case conference  
• authorizes service |
|                                              | Case manager                                 | • School/Family “on receiving end” of information presented at case conference; can accept, decline, or modify recommendations made by OT with family input/consent |

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<table>
<thead>
<tr>
<th>Activity</th>
<th>Role</th>
<th>Tools</th>
</tr>
</thead>
</table>
| Implementation of OT service at school | Intervention is varied: (e.g., 1:1 pull out service; equipment recommendations; OT/educators share information; models for EA; conducts further assessments; recommends referrals; sends homework home; etc.) | Visit frequency options based on CCAC guidelines:  
* Consultation – monthly visits, up to 10  
* Block Treatment – weekly visits, up to 8 |
| OT documents: | OT Documentation:  
* For themselves  
* In duplicate for family & educators  
* Summary for CM (midway through authorized visits; year-end) |  
* OT chart/file notes  
* Therapy Update/Progress & Communication duplicate forms  
* OT homework  
* Mid-block report  
* Year-end or discharge report  
* Formal letters recommending specific equipment |
| Case manager: |  
* Follow-up visit 1 time/year (often with the OT) | |

**What are your experiences with School-Based Occupational Therapy (SBOT) processes and procedures for service delivery?**

**Consider:**
- *What worked well & why?*
- *What supported the process?*
- *What constrained the process?*
- *Dilemmas*

<table>
<thead>
<tr>
<th>Process Examples:</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying need for OT</td>
<td></td>
</tr>
<tr>
<td>Making referral for OT</td>
<td></td>
</tr>
<tr>
<td>OT assessment process</td>
<td></td>
</tr>
<tr>
<td>Case conference</td>
<td></td>
</tr>
<tr>
<td>OT intervention/service provision</td>
<td></td>
</tr>
<tr>
<td>Documentation</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
Participatory Research Approach
Beginning in 2007, I worked with stakeholders from each of the organizations involved in planning and delivering OT services in this region to develop a program of research that would address a common dilemma: **How can we best support planning and delivery of school-based occupational therapy services such that they are “needs based”**.

Research Question
How does school-based occupational therapy collaborative consultation contribute to educational programs and outcomes for students with disabilities?

**Case Study Guiding Questions**

<table>
<thead>
<tr>
<th>Outcome</th>
<th>What is the desired goal or outcome?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>What is being worked on to achieve the goal?</td>
</tr>
<tr>
<td>Subject(s)</td>
<td>From whose perspective?</td>
</tr>
<tr>
<td>Tools</td>
<td>What is being used by whom?</td>
</tr>
<tr>
<td>Community</td>
<td>Who else is involved?</td>
</tr>
<tr>
<td>Division of Labour</td>
<td>How is work shared?</td>
</tr>
<tr>
<td>Facilitators/Barriers</td>
<td>What supports or constrains practice?</td>
</tr>
</tbody>
</table>

**Methods: Multiple Perspective Case Study**

**Cases N = 3**
- Alisha (multiple physical/complex medical)
- Connor (developmental disability)
- Jacob (mild motor)

**Cases were bounded by:**
- Service Administrator - case manager
- Service Provider - occupational therapist
- Service Recipients - educators; education administrators; EA; parent

**Data Collection**
- Extended observation in schools (7 – 8 months)
- Interviews with participants (informal and formal)
- Document Review (e.g., IEP; OT documentation; CM documentation)

**Data Analysis**
- Transcribed data
- Organized data (log trail; reading; coding)
- Generated 3 case stories
- Analyzed case stories (thematic analysis)
Focus Group Discussions: Multiple Perspective Examination of School-Based Occupational Therapy Services

Schedule & Plan

<table>
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<tr>
<th>Date</th>
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<td>• Focused discussion - connect findings to your experience</td>
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</tbody>
</table>

CASE DESCRIPTION & BACKGROUND PREPARATION FOR OCTOBER 21

Alisha

Alisha is a 6-year old girl who attends senior kindergarten at her local community school. She has light brown hair worn in a bob that ends in wispy curls at her shoulders. Short bangs frame her round face while the rest of her hair is pulled back with plastic barrettes that vary daily to match the color of her clothes. Like most six year olds, she is missing a few of her baby teeth. Alisha typically wears loose-fitted cotton track pants and sweatshirts in various shades of purple and pink. She has clean white running shoes that she sports over top of her ankle-foot orthoses. When she is not tugging them off of her face, she wears purple-framed glasses. Her wheelchair is mostly black. Dora stickers line the metallic red hangers of each footrest.

Her parents, educators, occupational therapist, and case manager all describe Alisha as medically fragile, with complex needs related to her development. Alisha’s medical history includes numerous cardiac surgeries, seizures, and asthma (document review, CM progress note, 05-08-07). Alisha’s cardiac health is stable. Her seizures have been under control for over four years and her asthma is under control with medication (document review, CM assessment, 05-08-07). Alisha’s mom reported that she remains vigilant when cold season hits as Alisha is at risk for pneumonia. When Alisha caught a cold this past winter, her mom said that her goal was to “keep her out of hospital” and so she kept her home from school for well over a week until she was certain that she was better (mom, 23-02-09). Alisha’s education assistant and occupational therapist both reported that Alisha has, in the past, missed a lot of school due to illness, which included a long hospitalization following scoliosis correction surgery when she was in junior kindergarten (fn, 08-01-09; CM documentation, 05-08-07).

Alisha requires physical assistance with all self-care activities including feeding, dressing, toileting, bathing, and mobility. Alisha takes food via a gastric feeding tube (g-tube). She has not taken food or drink by mouth since she was two years old (parent interview, 09-03-09). Alisha cooperates during all self-care routines at school including diaper changes, and donning and doffing her snowsuit for recess. Alisha is dependent on her education assistant (EA) to push her chair and because of her height, weight and mobility status, requires a two-person lift to transfer her in and out of her wheelchair (OT therapy note, 03-09-08). She can sit unsupported on the floor (or change table) and can help transition herself from side-lying to sitting by pulling herself up using her EA’s hand for support. When seated on the floor, her EA places a pillow behind Alisha because of her concern that Alisha cannot transition safely from sitting to lying (informal interview with EA). With effort, Alisha can “bum scoot” or roll to move short distances on the floor. Her mother reports that she is very anxious about the things that Alisha can “get into” if unsupervised and expressed great concern about the potential for Alisha to choke if she were to put small objects in her mouth (informal interview with EA). Her mom said that she makes a point of going with Alisha on the first day of school, partly to review Alisha’s needs with the EA and partly to reassure herself that Alisha’s needs will be met by caregivers other than herself (mom, 09-03-09). Alisha’s mom and EA maintain a communication book for sharing information daily. In addition to her wheelchair, Alisha has an adapted desk chair and stander. These were prescribed for Alisha by her preschool therapy team at the local outpatient clinic prior to entering junior kindergarten.

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Alisha communicates non-verbally by making sounds, smiling, and “screaming”. She has a contagious giggle. Alisha’s EA has purchased two toy mirrors which she offers to Alisha during transitions at school because Alisha enjoys looking at her reflection in mirrors and other objects (fn, 13-11-08). Alisha enjoys a variety of sounds and responds to sound by giggling and bouncing up and down. Her teachers report that Alisha’s favorite sounds include the tearing of paper towel and Velcro being ripped apart. Alisha makes eye contact and attends to others, including her peers. Alisha is quick to engage others by imitating their facial expressions and maintains interaction with others through this sustained imitative play. She reaches out with two arms to make physical contact with others (e.g., a hug) and as a gesture of greeting. On her Individual Education Plan (IEP), visual learning and maintaining eye contact are identified areas of strength for Alisha (document review, IEP, revised 09-10-08). When presented with choices between two objects, Alisha responds by grasping one of the objects offered. Alisha interacts with familiar cause-effect toys, especially those that make sound. When offered a toy phone by her EA, Alisha was observed to push the numbers and bring the phone to her ear on numerous occasions (field observations). She follows simple directions to use her hands with caregiver support, modeling, verbal cueing, and physical prompts. There has been considerable debate over Alisha’s hand preference among her educators (field notes). They have tentatively decided that Alisha prefers her left hand. Alisha’s IEP lists three primary areas of need including, (a) expressive language, (b) gross motor abilities, and (c) fine motor skill development (document review, IEP, revised 09-10-08).

Educators’ Goals and Expectations for Alisha

- **Inclusion and integration is the main focus**
  - Inclusion has social benefits for Alisha
  - Inclusion benefits Alisha’s peers
  - Alisha’s EA is an important facilitator of inclusion

- **Communication is a huge part of her program**

- A lot of her program comes through physio and occupational therapy

Educator Roles and Responsibilities

- SK teacher programs for SK class
- Programming for Alisha comes through special education teacher
- EA implements Alisha’s program
- VP works with them to “make sure that everybody’s okay and everybody has what they need and the structure of it is meeting what they are supposed to be doing” (VP, 25-02-09)
- Alisha receives infrequent support through the school board from a vision itinerant teacher and speech-language pathologist (fn, 09-12-08; informal interview with OT). These supports are indirect services provided through consultation with Alisha’s educators.
### Alisha's Education Program

#### Alisha’s Morning Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:25</td>
<td>Arrival: EA meets Alisha and another student at Access Bus and escorts them to class; EA helps other students as needed.</td>
</tr>
<tr>
<td>8:40</td>
<td>EA does Sit-to-Stand with Alisha in SK class. Alisha sits in adapted desk chair facing EA, Alisha’s back is to the class and teacher; EA sings songs quietly to encourage increased standing tolerance, Alisha sits between songs. When standing, Alisha is focused on her EA, during the sitting breaks. Alisha cranes her neck to see the teacher and her peers. The EA does many repetitions until SK teacher begins shared reading. During this time, SK students engaged in morning literacy instruction at carpet with SK teacher.</td>
</tr>
<tr>
<td>9:15</td>
<td>Shared reading at carpet. EA turns Alisha’s chair so that Alisha faces the teacher for shared reading time; Alisha sits in her adapted desk chair above and behind peers at back of carpet area; Teacher reads from gigantic storybooks with great expression in her voice. The teacher repeatedly engages with Alisha by asking questions, answering them for Alisha and encouraging eye contact.</td>
</tr>
<tr>
<td>9:30</td>
<td>Deskwork time: Alisha’s deskwork consists of a limited range of activities including stacking and removing plastic rings from a Fisher Price toy, turning pages in a board book, pulling a piece of plastic corrugated tubing, grasping plastic discs and putting them in a can, and coloring with hand over hand support from the EA. EA also helps other students with their work as needed. Free Play time: Beginning around 9:40, when the SK students have finished their deskwork, they engage in free play time until recess. Alisha typically stays at her desk/wheelchair and the EA continues with Alisha’s deskwork until diaper change time.</td>
</tr>
<tr>
<td>9:50</td>
<td>Check diaper; EA asks another EA to help with transfers to change table/wheelchair for all wheelchair-to-change table transfers. EA uses lift only when another EA unavailable.</td>
</tr>
<tr>
<td>10:10</td>
<td>Alisha typically given a toy mirror or phone to use during this time either at her desk or in her wheelchair; EA often helps tidy up/supports other students. Occasionally her peers will come to Alisha to say “hi” and engage briefly with one of Alisha’s toys (e.g., corrugated tube) or the EA.</td>
</tr>
<tr>
<td>10:30</td>
<td>Recess: EA bundles Alisha up for recess and takes her outside; EA supervises on yard.</td>
</tr>
<tr>
<td>Time</td>
<td>Activity</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>11:00</td>
<td>10:50 - 11:50: SK students go to Library, Gym, Music, Art, Drama (depending on the day of the week).</td>
</tr>
<tr>
<td></td>
<td>Alisha’s Lunch: Preempts Alisha’s involvement in these scheduled SK activities; EA may take Alisha to sign a book out in library or for warm up in gym and then return to the SK class to give Alisha her g-tube feed. EA complained many times that Alisha misses out on these activities; SK teacher also acknowledged that Alisha misses out on activities she could participate in with her peers. (e.g., “making faces in drama class and showing different emotions is something Alisha could participate in but because of her feeds, she is in the SK class alone with the EA” (SK teacher)).</td>
</tr>
<tr>
<td>11:15</td>
<td>EA writes in communication book for Alisha’s mom; Alisha given toy mirror or phone while EA writes in communication book.</td>
</tr>
<tr>
<td>11:30</td>
<td>EA takes Alisha to the Special Education Class; EA has her 1/2 hour lunch break. Before EA leaves she sets Alisha up at computer with jellybean switch and headphones where she uses simple scanning software on the computer for approx. 15 minutes. When other adults are in the room, the special education teacher can take her out of her wheelchair and let her play in the sensory room (mats; toddler toys; wall mirror) otherwise Alisha is included with other special education students for a story at the carpet or given one of her toys to use on her wheelchair tray (e.g., plastic corrugated tube; toy phone). At this time, Alisha is typically in the special education class at same time as 3 other Junior/Senior boys who all require support of the special education teacher.</td>
</tr>
<tr>
<td>12:00</td>
<td>EA checks diaper on way back to SK class. On Fridays, “Swim Day at local heated therapy pool”. EA goes with Alisha by Access Bus and Alisha returned home at 2:30 directly from pool.</td>
</tr>
<tr>
<td>12:10</td>
<td>Lunch Recess / EA Supervision in class/yard (SK students have their lunch); EA bundles up Alisha and takes her outside with SK class.</td>
</tr>
<tr>
<td>12:50</td>
<td>EA checks diaper.</td>
</tr>
<tr>
<td>1:00</td>
<td>“Put Alisha on carpet on blue pillow for a nap. Lie her on her side to face the wall. If she’s not tired, you can play on the carpet, color, do a math table job at her desk, etc. If teacher needs help, you can let Alisha play on the carpet and help the teacher” (EA schedule). While Alisha sleeps, her SK peers receive instruction. Alisha sleeps through the noise.</td>
</tr>
<tr>
<td>1:40</td>
<td>“If awake, take Alisha to Sensory Room in Special Education Class; or Sit-to-Stand exercises, otherwise let her sleep until 2:00” (EA Schedule); EA sometimes uses the sensory room along with two other EAs and their students who also have developmental disabilities. The sensory room is small with mats on the floor, a mirror on the wall and a few cause-effect toys to share. EA completes communication book for home.</td>
</tr>
<tr>
<td>2:10</td>
<td>EA checks diaper; Home time – Alisha taken by EA to Access bus.</td>
</tr>
</tbody>
</table>
## OT Services for Alisha

<table>
<thead>
<tr>
<th>Process</th>
<th>Alisha</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referral to SHSS OT Program</td>
<td>Preschool therapist informed school about Alisha’s needs and recommended equipment for school; referred her to SHSS Program for OT. SHSS request for service made by special education teacher prior to Alisha starting JK. Reason: OT consultation and training EA (also requested nursing &amp; PT).</td>
<td>Letter to Principal of Alisha’s School from preschool team – OT. Transition planning meeting involved: VP; preschool team; Special Education teacher; family; Case Manager. Service Request Form.</td>
</tr>
<tr>
<td>Intake</td>
<td>Home visit:</td>
<td>Documents:</td>
</tr>
<tr>
<td></td>
<td>• CM initially authorized 3 visits for Alisha in JK (2 assessment + 1 case conference)</td>
<td>• Service Authorization Form</td>
</tr>
<tr>
<td></td>
<td>• Other services included: PT and nursing at school; dietician at home – documentation shared with school.</td>
<td>• Client Information Referral Form</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Service Provider Referral Form</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Copy of Service Request Form</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Functional Assessment School Form</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Authorization to Collect, Use, &amp; Disclose Personal Health Information Form</td>
</tr>
<tr>
<td>OT Assessment</td>
<td>OT followed up on preschool OT involvement and equipment recommendations in JK; Re-assessment in SK (each took one visit)</td>
<td>Documents provided for Case Manager, family, and educators</td>
</tr>
<tr>
<td></td>
<td><strong>JK Goals:</strong> ensure proper seating; transfer training; purposeful hand use.</td>
<td>SHSS Therapy Plan – JK</td>
</tr>
<tr>
<td></td>
<td><strong>JK Recommendations:</strong> “regular consultation &amp; programming to be provided to educational staff; recommending adaptive equipment as needed; follow-up on bathroom modifications.”</td>
<td>SHSS Therapy Plan – SK</td>
</tr>
<tr>
<td></td>
<td><strong>SK Goals:</strong> safe transfers and seating; use of switches; functional hand use for class tasks.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>SK Recommendations:</strong> “regular consultation &amp; programming; instruct in use of sling/lift; recommend adaptive equipment and strategies as needed.”</td>
<td></td>
</tr>
<tr>
<td>Case Conference</td>
<td>No case conference “because transition planning meeting already occurred with the preschool therapy team” (OT, 27-05-09). Note: Alisha’s educators and VP changed between JK and SK.</td>
<td>Service Authorization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• OT requested monthly visits throughout JK (and again in SK) using SHSS Therapy Plan document</td>
</tr>
<tr>
<td>Process</td>
<td>Alisha</td>
<td>Tools</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>OT Service Implementation</td>
<td><strong>Equipment Recommendations</strong> “To support Alisha’s access and participation in her school program” (OT; SK; VP):</td>
<td><strong>Formal Letters</strong> (for VP SEA Application)</td>
</tr>
<tr>
<td></td>
<td>• Bathroom renovations (working with vendor) including lift; change table; amenities for hygiene.</td>
<td>• Equipment Recommendation – JK</td>
</tr>
<tr>
<td></td>
<td>• Computer equipment (switch) and scanning software for special education classroom.</td>
<td>• Equipment Recommendation Addendum – SK</td>
</tr>
<tr>
<td></td>
<td>• Sensory equipment and materials for room in special education class.</td>
<td>OT considered needs of other students on her caseload (in the same school) and made equipment recommendations on each SEA claim that would support equipment purchases to benefit the group of students.</td>
</tr>
<tr>
<td></td>
<td>• Computer, software, height adjustable desk for SK class.</td>
<td><strong>EA Training</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Transfer Training for EA</strong></td>
<td>• Reviewed bathroom equipment &amp; instructed EA in safe use of bathroom lift (after renovations/equipment installed - SK).</td>
</tr>
<tr>
<td></td>
<td><strong>Monitoring Alisha’s Skill Development / Modeling Activity</strong></td>
<td><strong>Working directly with Alisha</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Suggestions for EA</strong></td>
<td>• Pull-out sessions with Alisha and EA (fine motor activity to promote grasp; materials brought by OT).</td>
</tr>
<tr>
<td></td>
<td><strong>Consultations</strong></td>
<td>• Verbal recommendations &amp; demonstration for EA of activity ideas to support grasp development (during pull-out session).</td>
</tr>
<tr>
<td></td>
<td>• With special education teacher (e.g., switch placement; sharing information about equipment recommendations; set up of mats/mirror in sensory room)</td>
<td><strong>Talking with Educators</strong></td>
</tr>
<tr>
<td></td>
<td>• Follow-up with augmentative communication therapist</td>
<td>• Brief conversations with special education teacher (updates on equipment or other concerns; follow-up on equipment).</td>
</tr>
<tr>
<td></td>
<td>• Follow-up with feeding clinic therapist</td>
<td>• Ad hoc responding to issue raised by EA (in hallways) (feeding).</td>
</tr>
<tr>
<td></td>
<td><strong>Documenting for Others</strong></td>
<td>• OT sought input from outpatient clinic therapists about specific issues (e.g., next steps for computer software/hardware; Alisha’s feeding status).</td>
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<tr>
<td></td>
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<td><strong>OT Documentation</strong></td>
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<tr>
<td></td>
<td></td>
<td>• School Consult Therapy Update Notes (each visit) - for school &amp; family.</td>
</tr>
<tr>
<td></td>
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<td>• Mid-block report - for case manager</td>
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<td></td>
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<td>• Year-end report - for case manager</td>
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</table>
Dilemmas
In Alisha’s case, I found that dilemmas centered on two key areas: a) focus for Alisha’s alternative education program and b) communication practices among educators and therapists. I will come prepared for our focused discussion with data that illustrates what I would prefer to call dilemmas or “logical contradictions” because they are understandable when considering multiple perspectives on the day-to-day implementation of special education programs and therapy services in schools. I will share my findings concerning how these contradictions played out in Alisha’s case so that, as a group, we can:

a) Consider the dilemmas from our own experiences of being involved in similar situations (and perhaps identify others).

b) Draw on factors that support collaborative interactions among educators and therapists in a way that supports students with special education needs in achieving their educational goals.

I will use the framework of my research questions to describe what I learned about the above dilemmas in Alisha’s case. I hope that this framework might then help us, as a group, to sort through “factors” that contribute to successful service delivery. My case study research questions included:

<table>
<thead>
<tr>
<th>Outcome</th>
<th>What is the desired goal or outcome?</th>
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<tbody>
<tr>
<td>Object</td>
<td>What is being worked on to achieve the goal?</td>
</tr>
<tr>
<td>Subject(s)</td>
<td>From whose perspective?</td>
</tr>
<tr>
<td>Tools</td>
<td>What is being used by whom?</td>
</tr>
<tr>
<td>Community</td>
<td>Who else is involved?</td>
</tr>
<tr>
<td>Division of Labour</td>
<td>How is work shared?</td>
</tr>
<tr>
<td>Facilitators/Barriers</td>
<td>What supports or constrains practice?</td>
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</tbody>
</table>

I look forward to our discussion on Wednesday October 21, 2009!

Focus Group Discussions: Multiple Perspective Examination of School-Based Occupational Therapy Services

Schedule & Plan

<table>
<thead>
<tr>
<th>Date</th>
<th>Discussion Focus</th>
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<tbody>
<tr>
<td>November 4</td>
<td>• Case Study #2 - Presentation of Key Findings</td>
</tr>
<tr>
<td></td>
<td>• Focused discussion - connect findings to your experience</td>
</tr>
</tbody>
</table>

CASE DESCRIPTION AND BACKGROUND PREPARATION FOR NOVEMBER 4, 2009

Jacob
Jacob turned 9 near the end of his grade three year. His top four favorite activities include: playing his Wii, watching TV, playing computer games, and drumming (Jacob, 24-02-09). Jacob often spends hours building with Bionicles. His mom said “he’s got tons of them and he’s always coming out, look at what I made today and I catch him sometimes, he’s really into Star Wars and he’ll have a sword and he’ll make these light saber sounds” (mom, 24-02-09). Jacob reported that when he gets a new Bionicle, he often
starts by copying the design from the kit but after a few weeks, he uses his Bionicle pieces to make innovative creatures using his imagination (Jacob, 24-02-09). Jacob confidently put together different sized pieces of his six-armed spider to show me one of his Bionicle creations. It was comprised of a number of very tiny connector parts. Jacob said that it is easy for him to take apart and re-create his “made up characters” (Jacob, 24-02-09).

His mom describes Jacob as somewhat impatient because he expects to be able to do things without going through a process of learning how, “The perfect example of Jacob is when he was dying for a skateboard, had to have a skateboard, really wanted a skateboard. I got him a skateboard. He took it out of the package and the first thing he did was throw it up in the air, and ran and tried to jump on it like something he’d seen on TV. He could not believe that he couldn’t do it. There was something wrong with the skateboard” (mom, 24-02-09). She said that Jacob has high expectations of himself and if things don’t come to him naturally, he gets frustrated. His mom also noted that normally, he won’t try something until he sits and thinks about it and determines how he’s going to do it.

His mom also described Jacob as fidgety, “Jacob can’t sit still. I bet if you go downstairs right now, you’ll find him on one of those giant yoga balls, and he’ll lay on that and play videogames and bounce on it, like he will not literally stay still for more than five seconds. He takes it everywhere, he goes everywhere with the ball. I have to sometimes tell him when he’s eating to sit down and finish because he’s got to go, he’s got to do something else, something more important - there’s a Bionicle unattended to. Really, everything else is more important” (mom, 24-02-09). His mom reported that Jacob rides a bike, skateboards, ice skates and played hockey last year. She perceives Jacob as very active and said she hasn’t noticed anything unusual about his gross motor skills except that “he’s so fidgety” (mom, 24-02-09).

Jacob attends a local French immersion school and he is placed in Grade three of a Grade-two/three split class. He has had the same teacher for the past two years. Jacob’s Grade three program also includes 300 minutes of English taught weekly by another teacher. The English teacher was on a short-term contract, filling in for the regular English teacher who was on maternity leave.

The Grade three schedule includes English planning time in the mornings three times weekly with a longer period on Mondays and two shorter periods on Thursdays and Fridays followed by physical education and health respectively. In the regular French class, language lessons are scheduled primarily in the mornings with math, science, library, choir, computers, reading buddies, and a second physical education class in the afternoons. Jacob reported that the daily routine, set by his regular classroom teacher, involves completing a number of items from a list written on the chalkboard (Jacob, 24-02-09). He stated that the list can include up to seven daily tasks and that he typically completes two of the seven noting that he doesn’t get much practice with cursive writing because doesn’t get to this item on the list. Jacob is aware of other kids in his class who get all of the tasks completed each day and acknowledged that the reason he doesn’t complete the list of tasks is, “because I’m not really done the pictures in my story” (Jacob, 24-02-09).
## OT Service for Jacob

<table>
<thead>
<tr>
<th>Process</th>
<th>Tools</th>
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| Referral      | • In Grade 2, the regular education teacher identified her challenge in knowing what to do about setting expectations for Grade 2 written output because Jacob’s writing was not at a Grade 2 level.  
• VP (from Grade 2) requested OT Assessment of Jacob’s fine motor skill development: “large print, slow awkward pencil grip; poor spatial sense in written work.”  
• In Grade 3, the same teacher wanted OT service to “back up” teacher recommendations about necessary modifications for Jacob’s writing and organization skills in her Grade 3 program.  
• Regular supervision by VP with teacher (who was first year teacher of Grade 2 and 3).  
• CCAC Service Request Form |
| Intake        | • CM completed intake assessment with Jacob’s mom at the CCAC office.  
• CM authorized 3 visits (2 assessment + 1 case conference).  
• Service Authorization Form  
• Client Information Referral Form  
• Service Provider Referral Form  
• Copy of Service Request Form  
• Functional Assessment School Form  
• Authorization to Collect, Use, & Disclose Personal Health Information Form |
| OT Assessment | • OT completed assessment over 2 authorized visits with Jacob at school using pull-out in hallway area to conduct standardized assessment and clinical observations of Jacob’s motor performance.  
• OT file notes – for OT  
• Assessment & Service Provider Report – for Case Manager |

### OT Assessment Findings

The occupational therapist identified the following concerns:

a) **Significantly below average on tasks requiring fine motor and visual motor skills;**  
b) **Below average on tests of bilateral coordination and balance;**  
c) **Uneven areas of strength and weakness in visual perception;**  
d) **Some difficulty with snaps and fasteners;**  
e) **Some difficulty with visual scanning;**  
f) **Problems with written output including difficulty with letter formation and letter reversals; and**  
g) **Some fidgeting and wiggling during assessment that was attributed to sensory processing problems**  
   
(OT assessment, 07-04-08).
**OT Recommendations**

- **OT intervention to improve Jacob’s fine manual control (e.g., pinch strength, in-hand manipulation), achieve a dynamic tripod grasp on pencil for writing, and improve bilateral coordination and balance** (OT Assessment, 07-04-08).

- disco-o-sit for Jacob’s classroom chair which was described by the OT as “a sensory-motor strategy to help Jacob self-regulate his need for movement during seat work” (OT Assessment, 07-04-08)

<table>
<thead>
<tr>
<th>Case Conference</th>
<th>Formal written OT assessment report</th>
</tr>
</thead>
<tbody>
<tr>
<td>• OT shared Assessment findings and recommendations with Case conference participants who included: Jacob’s mom, Case Manager, and VP. Jacob’s teacher was not present at the Case Conference.</td>
<td>• Goals targeted intervention for skill development (document review)</td>
</tr>
<tr>
<td>• VP and parent accepted recommendations/plan for OT service.</td>
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<tr>
<td>• CM authorized 5 visits for remainder of Grade 2.</td>
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**Service Plan**

- It was not explicitly stated who/how recommendations will be implemented however it was implied that the OT would provide withdrawal services at school to work on skill development (document review; interviews with OT, VP, and Jacob’s mom).
- Jacob’s mom and VP held the expectation that the OT would work directly with Jacob at school to improve Jacob’s performance in the areas identified on the OT assessment (interviews with Jacob’s mom & VP).

**Service Authorization**

- OT requested 5 visits between April – June.
- For Grade 3, OT requested continued service authorization for Jacob’s skill development and indicated that the intervention would be provided by OT, school, and home (10 visits authorized for Grade 3).
## OT Intervention

<table>
<thead>
<tr>
<th>Equipment Recommendations</th>
<th>Grade 2 &amp; 3</th>
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<tbody>
<tr>
<td></td>
<td>- Loaned disc-o-sit for trail in class; formal letter recommending disc-o-sit for use at school; pencil gripper recommendations (Stetiro; Cross-over gripper); keyboarding software.</td>
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<tr>
<td></td>
<td>Grade 3</td>
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<tr>
<td></td>
<td>- Recommended read/write software; trials of software over summer at home.</td>
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<tr>
<th>Monitoring Jacob’s Skill Development</th>
<th>Working directly with Jacob</th>
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<tr>
<td></td>
<td>- Pull-out sessions (approximately 3 – 4 direct sessions in total) in hallway space using activities brought by OT (cursive writing review; fine manipulative activities; visual perceptual motor activities).</td>
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<thead>
<tr>
<th>Assessment/Re-Assessment</th>
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<tbody>
<tr>
<td>- Keyboarding evaluation (speed/proficiency).</td>
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<tr>
<td>- Re-assessment at start of Grade 3 (to set goals for OT involvement in Grade 3) and after IEP meeting to measure Jacob’s progress.</td>
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<tr>
<td>- Re-assessment of Jacob’s motor coordination (standardized assessment tools) and informal report summarizing findings using Progress &amp; Communication Note and copy of previous Assessment scores for comparison – for home and school).</td>
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<tr>
<td>- Recommended OT technology assessment in Grade 4 to see if Jacob qualifies for assistive technology (requested 6 service authorizations to complete this in Grade 4).</td>
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<tr>
<th>Information Sharing with Jacob’s Teacher/Parent</th>
<th>Hallway conversations</th>
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<tbody>
<tr>
<td></td>
<td>- Teacher shared information with OT about Jacob’s written output and organization skills in class.</td>
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<td></td>
<td>- Teacher and OT discussed challenges with implementation of both school and OT homework.</td>
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<tr>
<th>OT Homework</th>
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<tr>
<td>- OT sent homework/recommendations with Progress &amp; Communication note (cursive writing; keyboarding practice; therapy ball exercises) for Jacob’s mom to implement with Jacob at home.</td>
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<tr>
<th>Formal School Meetings</th>
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<tr>
<td>- OT attended IEP meeting and contributed to discussion around process of decision-making for adaptive technology.</td>
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<tr>
<th>Recommending Referrals to Other Services</th>
<th>Liaise with VP</th>
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<tbody>
<tr>
<td></td>
<td>- OT touched base with VP to recommend referral for psycho-educational and language testing as necessary pre-requisite to assessing and recommending technology (SEA claim).</td>
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<thead>
<tr>
<th>Documenting for Others</th>
<th>OT Documentation</th>
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<tbody>
<tr>
<td></td>
<td>- School Progress &amp; Communication Notes (each visit) – for school and family.</td>
</tr>
<tr>
<td></td>
<td>- File notes (each visit) – for OT.</td>
</tr>
<tr>
<td></td>
<td>- Mid-block report &amp; Year-end report – for case manager (Grades 2 and 3).</td>
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</table>
IEP Meeting at School (February 19, 2009):

- IEP meeting chaired by VP who shared a copy of a draft IEP for Jacob with Jacob’s mom and OT. Jacob’s teacher recommended specific modifications to written output (scribe; more time) and expressed concern about Jacob’s organizational skills including not returning homework to school.
- Jacob’s mom expressed great concern about the modifications and was explicit that she wanted Jacob’s teacher to have clear expectations that Jacob write.
- OT shared that she anticipated looking at assistive technology (AT) and explained a bit about read/write and word prediction software. Jacob’s mom was frank in her response that she did not want AT for Jacob.

Outcome of IEP Meeting

- Jacob’s mom and educators agreed to simple modifications where Jacob would still be expected to write but accommodated in how much written output was required. He would also be given the modifications for Gr. 3 standardized testing. Both teacher and VP felt that the OT assessment from Gr. 2 “validated” their decisions for the modifications proposed in Jacob’s IEP.
- Jacob’s mom asked if there was other testing they should be looking into at this time and although psycho-educational testing was discussed, decision to put Jacob on the list was deferred until after language testing. There was agreement among Jacob’s educators and mother that Jacob is clearly a bright child with an uneven skill set for demonstrating what he knows.
- OT agreed to re-assess Jacob’s motor performance to determine whether he has made any gains since Gr. 2 and planned to report back to school and Jacob’s mom on her findings. The OT did re-assess Jacob on March 2 & 24, 2009 using the BOT-2 (Test of Motor Proficiency – fine motor and bilateral coordination subtests). Based on the standardized re-assessment findings, the OT recommended the following in her Progress and Communication Note provided to home and school:

OT Recommendation:

“At this stage, I feel that using some of the read/write software will be helpful for Jacob. At school, he can access Co-Writer & Smart Ideas. For home use, I have attached the download information for Premier at Home. Take a look at it and have Jacob try some of the tools to do some of his homework tasks. These programs may be helpful for Jacob while he waits to be seen for psycho-educational testing. Call if you have questions [tel #].”

Teacher’s Reflections on Jacob’s Performance and Progress in Grade 3

Jacob’s teacher took some time to show me some of Jacob’s work as she reflected on his performance and progress this year, “so this is what he produced, they were supposed to practice summarizing about the book and see some kids, some boys in comparison, a boy who’s probably got the same grades, like he has about the same, a bit better reading level but not much, but that’s what he produces, that’s what Jacob produced, not much difference. So he’s going to get the same mark as, I mean I’m going to look at content mostly so he needs more time that’s for sure, Jacob needs more time than others but I’m not sure that computers will help him. I think he has to practice writing. He has to practice reading. It seems like even like we discussed he seems physically one or two years behind. And I think intellectually it’s just the same. Maybe not two years, but just a year; he’s just a bit slower; he’s not there yet, he’s more Grade 2 standard.” (Teacher, 27-03-09).

His teacher also talked about how she has been implementing Jacob’s IEP since the meeting in February, “So he has his personal journal to write, that’s about a paragraph. Now it if comes to a bigger writing task, I would either have to chunk it down, he does a bit a day, or I have him write part of it and the rest is scribed, where he just dictates it and that’s okay because from one paragraph I can see enough about his writing skills. I don’t need a whole page. I just want to know because often my writing tasks it’s about social studies, so it’s more about, like the last time it was a comparison from urban and rural communities. I wanted to know what he knows. I used it as the writing mark and as their social studies mark for the
content, but if he writes a paragraph, that’s enough for my writing. Sentence structure, I just need a few sentences for that, I don’t need more than that” (Teacher, 27-03-09).

When discussing scribing for Jacob she noted that she has other kids scribe for him, those who are faster and have time, “They write well enough so it’s no problem for them. He says it and they just write down what he says. He’s very accepting. He’s relieved, he seems actually to enjoy it. I find like in a way he thinks, I’m in charge, I’m telling you what to write” (Teacher, 27-03-09). She compared this to Jacob’s performance on the computer, “We actually had a typing project that took Jacob forever to type and once in a while I asked other kids to type for Jacob because that’s why I’m thinking the computer won’t really work out because even typing he has such a hard time, because he can’t spell. What comes in with Jacob is that he knows what he wrote and he can read it, nobody else can read it because he spells phonetically, he doesn’t spell right, he can’t spell” (Teacher, 27-03-09). She added that she doesn’t see a difference between Jacob’s ability in French and English.

When asked how Jacob participates in class, his teacher stated, “He always wants to write on the board, that’s one thing to say, it hasn’t affected him, he’s not shy about being able to do it. He’s highly motivated and wants to be, like that’s why it doesn’t even bother him when he dictates to other kids and they scribe for him, he’s just, it didn’t impact him at all, he has no, how would you say, complex, about it, it’s okay, you know, he always wants to write and for him it’s just important to be in the spotlight” (Teacher, 27-03-09). She went on to describe how it has always been her policy that if a student comes up to share their answer, they always have the option of handing the chalk over to another student, “so Jacob will start the sentence, whatever he remembers and often with Jacob often he just remembers the first three words and then oh, I forgot, and then someone else comes up and finishes it up for him” (Teacher, 27-03-09).

Jacob’s teacher also described Jacob’s performance with writing in his journal, “Lets see, so this is what he produced in three days. The first day I have to say he didn’t get anything on the page. He was just sitting there like this. Day one nothing. Day two, he wrote and yesterday I think he did the picture. But you know he has come a long way that’s why I was thinking. I mean all this year it’s really not much, but from something from where I didn’t know what he’s saying I think this is supposed to be (reading in French) hot potato, I played hot potato, duck, duck, goose, that’s supposed to be. So I mean he’s a boy, you could just see it, he’s just such a boy in his pictures with the swords and all that” (Teacher, 27-03-09). She went on to describe his success in term three, “I think term three will be his best term. I mean he went from term one, a D+ to a C-, which he earned. I’m sure, I’m hopeful that he’ll have a C maybe even a C+ at the end for his writing mark. So he’s getting better” (Teacher, 27-03-09).

His teacher also discussed a strategy she implemented to help Jacob improve his organization at school, “So another thing we did because I think he’s disorganized although mom says he’s very, can’t even imagine that kid at home, very tidy, everything has to be in place, well here he’s not so, and he forgets everything so this is a check. This is on his desk” (Teacher, 27-03-09). She went on to demonstrate how she puts a smiley face for each thing Jacob remembers to bring in, his math homework his spelling book, his agenda, etc. Each smiley face earns him extra points, “He’s getting extra points as an extra motivator, these are points that the other kids don’t have” (Teacher, 27-03-09). She explained that kids can use points in her class to buy privileges such as hot chocolate, eating their snack in class, popcorn, choosing the game in gym class, or sitting at the teacher’s desk for the whole day. His teacher said that this strategy has been really helpful for Jacob, “when he forgot it, boy the next day he had it because the first week he just didn’t have one filled in and I told him okay Jacob, you can only miss one” (Teacher, 27-03-09).

In looking back at the effort she has been putting into supporting Jacob in her Grade 3 class and considering Jacob’s mother’s reaction at the IEP meeting his teacher reminded herself, “My first reaction was why did I do all of this and I had to really, you know, remind myself it was for Jacob and not for the mom. Because when I talked to her I said maybe we should meet and get him a plan going just for Jacob so his writing I said wouldn’t hold him back academically” (Teacher, 27-03-09). She also talked about how she learned about the IEP process from her experience with Jacob’s IEP meeting and knows now that the
expectations are still Grade 3 expectations, just with some modifications, saying, “I think since mom has that position that he’s okay and we have to push him it’s good the C stays because sometimes they could get a B if they meet a standard that was set lower. So now after the IEP meeting and since [Jacobs mom] has that position that we just have to push him and he’s okay, I wouldn’t want to see a B in the report card because she’ll just tell herself oh, he’s okay” (Teacher, 27-03-09).

**Teacher Reflection on OT Involvement with Jacob**

When asked to reflect on occupational therapy services for Jacob, the teacher shared the following, “It has been so scarce, her visits, I’m not even sure how much impact it has on his progress because, honestly, in the whole year she saw him I think in the last year five times, so when you look at ten months, she comes every two months. Even sometimes she came and she couldn’t see him so that’s why I would say only ten times per year. She probably comes more frequently, but she couldn’t see Jacob every time, so she has a work overload and that’s a problem. I think he would really benefit from someone to come in I would say every two weeks and work with him a half an hour and then we would see more progress” (Teacher, 27-03-09). She went on to explain that she wasn’t sure how many more times the occupational therapist would see Jacob before the end of the year, “in the best case scenario, she’s going to see him twice from now until the end of June. I don’t think it’s anything in here [the occupational therapy reassessment]. I think it’s more to keep mom informed. I think it’s good because mom gets this [therapy note] each time [the occupational therapist] comes. I don’t think it benefits Jacob in itself very much. I mean she would just have to be more intensified from what she does with him. I mean I haven’t been there so I don’t really know” (Teacher, 27-03-09). She went on to explain, “I haven’t really seen what she does, but she said she’ll make him do cursive writing and she makes him finish it or things like that, does she? I do think that [the therapy notes] are more to keep us informed of what she does with him. I think it’s important she’s coming and it’s important to have all of this documented formally” (Teacher, 27-03-09).

When discussing the role of occupational therapy, Jacob’s teacher said, “I think [occupational therapy] backs us up, this is what’s happening you know and so if ever he would fail a grade or he would come close to that I mean mom couldn’t say you didn’t see this coming, you know I think it’s really important that someone professional sees him, not just me, like I’m happy about that. Since I’m also a beginning teacher like I had one move on last year and there was different problems with that student, we suspect he might have Asberger’s. I don’t know and again the mom was very, my child’s perfectly okay, nothing’s wrong. And now the Grade 4 teacher is pushing the testing and I kind of get the looks, why didn’t you do this? I mean it’s important she’s coming and it’s important to have all of this documented formally” (Teacher, 27-03-09).

**Teacher and Parent Reaction to OT Recommendations Following Re-Assessment**

I interviewed Jacob’s teacher following her receipt of the occupational therapy report discussing Jacob’s motor skill reassessment and recommendations. The teacher reacted to the occupational therapist’s summary, “[The occupational therapist] wrote in again which is kind of funny, she talks about the program again which I think mom’s so against. It was Premier at Home and at school. She was talking about how he can access Co-writer at school and Premier at Home and she attached all the information for mom to go on it and I still have to check it out” (Teacher, 27-03-09). As the teacher read a line from the report that read, “at this stage I feel that using some of the read write software will be helpful for Jacob”, she stopped and said, “It’s hard. [His mom] was so against technology. She doesn’t want to put labels, like she, she’s really he’s okay and I think, in the long run, he actually will be. I have a feeling, I don’t know, I’m not sure if this either is the best route to go with Jacob. It’s only Grade 3 and both of us, [Jacob’s English teacher] and I have seen a big change after March break. This week he has been so motivated and I don’t know, so he doesn’t write much, but he does write and it will depend, a lot of it will depend on his Grade 4 teacher, 

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how his Grade 4 teacher will accept his performance. It’s really, it’s very subjective for a teacher, what are you going to expect” (Teacher, 27-03-09).

Similar to the reaction of Jacob’s teacher, his mom responded in the following way to the recommendations that came out of the occupational therapy reassessment and year end reports, “This recommendation gives the perception that my input at our last meeting fell on deaf ears. I was very explicit when I spoke about his use of computer assistance in the classroom and my reasons for my opinions. I do not believe this is an effective solution for Jacob. I know he can use a keyboard. He is always walking around with his DS, or one of our 2 at home laptops or playing video games. Computer proficiency is not his issue at all. I cannot understand how working on keyboarding skills will effect a change in his writing skills. One might surmise that an alternate process is being sought rather than correcting the issue at hand, much in the way that you eat an apple because you don’t like oranges” (mom, 06-07-09).

Dilemmas for Discussion
As with the first case study, dilemmas around communication practices among educators and the occupational therapist were evident in Jacob’s case. Two other dilemmas centered around service delivery approaches:

1. Miss-match between:
   a. goals/objectives for OT involvement (develop Jacob’s fine motor skills) and
   b. service delivery methods (monthly monitoring of Jacob’s motor skills through pull out and OT homework for Jacob and his mom to work on at home). This miss-match influenced outcomes of service delivery for Jacob and perceptions of Jacob’s mother and teacher regarding the service.

2. Deciding to remediate or compensate: Whose responsibility is it?

These two dilemmas will form the basis of our discussion.

Similar to the first case discussion, I will come prepared to elaborate on these dilemmas by providing examples from the data I collected on this case study. Again, I would like us to:
   a) Consider the dilemmas from our own experiences of being involved in similar situations (and perhaps identify others)
   b) Draw on factors that support collaborative interactions among educators and therapists (and families) in a way that supports students with special education needs in achieving their educational goals (educationally relevant outcomes).

I look forward to seeing you on November 4, 2009.

Focus Group Discussions: Multiple Perspective Examination of School-Based Occupational Therapy Services

Schedule & Plan

<table>
<thead>
<tr>
<th>Date</th>
<th>Discussion Focus</th>
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<tbody>
<tr>
<td>November 18</td>
<td>• Case Study #3 – Presentation of Key Findings</td>
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<tr>
<td></td>
<td>• Focused discussion – Connect findings to your experience</td>
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</tbody>
</table>
Connor is a 6-year old boy with a slight build. He has short brown hair and blue eyes. He typically sports a comfortable cotton shirts and track pants and wears white and blue sneakers with Velcro closures. Connor lives with his mom, dad, older brother, and two dogs. They live in a large two-story home in a suburban neighborhood a short drive from their local school. Connor’s family owns their own local business. Connor attends Grade 1 in the afternoons and receives Intensive Behavioural Intervention (IBI) in the mornings. His family employs two therapists who share in the provision of IBI in the basement of Connor’s family home for approximately 28 hours weekly. Each weekday, after lunch, an IBI therapist normally drives Connor to school, dropping him off at the back door of the schoolyard and leaving him in the care of an Education Assistant (EA). Connor’s mom picks Connor and his brother up after school, greeting Connor and his EA at the front door of the school or in the hallway outside the Grade 1 classroom at the end of each school day.

Connor’s mom describes Connor as “easy going” and “laid back”. “Once he gets to know people, he’s pretty accepting. With him, if he feels he can trust you and understand, and that you will understand him then he’s willing to make a bond with you and accept what you’re going to ask of him and [follow your] guidance” (mom, 13-05-09). Reflecting back, his mom reported, “When he was little he was pretty quiet, everything revolved around the self, like he wasn’t really interested in people, wasn’t interested in playing, wasn’t interested in interacting, so your typical case [of Autism]” (mom, 13-05-09).

When considering Connor’s performance, his mom described Connor as inconsistent in showing others what he knows and what he can do, “That’s the thing with him, it’s amazing all of a sudden he’ll just do something completely unexpected and he won’t do it again for a month. It’s the same thing with words and talking and he’s been doing this for a couple years now, he’ll throw you off, you give him something, he’ll look, turn around and say thank you. And you’re like did I hear that, like you’re second-guessing. But he does that every once in a while where he’ll answer you, not just echoing you, he’s not mimicking you, he’s actually answering you so you know those thoughts are there, the motor planning all worked that time” (mom, 13-05-09). His mom also shared that while this is frustrating for her, she recognizes the importance of understanding Connor’s limits and uses the word ‘stressed’ to describe Connor’s response to situations where he is pushed too hard, “It’s frustrating too because it’s like you know it’s in there, and it’s just with him, you can push him but if you push him past a certain point he just gets too stressed out so unfortunately he’s not one of those kids that you can push hard” (mom, 13-05-09). She acknowledged that she can sometimes feel discouraged by Connor’s slow progress, “It’s kind of hard because when you’re seeing him every day in and day out, you sit there and think oh my goodness he’s still not talking, he’s still not toilet trained. I mean he has made progress on that level, but then on other levels you see okay yeah, he’s more accepting” (mom, 13-05-09). She went on to explain how important it is for her to review Connor’s progress with others so that she can have a more objective view of his accomplishments.

His mom feels there are a lot of things that we take for granted but that Connor hasn’t figured out yet, “Another thing we found out too because for quite a while he was seeing a speech pathologist and things are going along really well now, but it seems like it took him a long time to realize he had something in his mouth called a tongue and he could use it. I think it took him a long time to figure out because now all of a sudden he’s playing with his tongue and he’s doing different sounds, he’s sticking his tongue out, you can get him to mimic things with his mouth, while before there was no way” (mom, 13-05-09).

Connor’s dad reportedly stresses about Connor’s future, “he worries about what Connor’s going to do and what he’s going to be able to achieve, will he ever be independent, what will happen when he’s an adult” (mom, 13-05-09). In contrast, Connor’s mom maintains an optimistic view of Connor’s future, “Who says he’s not going to go to university, who says he’s not going to do this, who says he’s not going to do that. The way I look at it is we have two kids and they both are going to do whatever they want to do and who’s
to say each of them will or won’t, you don’t know. Maybe one day he could wake up and start blabbering,
you never know or start writing, or typing or something, but yeah, it’s a long road” (mom, 13-05-09).

CONNOR’S INDIVIDUAL EDUCATION PLAN

Class Placement
Connor is integrated into a Grade 1 class as much as possible but is withdrawn for “body breaks” which
take place in the special education classroom or hallways. Connor’s mom reported on how this approach to
Connor’s inclusion came about, “The school is great because they keep him in the class as long as he can
tolerate it. So with most kids [with special needs] what they did was they start them out in the [special
education] classroom and then would bring them to the [regular] class for 5 minutes, take them out and
work that way, but with Connor, because we had this experience at daycare, I said well, can we try it the
opposite way, have him in and a part of everything, take him out for 5 minutes here and there and then
back in” (mom, 13-05-09).

Connor’s mom clearly described that her biggest goal for Connor’s transition to school was his social
inclusion in the Grade 1 class. In addition to being accepted by his peers, his mom recognized that
Connor’s adaptation to a larger, louder environment was an important part of achieving success with his
transition to Grade 1, “The biggest thing that I looked for starting Grade 1 was the socialization with kids
and being around kids and the acceptance because I knew we were still going to be doing IBI’s and I know
as far as actual curriculum that he’s nowhere near, now mind you he proved me wrong because there’s
stuff he did at school, but to me the most important thing was just the interaction with peers because he
wants to be sociable, he wants to be with other kids. So starting school, knowing that it was different, a new
environment, new people, new everything, more kids, more noise, just for him to be able to adjust to that
and be part of his class” (mom, 13-05-09).

In reflecting on Connor’s transition to Grade 1, his mom reported, “My biggest fear was being accepted
and kids understanding. Of course I guess it’s very fortunate being at the school that we’re at, having quite
a few different kinds of disabilities or impairments at the school. I guess kids are used to seeing it, but at
that young of an age, I wasn’t sure what they would think of like just his making noises, can’t talk, the
flapping or the jumping and stuff, but yeah, to my amazement, they were really good, they just accept what
he does and just goes on from there” (mom, 13-05-09).

Connor’s mom discussed the role of the special education teacher in working with her to develop a
reasonable strategy for including Connor with his peers as much as possible, while recognizing Connor’s
need for frequent changes in environment, “Whatever ideas I came up with, she worked with it and we sat
down and talked and [the special education teacher] just took all her cues from me and saying okay if you
want to do it this way we’ll try it this way. [The special education teacher] did say well, what if we have to
take him out and I said by all means yeah if he’s getting stressed or if it’s too much sensory overload,
information, whatever or if he just needs a sensory break then because they’ve got the trampolines and stuff
and again they keep a schedule with going to the washroom so he goes about every half and hour or so he’s
going out of the classroom. Sometimes they’ll stop by and do a little bit of a body break on their way back”
(mom, 13-05-09).

Connor’s Areas of Strength and Needs
Connor is not formally identified but his IEP indicates that he requires special education programming and
services (IEP, 14-10-08). Connor receives private speech-language service twice weekly at school however
this is not identified on his IEP. In term two, occupational therapy services were initiated. Occupational
therapy services are administered through the Community Care Access Centre (CCAC).

Connor’s specific areas of strength are identified on his IEP including, “will persevere with preferred
activities, visual learning, and gross motor abilities” (IEP, 14-10-08). Areas of need include,
“communication skills (receptive and expressive), self-help skills, and fine motor skills” (IEP, 14-10-08).
The areas of need are consistent with his mom’s goals for Connor. “With him, my basic goal is communication first and foremost. If he can communicate that is the biggest thing. Now whether it be talking, whether it be through sign, whether it be through typing, writing, whatever form, I just wish there was something that would click and he would take off and do well” (mom, 13-05-09). Connor’s mom identified goals that she has for Connor in the area of self-help including toileting and dressing (mom, 13-05-09). For toileting, her goal is focused on recognizing the need to go to the toilet and initiating going to the washroom independent of adult prompts, “Self-help skills like toileting, understanding his bladder because I know he’s got good bladder control, and I know he can do that, but as far as just recognizing oh, I need to go pee and putting it altogether, initiating himself going to the washroom instead of us going okay it’s been twenty minutes, do you have to go, let’s try” (mom, 13-05-09). His mom described the type of assistance Connor currently requires with dressing, “what I’ll do is I’ll put the shirt partially over his head and he’ll pull it down and usually put his sleeves through. Pants, he’s most of the time he’s pretty good. He’ll plunk himself on the floor and put his pants on. Socks, I usually put them on his toe and then he’ll pull them up just to kind of help out a little bit, but as far as zippers and buttons we always have to start the zipper at the bottom and he’ll pull it up no problem or he can undo a zipper and take off his coat. Shoes, we still kind of help him a little bit because he doesn’t put his hand in the back of his shoe and hold it, he just kind of shoes his foot in there, he doesn’t pull the Velcro tight” (mom, 13-05-09).

Finally, his mom shared goals for Connor’s fine motor skill development that were developed as a result of Connor’s recent assessment by the occupational therapist at school, “Something that the OT is working with at school is writing. To him, even holding, colouring anything, it’s not, it’s not aversive, he’ll do it if you make him do it. But he has no desire to colour, to draw, to do anything like that. Now that could be something where an OT comes in very handy because he’s got very good fine motor skills, but I think his hands might be under-sensitive because his grip on a pencil is very light, he’ll put his hand on a doorknob, his hand will turn but he won’t be gripping the doorknob to turn the doorknob. So as far as the colouring, I mean I guess that’s quite hard for him because whether his hands are under-sensitive or he just hasn’t made that connection yet to hold on, so we’re working on stuff like that” (mom, 13-05-09). Connor’s mom recognized the importance of Connor’s fine motor development because skill development in this area will support alternative forms of communication like writing or typing (mom, 13-05-09).

The special education teacher provided her assessment of Connor’s skills, “he’s a little more scattered in his skill set. Some kids are a little more linear, but he’s got more up and down and it’s figuring out what he can and can’t do. He does vary from day to day as well just in his ability but I know that his world overwhelms him more than a lot of kids, just from a sensory point of view, he’s very much impacted a great deal by his environment or at least, that’s the impression I get. The noises, the sounds, the movement, everything that he’s always managing that and he does a brilliant job, you know, I mean his ability to regulate his behaviour in an environment like this really speaks well of him and his ability to please, you know. This is matched by his nature, having a very easy going, relaxed, giving personality is who he is, so I mean kudos on him, but I do get the feeling that there’s times he’s just fatigued by his environment and health issues at times” (Case Conference, S2C, 02-04-09). Throughout my field visits, Connor’s educators shared that Connor has minor health issues that include bowel discomfort on occasion and blocked nasal ducts (Case Conference, 02-04-09; EA, 27-02-09; fn, 19-02-09). Connor’s mom agreed with the special education teacher’s assessment giving examples of Connor’s anxiety when in situations where he cannot predict what will happen, “If you bring something home and he’s never seen it before he will run to the door and just kind of peek around or he’ll grab a pillow, sit on the couch and kind of peek over, like no I don’t want to see this, or is this okay to watch because he doesn’t know what’s coming up. He’s very, very impacted by what’s around him” (Case Conference, mom, 02-04-09).

Communication is a Key Goal for Connor
Both the special education teacher and the EA discussed their expectations around Communication. The special education teacher emphasized communication as a key part of the foundation skill set for any child, explaining that without communication, they cannot do anything else (S2C, 27-02-09). On another occasion, I observed the EA in conversation with the occupational therapist and special education teacher,
“the EA discussed Connor’s improving communication, sharing examples of his emerging language with the occupational therapist. [The EA] shared how Connor goes to the fish tank in the front foyer and says “bububububbles”. She reported that his speech is monotone and he babbles, but that within all that babbling Connor often comes out with a word. The EA spoke proudly about Connor’s emerging language. During this conversation, the special education teacher [addressing the occupational therapist] said “no offense, but with Connor, the priority is his communication. If kids don’t have communication, then the fine motor is useless”. She and the EA both nodded to each other about this fact” (fn, 19-02-09).

Communication, Social Skills, Fine Motor: It all works together
When discussing communication as the current focus of Connor’s education program, the special education teacher recognized how communication goals are interrelated with social skills and fine motor development, “Anybody who’s building communication skills has to be also social communication skills, and what’s the point of communication skills if it isn’t interaction with other human beings. So if you’re working all day every day and that for him is really the critical thing, the rapport and the communication skills and all the foundation skills like the attending skills, looking at people and looking where he’s been directed and looking when his name is called. It all fits too, even just sitting down at work because now it’s a give and take, like give and take is everywhere, and give and take is conversation and is interaction with people, but that give and take is also work, it’s the same with the fine motor kits, he has a turn, your turn, so it all works together” (S2C, 27-02-09).

<table>
<thead>
<tr>
<th>Process</th>
<th>Connor</th>
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</table>
| Referral to SHSS OT Program | • VP made referral to SHSS Program for OT service.  
• Reason for referral defined by special education teacher: assess Connor’s sensory issues; support programming around visual perceptual, motor planning, and fine motor skill development. |
| | • Transition planning meeting involved: VP; Principal Special Education teacher; family; Resource Daycare teacher.  
• Monthly meetings of special education team (review IEP; identify services/supports/gaps).  
• Service Request Form |
| Intake | • Home visit  
• CM authorized 3 visits (2 assessment + 1 case conference) |
| Documents | • Service Authorization Form  
• Client Information Referral Form  
• Service Provider Referral Form  
• Copy of Service Request Form  
• Functional Assessment School Form  
• Authorization to Collect, Use, & Disclose Personal Health Information Form |
## Process

<table>
<thead>
<tr>
<th>Process</th>
<th>Connor</th>
<th>Tools</th>
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| **OT Assessment** | • Initial assessment visit rescheduled by special education teacher – holiday concert at school.  
• Initial assessment rescheduled again by OT – OT not well  
• 2nd assessment rescheduled – Connor not well.  
• **Outcome:** The OT picked up the referral at the extreme end of the 2-month period and 7 weeks passes between the two authorized assessment visits. | • Classroom observation (10 - 15 minutes).  
• Extended interview with special education teacher (45 minutes).  
• Observation in special education classroom; gym activity.  
• Pull out assessment with activity brought by OT (OT directed EA and EA implemented activity with Connor).  
• Verbal confirmation with special education teacher about what school hopes to gain from OT assessment/intervention. |
| **Goals/Action:** Complete 2nd assessment visit; write formal report; discuss assessment results and plan for OT services at case conference. |                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                 |
| **Case Conference** | • Shared understanding of how OT can support programming for Connor at school (and home) – among OT, special education teacher, Connor’s mom.  
• Attended by OT, Connor’s mom, special education teacher, VP, researcher.  
• CM on holiday but directed OT to proceed in her absence; asked OT to call for service authorization following case conference. | • Formal written OT assessment report with recommendations.  
• Joint brainstorming of strategies for fine motor, visual motor, sensory activity (with special educator and Connor’s mom) using OT Recommendations as catalyst for discussion & action planning. | **Service Authorization** | • OT planned to see Connor monthly till year end and again in Grade 2.                                                                                                                                                                                                                                                                  | **Documents** | • OT file notes – for OT  
• SHSS (handwritten) Therapy Plan – for CCAC  
• OT file notes – for OT  
• SHSS (handwritten) Therapy Plan – for CCAC |

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### Case Conference

At the case conference, the occupational therapist began by saying she would share her findings based on only two visits with Connor. “I would say this is more or less a snapshot of him, it’s not really a full picture, it’s sort of as much as I know right now. So he was referred by [the special education teacher] for consultation mainly around development of hand strength and then the fine motor and visual perceptual skills. We kind of focused in for this one rather than just a general assessment” (case conference OT, 02-04-09). The occupational therapist went on to describe how she collected information on her two assessment visits and concluded, “it was nice to see this contrast, how he was doing in a whole variety of settings” (case conference, OT, 02-04-09). The occupational therapist also explained that she also reviewed Connor’s OSR and looked through the private occupational therapy report and also looked at Connor’s IEP. She shared her understanding by stating, “Connor definitely has a busy schedule. He seems to have really developed a lovely relationship with [the EA] and he’s willing to attempt a pretty wide variety of tasks when she presents them to him. One thing that’s definitely come up is working on keeping his “head up” for the communication, the communication skills in general is a big focus of his program” (case conference OT, 02-04-09).

The occupational therapist went on to share both observations and information that was reported to her during the assessment by either the special education teacher or Connor’s EA. Each time she did this, the special education teacher “jumped in” to elaborate on these stories and provide her assessment of Connor’s
performance. She seemed very keen to share details with Connor’s mom in particular and to celebrate
Connor’s accomplishments. The occupational therapist went on to discuss her findings with respect to
Connor’s fine motor skills. As she shared her observations, the special education teacher and Connor’s
mom shared in the discussion, contributing their ideas and describing other circumstances where Connor
has demonstrated similar performance. They built on each others’ ideas to generate activity ideas and
strategies for facilitating Connor’s participation in fine motor activities and to get him using his hands.
They made a collective decision to encourage Connor’s use of his left hand when presenting materials, and
they critiqued strategies that may support Connor’s performance such as playing familiar music during less
than desirable tasks (case conference, 02-04-09). Connor’s mom shared information about Connor’s
performance in the home environment and answered questions about how to support Connor with his
washroom routine.

When it came to identifying very specific methods for working with Connor, the occupational therapist said
that she would need to work with Connor and his teachers longer in order to figure out exactly which
activities and which strategies to recommend specifically saying, “we’ll work out the specific activities
probably on our next visit” (case conference OT, 02-04-09). Connor’s mom was eager to use the
occupational therapist’s suggestions within the context of home IBI programming. His mom also shared her
goal for Connor to learn how to print. The occupational therapist acknowledged this goal and said that she
would focus on prerequisite activities that will support future development of printing skills (case
conference, 02-04-09). The therapist acknowledged a few times that her assessment report provides “pretty
general”, “pretty broad goals” and she reinforced that she will need to spend more time with Connor to
better understand his needs in the area of sensory processing (case conference OT, 02-04-09).

At the discussion of Connor’s sensory needs, the special education teacher and Connor’s mom once again
contributed their ideas and suggestions about Connor’s responses and abilities when presented with
different sensory experiences (case conference, 02-04-09). Again they brainstormed a variety of activity
and equipment ideas (e.g., chewing on gum; disc-o-sit; fidget toys; vibrating pillow, wrist weights, etc) and
the occupational therapist summarized that her role will be to help in the selection of appropriate sensory
strategies and evaluate their success (case conference OT, 02-04-09).

Near the end of the case conference, the special education teacher took on the role of “summarizer” by
reviewing the expectations that they had decided on during the case conference. She wrote notes about each
directly on her own copy of the occupational therapist’s report. Specific suggestions centered around pre-
writing and visual motor activities to encourage Connor’s development of tool use. The occupational
therapist discussed the developmental progression of visual motor integration skills and made
recommendations about what order to introduce for introducing imitating and copying simple lines and
shapes. She also made a specific recommendation to put much of Connor’s pre-writing activities up on a
vertical surface which would support proprioceptive feedback through his arm but also improve his visual
regard that is so essential for communicating with others. The occupational therapist said that she would
return monthly to work with Connor’s educators to develop more specific suggestions around a sensory diet
for Connor. She also said she would be sure to share all suggestions with Connor’s mom so she can include
them in Connor’s IBI program (case conference, 02-04-09).

**Occupational Therapist’s Reflection on the Case Conference**

The occupational therapist said the case conference for Connor was unusual because normally the case
manager keeps it on track by chairing and not letting people drift off topic. She said that although there was
dialogue with [the special education teacher] and Connor’s mom, she felt they did stay on topic but that it
was unusual because normally at the case conferences there is not much dialogue. Typically, she reported,
case conferences are an opportunity for her to read her report out loud to the parent and teachers and to ask
if there is input into the plan. She said there is never any input and that generally everyone agrees with the
plan that she writes into her reports. She said that case conferences are usually 45 minutes or less and she
joked, “They are an opportunity for me to demonstrate my ability to read out loud” (fn, 14-04-09). She
said she normally feels quite awkward sharing her report and having everyone agree and the conference
ending with what she called a “passive acceptance of what she has to offer” (fn, 14-04-09). She emphasized that normally teachers and parents are passive recipients of her reports at the case conference. She said this is especially so if she has done a standardized assessment where she reports her findings and makes recommendations for the use of a computer. In these cases she says the case conferences are very quick and everyone agrees. She said the only time there might be dialog in a case conference is if she assess a child and says that she isn’t going to recommend a computer saying, “then there might be dialogue” (fn, 14-04-09).

The occupational therapist repeated that Connor’s case conference was unusual and shared that from it she realized that she will need to use Connor’s mom as a “key resource” (fn, 14-04-09). She relayed the example of recommending gum chewing at the case conference which was followed by mom saying that it was tried in the past and it won’t work. The occupational therapist was pleased with this kind of input and said, “This is the kind of information I need, this is something I will cross off of my list of things to try with Connor” (fn, 14-04-09). The occupational therapist also shared that she has continued to be stumped by [the special education teacher’s] question about tactile defensiveness. She said that she didn’t think of this with Connor initially and now she is thinking about what information she can provide to respond to this question (fn, 14-04-09).

The occupational therapist went on to talk about her role at the school with Connor given that it is the end of the year. She said that she knows that she is leaving in June (as she has been covering a maternity leave) and that this is influencing how she provides service (fn, 14-04-09). The therapist noted that if she knew she was the one providing long-term service with Connor, it might influence her decision to use a more direct treatment approach. However, since she only has a few visits and because the teacher and EA don’t really need to learn how to implement her suggestions, she sees her role this year as being about, “getting the right resources to the right people” (fn, 14-04-09). She reinforced that the teacher is really good about taking resource information and putting it into practice. She showed me some of her ideas for what she would do on her next visit. The occupational therapist had a text with sensory suggestions and had marked specific pages to copy and provide to the teacher. She said that she would walk the teacher through the specific ideas. Aside from that, she said that her role will not be direct treatment and that although she would like to work directly with Connor, her “time will be best spent in providing the educators with appropriate resources to aid in their programming” (fn, 14-04-09).

### OT Service

<table>
<thead>
<tr>
<th>Getting information and resources to special education teacher</th>
<th>Extended information sharing (in hallways/special education classroom) between special education teacher and OT about:</th>
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<tbody>
<tr>
<td></td>
<td>• Visual motor integration and developmental sequence to introduce pre-writing activity with Connor.</td>
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<tr>
<td></td>
<td>• Adapting resources available in school environment for use with Connor to meet specific pre-writing goals (e.g., vertical surfaces; fine motor materials).</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Joint Planning for Connor’s Education Programming in areas of visual motor integration &amp; fine motor development (OT and special education teacher)</th>
<th>Equipment Trials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OT loaned specific resources for special education teacher and EA to try with Connor at school (e.g., wrist/hand/pencil weights; wobble cushion; fidget material).</td>
</tr>
</tbody>
</table>

| Monitoring Implementation of Program Recommendations | School Consultation Therapy Update Notes (each visit) – for school & family (OT used this to explain how/why and to seek feedback on success of strategies). |
**Ongoing assessment** of the impact of Connor’s sensory processing on successful performance at school (OT felt brief time with Connor to date did not provide enough time to understand Connor’s sensory issues and therefore felt unable to sufficiently support problem solving this area identified as a concern by educators).

**Sensory Assessment**
- Observation/interview/hallway conversations with educators.
- Provision of information on sensory processing to special education teacher.
- Plan – administer Standardized Assessment to obtain a better understanding of Connor’s sensory processing needs.

**Documenting for Others**
- File notes (each visit) – for OT
- Mid-block report – for case manager
- Year-end report – for case manager

**Dilemmas for Discussion**
In contrast to the first two case studies, communication practices and working relationships among the special education team supported interactive communication that translated into specific program planning and implementation strategies for Connor. The special education teacher played a very strong role in this case by being the person who took responsibility for all information related to the design, and implementation of educational programming for Connor. She did this by a) being an active participant; b) maintaining involvement in all channels of communication; and c) making innovative use of documentation to support actions around program planning and implementation for Connor.

The special education teacher also used the opportunity provided by the OT case conference to shift the focus of education programming for Connor from developing foundation skills for learning (focus in Term 1) to developing pre-academic learning skills (new focus for Terms 2 & 3). Both the special education teacher and occupational therapist used documentation in innovative ways to support actions and implementation of recommendations. It is important to point out the role of administration (VP) in creating formal channels for tracking implementation and service provision. It is also noteworthy that Connor’s mom, although reserved in her approach, was an integral member of the team when it came to both planning Connor’s program and assessing his progress.

In contrast to the other cases, this case helps us to learn a lot about how having a specific focus for joint effort (defined by the key educators), effective communication practices, and innovative use of documentation supported positive outcomes for Connor. However, this case was not without it’s challenges. Three key dilemmas in this case included:

1. The special education teacher never has time to meet with EAs without students present.
   - The special education teacher consistently “makes time” for sharing information; she makes herself available when the OT is in the school for Connor despite always being “on the fly.”
   - The EA was invested and often stayed late to discuss Connor’s day.
   - The special education teacher uses her planning time to observe the EA and student, assess implementation, and make program adjustments.

2. Administrators are concerned about maintaining student confidentiality when hallway conversations take place…BUT:
   - Meaningful conversations often happen “in the moment” in response to day-to-day challenges with programming.
   - These hallway conversations provide moments where educators and therapist show great support for each other.

3. Connor is integrated into the Grade 1 class with withdrawal for body breaks…BUT
   - The Grade 1 Teacher is not involved in developing (Spec Ed) or implementing (EA) Connor’s education program.
The Special Education Teacher holds responsibility for understanding the Gr. 1 Program/Schedule and directing EA in her work with Connor during classroom instruction/work periods (fine motor kits).

- The EA takes responsibility for adapting Gr. 1 activities for Connor
- Powerful complex working relationships among special education team contrasted with working relationships between Gr. 1 and Spec. Ed.

These dilemmas, along with an understanding of how collaboration was supported in this case study will form the basis of our discussion. Similar to the first two case discussions, I will come prepared to elaborate on these dilemmas.
Appendix D

Focused Discussion Group Analysis of Data from Focused Discussions

(October 7 – November 18): Summary of Emergent Principles and Associated Challenges
<table>
<thead>
<tr>
<th>PRINCIPLES</th>
<th>WHEN IT WORKS WELL, THIS IS WHAT IT LOOKS LIKE</th>
<th>ASSOCIATED CHALLENGES BASED ON CURRENT PRACTICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Themes generated by researcher by analyzing data from focused discussions with participants)</td>
<td>(Appreciative examples provided by participants during our focused discussions)</td>
<td>(Identified by Participants During our Focused Discussions)</td>
</tr>
</tbody>
</table>
| **1. OT has sufficient time up front to complete a thorough assessment. Focus for OT assessment is matched to the needs of educators in programming for student** | • The OT uses part of their assessment time to understand what is already in place in the classroom.  
• The OT gets input from both parents and educators as part of the assessment process; knowing about the child and school supports/programming that is in place would support OT recommendations (tailored to the student and the context).  
• Parents are asked what they hope for their child at school and goals are built around this – OT described using this strategy during an initial assessment involving the whole special education team - the family came to school during the OT assessment – they tailored how each person’s expertise could be used to support parent-identified goals for the student; this is a much better use of time – a family-centered approach to goal identification.  
• Outcome of assessment: educators value OT recommendations based on | • Pressure on OT to complete formal written report in a timely way: CCAC would like OTs to have their assessment reports to the CM ahead of the case conference so that the CM knows what to expect at the case conference.  
• OT typically provided with service authorization for two assessment visits.  
• Scoring results of standardized assessments takes time; additional time is required for therapist to use findings along with their clinical reasoning to come up with their findings and recommendations.  
• OTs are hard pressed to get comprehensive information in only 2 assessment visits; OTs are left not knowing what is already in place in the classroom.  
• OT assessment reports present the plan to the educators.  
• Therapy plans (contained in the OT assessment report) are seen as separate from education plans (IEP).  
• Within 7 days of completing assessment, CCAC contract guidelines require OT to submit |
their assessment and include them in the student’s IEP/programming (OT strategies are wonderful and extremely helpful).

- Don’t rush analysis of complex issues; complex issues may take additional time to understand/sort out.
- Thorough assessment is important.

a written report of their goals/plan.

- In the past, for kids with Autism, we automatically got 4 assessment visits – it was recognized that you couldn’t possibly get all the information in 2 visits.
- “Bread and butter kids” make up for complex students/issues/contexts.
- Taking extra time to talk with educators is not “billable” time.
- I was at a school yesterday and there were 6 or 7 kids that the OT had to see and a note was sent home with one of the kids saying “sorry, I ran out of time”, I’ll come back” – there was just no time.”

- Each assessment is easily 4 – 6 hours intensive, direct time, that doesn’t include information sent to parent, all the indirect time, calls to parents, coordinating with schools for the visit; it involves a lot of time before the therapist even gets to the visit and incredible amount of indirect time after the assessment visits; it is costly to the providers.
- Visits are not a set time – they are a visit up to 2 hours; after 2 hours the therapist can bill as a separate visit.
- When it is the beginning of the school year and you have 50 referrals to go through and they all need to be seen at once, therapists are all working hard and overtime to get ready for the case conference.
- Want to do a quality job but
therapists are constrained by the requirement of their employers that they complete 4 visits/day
- Rush of referrals at certain times of year; cannot keep up appropriate staffing for referral – large caseloads.
- OT will “add” a new referral for a variety of reasons (e.g., already at the school) – leads to increased caseload.

| 2. Good Case Conferences allow for shared focus for joint effort and permit two-way interaction among educators and OT to support program development for the student | 2-way information sharing (education and OT).
- Educators have a say in OT recommendations by considering the feasibility in the education context (2-way planning supports negotiating how to best meet the student’s needs).
- Dynamic CM role (value added = system navigation, service coordination, & negotiation of service planning that will work in education context/family).
- Right people at the table (those who need the information).
- Sharing of information and planning is needs based (considers the specific educational goals/outcomes for the student).
- CM overviews the SHSS program; CM & OT roles & Service Delivery Model/Approach (time limited; consultation).
- Parents have opportunity to share their goals and wishes; planning then feeds off of parent identified hopes and goals.
- Student involved in service. |
| It is a convoluted process with lots of layers and lots of people involved & therefore it isn’t surprising that people don’t understand who’s doing what and why.
- Typically, the case conferences are more about the OT giving a presentation to whoever is at the case conference.
- The OT report is completed in advance of the case conference with goals and recommendations already identified which preempts opportunity for joint sharing of information about the student and context.
- It is challenging to schedule case conferences in a timely way (fitting them in sufficiently early in school year to contribute to IEP).
- It is difficult to get the right people to the table.
- Students are not involved, not sure why we don’t involve them (issues around parent wishes, consent, etc.). However it is important to recognize that involving students may be an important factor in gaining student investment in the
- Result in action-oriented planning.
- Actions have responsibility assigned (nobody owns the whole thing); Responsibility for actions is shared; case conferences result in action plans so everyone knows who is responsible for what.
- The case conference is about program development, therefore educators involved in the students program should be at the table.
- Take place annually at the start of the school year for each student.
- Someone (from the school) takes leadership for communicating about actions with all stakeholders following the case conference (during implementation of strategies) (accountability) (? IEP or other documentation can be used as a working tool to support tracking implementation/actions).
- Service plans for the child are integrated; use of case conferences at the start of the school year will help establish integrated goals.
- Everyone is on the same page.
- Involving students in formal school meetings is typically done as a reactive rather than proactive action – usually when compliance is an issue (we’re not saying this is good, but it is usually what happens).
- There is a sense that the case conference “belongs” to the CM and OT and they are responsible for directing the process and actions arising from case conferences.
- Ensuring that strategies shared at the case conference get communicated effectively to the EA is a concern since EAs are often responsible for implementing the program with the student.
- Responsibility for follow through with implementation of OT strategies is no always clear (for example, the OTs are really good at providing strategies to support student behaviour. However their sensory recommendations are often not implemented and it rarely gets traced back to the educator or EA that they are not following the OT recommendation (accountability for implementation).
- Complex kids have ongoing goals that remain the same from year to year but since education staff turns over each year, OT needs to ensure that the information is reviewed with new educators; this is especially important for positioning,
transfers, and safety recommendations made by the OT.
- OT presents their findings to a group of people who all know the student better than the OT.
- We are all working with the child to improve his/her level of skills but tend to do everything from a personal/individual/professional perspective – this takes a lot of energy/effort.

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<thead>
<tr>
<th>3. OT service is organized on a case-by-case basis to ensure that it is responsive to needs that educators have for programming for students</th>
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<tbody>
<tr>
<td>• OTs utilize authorized visits uniquely in each case so that services are truly needs based and customized to the student, educators, and context of consultation.</td>
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<tr>
<td>• OT uses best practice evidence to support their recommendations</td>
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<tr>
<td>• Teachers are provided with specific information that will support classroom programming as a result of their consultation with OT.</td>
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<tr>
<td>• Scope of OT practice in schools is defined for others.</td>
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<tr>
<td>• It is important to share different perspectives regarding outcomes and how the goals/outcomes inform next steps for professional involvement.</td>
</tr>
<tr>
<td>• Actions resulting from OT service must be identified and clear as to who is responsible for what.</td>
</tr>
<tr>
<td>• Visits authorized from CCAC are flexible so that the therapist can address case-by-case needs – there are opportunities for</td>
</tr>
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</table>

- When doing treatment in the school, I start with weekly or biweekly and then gradually decrease to once every 3 weeks or once a month.
- Options for service delivery tend to be “block of weekly visits for 6 – 8 weeks or monthly visiting – some providers still ask for and get weekly authorizations for a block of time but others tend to get monthly service authorizations for school visiting.
- Once the block of visits is used up, there are only two visits remaining for the rest of the school year for that child (10 visits/school year are typically what gets authorized).
- Authorizing 10 visits/year (monthly visiting) does not allow you to provide case-by-case service; cannot respond to needs.
- Does CM ask therapists for updates? How up-to-date is the CM kept during the bulk of the visits? I’m not sure but this is something to think about.
creative care planning.
- CM is involved throughout the treatment period for the child (not just at assessment and case conference).

### 4. Service methods are matched to educational goals and outcomes for students

- OT service matches goals for student (skill development; refinement/maintenance of function; compensation; environmental adaptation).
- Resources (material and human) support goal achievement
- Authorizing visits need to be tailored to the model of intervention used by the OT.
- Weekly intervention can work well if family is invested and actively participating with follow-up daily at home.
- We don’t know what is more effective: consultation vs. direct intervention model – which has more positive outcomes?
- There is a “myth” of direct service by OT in schools; in reality, OTs are unable to effect change in student skill without negotiating with families and educators (and students) to ensure that strategies for skill development are implemented accurately and with sufficient frequency to support skill development.
- Morphing over time – 5 years ago OT was given a) block authorizations or b) monthly consultation but these have morphed together.
- Even if the OT could provide direct treatment, their caseload is so big, they don’t have time to see students weekly.

### 5. Parents understand the rationale for involving OT, the understand the approach to service delivery, and are invested in OT service

- Parents understand OT service & model of service delivery (time limited service geared toward supporting educators to meet the student’s needs at school).
- It is helpful when the CM shares information about the SHSS Program and the role of both the CM and OT.
- Value added of CM is that they are looking at bigger picture of service for this child and can support parents with navigating the system and service planning.
- It can be very confusing for parents when multiple services are involved knowing who to speak to about what can be overwhelming for parents.
- Parents need help understanding the scope of each service.
- Parents need help navigating the layers of service.
- It often all comes at once and that can be overwhelming for parents.
- Discharge from OT can come as a surprise to families and they see it as a “lifeline” that is being cut.
- There is clear communication with families about expectations for OT service (intake role of CM has supported this kind of communication; in past CM didn’t do the intake assessment).
- There is clear communication about expectations for family involvement in the service (e.g., implementing OT homework when there are expectations to change/improve student skill level is needed to effect change).
- We need to ensure clarity about the service for parents.
- Families are asked what their goals, hopes, wishes are.
- Parents understand that 1XW or 1XM visiting by the OT will not effect change; parents have to be a part of the change if skill development is a goal for the student.
- Strengthened focus on goals that are important to family and child & building on this.
- Communication between OT and parent regarding parent expectations (e.g.: OT homework, OT Plan) must be transparent.
- OTs do come to managers to say that parents are not engaged.
- OT contact with families is minimal (telephone call for consent before assessment; case conference).
- Following intake assessment, CM has very little involvement/interaction with the family; CM does annual visit to school for follow-up as requirement of their job.
- CM may not ever meet the child because intake assessments are done while the student is at school (at the family home or CCAC office).
- If parents aren’t involved with implementing strategies on a daily basis at home, monthly OT is the same as “spitting in the wind.”
- If there is no home “buy in”, do we release the client and move onto more participatory clients?

| 6. “We’re educators, we’re not therapists.” OT service supports educators with challenges related to educational | Teaching strategies may relate to PT/OT suggestions but the goals are education goals. |
| | IEP is about education. |
| | OT findings contribute to education program (embedded into IEP). |
| | IEPs have | For kids like Alisha, many of their goals are therapy goals, it is a huge part of their program; I don’t necessarily agree, but this is what happens; Alisha is a good example of any child with high medical and complex physical needs. |
| | Why am I putting OT and PT |
programming and inclusion. Therapy strategies may support educators to achieve outcomes for students but the goals are education goals.

provisions/requirements for transition planning.
- Education programming begins with a good understanding of the child so that educators can support the student appropriately.
- Transition planning for students is about asking parents where they see their child post-secondary and identifying what we need to put in place to achieve their goals.
- Communication about the student must travel from one teacher to the next to support transitions between years/grades.
- OT service supports educators with ill-defined problems around educational inclusion (e.g., how can educators best involve Alisha in desk work, story time, or free play in the SK class).
- Educators set the scene for OT involvement by defining challenges in terms of the education program or context for student.
- In terms of our culture and in terms of the SST role, when we look at children who are struggling the move now is to say that the struggling child is not the Gr. 1 teacher’s problems, but it is a division job – when they have division meetings, they have to come up with a plan from within the division.

goals on an IEP? Shouldn’t it have education goals.
- OTs say that they are looking at the educational relevance and consider recommendations that support the student’s access and participation in their education program.
- In reality, therapy goals get thrown in rather than integrated into educational expectations for the child.
7. **OT shows educators how to implement specific recommendations and provides opportunity for feedback to ensure successful implementation by designated educators. Educators and therapists assess the success of strategies on achievement of student goals/outcomes.**

- We would need to show educators how to use the strategy/device with child on repeated occasions; in context; and the educators would need to see the child being successful with the recommendation or technology.  
  - It can be time intensive to adapt materials to support classroom teachers to include a child; it requires professional expertise, experience.  
  - Educators see the child being successful with the recommendation/technology.  
  - OT consultation may be about showing educators how to implement strategies with the student in the classroom context in order to convince teachers that it is “easy” to implement with the student.  
  - OT documentation supports teachers with implementation of specific strategies/tools/recommendations.  
  - It could be that more time is required to learn technology and how to use it; sometimes people are afraid of technology.  
  - Sometimes pull-out is needed to demonstrate something in another area of the school.

- Some educators are not implementing technology even after being shown how to use it.  
  - Teachers often say, we haven’t had time to try your suggestion yet.  
  - There are only so many hours in the day.  
  - OT documentation is primary form of communication about OT recommendations – it emphasizes what was done by OT, not how and why; teachers left unclear about recommendations or how to implement strategies; educators don’t always understand what therapy notes refer to.  
  - Even when EAs or educators have seen the strategies implemented by OT, they struggle to implement effectively in the classroom.  
  - OT often tells what, but neglects to show how and explain why (Time; methods of communication).  
  - EAs get to see the OT working with the student but aren’t responsible for program development; Educators responsible for program development rarely get to see the strategies in action.  
  - OT time is spent primarily with EA; the EA gets the hands on practice; EA gets to play with the resources and they have direct access to the OT explanation of how and why; Alisha is not alone, this happens, it could be 16 different kids off
the top of my head because that’s the way, it is the way it absolutely works, and it’s sad but it is absolutely the way it works.
- It isn’t fair to ask the EA to synthesize the information coming from professionals; it shouldn’t be their responsibility to integrate that information and make those decisions, it has to come from a higher level.
- OTs struggle to inject themselves into the school program and the teacher’s schedule.

<table>
<thead>
<tr>
<th>8. <strong>A key educator holds responsibility for the student’s education program; this includes supporting the EA who holds responsibility for program implementation and being accountable for all the pieces of information related to the student’s program, related services, and supports</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>OT programming and service planning goes through a key educator.</td>
</tr>
<tr>
<td>SST can be that key educator; it is important therefore to ensure that SST is there when the OT visits and is responsible for gathering all materials on the child so that these can be used in developing the student’s IEP.</td>
</tr>
<tr>
<td>Educators know how to get in touch with the OT to discuss programming and recommendations/needs.</td>
</tr>
<tr>
<td>Key educator regards OT input as valuable: guards the information to ensure that it is used in education programming.</td>
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<tr>
<td>Therapists book their school appointments so that the key educator is available during their visit and can follow-up on recommendations made by the OT.</td>
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<tr>
<td>OT discusses needs, goals, and how to implement supports</td>
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<tr>
<td>There is a belief that educators know what is happening and drive the programming; in reality the EA drives the program and has significant responsibility.</td>
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<tr>
<td>Classroom teachers have 20 or more kids they are responsible for.</td>
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<tr>
<td>Students on an alternative IEP do not follow the curriculum; the Spec ed teacher therefore has responsibility for their program and reporting.</td>
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<tr>
<td>When you filter lots of information through an EA, you may find that they get bumped and the information goes with them.</td>
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<tr>
<td>OT needs to meet with SST on each visit to discuss needs, goals, and find ways to put supports in place; SST guards that information; SST regards it as absolutely important.</td>
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<tr>
<td>SST Knows how to get in touch with OT.</td>
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<td>Sometimes therapists just show...</td>
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</table>
with key educator; while the OT can support an EA with tweaking recommendations and providing feedback/coaching during implementation, EAs are not the primary source of information on programming for the student.
- The key educator is aware of classroom teacher schedules and uses this to strategize around how to implement recommendations with available resources.
- Documentation is used to monitor implementation and assess needs/goal attainment.
- Key educator (Classroom teacher; SST; special education teacher) is responsible for implementation of expectations.
- Key educator monitors and assesses implementation of strategies in context of the student’s education program and goals.
- Someone is designated to collect information and be accountable for it (in Connor’s case it was the special education teacher).
- Someone is responsible for programming; communication is key.
- Key educator helps ensure that actions are identified, “who is responsible for doing what” otherwise things don’t get done and/or we are all working within our own vacuums.

| 9. Meaningful communication supports | - Meet all team players at outset and work together to develop a shared plan (e.g., S-LP; clinical |
| - Many times, the emphasis in communication is on this little slip of paper, how can you | up at school. |
**educators and therapists in joint effort toward achieving student goals and outcomes in the education context**

- Everybody on the team meets each other at the outset – it doesn’t need to be just when the child comes on service but should take place at the start of each year.
- Time and money well spent, you put the money in at the beginning and you may not have as many meetings at the other end – get a good plan off the ground well from the start.
- Tap sophisticated knowledge/access the information from professionals so it can be put to effective use.
- CM has an active role in service planning, negotiating how recommendations will get implemented – they have a good understanding of the students’ needs and the big picture and can support negotiation of how to implement services for benefit of student.
- Avenues of communication are defined between key players.
- Communication includes professionals, parent, child.
- Communication of all involved parties takes place closer to the beginning of the school year and is ongoing to allow for more appropriate, client-centred, and clear expectations regarding goals, roles of involved parties, treatment plans, and overall education programming.
- Multidisciplinary meetings are communicate the sophisticated information in that kind of documentation?
- We send home a lot of stuff in writing (from the school) and a lot of times parents don’t see/get the information; as much as you put anything in writing, it is more effective to communicate person-to-person.
- Some families may have literacy challenges and won’t benefit from written information.
- In past, CM didn’t even do the initial intake assessment so this is an improvement in terms of communicating with families about the service.
- Minimal communication between CM and OT for accountability purposes (through OT documentation; annual visit by CM – but only if done in collaboration with OT visit).
- CM spends time authorizing visits – relies on OT information to make call about service authorization; service authorization is “cookie cutter” vs. case-by-case negotiation.
used to discuss/set goals and teaching strategies; assessment methods to meet those goals are defined; ongoing meeting to discuss assess progress and set new goals.

<table>
<thead>
<tr>
<th>10. Regular Classroom Teachers are Actively Involved with OT Service</th>
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<tbody>
<tr>
<td>• Educators have experience working with OT.</td>
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<td>• Educators have a good understanding of what constitutes an appropriate referral to OT.</td>
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<td>• Educators can creatively make time to meet with OT.</td>
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<tr>
<td>• Educators can extend ideas provided by OT beyond the child referred to implement strategies with the whole class.</td>
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<tr>
<td>• OT recommendations are a part of the child’s whole program (embedded into class program; curriculum).</td>
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<td>• Teachers can understand how to implement strategies easily (automatically) in context of their day-to-day instruction and classroom planning.</td>
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<tr>
<td>• Recommendations made by OT can be applied to the whole class (benefit more than the one focal student referred).</td>
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<tr>
<td>• Education staff (especially regular educators) need to understand what OT is and what they do.</td>
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<td>• It is inconsistent; some educators don’t know what OT is and how to work with OT.</td>
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<tr>
<td>• The problem is the classroom teacher is “once removed” from the process of planning and receiving OT recommendations. There isn’t that direct conversation with the classroom teacher therefore they may not have a good understanding of the recommendations and nuance of how they can help in classroom.</td>
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<tr>
<td>• Interacting with teachers is the hardest part for OT (tracking them down, catching them between class activities while teachers are preoccupied with activity preparation, students - their attention is divided; following teachers on playground duty, etc.).</td>
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<tr>
<td>• Teachers are busy; SSTs often try to make themselves available to OT when they visit because the class teachers are too busy.</td>
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<tr>
<td>• Indirect communication with classroom teachers (e.g., SST takes responsibility for communicating the information to the teacher; OT therapy updates/progress notes substitute for face: face communication</td>
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</table>
OT assessment considers the learning environment and service allows for classroom consultation to

<p>| 11. OT assessment considers the learning environment and service allows for classroom consultation to | • OT is extremely skilled in environmental scanning and can provide valuable recommendations that affect how the class is set up, how activities are arranged, how tools are used, and adaptations that will support all children. | • The problem is that we have a 1:1 OT – child referral model vs. a whole class/environment model for OT involvement. |
| | | • Billing OT service is on a per child/per visit basis. |
| | | • OT is there for one student (caseload model). |</p>
<table>
<thead>
<tr>
<th>Support implementation of recommendations beneficial to the whole class</th>
<th>Even if OT’s bag of tricks could help the whole class/teacher, their supplies/tools aren’t available for the whole class.</th>
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<tbody>
<tr>
<td>• Classroom consultations mean that OT recommendations could be applied to all – “what is good for one is generally optimal for all children in the class.”</td>
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<tr>
<td>• Classroom consultations may help classroom teachers implement OT strategies and recommendations more easily.</td>
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<tr>
<td>• Environmental assessment for classroom is an important role for OT because they see things that educators don’t (e.g., where to place book).</td>
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<tr>
<td>• There isn’t a teacher in our board who wouldn’t take in all these recommendations and use them in their teaching.</td>
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<tr>
<td>• With an integration model of education, the focus should be on what is the student’s learning environment – OTs therefore need to work at the level of the environment.</td>
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<td>• The “collaborative challenge” is how to creatively use the authorized visit within the context of environmental assessment, education for a group of educators; we need to be innovative and creative in how we use the allotted visits.</td>
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<tr>
<td>• OT is important for physical accessibility consultations.</td>
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<tr>
<td>• OT recommendations support students better when an environmental approach is taken to ensuring recommendations made benefit the whole class; need to consider whole class approaches to consulting with</td>
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<tr>
<td>12. Organization of OT Service enables opportunities for OT to contribute their knowledge to support continuing professional development of educators</td>
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<tr>
<td>- OT provides education to groups of educators about strategies to support whole class programming.</td>
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<tr>
<td>- OTs provide informal, general education across many content areas (e.g., use of assistive technology for kids who struggle, not just the kids who have it prescribed but for all kids who can use a few strategies to make learning easier; JK teachers could use what they learn from OT to support learning readiness, learning stations, pre-academic motor skills etc. – teachers are always complaining they never learn about these things in teachers college; OT can support teachers in understanding and programming to address the visual-motor and sensory-motor developmental needs of younger children).</td>
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<tr>
<td>- Continuing teacher education is needed to help teachers with general strategies that are easy to implement</td>
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<td>- In the past we had success with involving OTs in professional development for Board courses (not sure how they got paid but they came for both daytime and evening courses).</td>
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<td>- Involving OT in Board Professional Development courses has dropped off over the years.</td>
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<td>- Brown bag lunches are not supported (Paid for) by CCAC in the past an OT requested to do these in response to teacher request but the funding model didn’t support it and the CM said that it wasn’t “billable” time; the OT did it anyway but it was supported by her employer.</td>
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Appendix E

Participatory Analysis of Emergent Principles
### Service Delivery (Approach)

<table>
<thead>
<tr>
<th>Individual-level support for student referred</th>
<th>Organization of OT service enables opportunities for OT to contribute their knowledge to support continuing professional development of teachers.</th>
<th>Service methods are matched to educational goals and outcomes for students.</th>
<th>Service is organized on a case-by-case basis to ensure that it is responsive to the needs that educators have for programming for students.</th>
<th>System-level support for educators and parents</th>
<th>&quot;Focus of OT assessment is matched to the needs educators have for programming for student.</th>
<th>Service methods are matched to educational goals and outcomes for students.</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>OT service is organized on a case-by-case basis to ensure that it is responsive to the needs that educators have for programming for students.</em></td>
<td><em>OT has sufficient time up front to complete a thorough assessment.</em></td>
<td>Regular classroom teachers are actively involved with OT service</td>
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<tr>
<td>Process <em>Collaboration (Practices)</em></td>
<td>OT service supports educators with challenges related to educational programming and inclusion. Therapy strategies may support educators to achieve outcomes for students but the goals are education goals.</td>
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<td>Process <em>Collaboration (Practices)</em></td>
<td>Good case conferences allow for shared focus for joint effort and permit two-way interaction among educators, parents, and OT to support program development for the student (scheduled).</td>
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<tr>
<td>Meaningsful communication supports parents, educators and therapists in joint effort toward achieving student goals and outcomes in the education context (ongoing).</td>
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<td><em>Teachers develop educational program; Educational Assistants implement program</em></td>
<td>A key educator holds responsibility for the student’s education program; this includes supporting the EA who holds responsibility for program implementation and being accountable for all pieces of info related to the student’s program, related services, and supports.</td>
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<tr>
<td>Parents understand the rationale for involving the OT. They understand the approach to service delivery and are invested in OT service.</td>
<td>OT assessment considers the learning environment and service allows for classroom consultation to support implementation of recommendations beneficial to the whole class.</td>
<td>OT shows <em>educators how to implement specific recommendations and provides opportunity for feedback to ensure successful implementation by designated educators.</em></td>
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**Figure E1.** Group 1 Summary of Emergent Principles.
OT has sufficient time up front to complete a thorough assessment. Focus for OT assessment is matched to the needs of educators in programming for the student.

OT shows educators how to implement specific recommendations and provides opportunities for feedback to ensure successful implementation by designated educators.

Educators and therapists assess the success of strategies on achievement of student goal/outcomes.

Parents understand the rationale for involving OT. They understand the approach to service delivery, and are invested in the OT service.

System level intervention: overarching/underpinning principles

OT service organized on a case-by-case basis to ensure that it is responsive to needs that educators have for programming for students. Service methods are matched to educational goals and outcomes for students.

OT assessment considers the learning environment & service allows for classroom consultation to support implementation of recommendations beneficial to the whole class.

OT service supports educators with challenges related to educational programming and inclusion. Therapy strategies may support educators to achieve outcomes for students but the goals are educational goals.

Meaningful communication supports educators and therapists in joint effort toward achieving student goals and outcomes in the education context.

Organization of OT service enables opportunities for OT to contribute their knowledge to support continuing professional development of educators.

Good case conferences allow for shared focus for joint effort among educators and OT to support program development for the student(s).

Regular classroom teachers are actively involved with OT service.

A key educator holds responsibility for the student’s education program; this includes supporting the EA who implements the program and being responsible for all pieces of information related to the student’s program, related services and supports.

Figure E2. Group 2 Summary of Emergent Principles.
Parents understand the rationale for involving OT; They understand the approach to service delivery, and are invested in OT service.

Meaningful communication supports educators and therapists in joint effort toward achieving student goals and outcomes in the education context.

Good case conferences allow for shared focus for joint effort and permit two-way interaction among educators and OT to support program development for the student.

Organization of OT service enables opportunities for OT to contribute their knowledge to support continuing professional development of educators.

OT service is organized on a case-by-case basis to ensure that it is responsive to needs that educators have for programming for students and service methods are matched to educational goals and outcomes for students.

Consider aligning service planning to school year activities/cycles (e.g., IEP, report cards, parent interviews & case conferences)

Consider differentiating feedback sessions about assessment findings from as case conference for multidisciplinary program planning

*OT has sufficient time up front to complete a thorough assessment

*Focus for OT assessment is matched to the needs of educators in programming for student

OT shows educators how to implement specific recommendations and provides opportunity for feedback to ensure successful implementation by designated educators.

Educators and therapists assess the success of strategies on achievement of student goals/outcomes.

OT assessment considers the learning environment and service allows for classroom consultation to support implementation of recommendations beneficial to the whole class.

Regular classroom teachers are actively involved with OT service

OT service supports educators with challenges related to educational programming and inclusion. Therapy strategies may support educators to achieve outcomes for students but the goals are education goals.

A key educator holds responsibility...

**Figure E3. Group 3 Summary of Emergent Principles**
Appendix F

Participant Reflections on their Learning in the Focused Discussion Sessions
The following are verbatim quotes from the participants who responded when asked to jot down what they felt they learned by participating in the focused discussion sessions. Participants responded anonymously following the fifth focused discussion session.

“I have developed a solid knowledge of how the system works on a larger scale – I am lucky enough to be able to focus on one child whether it is my child or a student. This group has shown me the larger picture.”

“I have learned how I as an EA can better support the student, the teachers, and the therapists.”

“Importance of collaboration, identifying key stakeholders, and open communication.”

“I valued having the opinions of the other key players and getting their point of view. This has caused me to rethink how my own thoughts, beliefs, and practice influences other key participants and how I may change portions of my practice or my approach.”

“There is value for the student of understanding the other provider/participant’s perspective of the process and what they need from it – that may be different than I thought it was. For example, what CCAC thinks they are to provide is not what the therapist thinks they are to provide and my not be what was the original need.”

“I learned more about the whole process of service provision in the school setting and meeting everyone!”

“It was valuable,
- hearing from the different areas regarding successes, difficulties/challenges – too often we only see things from our own perspective;
- the importance of collaboration and communication was emphasized – makes me think about how I personally can do a better job within my own role.
- Great study! Thanks.”

“It was helpful listening to everyone’s perspectives, analyzing data without predetermined solutions, the articulation of “principles”, and presentations of the case studies. I look forward to the next steps!”

“I have learned such breadth and depth about the education system – lots of food for thought, triggers for service delivery, refinements, and understanding the system-wide interface. This has been very rich learning.”
“This makes me think we need to describe/clarify case conferences from all stakeholders perspectives.”

“I enjoyed networking, sharing with OTs, and school health support service agency providers. I learned more about how the “system” works at present.”