# THESIS

# EXPLORING THE APPLICABILITY AND UTILITY OF THE SUBJECT-CENTERED INTEGRATIVE LEARNING MODEL IN CLIENT AND FAMILY EDUCATION

# Submitted by

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#### **ABSTRACT**

# EXPLORING THE APPLICABILITY AND UTILITY OF THE SUBJECT-CENTERED INTEGRATIVE LEARNING MODEL IN CLIENT AND FAMILY EDUCATION

Client education is one of the primary intervention methods used by occupational therapists. However, existing models for client education within occupational therapy do not provide information on how practitioners can make the link between teaching interactions and occupation explicit for learners. The educational model proposed in this study, the Subject Centered Integrative Learning model for Occupational Therapy (SCIL-OT), can provide the connection between teaching interactions and client occupation by guiding the provision of information in an explicit and visual manner that represents occupation as the core of teaching.

This study used a theory building design and basic qualitative research methods.

Occupational therapists providing client education in everyday practice were taught the SCILOT and were asked to incorporate the model into client education. During a final interview,
client educators reported on their experiences applying the model. All interviews were
transcribed and coded based upon elements of the model and experience with the model in
practice. Coded data were then analyzed for themes or common threads to provide further
understanding of client educators' experiences with applying the SCIL-OT in practice.

After learning about the SCIL-OT, 1) language used by client educators shifted from implicit to explicit descriptions of the core subject of occupation in how teaching was described, and client educators became more intentional in making teaching links to connect the knowledge community and topics to client-centered occupations; 2) there was increased emphasis on

building relationships within the knowledge community; and 3) client educators explained meaning was developed within teaching experiences when centering educational interactions on client-centered occupations. Despite these transitions, client educators expressed difficulty understanding the difference between the elements of topic and subject within the model which made it difficult to explain the dynamics of educational encounters in clear language.

When reducing these findings down to the common threads, client educators expressed that the SCIL-OT incorporated meaning, stronger client-centered approaches, and increased engagement by clients and family members within teaching experiences. Although a client-centered approach is emphasized within the occupational therapy profession, participants explained the routines of day to day practice can overshadow the intention of connecting with clients and families during teaching interactions. The SCIL-OT acted as a visual aide, illustrating the components within educational experiences, thus reminding client educators to make intentional connections between the knowledge community, topics, and subject.

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## **CHAPTER 1: INTRODUCTION**

Client education is one of the primary intervention methods used by occupational therapists, and it is described as the facilitation of behavioral changes intended to empower patients to become active participants in their health management (Niedermann, Fransen, Knols, & Uebelhart, 2004). Berger (2009) explained that occupational therapy practitioners "are constantly teaching [their] clients" (p. 418) and the type and processes for client education change within the profession, depending on practice setting. As a few examples, occupational therapists in school-based practice educate teachers on appropriate learning environments, therapists in community settings teach clients how to ride public transportation, and therapists in rehabilitation teach adaptive dressing techniques following stroke. When delivered effectively, education by occupational therapists can lead to positive outcomes for clients and family members alike (Fingerhut, 2013).

Presently, existing models for client education within occupational therapy incorporate aspects of occupation with the intention of improving occupational performance, but they do not provide a way in which practitioners can make the link between performance and occupation explicit for client-learners in the process. Using a model that highlights occupational therapy's unique focus of human occupation within client education may empower clients and family members in becoming more competent in connecting new information to their own lives and their unique set of daily occupations, rather than "learning for the sake of learning" (May, Day, & Warren, 2006, p. 1047). The educational model proposed in this study, the Subject Centered Integrative Learning model for Occupational Therapy (SCIL-OT), may provide the connection between the information taught and clients' daily lives by guiding the provision of information in an explicit and visual manner that represents occupation as the core of teaching.

Human occupation has been defined as "self-initiated, self-organized activity which is goal-directed ... energized by unique interests and expressed as skill" (Yerxa, 2000, p. 91), and it has been widely recognized by scholars as the central concern of occupational therapy practice and academic education. Fisher (2013) expressed that when practice and education explicitly assign utmost importance to the subject of human occupation, they are said to be "occupation-centred" (p. 163). In client education, however, the concept of occupation is often implicit not explicit. Without a direct link to occupation, it can be difficult for clients to apply new information to their everyday lives and contexts. However, centering education on the specific occupations clients want and need to do provides relevance and motivation for clients to become more active within the learning process.

In academic education, the Subject Centered Integrative Learning Model for Occupational Therapy (SCIL-OT) has been evolving to help educators more explicitly center learning on occupation. However, the SCIL-OT has not been explored as a tool for promoting occupation-centered processes within the context of client education. The purpose of this study is to determine if the SCIL-OT has utility among occupational therapy practice for conducting occupation-centered client education by answering the following questions: 1) How are the concepts and principles of the SCIL-OT reflected in teaching within the context of client and family education? 2) How do occupational therapists experience the concepts and transactions of the SCIL-OT within the context of client and family education? 3) What are the limits of the SCIL-OT, and what recommendations do client educators have for its refinement? 4) How does the SCIL-OT guide client educators in designing and implementing learning experiences?

## CHAPTER 2: FRAMING THE RESEARCH PROBLEM

To conduct a thorough literature review, I utilized the following databases: PubMed, EBSCOhost, CINAHL, Academic Search Premier, MEDLINE, and PsycINFO. Combinations of the following search terms were provided for each of the mentioned databases: "family-centered care," "occupational therap\*," "models," "frameworks," "client-centered care," "patient-centered care," "nursing," "health professions," "adult learning," and "subject-centered learning."

After finding literature, I used a matrix analysis to organize and evaluate the information in light of this study's problem and questions. Table 1 provides an example of how the literature matrix was used by providing a few examples of the categories. The full matrix included these elements: client education, family education, educational models, teaching approaches, and application to the SCIL-OT. A category for knowledge community was created during the review process due to the literature's emphasis on how to create and maintain therapeutic rapport with clients and families throughout the education process.

Table 1
Example of Literature Review Matrix

Source	Discipline	Client Education	<b>Educational Models</b>
Greber, C., Ziviani, J., & Rodger, S. (2007). The four-quadrant model of facilitated learning (Part 1): Using teaching-learning approaches in occupational therapy. <i>Australian Occupational Therapy Journal</i> , <i>54</i> , S31-S39.	OT	"The process of facilitating skill acquisition primarily involves engaging clients in teaching-learning encounters," (p. S31).	"Teaching-learning approaches focus on structuring the therapy encounter in a way that enables mastery of the skill in its current form and in its existing environment," (p. S33).

I analyzed the literature further by identifying key information based upon relevance of content to my research questions. This information was highlighted then placed into all corresponding categories within the matrix. Each category of the matrix was separated and used to determine where more research needed to be done before moving forward with synthesizing

the literature. For example, if the same authors were referenced multiple times within a category, I continued searching for additional sources.

To synthesize the literature, I analyzed each matrix category individually and then the entire body of work as a whole to identify overarching themes, along with areas that could benefit from the incorporation of the SCIL-OT. This analysis led to the creation of the following areas that will now be discussed. I will begin by reviewing literature on the definitions of occupation-centered practice and components within client education. I will continue by explaining tenets of client education, including processes and principles driving current educational practices and the outcomes of effective client education. I will then describe the SCIL-OT before providing information on current models guiding client education in occupational therapy, including their strengths and weaknesses. Finally, I will address how the SCIL-OT could address the identified needs within client education in occupational therapy.

# Occupation-Centered Practice as a Context for Client Education

An explicit link to occupation is vital within client and family education, because an individual's life is made up of a variety of meaningful occupations to which learned information can be applied. Townsend (1997) stated occupation is the "active process of everyday living" that "comprises all the ways in which we occupy ourselves" (p. 19). Dickie (2014) explained the importance of occupation when stating "to be human is to be occupational," since "occupation is a biological imperative" (p. 16). What people do each day stems from innate human needs to be occupied, and through meeting this need people influence their health and well-being. Therefore, since occupation is a potentially health-promoting drive deeply ingrained within human nature, it is the central focus of occupational therapy and therefore, ideally, of client-family education.

Tying client education to occupation can help make the education meaningful to a client's everyday life and resonate on a personal level.

Dickie (2009) emphasized the importance of therapists remaining focused on occupation rather than solely on topics such as "cognition, mental states, motor control, or balance" (p. 16). She encouraged therapists to view the patient "as an occupational being, with many strengths and needs that require integration if they are to contribute to the patient's future occupational routines" (p. 16). Therefore, viewing clients as innately occupational, and occupation as a source of health, will promote client education that is specific to each individual, thus encouraging clients to more closely identify with the education they are receiving, thereby leading to more personalized therapeutic outcomes.

# **Educating Clients and Families**

# **Defining Client in Client Education**

Depending on the circumstance, the term *client* can refer to a single individual or group. Berger (2009) explained it is essential to understand the "strengths, limitations, culture, values, interests, age, and education level" (p. 419) of a client in order to provide appropriate interventions and education. Thus, in this description, the "client" in client education refers to the individual receiving services. In other descriptions, however, the term "client" actually refers to the entire client constellation, defined by Fisher (2009) as the service recipient along with those "who live with, work with, or are otherwise closely connected to" (p. 3) this individual. The inclusion of individuals other than the client is important because the client's social supports are often responsible for managing his or her condition or providing care.

The collective understanding of "client" is widespread in the literature. For example, after analyzing a series of interviews, Brown, Humphry, and Taylor (1997) determined "families

represent continuity" and make up the "social context" for individuals receiving services (p. 598). This means that as part of the environment, family members and loved ones can be enablers or disablers to the client's participation in daily life and community. Because family members are often caregivers of service recipients, the therapist is responsible for providing relevant information and fostering learning among the client constellation to allow successful adherence to the therapeutic plan of care when the client is at home (Olsen & May, 1966).

When applying a collective understanding of "client" to client education, a common thread identified was the importance of establishing a collaborative relationship with the entire client constellation as active members in the education process. For example, in a descriptive study, Jeffries (2009) expressed "the family and professional have a shared responsibility" (p. 129) to develop and implement a service plan. Similarly, in a systematic review, Baker et al. (2012) stated "pediatric patients" success in therapy was significantly improved by incorporating family training" (p. 35).

The term family-centered practice has also been used to describe the client as going beyond the individual service recipient. For example, when determining the validity and reliability of a new assessment, Fingerhut (2013) explained that family-centered occupational therapy within a pediatric setting "involves working with parents, families, and the child ... to facilitat[e] participation in life through engagement in occupation" in order to enhance "the quality of life for the whole family" (p. 37). Therefore, when working with any age, the focus of client education extends beyond the individual to address occupational outcomes for the entire client constellation in order to make the most significant impact.

When emphasizing the importance of the client constellation, it should be noted that family members do not always want to be active in the therapeutic or education process

(Andrews, Griffiths, Harrison, & Stagnitti, 2003; Pang, 2010). There is an assumption that families want to be highly involved in the care of a loved one; however, a series of interviews revealed some family members do not see themselves as important components within the care team and are simply "expecting to be directed" (Andrews, Griffiths, Harrison, & Stagnitti, 2003, p. 442). Pang (2010) explained in the descriptive portion of her work that an occupational therapy session may be the only hour per week parents are not coordinating or managing care for their children, which could be seen as a moment of respite and hold them back from wanting to play active roles as learners and care facilitators at that time.

In sum, when using the term client education, the singular client can be misleading, because it is more commonly portrayed pluralistically, referring to a client's entire social network. Thus, within teaching interactions, all individuals involved within a service recipient's care are considered clients, and this network of individuals is the focus of client education within occupational therapy and within this paper.

# **Defining Education in Client Education**

Client education has been described as "help[ing] clients achieve their goals by involving them in their treatment through information exchange and education" (Sharry, McKenna, and Tooth, 2002, p. 573). Client education has also been described as providing "knowledge and skills" needed "to enhance well-being and live as safely as possible" (Berger, 2009, p. 418). These definitions illustrate the idea that education is what leads the client to achieving goals and an enhanced quality of life, which further demonstrates that client education is an integral part of occupational therapy practice. Therefore, providing education in an individualized manner allows occupational therapists to holistically approach clients' needs by acknowledging personal, environmental, and social factors influencing the educational encounter (Jeffries, 2009). In a

descriptive study, Jeffries explained further that taking a holistic approach with clients involves working collaboratively with all members of the client's support network as part of the service planning team through recognizing their abilities to be recipients and providers of relevant information and services.

Stern (2009) explained that the profession of occupational therapy draws from a variety of theories and frames of reference, and Hooper (2006) noted that occupational therapy practice is often guided by adult learning principles. DeCleene and Ridgway (2013) also believed in the importance of adult learning when stating "theories of adult education should be the foundation of client education" (p. 1). Adult learning principles can be beneficial within client education, because adults are typically the clients, caregivers, or advocates for those receiving services in occupational therapy settings. This is especially true in pediatric settings, because parents or guardians are the individuals involved in the carryover of information to the child's life.

One key premise in adult learning is that adults, or in my case, clients, possess rich resources in their life experiences that they can bring to learning encounters. When looking at early concepts of adult learning principles, Long (1990) found that scholars emphasized the idea that adult learners have unique experiences they bring into each teaching and learning interaction, and these experiences impact the organization and generalization of new and existing information. This is still highlighted today as Stern (2009), who wrote about client education in occupational therapy, explained constructivist learning as a process in which adult learners "must be active participants" in order to "gather information and develop strategies at the same time" (p. 380). When adult learners are able to take in and apply information at the same time, they can retain this information in a more effective manner. Therefore, adult learners need to be able to shape new information around prior experiences.

## **Processes Guiding Client Education**

Client education, understood broadly, involves clients in their own healing process. For example, Radomski (2011) proposed that client education should be interwoven into routine occupational therapy using strategies that enable clients "to advance their own healing, adaptation, wellness, and quality of life" (p. 472). Empowering clients to be active in the process of enhancing participation through empowering them in their abilities to impact their own lives could be considered, in itself, a healing mechanism. Providing education, while building collaborative rapport with families, enables family members to become competent caregivers and team members within the care of their loved ones. Yet, families' competence, knowledge, and experiences change as they move through the therapeutic process over time. Thus, when providing teaching interactions from a family-centered perspective, Greber, Ziviani, & Rodger (2007b) recommended that occupational therapists choose educational "strategies that meet the changing needs of the learner[s] as skill acquisition proceeds" (p. S41).

Client education, understood more specifically, involves the facilitation of behavioral changes intended to empower patients to become active participants in their health management (Niedermann, Fransen, Knols, & Uebelhart, 2004). The facilitation of new behaviors can be difficult for any learners. Therefore, when providing client education, Graham, Rodger, and Ziviani (2008) emphasized that practitioners should "(i) interact as friends, guides, or informants; (ii) convey a belief in parents' abilities; and (iii) provide timely, practical information" (p. 17). Jeffries (2009) described an additional principle: provision of family-centered education needs to occur "within the context of the family's life" (p. 129).

Further processes suggested to occupational therapists to enhance the provision of client education include scaffolding the incorporation of the client constellation. Scholars explained

this scaffolding is based on a balance between comfortability of members and effective treatment, taking on an interactive and encouraging role when working with family members, and considering the client's social, environmental, and cultural contexts when providing education (Andrews, Griffiths, Harrison, & Stagnitti, 2003; Pang, 2010; Graham, Rodger, & Ziviani, 2008; Jeffries, 2009; Palisano, 2012). While very useful in setting up educational encounters, these processes and principles remain generic and not specific to occupational therapy, meaning the role of occupation as the core concept of the learning process is not present.

# **Outcomes Resulting from Effective Client Education**

Various authors have found that effective client education results in positive outcomes for those involved in the education process (Olsen & May, 1966; Palisano, et al., 2012; Rosa, 2009; Radomski, 2011). For example, in a conceptual piece, Olsen and May (1966) emphasized that supporting families through education helped clients make gains in their own development, as they explained "a direct relationship appears to exist between family guidance and a patient's continued independence" (p. 88). Hammond and Freeman (2004) found in a follow up four years after a study on individuals with rheumatoid arthritis that those in the intervention group receiving approaches focusing on "educational, behavioural, motor learning and self-efficacy enhancing strategies" (p. 522) showed more improvement in the areas of joint protection, stiffness, and performance in activities of daily living than those who received only a biomedical focus. Therefore, providing individualized education in conjunction with therapeutic interventions has lasting effects on clients' everyday lives.

Furthermore, a literature review by Palisano et al. (2012) showed family-centered care is considered to be "best practice in early intervention and pediatric rehabilitation services" (p. 1043) based upon the benefits shown when incorporating families into all aspects of care. The

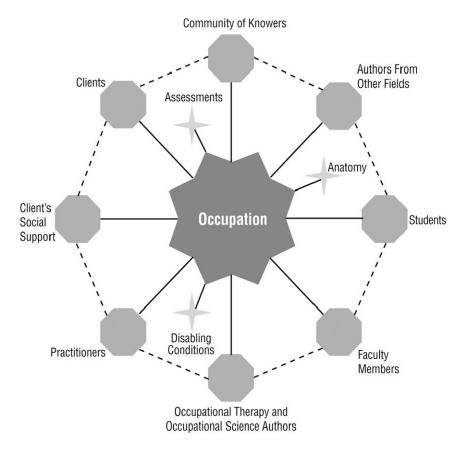
authors explained these beneficial outcomes involved families advocating for their children to be included and integrated within all aspects of society once the family members were empowered to be a force of change in the children's lives. When working with the geriatric population, caregiver burden was reduced when occupational therapy education was adhered to by caregivers of individuals with Alzheimer's disease (Radomski, 2011). Therefore, taking on a family-centered mindset will enhance a practitioner's ability to incorporate family members in more meaningful roles in the lives of their loved ones.

Rosa (2009) reported that occupational therapy specific outcomes moved beyond clients and onto practitioners. She explained that along with client successes including "improved functional performance in areas of interest to them, resumption of life roles, decreased pain, improved safety and physical health, and increased levels of satisfaction with therapy and the outcomes of intervention," (p. 287) practitioners who felt they had meaningfully helped clients reported "a strong sense of connection with those clients and a sense of joining with them in mutually supportive partnerships" (p. 287). In sum, the provision of client-centered education in any type of intervention positively impacts outcomes for clients, family members, and practitioners alike.

# **Models Supporting Client Education**

# **Subject Centered Integrative Learning for Occupational Therapy**

This study targets a model believed to have potential for, but as yet not studied in, the context of client education. The Subject Centered Integrative Learning Model for Occupational Therapy (SCIL-OT) is introduced here in order to compare and contrast existing client education models in the next section. As seen in Figure 1, the SCIL-OT is an education model with the



*Figure 1*. The Subject Centered Integrative Learning model for Occupational Therapy (SCIL-OT). Hooper, 2015.

subject of human occupation as its core, and it has been primarily developed in an academic education context. Mitcham (2014) described the idea of the SCIL-OT as a "relationship between core and topics set against a contextual backdrop, [with] a community of knowers that will vary every time" (p. 643) learning outcomes are identified. Therefore, the SCIL-OT is made up of the following elements that can be linked to one another throughout the education process: core subject, topics, knowledge community, and context.

## **Elements**

The first element of the SCIL-OT is the *core subject*, illustrated in Figure 1 as the central star. A core subject is the main premise upon which a profession is developed, and it is the true nature of what makes a profession unique. Hooper (2006) explained that a core subject has been

referred to as a profession's hallmark philosophy, its central focus, that which holds the "highest level of importance and disciplinary knowledge" (p. 187). In occupational therapy as a profession, the core subject is human occupation. Molineux (2009) compared various definitions of occupation and provided Townsend's perspective that human occupations encompass "the active process of looking after ourselves and others, enjoying life, and being socially and economically productive over the lifespan and in various contexts" (p. 19). Furthermore, he noted that the American Occupational Therapy Association defined occupations as "the activities people engage in throughout their daily lives to fulfil their time and give their life meaning" (p. 19). Since occupation is at the very core of the profession, it is important to ensure it is at the core of what is being taught within client education in occupational therapy.

Hooper (2006) explained that *topics*, seen as the four-pointed stars in Figure 1, constitute another element within the SCIL-OT referring to any content taught within a profession. For example, if human occupation is seen as the subject within the SCIL-OT, topics within client education could include medication management, transfers, or surgical precautions. Hooper et al. (2014) explained how topics can appear to be "stand-alone, generic content areas, but they are reconstituted into something new when conjoined with a profession's core subject" (p. 188). Therefore, subject centered education emphasizes teaching how these topics are "tethered to a core subject," (Hooper, 2006, p. 558) because "the integration of topics with [a] core subject" (Hooper, et al., 2014, p. 188) makes up a profession's body of knowledge.

Finally, the third element of the SCIL-OT is the *knowledge community*, made up of various individuals working together to "co-construct new knowledge" about the core subject of human occupation (Mitcham, 2014, p. 643). The knowledge community is seen in Figure 1 as the series of octagons on the outer edge of the model. Within occupational therapy, the

knowledge community can be made up of clients, family members, physicians, social workers, or anyone else involved in a patient's care. Rather than simply receiving knowledge, all learners are encouraged to assist in the creation of a newly developed idea in relation to the central subject. For example, clients add knowledge of their personally meaningful occupations based upon their experiences and perceptions of how these occupations fit within their lives.

## **Interactions**

All elements within the SCIL-OT can influence one another, and when this occurs, it is referred to as what the research team considers a *teaching link*, illustrated in Figure 1 as the lines connecting various elements. It is important to note that the educator is the one who intentionally fosters a link. An example would be when therapists make a link between how to transfer from a wheelchair and the everyday occupations that transfer makes possible, such as getting in and out of bed on one's own, allowing for more independent management of morning and evening routines. Another example is as follows: when working with children in schools, a therapist may address fine motor skills, a topic. When the therapist also educates on how fine motor skills empower other occupations like putting on warm clothing in winter or working at the computer, the therapist is actively linking the topic to the core subject of occupation for the client.

A teaching link could also occur when the context impacts topics and their connections with occupation. For example, an occupational therapist working in the context of an inpatient rehabilitation facility may be working with individuals following traumatic brain injury or spinal cord injury. Due to this particular environment, topics would focus on compensating or adapting activities of daily living. When working with these individuals, they are likely recovering from a traumatic injury and will not be returning to their everyday occupations in the same capacity. Therefore, the link between topic and occupation will need to be more explicit, as patients may

need assistance in discovering new occupations rather than returning to those in which they previously engaged.

In sum, all of the elements and their interactions in the learning process must be taken into consideration and understood. It is also important within the SCIL-OT to provide to learners clarity on the relationship between what is being taught and human occupation. Creating this link may be obvious for practitioners, but clients will need to have the core subject of occupation explicitly intertwined within their learning processes to truly help them anchor the information they are learning to their everyday lives and contexts. Therefore, it is important for practitioners to find ways to link elements within the model to make the educational process most effective for each client.

#### **Relevance of the SCIL-OT in Client Education**

Thinking about how the SCIL-OT may apply to client education requires clarifying what may be the topics, who makes up the knowledge community, and what the educational process may look like within this context. Then, the teaching interaction needs to be connected to occupation in a way that can help the client understand the link to and impact of the core subject of occupation within his or her own life. By connecting the topic and core subject through the client specific context, the client is incorporated as an important asset to the knowledge community by gaining information on his or her everyday occupations.

**Topics.** Occupational therapists link relevant topics within the client's situation to human occupation in order to provide a way for clients to retain and apply this information across their lives and everyday routines. Furthermore, topics included in client education are specific to the needs of the service recipient, which makes the SCIL-OT client-centered. For example, if the client is experiencing fatigue symptoms, a relevant topic would be energy conservation

techniques. The occupational therapist would take this topic of energy conservation and link the information to an occupation that is meaningful to the client. If the client regularly engages in gardening, the therapist would explain why the recommended energy conservation techniques will enhance participation in this meaningful activity. In this particular situation showing the utilization of the SCIL-OT, education on the topic of energy conservation is used to reach the goal of increased participation in the client's chosen occupation of gardening.

Knowledge community. Within client education in occupational therapy practice, the knowledge community consists of individuals including but not limited to clients, family members, members of the care team, and the occupational therapist. The composition of the knowledge community can vary depending on the setting. For example, in a skilled nursing facility, the knowledge community would include members of the therapy team, family, doctors, nurses, nurses' aides, and a social worker. However, in a school setting, the knowledge community would be made up of the student, parents, teachers, and school faculty. Therefore, the knowledge community looks different even among occupational therapy practice settings, so it is important to identify and include all individuals who are important to the client's care.

Educational process. When using the SCIL-OT as an educational model, the educational processes appear as teaching on the lines, meaning providing education in a way that creates a link between topic and core subject (Hooper, 2015). This is completed explicitly to emphasize the impact on a client's life. To build upon current approaches used within client education in occupational therapy, the SCIL-OT can be used as a guide to assist therapists in providing to the client an explicit link to occupation through an effective understanding and utilization of the SCIL-OT elements. The practitioner sets up client learning opportunities to show how a topic links to his or her everyday occupations. The client then actively works with the practitioner to

develop this new knowledge in order to mold the discussed topics into routines and habits that directly fit into his or her lifestyle.

## **Additional Current Models for Client Education**

Six educational models and one framework have been identified as being used to guide client education in occupational therapy. In this section, three of what seem to be the strongest models, as evidenced by their focus on occupation and aim to enhance clients' occupational performance are highlighted; in other words, three that seem closest in scope to the SCIL-OT. These models include the Four Quadrant Model of Facilitated Learning (Greber, Ziviani, & Rodger, 2007a & Greber, Ziviani, & Rodger, 2007b), Occupational Performance Coaching (Graham, Rodger, & Ziviani, 2008), and the Ecological Model of Adherence (Radomski, 2011). Each of the models have an end goal of increasing a client's occupational performance, but they seem to practice upon the assumption that occupational therapists intuitively understand how to explicitly link the information being learned and occupation in relation to the client's life, the link that the SCIL-OT seeks to make explicit.

# The Four Quadrant Model of Facilitated Learning

Greber, Ziviani, and Rodger (2007a & 2007b) developed the Four Quadrant Model of Facilitated Learning (4QM), seen in Figure 2, to integrate learning theory and core tenets of occupational therapy. The aim of the 4QM is to "guide occupational therapists in their use of teaching-learning approaches as part of occupational therapy practice by embedding them within contemporary theories of occupational therapy, psychology, and pedagogy" (2007a, p. S31). The 4QM uses processes within a frame of reference focused on acquisitional learning, described as emphasizing the development of skills specific to occupational performance through the use of "compensatory, adaptive and teaching-learning approaches" (p. S33). This model was developed

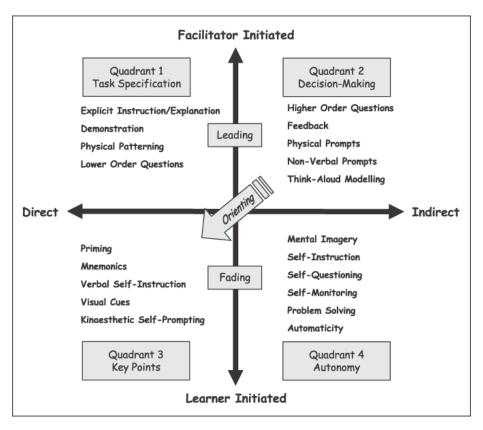


Figure 2. The Four Quadrant Model of Facilitated Learning. Greber, Ziviani, & Rodger, 2007a.

from combined education and occupational therapy perspectives, and its synthetization was completed for and by occupational therapists.

The four quadrants are formed by the intersection of two continua. One continuum represents the range of how instruction is provided from direct to indirect. The second continuum represents the range of who initiates learning from therapist to client. Placed perpendicular, the two continua form four quadrants, each with a cluster of instructional strategies a therapist might use with a client. The occupational therapist is charged with identifying which quadrant would be most appropriate for each individual client and accommodating education strategies based upon this categorization. The educational processes can then be modified over time to allow a client to move through the quadrants in a progressive manner to the ultimate goal of Quadrant 4:

autonomy. Although autonomy may be the eventual goal, there are often times when direct instruction or therapist-led approaches are most appropriate.

To provide further explanation, at the intersection of direct instruction and therapist initiated learning, Quadrant 1, therapists use teaching methods such as explicit instruction and demonstration, physical patterning and lower order questions. Quadrant 2, where indirect instruction meets facilitator-driven processes, the instructor addresses "task performance by encouraging [the client] to engage in decision-making processes" (Greber, Ziviani, & Rodger, 2007a, p. S36) through comments or suggestions regarding current performance and challenges. Quadrant 3 lies at the intersection of client-driven learning and direct instruction and focuses on observable strategies, such as "self-talk or picture cues" (p. S36) that can be used by a client to impact his or her own performance. Finally, Quadrant 4 represents autonomy marked by the intersection of indirect instruction and client-driven learning completed "through learner-driven processes that are not obvious to the facilitator" (2007a, pp. S36-S37).

While the authors' description of and intent for this model are helpful in focusing on occupation as an outcome, which is captured as participation in meaningful activities, the graphic model itself does not guide practitioners to link occupation within the educational process. In other words, the 4QM was developed upon a foundation deeply focused on occupation, and it provides a wide range of options for instruction, which suits occupational therapy goals of autonomy and self-direction. However, there is no explicit reminder in the model's graphic that the focus of the teaching strategies is occupation. The authors seem to assume practitioners will intuitively connect what they are teaching to clients' occupational performance. Therefore, someone who does not know the background of the model could apply it within any profession and with no consideration of the core subject addressed through the instructional processes.

In relation to the SCIL-OT, both models are profession specific and combine principles from the fields of education and occupational therapy. They both describe elements and transactions that take place in client education, and they offer processes to guide teaching interactions. The SCIL-OT, however, attempts to take this information one step further by placing the subject of occupation visibly at the core of learning processes in the model graphic. This can, in turn, be an explicit reminder to practitioners to connect information taught to clients back to occupation and its relation to their everyday lives.

# **Occupational Performance Coaching**

Another model used to guide client education within occupational therapy is

Occupational Performance Coaching (OPC) (Graham, Rodger, & Ziviani, 2008). OPC was

developed to provide educational guidance from occupation-centered and client-centered frames

of reference. The OPC approach guides practitioners in teaching parents how to coach and

support their children while participating in a desired occupation. Immediate feedback and

support are provided, which enhance "dual objectives," (p. 17) referring to the occupation of

play for the child and role of parent for the adult. As noted earlier, family-centered practice is

seen as a beneficial approach, and OPC provides guidance in family-centered education

principles. The model is clearly focused on occupations important to the family as a whole, and

occupation is used as a means and as an end to the intervention process, demonstrating strong

tenets of occupational therapy practice. Therefore, this model is a strong tool for use with

children and their families.

Graham, Rodger, and Ziviani (2010) explained that the coaching process guides parents in facilitating their children's participation in occupations through the use of three domains. The first domain of emotional support identifies and addresses "parents' intrapersonal challenges in

being the change agent within [the client's] context and aims to build the therapeutic relationship" (p. 5). The domain of information exchange "guides therapists' consideration of their own or parents' information needs when exploring changes" (p. 5) within the coaching process. Finally, the domain of structured process provides "a clear sequence of steps that guide the overall direction of interactions," (p. 5) which include setting goals, exploring options, making an action plan, carrying out the desired plan, checking on performance, then generalizing the plan to everyday life.

OPC has similarities to the SCIL-OT. First of all, both models emphasize active involvement of participants within the therapeutic and education process. In the description of the OPC process, occupation is clearly the intended outcome. Although the OPC process is focused on improving occupational performance, this focus is communicated in the published description of the process without any graphic representation, leading a reader's interpretation to be their ultimate guide within the application and utility of the process. Thus, the model seems to assume the therapist who enters the coaching process is automatically able to coach from an occupation-centered perspective.

Graham, Rodger, and Ziviani (2010) provided three case examples describing OPC in action. One family chose a goal for their child to come to them when called. It was unclear how the therapist would make explicit the link between coming when called and the daily life of the family. An assumption seemed to be that the therapist would intuitively work within an occupation-centered mindset and would naturally find out more about how not coming when called was impacting occupational performance for the child and family members. In relation to the SCIL-OT, coming when called would be considered a topic, with the explicit graphic reminder that the topic needed to be linked to everyday occupation.

## The Ecological Model of Adherence

The Ecological Model of Adherence (EMA), illustrated in Figure 3, is another model within occupational therapy used to guide client education, which explains adherence as the level at which patients adopt and follow advice or recommendations provided by their clinicians (Radomski, 2011). Within the occupational therapy profession, adherence to therapeutic recommendations could include patients showing up to appointments, following home programs, or adopting recommendations into the routines of daily life.

The EMA involves the incorporation of person factors, provider factors, and intervention factors combined with learning and self-determination within various environments and contexts (Radomski, 2011). This model was originally used in the field of rehabilitation, and Radomski adapted it to promote success in occupational therapy education. This model focuses on how "person, provider, intervention, and related contextual factors are synthesized, shaped, and

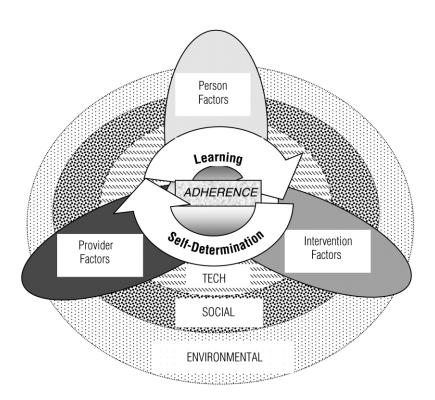


Figure 3. The Ecological Model of Adherence. Radomski, 2011.

actuated through self-determination (personal choice) and learning (skill acquisition and employment)" (p. 472). The principle behind EMA is that patients incorporate information more consistently after discovering its importance (Radomski, 2011).

Radomski (2011) suggested that the process of reaching adherence is a sequence of decisions made collectively by clients and therapists. This process is made up of the following categories: "(1) selecting and right-fitting the recommendation, (2) advancing self-determination and learning, and (3) supporting implementation of recommendations and habit formation" (p. 472). When selecting recommendations, therapists are encouraged to get to know their patients, which involves gathering information on daily activities, supports, strengths, and challenges. Therapists can then identify and optimize recommendations to fit clients' lives. Once a recommendation is made, therapists move to the second category of enhancing self-determination and facilitating learning. This stage involves therapists teaching clients how to use and implement recommendations into daily life. Finally, when a patient commits to implementing the recommendation into everyday routines, the final stage of encouraging the formation of the recommendation into a habit is reached.

Although this model has been shown to be helpful in enhancing adherence to therapeutic recommendations in the field of rehabilitation, the phases do not mention occupation beyond the initial exploration of the client's interests, values and goals. The model is explicit in guiding the therapist in selecting a recommendation that meets the client's immediate needs. However, there is no guidance on how to follow through to ensure this recommendation is making the most beneficial impact on the rest of the client's life. This is likely due to the fact the model was not developed specifically for the profession of occupational therapy.

When relating the EMA to the SCIL-OT, both models emphasize the importance of individualizing the educational process to best fit the client's life. Within the EMA, the focus is on making the most feasible recommendations for a client to incorporate into his or her routines and habits, and the SCIL-OT aims to guide practitioners in linking educational encounters to the individualized occupations of a client's life. When looking at the elements of the EMA, adherence would be considered a topic to be further linked to the core subject of occupation. The SCIL-OT could take the information and guidance provided by the EMA further by ensuring the recommendations being incorporated into a client's daily routines are clearly linked to their impact on the client's everyday life.

# **Summary**

Overall, each of the three models has elements of the SCIL-OT embedded within them. For example, there is a consistent emphasis on the knowledge community, as the models encourage individuals within the client constellation to 1) see themselves as a part of the team and 2) enhance their identity within the team of experts surrounding the client's care. In some cases, particularly within the OPC process, the family is seen as the collective client, which means the education provided is intended to better the family's overall occupational performance and quality of life. The models also aim to achieve enhancement in occupational performance through the improvement in particular skills, referred to in the SCIL-OT as topics. The models presume client-centered services and educational processes that take into consideration a client's individualized needs, which represent a holistic view of the client, as the person, environment, and task are taken into consideration.

Although the models promote improved occupational performance through enhancement and individualization of educational strategies, it is unclear in the provided graphic illustrations

that occupation is the center when interacting with clients. Nothing explicitly denotes that a link needs to be intentionally made from information taught to occupation as the core of the educational process. The connection between educational approach and human occupation seems to be assumed by the practitioner and may not be clearly explained to the client. A reasonable assumption is made in all three models that when a goal is met, the link to occupation has been made for the client. However, there is nothing to guide client education in closing the loop between what is being taught and its overall occupational impact that will take place in clients' lives, which prevents clients from being able to tether what they are learning to the contexts of their everyday lives and occupations.

# **Need and Significance of Proposed Study**

The purpose of this study is to look at the applicability of the SCIL-OT as a guide for client education. The SCIL-OT can be used as a model to guide the facilitation of information in a way that can more clearly connect necessary information and the client specific contexts of everyday life. By encouraging learners to actively construct their own knowledge, an anchor is provided to allow more fluid application of the new information to more natural contexts.

Hooper et al. (2014) explained that helping clients apply information to their lives is important, because knowledge simply exists without meaning when lacking ties to occupation, which can make it difficult for learners to organize knowledge in a purposeful manner.

Application of the SCIL-OT within practice could make a significant impact on the profession of occupational therapy, because client education is an integral part of practice. When analyzing the literature, the three strongest educational models still lacked a solid and clear connection to human occupation, which is the subject that makes the profession of occupational therapy unique. If we continue to develop and use models that can be easily applied within any

profession, our professional identity and individuality are overshadowed. We need models unique to our own profession to show the distinct nature of occupational therapy and the true impact of human occupation within a client's life.

The proposed use of a model to guide client education corresponds with DeCleene and Ridgway's (2013) findings that "the intentional introduction of elements of learning theory can impact the ways in which future therapists approach client education" by enhancing "future therapists' abilities to engage clients" (p. 10). Although this study was focused on students in the academic setting, they found having a foundation and understanding of adult learning principles influenced client education practices.

While the concept of using the SCIL-OT to guide educational practices with clients and families seems to correspond with adult learning principles and other models that have been applied in practice, more research needs to be done on the applicability of the SCIL-OT within various contexts. This study looked more specifically at the utility of the SCIL-OT within the context of client education based upon the perspectives and experiences of occupational therapists who regularly apply client education within their own practice. This study involved practitioners regularly interacting with clients to determine the feasibility of incorporating the SCIL-OT within current practice. Practitioners applied the model to educational practices in a variety of practice settings and provided feedback on the process, including the model's strengths and weaknesses, along with recommendations for change. The incorporation of client educators was a method to ensure the model is up to date and useful within current practice and among the unique array of settings that make up the current occupational therapy scope of practice.

The following research questions provided guidance to the study: 1) How are the concepts and principles of the SCIL-OT reflected in teaching within the context of client and

family education? 2) How do occupational therapists experience the concepts and transactions of the SCIL-OT within the context of client and family education? 3) What are the limits of the SCIL-OT, and what recommendations do client educators have for its refinement? 4) How does the SCIL-OT guide client educators in designing and implementing learning experiences? In this study, I explored the applicability of the SCIL-OT within the context of client and family education through feedback provided by practitioners applying the model in various occupational therapy settings. I looked at the practitioners' educational experiences before and after applying the SCIL-OT to determine if the model provided the intended guidance and link to the core subject of the profession.

## **CHAPTER 3: METHODS**

# **Study Design**

The study used a theory building approach through basic qualitative research to evaluate the utility of the SCIL-OT in providing occupation-centered education to clients and families (Lynham, 2002; Sandelowski, 2000). Lynham (2002) described theory building as the "ongoing process of producing, confirming, applying, and adapting theory" (p. 222) through the stages of conceptual development, operationalization, confirmation-disconfirmation, application, and ongoing refinement and development. Because the SCIL-OT has already been developed and applied in academic settings, this study expanded the current theory through the confirmation-disconfirmation stage to elaborate and explore the theoretical concepts of the model into the context of client-family education.

The confirmation-disconfirmation phase of theory building research exists to "purposefully inform and intentionally confirm or disconfirm" (Lynham, 2002, p. 233) basic tenets of a theory. The application phase is then aimed at enabling the researcher to understand and further develop theory based upon participant experiences. Lynham explained that theory building researchers are expected to continually adapt, develop, and improve theory through attention to trustworthiness and continual refinement to ensure relevance and utility in practice. Theory building research was the best fit for analyzing the applicability and utility of the SCIL-OT, because this study looked the model's ability to be translated to current practice within a variety of settings.

A basic qualitative approach was used to fulfill this theory building study. Scholars explained basic qualitative work as looking to identify and explain patterns of experiences or

perspectives in terms of a conceptual or philosophical framework (Sandelowski, 2000; Caelli, Ray, & Mill, 2003; Merriam, 1998). A basic qualitative approach was appropriate for this study because client educators' experiences in using the SCIL-OT within teaching interactions were analyzed to find recurring patterns or themes, eventually determining the confirmation or disconfirmation of the model's utility in practice. Using client educators' teaching experiences to better understand the utility of the elements and interactions within the SCIL-OT mirrors Sandelowski's (2000) idea that researchers completing basic qualitative work are able to transform an experience or event through its interpretation by participants. She explained that the level of interpretation within basic qualitative research is different than that of a phenomenological or ethnographic study, because with a basic qualitative focus, there is less inference and more focus on objective statements made by participants.

In this study, researchers used a collaborative design in which the researchers developed the research questions and approach, and client educators acted as advisors to inform the researchers of their current approaches to education in order to provide collaborative analysis on the strengths and weaknesses of the SCIL-OT. Collaborative research was supported by Letts (2003) who stated interactive knowledge is gained through examining "the connections and relationships between people" (p. 79). Related to this, client educators shared how implementing the SCIL-OT impacted their interactions with clients. In addition to building relationships, critical knowledge was advanced through "the process of reflection on issues and actions to resolve them, which in turn result[ed] in further reflection and knowledge development" (p. 79). That is, as the client educators attempted to integrate the SCIL-OT into educational practices, they identified how the model impacted their teaching interactions with clients, thus assisting researchers in modifying the model to best fit current practice.

### **Sampling and Participants**

Client educators were selected purposively through the use of a key informant and snowball sampling. Purposive sampling involves recruiting participants based on criteria relevant to the study while snowball sampling takes place when individual participants nominate others who may be appropriate for the study (Kielhofner, 2006). These were appropriate methods for this particular study, because there were a small number of participants. Rehabilitation managers and supervisors were contacted through the use of the key informant, and these individuals had the option to recommend occupational therapists they felt best represented client education in their particular settings. We hoped to gain advisors who were passionate about client education and who were open to personal and professional advancement.

Snowball sampling began by utilizing the Academic Fieldwork Coordinator in the Colorado State University Occupational Therapy department as a key informant (Creswell, 2013). She was asked to identify potential participants for this study based upon the following inclusion criteria: (i) registered occupational therapists incorporating client education in practice, (ii) willingness to attend and provide feedback in three focus groups through distance communication, (iii) access to technology to attend focus group sessions, and (iv) ability to read and communicate in English. Potential client educators were then asked to identify additional individuals they saw as valuable to this study. Twelve client educators were invited to the study, and five participants accepted.

#### **Data Collection**

The data collection process took place over the course of three interviews between sixty and ninety minutes each. The first interview session began with a discussion of the research and establishment of shared goals and expectations for the study. This was important, because we

wanted client educators to understand their roles as active participants in the research process. The researchers used open-ended and follow-up questions to explore the group's current teaching interactions. This included query on satisfactory and dissatisfactory educational experiences to gather a baseline of participants' current teaching practice and to determine if elements of the SCIL-OT were already present.

The second interview introduced the SCIL-OT. The researchers presented the model and facilitated discussion exploring participants' initial responses to the model, including how it was perceived to relate to their current education practices. The client educators were asked to apply the SCIL-OT to their teaching interactions for a few weeks before providing feedback on their experiences and commenting on the model further. To understand how the SCIL-OT impacted each advisor's practice, a worksheet, shown in Appendix D, was provided to assist the client educators in charting out and processing their teaching experiences according to the model. The client educators were asked to complete three worksheets prior to the third interview session.

The client educators applied the SCIL-OT to practice for approximately three weeks before participating in the final interview. The researchers posed interview questions exploring the participants' experiences of using the model, and the model's congruence or lack of congruence with the participants' educational practices. Client educators provided statements to confirm and disconfirm the model, and made recommendations for change. This final interview session was essential, because to incorporate a new model into current practice, it needs to be realistic in regards to time, funding, and other constraints that come with the variety of settings within occupational therapy.

While the study originally called for focus groups, scheduling conflicts between researchers and client educators required the arrangement of interviews with one to three

participants in each. Two client educators completed all three interviews. However, feedback on the utility of the model was received from four participants, and the variation in interview progression is illustrated in Table 2. Two client educators completed worksheets with the visual representation of the SCIL-OT as it was related to their individual practice settings – community day program and pediatric hospital. A total of 6 hours of interviews were recorded and transcribed for coding. Pseudonyms will be used to protect client educators' anonymity.

Table 2

Progression of interviews for data collection

Client	Interview 1	Interview 2	Interview 3
Educator			
Janet	Completed as intended	Completed as intended	Completed & provided 3 worksheets
Emily	Completed as intended	Completed as intended	Completed & provided 3 worksheets
Melanie	Completed as intended	Completed as intended then M provided detailed input as to how the model applied to her setting	Did not complete due to scheduling and technological barriers
Emma	Completed but learned about the SCIL-OT a few months prior	Provided feedback on how the model was utilized in client education	Information was covered in interview 2
Helen	Completed	Dropped out due to minimal client contact	Did not complete

### **Data Analysis**

The audio from each focus group was digitally recorded and transcribed verbatim using a professional transcription service and was uploaded to a secure server to which only the researchers have password access. A combination of inductive and deductive processes was used to code the transcripts and examine codes for themes and relationships among the interviews. Deductive coding involved analyzing the text according to the apriori elements of the model, distinctly defined. Inductive coding elaborated on any information not within the context of the initial codes. This helped the research team more clearly define and describe the elements of the model along with the experiences and perspectives of the participants. The use of combining

inductive and deductive analyses aligned with Miller and Crabtree's (1992) idea of template analysis, in which an initial coding system is modified throughout the data analysis process. Sandelowski (2000) further explained this is done to ensure the theory or model being analyzed is revised to "best fit the data" (p. 338). This process was supported by Nvivo, a qualitative analysis software package.

To begin analyzing data, transcripts were read line by line, labeling important statements, segments, and text fragments of relevance to the research questions. Inductive and deductive coding processes took place simultaneously to identify elements of the model along with client educator experiences of each element. For example, a member of the knowledge community would be coded based upon the apriori code of "knowledge community". The relationship with this individual and further explanation of interactions would be coded as a theme, such as "mismatched expectations" or "cooperative," related to the element of knowledge community. This shifted from assigning data based upon language to conceptually categorizing data. Data from themes among each apriori code were then analyzed to identify primary findings within each SCIL-OT element.

Transcripts were analyzed between each interview session in an iterative manner allowing the researchers to explore information gained thus far and to inform subsequent interviews. Assigned themes were analyzed and modified based on their consistency with the text, frequency, and relevance. To ensure each member of the research team was applying data consistently, sample data were read through by each member and sub-codes or themes were applied until there was consistency among the group. In the process of applying the data, the text was used to expand the definitions of each sub-code and theme to become more representative of information and experiences provided by client educators.

Data were analyzed to explore how the model influenced occupational therapy education for the advisors by answering the following research questions: 1) How are the concepts and principles of the SCIL-OT reflected in teaching within the context of client and family education? 2) How do occupational therapists experience the concepts and transactions of the SCIL-OT within the context of client and family education? 3) What are the limits of the SCIL-OT, and what recommendations do client educators have for its refinement? and 4) How does the SCIL-OT guide client educators in designing and implementing learning experiences?

The data from each interview session were analyzed differently to best match the research questions addressed in the particular session. The first interview session was focused on the confirmation-disconfirmation stage of theory building and began with deductive coding partnered with inductive coding guided by the first research question looking at current educational practices. The second interview session also had an emphasis on the confirmation-disconfirmation stage of theory building and used inductive coding guided by the second and third research questions regarding experiences in applying the SCIL-OT and recommendations for change. Finally, the third interview session focused on the application usefulness stage of theory building with some carryover of confirmation-disconfirmation. Inductive coding was guided by research questions three and four to determine how the SCIL-OT influenced teaching sessions and additional recommendations for change.

Following the coding process, findings were identified by looking at data within each theme. The purpose was to identify how the elements and interactions within the model were experienced by practitioners and to determine how this transitioned with the use of the SCIL-OT informing practice. Changes to the model were recommended based upon feedback from client educators to facilitate the SCIL-OT in becoming more applicable within practice. Table 3 lists

apriori codes along with their sub-codes and themes to provide further examples and increase understanding of the data analysis process.

Table 3
Codes, sub-codes, and themes from the data analysis process

Start Code	Sub-Code	Themes
Subject	<ul><li>Implicit</li><li>Explicit</li></ul>	NA
Knowledge Community: Client/Family	<ul><li>Age/Developmental Stage</li><li>Life Circumstances</li><li>Past Experience</li></ul>	<ul><li>Negative Behavior</li><li>Positive Behavior</li></ul>
Knowledge Community: Client/Family – Therapist Interaction	NA	<ul><li>Cooperative</li><li>Mismatched Expectations</li><li>Modified Educational Approach</li></ul>
Knowledge Community: KC Member – Community Interaction	NA	Seeking Community Members as Resources
Knowledge Community: Therapist	Instructional Process	<ul> <li>Expectations for Client/Family</li> <li>Frustration</li> <li>Gratification</li> <li>Perception of Client/Family         Expectations     </li> <li>Perceptions of Self</li> <li>Perceptions of Therapist Role</li> <li>Road-Block to Engagement</li> </ul>
Торіс	<ul><li>Technical Skills</li><li>Soft Skills</li><li>Informational</li></ul>	NA
Teaching Links	<ul> <li>Knowledge Community – Context</li> <li>Subject – Context</li> <li>Subject – Knowledge Community</li> <li>Topic – Context</li> <li>Topic – Knowledge Community</li> <li>Topic – Subject</li> </ul>	NA
Context	Point in Services (Continuum of Care)     Practice Setting	NA

### **Trustworthiness**

A combination of peer debriefing, member checking, and theoretical positioning were used to ensure rigor of this study (Kielhofner, 2006; Creswell, 2013; Caelli, Ray, & Mill, 2003). Kielhofner explained peer debriefing as "multiple investigators simultaneously but independently engaging in the analytic process" (p. 353). Alongside this research, two additional

studies were exploring the experiences of fieldwork educators and academic educators when using the SCIL-OT in their teaching interactions. Peer debriefing occurred weekly when student researchers from each study came together to ensure methodology was consistent among the three projects. This was most emphasized when developing the initial codes for the data analysis process. To ensure the initial codes were being applied consistently, sample data were read by all three student researchers and codes were applied until there was consensus.

Throughout the interview sessions, the researchers reflected upon what had been said to ensure the information was accurately understood, which was a form of member checking (Creswell, 2013). This took place to ensure client educator feedback was taken and applied in a way that corresponded with the true nature of their recommendations. This study was intended to better client education practices within occupational therapy, so making the appropriate changes ensured the revised model can be feasibly applied into a variety of practice settings.

Finally, bracketing maintained accountability for the ways in which researchers' personal beliefs, motives, and experiences may have impacted interpretation of the collected data (Caelli, Ray, & Mill, 2003). To prevent my own interpretations of data from clouding the experiences of the client educators, I incorporated a process to better ensure interpretations were supported by the data. When developing themes from the data and interpreting client educator experiences, I put my perspectives on hold and put myself in their shoes. In other words, I held my preliminary understandings tentative to ensure my understandings fit the data.

### **Positioning Statement**

Throughout the process of studying the experiences of practitioners and client educators, I had to recognize my unique perspective as a student. For example, I feel that maintaining occupation-centered and client-centered practice is a responsibility of occupational therapists in

any setting due to the emphasis on these paradigms within my current graduate program. In the beginning phases of the research, I also felt practitioners would be resistant to the incorporation of a new theoretical model based upon my impression that occupational therapists are busy and pressed for time. Therefore, when moving forward into completing interviews and analyzing data, I had to be conscious of my own personal perceptions from a student lens when analyzing client educator thoughts and experiences.

#### **CHAPTER 4: FINDINGS**

As therapists initially spoke about their teaching experiences, they used language that was aligned with elements of the model, and their language was coded based upon where it fit best within the SCIL-OT elements and interactions. Although the study was not designed to be a pre-test post-test model, there was a notable shift in language and use of the model's elements throughout the progression of interviews with increased knowledge of SCIL-OT elements and interactions. Most notably, after learning more about the model, there was a shift in language used by client educators. Language moved from implicit to explicit use of the word occupation in how teaching was described, and client educators became more intentional in connecting knowledge community and topics to the subject of occupation.

Along with the shift from implicit to explicit language, the second and third interviews showed an increased emphasis on the knowledge community in client education as educators created stronger connections between themselves and clients and linked education to client-centered occupations. Client educators explained that their teaching experiences took on more meaning when explicitly addressing client-centered occupations, which helped to build rapport and stronger relationships between clients and therapists. Despite these transitions in language and emphases in teaching, client educators expressed a sense of difficulty discriminating the definitions of topic and subject, which made it difficult to explain to clients the dynamics of educational encounters in clear language. When reducing these findings down to their common threads, client educators expressed the SCIL-OT 1) helped their teaching interactions become more meaningful by connecting topics and the knowledge community back to occupation, 2) provided stronger client-centered approaches by addressing meaningful occupations, and 3) increased client and family engagement within teaching interactions.

The findings are presented based upon themes discovered within the data, and the themes are organized by the SCIL-OT elements. Within each element, I will illustrate the shifting use of the concept corresponding with increased knowledge of the model. I will also discuss confirmation or disconfirmation of each element as explained by the participants. Finally, I will provide suggestions for the model based upon the data, including clarification of some elements along with the addition of context as an overarching element within the SCIL-OT.

### Shifts from Implicit to Explicit Use of Occupation as the Subject of Teaching

Based upon its central location within the SCIL-OT, the element, subject, is defined as the main premise upon which a profession is developed and thus the hallmark focus and philosophy holding the "highest level of importance and disciplinary knowledge" (Hooper, 2006, p. 187). In occupational therapy as a profession, the core subject is human occupation, which is seen by the American Occupational Therapy Association (AOTA) as "the activities people engage in throughout their daily lives to fulfil their time and give their life meaning" (1997, p. 864). Since occupation is at the very core of the profession of occupational therapy, it is important to ensure this is also the focus within education, including client education.

The primary finding related to the model's concept of subject was the shift of language used by practitioners. During the first interview, it was apparent that client educators rarely used the word occupation in relation to what they taught their clients. Therefore, to better explore this shift, the code identifying how participants discussed the element of subject was split into subcodes, implicit and explicit. The code "explicit subject" was applied when client educators used the word "occupation" while explaining what and how they taught clients, while the code "implicit subject" was applied when they referred to occupation in more broad or general language such as teaching clients "how to be functional and get back to life" (Helen, Interview 1)

or teaching how to do "things they used to" (Janet, Interview 1). Coding data related to subject as implicit and explicit revealed that while not using the term "occupation" per se, client educators did have an outcome for their teaching in mind that was consistent with how the core subject is defined in the model. That is, they understood teaching clients to be about more than learning a topic such as range of motion, but saw each topic as connected to a larger core outcome.

By the end of the interviews, there was a notable shift in how often client educators used the term "occupation" instead of general language such as getting "back to life" (Helen, Interview 1) when referring to what and how they taught clients. This shift was most evident in a frequency count of the codes "explicit subject" and "implicit subject". When describing teaching experiences prior to understanding the model, the word "occupation" was coded four times. However, when discussing teaching experiences after learning about the model, participants used the word "occupation" twenty-three times. Although there were variations in the interviews, this increase was prominent in comparison to other terms within the model, such as "knowledge community" or "topic," which did not have such a significant shift in how educators explained their teaching.

Although frequency was the most evident shift when looking at the element of subject in the model, the way in which participants referred to the subject also transitioned from a broad use of the term to a client-centered use of the term. That is, they used the concept of occupation in reference to individual client goals. In the initial interviews, participants listed occupations that were broad and could apply to anyone. Emma, for example, spoke of wanting clients to increase "participation and health promotion, and social participation and healthy interdependence within the community" (Emma, Interview 1). In Emma's list of occupations, the term "occupation" was not explicitly connected to a particular client's needs. The broad

terminology reflected the subject, occupation, as a general concept that could be used in reference to anyone's life. Unlike the connections in the model, there was not a clear connection between occupation and the client or family, nor was there explanation for choosing the occupation or a delineation of the occupation from various topics.

Take for example the interview with Melanie, Janet, and Emily. During the first interview, Melanie explained occupations within the inpatient rehabilitation setting as what clients need to learn "to feel safe and ready for discharge [from the hospital]," but after learning about the SCIL-OT, she explained her teaching as: "I'm kind of looking at like occupation as kind of like [the client's] long-term goal" (Interview 2). The subtle shift in how Melanie represented the subject indicated a more client-centered focus. Rather than using general terminology, Melanie used language to show how she would work on the client's goals.

Janet initially explained occupations as activities she teaches that "look functional" or clients learning how to "do things they used to" (Interview 1), but after applying the SCIL-OT in practice, occupation became the driving force behind her teaching interventions. She explained she was pleased with the way the model helped tie information to occupation and provide "clear links of ... how it's a piece of something bigger" (Interview 3).

Finally, Emily showed a progression in the way she understood and applied the subject of occupation. During the first interview, she stated she wanted clients "to think big picture, think their occupation," which illustrated a focus on explicit occupation. After discussing the SCIL-OT, Emily moved further in her explanation of subject by providing an example of a teaching interaction with a young man. When explaining this experience, Emily illustrated how she played a facilitative role by stating the following to the client:

"I've noticed that it seems like you want to play with other kids on the playground, but maybe it seems like it's hard for you to know how to try to join into their play. This would be something you could try [to learn]." (Interview 2)

Emily stated the SCIL-OT helped her think about "bringing [information] back to that bigger picture of that occupation" (Interview 2). After applying the model in practice, Emily explained she put increased emphasis into tying client education back to occupation. She stated that when focusing on the interactions between SCIL-OT elements, she found it most "helpful to relate [information] back to the ultimate occupation goal" (Interview 3). Therefore, she maintained a consistent focus on tethering information within teaching interactions back to occupations that were meaningful to clients.

In sum, once client educators were introduced to the SCIL-OT, they shifted from broad depictions of subject in their teaching to specific, client-centered examples. Emma explained the increased client-centered perspective by stating that addressing occupation is always "client-centered because that occupation is different for everybody" (Interview 1). Conducting teaching experiences with a more client-centered focus on occupation allowed participants to meet clients' particular learning needs. The shift away from an implicit or general use of occupation suggested that the SCIL-OT facilitated client educators' understandings of subject as an explicit and person-centered concept rather than a larger "catch-all" term.

### Confirmation and Disconfirmation Related to the Element, Subject, in the Model

The increased frequency of referring to the subject element of the model, as well as the specificity of how participants referred to the subject, were understood as confirmatory. Client educators generally provided positive comments regarding the model's concept of core subject as resonating with their teaching experiences. Participants expressed they felt more client-centered when using the SCIL-OT, because it acted as a reminder to link teaching interactions back to the individual's specific occupations.

On the other hand, one participant expressed that depending on the setting and educational interactions, there could be multiple occupations being addressed simultaneously when teaching particular skills to a client. In other words, when client educators taught component skills considered in the model to be topics, such as fine motor coordination that impacts multiple occupations simultaneously, they had more difficulty delineating the model's concept of subject. In this participant's view, addressing multiple occupations at one time would mean that multiple copies of the SCIL-OT model would be present within each session, making it difficult to keep track of and verbalize the thought process and rationale for each individual area. Therefore, there was a need to clarify that the core subject of the model was not only meant to be singular (i.e. refer to a single occupation each time) but that, more generally, the subject provided opportunities to explain to clients that occupation is a health promoting agent on many levels and provided a way to incorporate meaningful goals.

### **Understanding the Roles and Interactions among Knowledge Community Members**

Although the most notable shift in language came about in discussion of the subject element of the model, all interviews showed an emphasis on the knowledge community element as a vital piece of teaching experiences. Knowledge community was defined as various individuals working together to "co-construct new knowledge" about the core subject of human occupation (Mitcham, 2014, p. 643). In client and family education, this concept is similar to Fisher's (2009) idea of the client constellation, which is made up of the service recipient along with those "who live with, work with, or are otherwise closely connected to" (p. 3) this individual. In the SCIL-OT, knowledge community refers to the team among which learning takes place, and the client educator creates opportunities for learning connections between the members that make up this community.

During the data analysis process, I began by coding text as "knowledge community" anytime participants identified individuals who were involved in the care team, such as parents, caregivers, or day program staff. As I moved further into participant interviews, there were clear and intentional emphases on specific interactions between members of the knowledge community, leading to the development of more specific sub-codes. Consistent with how knowledge community is represented in the model, the code was initially broken down into the most prominent knowledge community members referenced in the interviews – client/family and therapist. The data also included descriptions and characteristics of members of the knowledge community and their interactions. Going beyond how the element of knowledge community is described in SCIL-OT, the following codes were added to further elaborate the more primary code of *client/family-therapist interaction: mismatched expectations* between the educator and client or family, *cooperative relationships*, and educator-modified approaches based on client circumstances.

Overall, when discussing teaching experiences, participants emphasized the relationships between the knowledge community members rather than simply understanding the make-up of the knowledge community as a whole. In other words, when using the model, client educators assisted individuals such as parents, staff, and caregivers in understanding their value among the knowledge community. The emphasis and focus on relationships within the knowledge community led to the development of the following themes related to the importance of collaboration and a client-centered mindset

# **Collaboration Leads to Engagement**

All participants emphasized the knowledge community throughout their discussion of teaching experiences in ways largely consistent with the SCIL-OT. Participants interpreted the

value of education sessions based upon the level of client engagement within the learning process. Client engagement, because it involves a collaboration between the educator and client was coded "knowledge community." Participants explained that they experienced client engagement "when connection [was] happening and people [were] ready to learn" (Janet, Interview 1) or when working to get "people on the same page as opposed to ... butting heads" (Emily, Interview 2). Participants worked to ensure teaching interactions engaged clients, but these explanations of engagement showed therapist effort was needed to increase client and family motivation to collaborate.

There were many times when participants felt they had to take on extra responsibilities to ensure education was delivered in a manner congruent with the client or family's learning style. One participant explained therapists at her facility worked in conjunction with clients and families to determine learning preferences prior to providing education. She stated they "get to try a few different approaches ... and work with [clients to identify] how they're going to learn the material best" (Melanie, Interview 2). This demonstrated how certain facilities are aware of the importance of knowledge community members and are currently incorporating strategies to best meet their educational needs and actively engage them as learners. In the language of the SCIL-OT, educators used processes such as preferred learning styles to facilitate relationships among members of the knowledge community for the purpose of learning

Once introduced to the SCIL-OT, client educators had a new lens through which to understand the dynamics of the knowledge community in client education, which helped practitioners create strategies to increase client engagement. Janet stated the effectiveness of educational interactions "depends on if [clients] are ready to listen or they aren't," (Interview 1) and she explained that she preferred to create comfortable environments for clients and families

to promote collaborative relationships. She explained further by stating the model assisted her in incorporating "collaboration and lines of open communication to promote [an] environment of sharing as well as increased communication, also providing opportunities to build therapeutic rapport" (Worksheet 3). The knowledge community became more visible and explicit as a leaning tool in client education.

Overall, participants drew value and meaning from clients' levels of collaboration within the knowledge community and engagement in the client education sessions. One participant responded by stating "it's satisfying when you have the collaboration and the patient buy-in and the follow-through" (Emily, Interview 1). This quote exemplifies the importance Emily found in building rapport with clients. After applying the SCIL-OT in practice and building an understanding of the knowledge community, she took on a new understanding of the support naturally built into a feeding group she facilitated. Since clients do not always have a prevalent support system, Emily stated the SCIL-OT helped to "keep that community of knowers in mind when there's not that structure in place, when you are just doing individual therapy and you don't have a support group that's already in place around that" (Interview 3). Therefore, understanding the presence and purpose of the knowledge community gave Emily a new perspective on when more energy needs to be invested into educating and supporting members of the knowledge community within teaching experiences.

#### A Client-Centered Focus Leads to Buy-In

When discussing the SCIL-OT element, knowledge community, participants emphasized the importance of a client-centered focus, or recognizing members within the knowledge community beyond the client and educator. It was not enough just to get active engagement.

Maximizing the knowledge community in learning involved focusing the interactions around

goals that were meaningful and emphasizing the importance of each member of the knowledge community within teaching interactions. Although similar ideas, this varies from the client-centered focus in relation to the core subject of occupation. To explain further, a client-centered focus on occupation emphasizes choosing the subject for the teaching interaction based upon the needs and preferences of the client constellation, while a client-centered focus within the knowledge community involves helping individuals recognize their value within the teaching interaction. A few participants explained that maintaining a client-centered focus appeared to strengthen client and family buy-in or acceptance of provided teaching experiences.

When describing the importance of buy-in, one participant explained this process starts at the beginning of the client-therapist relationship and involves the entire family structure. She explained the importance of involving and engaging families early on in the therapeutic process based on the nature of brain injuries by stating:

"If we don't have buy-in with the family from the beginning or we don't have family present during their initial admission, it's really hard for us to set-up that structure and routine that they need to go home to following discharge from the hospital. So that's when some of our discharges fall apart. We just don't have the buy-in from the family because a lot of our brain injury patients when they come in don't have the attention or the skills to be able to manage themselves safely within the home. And that sometimes is really hard for families to accept. That's where we find it the most difficult cases are discharge dispositions is if you don't have family on board from the beginning." (Melanie, Interview 1)

This information was disclosed during the first interview, which illustrated that even prior to learning about the model, Melanie was working to actively engage families in the therapeutic process by facilitating meaningful connections with them at admission. Although not yet using the term "knowledge community," there was a presence of this element within typical teaching experiences in Melanie's client education.

After learning about the SCIL-OT, practitioners expressed the model gave them ways to make sure their interactions were client-centered and included more members of the knowledge community. When completing a worksheet with a client, Janet stated the model "allowed

reminders/prompts to link tasks back to occupation and ways to link community of knowers to each other as well as elements of the tasks creating a larger collaborative network" (Worksheet 3). She explained the model provided links within the knowledge community along with opportunities to include a wider network of support. Janet expressed the importance of not only taking on a client-centered perspective but helping others recognize their role within the knowledge community. She stated, "I think another feature of that community of knowers is not only identification but also having those separate knowers realize that they are within a community of knowers for a particular topic" (Interview 3).

Emily then discussed how the SCIL-OT enhanced the level of meaning within teaching experiences and explained this added meaning might bring about more consistent follow-through from clients and families. She stated:

"I think that this model adds meaning to the methods that we're using and the topics that we're teaching, and it made me think about our last conversation about disappointing interactions that we've had with clients and families, and it makes me wonder if those situations are ones where maybe I didn't add enough – I didn't link it back enough to what their meaningful goals are. Like, the tough thing – if I just said "do these rotation activities," and they're like "eh, they're kind of hard to do and they're kind of annoying," you know, then they didn't do them, but if I had said, "do this, because it will help with your goal of your child getting in and out of the tub," then it adds that meaning to them, and maybe that leads to more compliance or more – compliance for home programming or for students maybe it makes meaning for them to really have that context for the information that's being shared." (Interview 3)

Within this conversation, Emily reflected on a previous teaching experience with a client and his parents and felt she may have been more successful in increasing their understanding of the clinical reasoning behind the topic chosen for her education session if she would have provided a connection to an occupation that was meaningful for the whole family. When explaining interactions with knowledge community members, client educators continually emphasized the importance of a client-centered mindset. This demonstrated the need to individualize interactions based upon clients and family members to provide a supportive social network to facilitate individuals' roles within and among the knowledge community as a whole.

The SCIL-OT does not specifically address the use of a client-centered mindset; however, the visual representation of the model reminded client educators to acknowledge all individuals involved within a client's care, thus validating knowledge community members' roles and experiences.

Emily continued explaining how the knowledge community element within the model was helpful in establishing a group identity and providing a collaborative dynamic. She stated, "the part that I really like and find really useful is this concept also of community of knowers and relating to participants, caregivers, whoever it is, management that I'm talking to, that we do have a group and we're kind of all in this together and we're collaborating and who else can we pull in that might be able to support" (Interview 3). She explained the importance of working with clients and families during pediatric treatment sessions by stating "it is important to go through the process with both the parents and the child so there is buy-in from both, the bigger component with pediatric settings is the process for the parents" (Worksheet 3).

### Confirmation and Disconfirmation of the Element, Knowledge Community, in the Model

Participant responses to the SCIL-OT illustrated a sense that the element of knowledge community assisted in enhancing their ideas of client-centered practice, which moves beyond the idea of knowledge community as defined in the model but confirms the utility of this element. The data showed strong connections between this element of the model and collaboration, client engagement, and buy-in from clients and families. On the other hand, one participant expressed that the model can be difficult to use if there are multiple family members involved within a child's care in pediatric settings. She explained that if there are different individuals with varying opinions on which occupations should be addressed, it would be difficult to move forward with planning interventions and education around the client's needs.

Throughout the interview process, it was evident that participants valued the use of client-centered practice when teaching. In their view, the model provided additional prompting to remain client-centered by delivering a way to visualize and better facilitate the connections between knowledge community members and help them understand their roles within teaching experiences. Developing this idea of client-centered practice was the participants' way of interpreting the emphasis on knowledge community. Instead of discussing the members within each knowledge community, one participant stated "just being client-centered is the most important, so these goals are the most important to them, so I think that stands out" (Melanie, Interview 2).

### **Topics as the Background in Teaching Experiences**

Hooper, et al. (2014) explained how topics can appear to be "stand-alone, generic content areas, but they are reconstituted into something new when conjoined with a profession's core subject" (p. 188). Specific skills or techniques taught to clients were coded as topics, and the way in which educators addressed topics did not seem to change as extensively as subject and knowledge community after being introduced to the SCIL-OT. However, topics were still important features within teaching experiences as they provided a focus for each education session. In other words, topics were the content areas addressed within teaching interactions that needed to be linked back to the core subject of occupation. Topics identified by client educators mirrored the idea of topics within the SCIL-OT, and they are listed in Table 4.

Table 4
Topics Identified by Client Educators

Technical Skills	Transfers, scapular mobilization, mobility, safety concerns, ADL compensatory	
	strategies, finances, dressing, bathing, teeth brushing, handwriting, drawing, tying,	
	riding a bike, playing on a playground, life skills, toileting, cooking, meal preparation,	
	transportation access & use, posture for safe feeding, hip rotation	
Soft Skills	Soft Skills Interpersonal communication, de-escalation, emotional regulation, community	
	reintegration, behavior management, participation, asking for and accepting help,	

	mental health and self-care, flexibility, collaboration, building rapport, therapeutic use		
	of self, advocacy, coping strategies, and social skills: social pragmatics, friendship		
	skills, reciprocal conversation, sharing information		
Informational	OT in the community setting, why OT is beneficial, importance of the planning phase		
	in treatment, disease processes, discharge preparation, rehabilitation process, recovery		
	process, sexuality, caregiver management, taking respite		

## **Unclear Topic/Subject Distinction**

When applying the SCIL-OT to teaching experiences, one client educator expressed she had difficulty delineating between topic and subject to which another client educator confirmed this challenge. This concern arose in the final interview when Emily explained how in some scenarios "the topic equals the skill" being addressed in the teaching interaction. Emily continued by explaining her idea that topic and subject "really mean a very similar thing to [her] outside of this model," and she felt as if the language used to explain the elements was not clear enough, leading to some confusion.

Client educators understood the concept of topic from different perspectives, which may have led to the difficulty separating topic from subject. For example, Melanie viewed topics as equivalent to the clients' "short term goals" (Interview 2). A topic, for example, may be increased range of motion while the subject, or long term goal, may be showering independently. Other participants saw topics as combinations of smaller components. For example, Janet explained she addressed topics such as "self-care in terms of taking respite" which is made up of "taking care of your mental health and physical needs" (Interview 2).

Janet explained further that topics in her community-based setting included "community reintegration and behavior management," (Interview 1) and Emma stated she addresses "the social pragmatic of things," especially in relation to "friendship skills" (Interview 1). Both of these examples show topics that are made up of smaller components which is not congruent with

what the element of topic was intended to portray when developed for the SCIL-OT. Topics within the model can be broken down further, but the visual representation was intended to be a clear depiction of content that is addressed within teaching interactions.

### Confirmation and Disconfirmation of the Element, Topics, in the Model

Client educators' explanations of topics within teaching experiences confirmed the importance of topic as an element within the SCIL-OT, as it provided the more explicit focus for teaching experiences. The primary disconfirming idea related to topics was therapists' perceived lack of distinction between topic and subject currently within definitions of the elements. For example, Emily stated "I found myself reading all these terms and ... trying to recall exactly the topic versus the subject" (Interview 3). When discussing the effectiveness of the title of the model, Janet stated "maybe just if there's more definition between subject and topic, then maybe leaving the subject there would be okay, and then just a differently-defined topic or do topic/skill" (Interview 3). Therefore, to be even more useful and applicable within client education, participants felt providing more examples when learning the model would be helpful to increase this understanding.

# **Teaching to Connect Subject, Topic, and Knowledge Community**

All elements within the SCIL-OT are to be intentionally linked during teaching, and when this occurs, it is referred to as what the research team considers teaching links or "teaching on the lines." Subject-centered education emphasizes three primary links that educators make with clients: links between the topics taught and how they relate to the core subject; links between the client and the core subject, emphasizing why the subject is important in the client's life; and links between the client and other members of the knowledge community.

Teaching links were coded and placed within categories specific to the elements addressed. The code for links was used when there were multidirectional impacts within elements. When determining themes, all links were analyzed first based upon their separate elements then compared altogether based upon the elements' interactions with one another. For example, Janet stated "at the older adult site, we work on de-escalation and emotional regulation with dementia" (Interview 1). In this instance, "the older adult site" was coded as practice setting under context, and "de-escalation and emotional regulation" were coded as topics. Because Janet added the reasoning for the connection between topic and practice setting (i.e. working with the dementia population), this was an intentional link made within the teaching session.

Many additional links made prior to learning about the model were coincidental. For example, Janet connected the practice setting and topic by stating "at the community reintegration site (setting), we focus on community reintegration and behavior management (topics)" (Interview 1). Emily also connected practice setting to subject by explaining there is a focus on self-care (occupation/subject) within the pediatric hospital (setting) (Interview 2). When explaining these connections, Janet and Emily did not illustrate an active effort made to link the elements of context and topic. These examples illustrated the idea that at the beginning of the interview process, client educators described unintentional connections between elements, in that elements coexisted rather than impacted one another through intentional linking. The examples also showed that these unintentional links were often made between two elements without bringing in the entire scope of the SCIL-OT.

After learning more about the model, intentional links were made more often and incorporated multiple elements, which provided a more comprehensive use of the SCIL-OT within teaching experiences. When applying the SCIL-OT in practice, Janet used a visual

representation of the model to facilitate a client in making her own connections between elements to reach her goal of finding a volunteer position (occupation). Janet stated in using the SCIL-OT, the "organization helped create a flow between the components of tasks and community of knower while creating links back to occupation" (Worksheet 1). Being able to provide connections between all of the elements was helpful for this client in making progress toward a client-centered goal. Together, Janet and the client identified current and necessary supports within the knowledge community along with topics that would be beneficial before moving forward in applying for a volunteer position, which was the occupation being addressed.

Teaching links within the model were intended to show deliberate connections made by client educators between elements. Teaching links were seen as valuable, because providing connections for clients and families can facilitate understanding of what is being taught in educational interactions. When client educators used the SCIL-OT in teaching interactions, they integrated intentional links more often and among all elements of the model. This helped promote a better understanding of the client educators' clinical reasoning processes to justify the focus of each session.

### Intentional Links Back to Occupation added Meaning for the Client/Family

Participants emphasized the importance of linking topics and members of the knowledge community back to the central subject of occupation. Remembering to explain how teaching experiences applied to clients' daily occupations provided a way for clients and families to identify the meaning behind what they were taught. Some participants explained how occupational therapists commonly underestimate the amount of clinical thinking that goes into everyday practice, especially how individual topics relate to the client's larger occupational outcomes. They explained that thinking through the SCIL-OT within teaching experiences was

helpful to guide the explanation of why the therapist was implementing certain strategies or recommendations. Janet explained:

"We know a lot of things and we take it for granted that a lot of these things are very straightforward or simple, but they're not. And so I like how kind of breaking things down does kind of prompt you to reflect on all of those pieces. Even if it's something we've done every week for several years, we're still going to get the same questions sometimes and we're still -- there are going to be things that aren't as clear, and we need to be able to make that connection. And I think the model does reflect that process of continuing to remind us that even the things that we might think are simple or should be kind of commonly known aren't -- that isn't necessarily the case, and a reminder to link it back to why we're doing it and be able to articulate that for people." (Interview 3)

She expressed that being able to connect the SCIL-OT elements in teaching experiences provided "clear links of why" she chose interventions "and how it's a piece of something bigger" (Janet, Interview 3). She went on to explain the value of clinical reasoning by stating occupational therapists "have a real kind of idea ... of why [an intervention] would be helpful" (Interview 3) and emphasized the importance of the therapists' responsibility to explain this reasoning.

Emily expressed the importance of remembering to step back from the skills (topics) being addressed in sessions in order to provide explicit links to occupation for clients and families. She explained that when using the SCIL-OT, meaning was incorporated into teaching interactions because of the explicit links being made to connect the skills being addressed in practice back to client-centered occupations. She explained:

"Teaching on the lines and teaching the connection back to occupation. I think that's really a great way to frame this and to frame our education, because I think so often, it can be easy to get into skill building and not relating it back to what's most meaningful for the patient and for the family, and so I really like those ideas and that terminology that you're using of teaching on the lines. I think it really is going to add meaning to the education that we're doing." (Interview 1)

Therefore, when engaging in client education, the SCIL-OT reminded Emily to continuously make connections evident for the client and family members to explain her thought processes and reasons for choosing intervention strategies. Thus, making these connections

added meaning to the methods Emily chose because they clearly related to the client-centered occupations at the core of the teaching experiences.

### **Client Educators used Instructional Processes to Make Teaching Links**

Instructional processes are defined as formal and informal educational approaches, including assessment of learning and assessment of perceived learning, and they were coded due to their impact on the educational experience. Client educators explained that they chose instructional processes based upon the knowledge community, setting, or topic being addressed. Instructional processes were coded when client educators identified specific teaching approaches used within client education, and they were most frequently coded in the first round of interviews. Table 5 shows the instructional processes coded in the data along with their intended topics, subjects, or knowledge community members.

Table 5
Instructional Processes Identified in Teaching Experiences

Practice Setting	Instructional Process	Topics	Knowledge Community	Subject
	Modeling & Reflection	<ul> <li>Specific concerns regarding the practice setting</li> <li>The role of OT in the community setting</li> </ul>	Staff & Student Interns	"I want everything to look functional" (Janet, Interview 1)
Community – Based Practice	Mini-labs	Techniques, such as transfers & scapular mobilization	Student interns	Not addressed by client educator
Based Practice	Support Groups & Tip Sheets	<ul><li>Accepting help</li><li>Self-care</li><li>The disease process for Dementia</li></ul>	Caregivers of adults with Dementia	Finding life balance
	Cooking Group	<ul><li>Planning</li><li>Shopping</li><li>Making meals</li></ul>	Community based younger adults	Cooking
Inpatient Rehabilitation	Honesty & Encouragement  Patient Engagement:	<ul> <li>Realistic goals</li> <li>Patient empowerment</li> <li>The recovery process</li> <li>Compensatory strategies</li> <li>Discharge plans</li> </ul>	Individuals with Spinal Cord Injury & Traumatic Brain Injury	Not addressed by client educator

	open-ended questions, reflection, and summarization  Skill-based Teaching	<ul> <li>Specific skills or routines, such as bowel programs</li> <li>Struggles</li> <li>Caregiving</li> <li>ADL compensation</li> </ul>	Patients & Caregivers	"How can they manage at home by themselves? How can they coordinate their day?" (Melanie, Interview 1)
	Folders & Handouts  Collaborative	<ul> <li>Setting goals</li> <li>Communication with staff</li> <li>Setting goals</li> </ul>		,
	process:  keeping an open and supportive line of communication	Planning treatment	Parents	N/A
Pediatric Hospital	Motivational Interviewing	<ul><li> Critical thinking</li><li> Problem solving</li></ul>		Getting "through the day" (Emily, Interview 1)
	Teaching on the lines of the SCIL-OT	<ul> <li>Self-care: dressing, bathing, brushing teeth</li> <li>Handwriting</li> <li>Drawing</li> <li>Typing</li> <li>Riding a bike</li> <li>Playing on the playground</li> <li>Social interactions</li> </ul>	Children & Caregivers	"What's most meaningful for the patient and for the family" (Emily, Interview 1)
Alternative School	Therapist Facilitation of: groups, role play, community outings, social stories reflection	<ul> <li>Rules of conversation</li> <li>Social pragmatics</li> <li>Friendship skills</li> <li>Sharing information</li> <li>Reciprocal conversation</li> <li>Bus etiquette</li> <li>Personal space</li> </ul>	Students	Social skills

# Confirmation and Disconfirmation of the Element, Teaching Links, in the Model

Client educator responses to teaching links confirmed the importance of this element within the SCIL-OT. The model was seen as a strong visual reminder to create intentional links to the core subject of occupation. When the occupation was client-centered and chosen by the clients or family members, client educators expressed there was an added element of meaning embedded within the teaching experience, thus enhancing involvement and engagement of the

client constellation. There was a clear shift in data showing growth from unintentional links made by client educators to links that were multifaceted and were created with the intention of connection the clients and family members back to a meaningful occupation.

### **Suggestions for the Model Based on Findings**

# Context as a Backdrop for the Model

A common idea mentioned throughout the data was the idea of context as a backdrop for teaching experiences. Sub-codes were created to account for practice setting and client population commonly noted by client educators prior to identifying instructional processes, topics, or occupations. In other words, there were many occasions when client educators discussed their practice setting as a way to justify the reasoning for choosing a particular topic or subject. As mentioned previously, Janet explained how subject and topic differ between the community integration and older adult sites. Although this could be attributed to the client populations seen at each site, each practice setting has a unique knowledge community depending on its characteristics, which should be valued within the teaching experience.

Melanie explained how her practice setting influenced her work by stating "the majority of the families are ... in-house so [she prepares] the families for discharge to take their family members home" (Interview 1). Due to the nature of her setting, inpatient rehabilitation, she must focus on the transition home following discharge, where the practice setting after discharge would hold a different focus. One element of context that was frequently identified was time allowed with patients among practice settings, which impacted the therapist's approach to teaching interactions. Melanie stated her team does not "have the gift of time because of insurance pressures and everything" since patients arrive "within a week of being injured these days" (Interview 1). She explained further that this means teaching is something her team does

not "have the luxury of time to work through" (Interview 1). On the other hand, Emma explained her role in an alternative school.

"I have the benefit of working with [students] for a long time. We have long established relationship, it's not a short-term therapy at all, so I have time to have them make mistakes and come back to that. And also, I'm not restricted by service delivery. I'm not restricted by necessarily reimbursement and things like because it's a non-public school. The way that our program works is we are embedded in the curriculum. Our services are not direct reimbursed. I don't have to submit for each hour that I spend with each kid. So if some kids needs me all day or for three hours instead or something like that, then I'm able to do that and be a little more flexible with my delivery." (Interview 1)

Emma's description of her practice setting provided a clear depiction of the influence her context holds over teaching interactions. She explained that she is not limited on time, so she is able to provide as much direct service as she feels is necessary, and she works with the same students for long periods of time, allowing her to build relationships and try different approaches to facilitate success. These are only a few examples of how client educators provided information regarding their practice setting in relation to their choices in instructional processes, topics, or subjects being addressed. Therefore, whether embedded within the model or not, this will be an ever-present element within client and family teaching interactions.

### **Delineation of Topic and Subject**

The primary suggestion expressed by client educators to modify the model for the practice setting was to provide more distinction between the elements of topic and subject. The differentiation of topic and subject in practice was blurred for some participants, which made it difficult to maintain a consistent focus on each client's needs. To counteract this challenge described by client educators, providing more clear examples of each element when teaching the model would support a stronger understanding of the model. The SCIL-OT was originally developed for academic education in which the term "topic" naturally flowed with the idea of a teaching interaction. However, within client education, participants discovered they commonly equated the terms "topic" and "skill," which means combining the two terms on the visual

representation of the model (i.e. "topic/skill") would ensure the SCIL-OT remained consistent with its terminology among academic and fieldwork education while providing the clarity needed for client educators to understand the true nature of topic versus subject.

It may be beneficial for future materials to include an example model completed with elements specific to the client educator's educational context. Due to the variation in occupational therapy practice settings, seeing a visual representation of the SCIL-OT specific to the context may provide a way to bring focus to the separation in topic and subject. This could reduce misunderstandings or confusion when discussing the difference between topic and subject.

#### **CHAPTER 5: DISCUSSION**

The findings gave way to three common threads. Client educators expressed that using the SCIL-OT within teaching interactions 1) incorporated meaning, 2) strengthened client-centered approaches, and 3) increased engagement by clients and family members. These concepts all fit within Molineux's (2009) five proposed characteristics of occupation: "active engagement, purpose, meaning, contextual, and human" (p. 19). To explain further, the findings illustrated the importance of client engagement in meaningful activities, which makes up the human nature of occupation. The incorporation of personal engagement and meaning into client education demonstrated the ability of the SCIL-OT to facilitate teaching interactions across practice settings when incorporated by client educators.

# **Linking Teaching to Occupation Provided Meaningful Client-Centered Education**

Within the preliminary findings, data showed that the SCIL-OT added meaning to teaching experiences for clients and educators, which could be due to the explanatory validity of the SCIL-OT, or "the extent to which a set of concepts is adequate to explain the body of data" (Brinberg, 1982, p. 43). Client educators were involved in educational interactions prior to learning about the SCIL-OT, but the model provided a visual representation of the components making up these experiences. In other words, it served as a road map illustrating the guiding elements that were present but taken for granted by educators. Some client educators reported a sense of everyday practice becoming routine but explained that the model acted as a visible reminder to make explicit links between members of the knowledge community, topics, and the occupation being addressed.

The SCIL-OT also added meaning to teaching experiences due to the connections being made to a patient's life, which is strongly supported in the literature. Molineux (2009) explained occupations are purposeful and meaningful, demonstrating the idea that individuals are connected to their occupations. Townsend (1997) suggested that even the words associated with occupations are meant to try and capture the personal connection within their nature. Therefore, centering educational interactions on client preferences and interests provided rich and meaningful experiences to which patients could find personal connections.

The focal point of the SCIL-OT is the placement of the subject of occupation at the center. When looking at the shift in use of the subject in client educator explanations of teaching interactions, the occupation-focused model facilitated a transition from broad combinations of occupations to more individualized, client-centered experiences. This is supported by the perspective that occupations are meaningful to clients and families, so when a client educator is focused on occupations specific to a client's life, a client-centered lens is automatically implemented. Jackson (1998) explained this concept further by stating therapists who center practice on occupation "are more apt to be synthesizers, viewing the patient as an occupational being" (p. 472). The SCIL-OT has a clear focus of occupation at the center of teaching experiences, which could be the reason the model supported client-centered approaches when used in practice.

Occupation cannot be defined without the incorporation of the individual with whom it is attached, which further confirms the idea that to be occupation-centered is to be client-centered. Although there are many ways to define occupation, many of its explanations emphasize the active experience of the person involved within the activity (Pierce, 2001; Townsend, 1997; Molineux, 2009). Therefore, occupation cannot be defined without a human element, and an

activity can only be considered an occupation when there is a client experiencing and receiving meaning from the activity itself.

The incorporation of meaning into teaching experiences was a strong finding of the study, as it was experienced by the clients and educators. When clients make personal connections, information can be better interpreted and internalized, thus enhancing the abilities of clients to follow through and understand the whole of each teaching interaction. Ryan and Deci (2000) explained that motivation and relevance must be present in order to foster a sense of competence. They continued by explaining that positive client outcomes are associated with the internalization of treatment sessions and information provided by therapists. Therefore, when taking on a client-centered perspective, client educators are more likely to facilitate meaning and connection within teaching interactions, confirming Ryan and Deci's idea that "relatedness, the need to feel belongingness and connectedness with others, is centrally important for internalization" (p. 73).

When guiding educational interactions based upon the SCIL-OT, client educators reported an increased level of engagement by clients and family members. I believe this is due to the focus on client-centered occupations and the visual reminder from the model to make explicit connections for clients and families. The literature explained there is significant meaning associated with occupation, which can be the reason occupation-centered education engages clients and family members in their own care. Jackson (1998) explained meaning experienced through occupation enhances self-identity, which suggested occupation ties in with individual uniqueness. Jackson suggested that fostering self-identity "challenges the physical, cognitive, psychological, symbolic, and transcendental components of the person," (pp. 471-472) illustrating that a focus on occupation incorporates a full body experience. Therefore, a sense of

motivation and purpose are embedded within client education when addressing occupations that are innately meaningful to the individual and contribute to the development of identity.

Friedland (1998) supported the idea that client-centered teaching facilitates a sense of meaning and ownership of experiences when explaining client-centered approaches foster individuality and self-fulfillment. The SCIL-OT takes on a client-centered lens due to its focus on occupation, which supports the development of identity and self-perception, thus leading to engagement. Engagement is a construct so deeply embedded within occupational therapy practice that client educators help create the lives of their clients when they take on the charge of addressing client-centered occupations (Peloquin, 2005). The perspective that occupational therapists co-construct the lives of their clients supports the finding that there is a natural collaborative component within occupational therapy. This collaboration ties back to the idea of occupation-centered practice evoking client-centered practice due to the focus on addressing activities that are innately meaningful to the client.

Eakman (2015) explored the idea of meaning within occupation and stated meaning is incorporated into activity when a client is motivated to participate in an occupation. This supports the personal connection made by clients to teaching experiences when centering the focus on a client-centered occupation. Eakman acknowledged the "motivating power of emotion" (p. 319) that can be found within occupation, which supports the idea that the meaning of occupation is the driving force of the emotions tying clients to their chosen occupations.

It is impossible to connect to occupation without also promoting active engagement. Indeed, the very definition of occupation includes engagement, investment of attention, use of energy, and active involvement in society (AOTA, 1997; Molineux, 2009; Townsend, 1997). Eakman (2015) explained further that supporting independence and belonging incorporates

meaning within therapeutic interactions. Therefore, since the SCIL-OT is centered on the core subject of occupation, there is also a focus on client-centered practice, which naturally enhances the meaning and increases engagement within teaching interactions.

#### Confirmation and Disconfirmation of the SCIL-OT in Client Education

This study was developed as part of the confirmation/disconfirmation stage of the theory building process. Lynham (2002) explained this stage of the theory-building process works through the development, implementation, and assessment of conceptual ideas to determine their applicability in practice. Although most of the constructive feedback within the data was confirming to the use and applicability of the SCIL-OT in practice, there were a few areas that stood out to participants as needing improvement or not as helpful within the education process. For example, participants expressed difficulty understanding the difference between topic and subject due to the ideas becoming intertwined and difficult to separate. Finally, participants within the study did not always see themselves as educators. One participant explained she felt more like a facilitator when she stated:

"I see it more as facilitation in terms of the fact that I want to set it up so that my client doesn't know really that I had anything to do with it; that I was there just to support and do that, but it was their idea and their doing, to the greatest extent that I can where they feel that they are the ones in control, that they are the ones that have discovered it as opposed to me teaching them." (Emma, Interview 1)

Emma's experience showed how the nature of her practice setting impacted the amount of freedom she had to develop her therapeutic creativity and practice based purely upon her clinical reasoning skills. The impact of context or practice setting upon teaching experiences relates to the suggestion of context as an overarching element within the model due to the impact the practice setting has upon all elements of the SCIL-OT. Table 5 illustrated this further, and the impact of practice setting supports the idea that context-specific examples of the SCIL-OT would

be beneficial in helping client educators more easily understand and apply the model within their individual contexts.

### **Future Implications**

### **Implications for Practice in Providing Client Education**

The experiences expressed by client educators showed that interactions occurring within the SCIL-OT are often existent within the mind of the occupational therapist providing client education. Because these connections and clinical reasoning become routine over time, the visual representation of teaching interactions within the model provided a reminder for client educators to provide explicit links between the teaching interaction and the meaningful, client-centered occupation at the center of the experience. Therefore, client educators can use the model to guide them in implementing teaching links to help incorporate meaning for clients and families within teaching interactions.

An additional consideration is that many occupational therapists do not see themselves as educators – instead, they perceive their roles to be closer to facilitators or therapists focused on interventions and recovery. Because of this, the model can be taught to practitioners to help make the educator role more explicit and to clarify some of what the role entails. When teaching practitioners about the model, it would be helpful to provide more examples of how the SCIL-OT elements apply in different practice settings. This would help practitioners more clearly understand the difference between elements, thus making the model easier to apply.

#### **Implications for Research**

Lynham (2002) explained that the final step within the theory building process, and that which follows confirmation/disconfirmation, is the stage of execution and refinement. Although

the findings from this study largely confirm the utility of the SCIL-OT within client education, a similar study with a larger group of client educators would be beneficial to further understand the generalizability of the findings. Most of the client educators in this study practiced in the same geographical location, which may keep the findings from being consistent with other locations. It would also be fitting to look at the utility of SCIL-OT across practice settings to determine if the model fits better within certain contexts.

Further research could be completed on the impact of changes recommended by client educators, including the shift of topic to topic/skill, along with the implementation of context as an overarching element. One example of a beneficial study would be to teach the SCIL-OT to a new group of client educators and replace the element of topic with the suggested topic/skill. The data could then be compared with data from this study to determine if the shift in language helps client educators better understand the differentiation between topic and subject when applying the model in practice.

#### Limitations

The primary limitation within this study was the decrease in participants throughout the research process. There were originally five exemplar client educators, but only two participants completed all three interviews. The challenge with maintaining contact with client educators may have stemmed from time limitations placed upon occupational therapy practitioners. There was also the possibility that client educators did not feel comfortable disagreeing with the model. The principal researcher, who developed the model, was present during many of the interviews, which could have prevented client educators from providing disconfirming statements explaining their experiences with the model. A limitation of the research process could be the use of a deductive analytic approach to interpret experiences of client educators. Codes were defined and

applied based upon their representation of the model which could have misrepresented concepts when applying them to the language of client educators. In other words, data were coded based upon language from the model which may not have matched language used by client educators to describe their teaching interactions.

#### Conclusion

When client educators incorporated the SCIL-OT into teaching interactions with clients and families, they discovered an increase in meaningful, client-centered, and occupation-centered educational experiences. Although a client-centered approach is emphasized within the profession of occupational therapy, client educators explained that the routines of day to day practice can overshadow the intention of connecting with clients and families during teaching interactions. The SCIL-OT acted as a visual aide for client educators to illustrate the components within educational experiences, thus reminding therapists to make intentional connections between the knowledge community, topics, and subject.

Connecting clients with occupation-centered education corresponds with the value Meyer (1922) placed upon occupation as he explained it is the essential way through which "man learns to organize time" (as cited in Molineux, 2009, p. 9). Molineux provided additional insight to the truly complex nature of occupation by stating:

"Although much energy is expended in trying to find a universal definition of occupation, it is probably more fruitful to have a shared understanding of the *nature* of occupation. This will ensure occupational therapists have a basis on which to discuss their work with individuals, groups, and communities. Furthermore, it should ensure that when working with people the complexity of occupation will not be forgotten." (p. 24)

The various explanations of occupation and the profession of occupational therapy illustrated the intricacies and complexities that impact client education within teaching interactions. There are many definitions of occupation and various skill sets brought out within

practice, such as acting as artist and scientist simultaneously (Peloquin, 2005). Jacobs (2012) added the role of communicator to practitioner responsibilities by explaining it is necessary for occupational therapists to "effectively communicate that occupation is essential to individuals' and society's health and well-being" (p. 653). Because of the various roles an occupational therapist can play within a client's life, practitioners are encouraged to explain their thought processes without assuming patients and families understand the "why" of their focus within education sessions.

Reed (1986) carried an emphasis on this clear communication with clients when she stated that the why and how of therapeutic interactions must always be addressed. She communicated to her audience that it is not only important to clearly communicate the methods and processes within teaching experiences, but client educators need to be sure methods and media being used align with the basic tenets of occupational therapy practice. Therefore, the SCIL-OT responds to Reed's call by providing intentional links between topics or skills and the core subject of occupation in each teaching interaction. To remain client-centered and communicate these links, the SCIL-OT surrounds the teaching interaction with the knowledge community to ensure the needs of clients and family members are valued and are explicitly connected back to occupation.

As I personally move from the role of a student to occupational therapy practitioner, the findings from this study will guide my future practice. The examples and experiences provided by client educators demonstrated how even the slightest shift in language can incorporate a new level of meaning for clients and families. My academic education emphasized the driving force of meaningful and purposeful activities within occupational therapy, but analyzing how client educators within this study were able to use the SCIL-OT to make teaching interactions

meaningful and engaging for clients and families has given me a stronger grounding in how to take on the role of client educator in my future practice.

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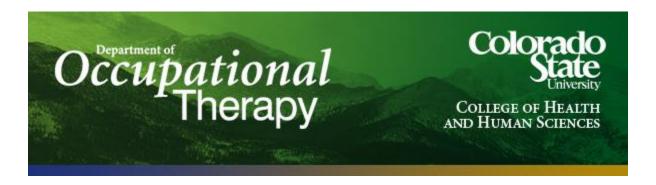
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#### APPENDIX A: INVITATION TO PARTICIPATE



## Exploring the Applicability of a New Model of Occupational Therapy Education (MOTE) in Four Learning Contexts

Dear		
Dear		

Because you were nominated by Patty Stutz-Tanenbaum or your supervisor as an exceptional client/family educator in occupational therapy, we would like to invite you to participate in a research study entitled, *Exploring the Applicability of a New Model of Occupational Therapy Education (MOTE) in Four Learning Contexts*.

This model is an occupational therapy-specific teaching and learning model. Its purpose is to guide the conceptualizations, learning outcomes, and instructional processes that OT educators employ to help students and clients learn. Due to a paucity of OT-specific education models, education may fall short of helping learners organize all the topics they must learn. Therefore, this study seeks to move the Model of Occupational Therapy Education beyond the conceptual phase of theory-building in applied disciplines (Lynham, 2002). The study uses participatory research methodology to draw upon OTs in education to review, critique and hone the definitions and interrelationships of the model's concepts. The primary research questions for the study are: 1) How do occupational therapy educators experience the concepts and transactions of the MOTE? 2) How does the model guide educators in designing and implementing learning experiences? 3) What are the limits of the model and what recommendations do educators have for its refinement?

If you choose to participate in the study, you will be asked to participate in three 60-90 minute conference calls with the research team and 4-5 other educators like yourself. The focus of the group interviews will be: 1) your approaches to teaching clients/families, 2) the Model of Occupational Therapy Education and your responses, critiques, and suggestions for the model, 3) Share your experiences and recommendations after attempting to implement the model in your teaching practices.

Your participation is highly valued and important for the progress of this research. We sincerely hope you will choose to participate, though your engagement is completely voluntary. To let us know of your interest or to ask further questions regarding the study, please contact Barb Hooper at <a href="mailto:barb.hooper@colostate.edu">barb.hooper@colostate.edu</a> or 970-491-1325 by Thursday, April 30, 2015. If you choose to participate, please complete and return the attached consent form. Upon receipt, we will contact you to schedule the focus group.

Sincerely,

Barb Hooper, PhD, OTR, FAOTA Associate Professor of Occupational Therapy Colorado State University

Amanda Zorn – CSU OT Graduate Student

#### APPENDIX B: CONSENT FORM

## Outside Consultant Consent to Participate in a Research Study Colorado State University

TITLE OF STUDY: Exploring the Applicability of the Model of Subject-Centered Integrated Learning for Occupational Therapy in Three Occupational Therapy Education Contexts

PRINCIPAL INVESTIGATOR: Barb Hooper, PhD, OTR, FAOTA

Barb.Hooper@colostate.edu

STUDENT INVESTIGATORS: Devin Barth (dbarth@rams.colostate.edu)

Addy Brown (addbrown@rams.colostate.edu)
Amanda Zorn (Amanda.Grigg@rams.colostate.edu)

WHY AM I BEING INVITED TO TAKE PART IN THIS RESEARCH? You are being invited to participate in this study because you are recognized as an educator in occupational therapy (OT) either in academic, fieldwork or client/family education contexts.

WHO IS DOING THE STUDY? Dr. Barb Hooper is the Principal Investigator for this study. She will lead a team of four occupational therapy student researchers, three of whom are completing their thesis in partial completion of their Master of Science degree in occupational therapy and one is completing this study as one phase of doctoral research.

WHAT IS THE PURPOSE OF THIS STUDY? The purpose of this study is to further develop the Subject-Centered Learning Model for application in OT education.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST? This study will involve occupational therapy educators internationally. It will take place over the telephone and through web-conferencing. In total, the study will involve up to 5 hours over a time period of 1-2 years.

WHAT WILL I BE ASKED TO DO? You will be asked to participate in three group conference calls/interviews with the research team and a small group of educators doing similar work as you. The focus of the group interviews will be: 1) your approaches to teaching students or clients/families, 2) the Subject-Centered Learning Model and your responses, critiques, and suggestions for the model, 3) Share your experiences and recommendations after attempting to implement the model in your teaching practices. All three of these sessions will be audiotaped and transcribed.

ARE THERE REASONS WHY I SHOULD NOT TAKE PART IN THIS STUDY? If you do not have: a substantial role in teaching students or clients/families at this time, access to technology to enable you to participate in focus groups with participants in diverse geographical locations, if you are not willing to participate in three focus groups or if you are unwilling to be audiotaped.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS? It is not possible to identify all potential risks in research procedures, but you may experience discomfort or fear or worry when asked to share openly about your teaching and to offer contradictory viewpoints on the model under investigation. Every effort will be made to create an open, comfortable environment for dialogue.

ARE THERE ANY BENEFITS FROM TAKING PART IN THIS STUDY? The ultimate aim of the study is to improve the quality of OT education across learning contexts. There is no known benefit for participating, but we hope that contributing to this endeavor could be professionally satisfying and meaningful. Also your own teaching practices may be more deeply affirmed through the study and the study may provide new insights and approaches for your teaching.

DO I HAVE TO TAKE PART IN THE STUDY? Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled.

WHO WILL SEE THE INFORMATION THAT I GIVE? Only the PI and student investigators will have access to the audiotapes and their written transcriptions. We will keep private all research records that identify you to the extent allowed by law. All research records will be kept for at least three years and up until the data are published. We may be asked to share the research files with the CSU Institutional Review Board ethics committee for auditing.

Your information will be combined with information from other people taking part in the study. When we write about what we learned from the pilot study we will write about the combined information we have gathered. You will not be identified in these written materials.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. For example, your name will not be kept with your research records and your record will be stored under lock and key.

WILL I RECEIVE ANY COMPENSATION FOR TAKING PART IN THIS STUDY? You will receive a \$25 electronic gift card for participating in this study. Your identity/record of receiving compensation (NOT your data) may be made available to CSU officials for financial audits.

WHAT HAPPENS IF I AM INJURED BECAUSE OF THE RESEARCH? The Colorado Governmental Immunity Act determines and may limit Colorado State University's legal responsibility if an injury happens because of this study. Claims against the University must be filed within 180 days of the injury.

WHAT IF I HAVE QUESTIONS? Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, Barb Hooper at 970-491-1325 or barb.hooper@colostate.edu. If you have any questions about your rights as a volunteer in this research, contact the CSU IRB at: <a href="mailto:RICRO\_IRB@mail.colostate.edu">RICRO\_IRB@mail.colostate.edu</a>; 970-491-1553. We will give you a copy of this consent form to take with you.

Your signature or electronic signature acknowledges that you have read the information stated and willingly sign this consent form. Your signature also acknowledges that you have received, on the date signed, a copy of this document containing 2 pages.

Signature of person agreeing to take part in the study	Date	
Printed name of person agreeing to take part in the study		
Name of person providing information to participant		Date
Signature of Research Staff		

#### APPENDIX C: INTERVIEW PROTOCOL

# **Exploring the Applicability of the Model of Learning Human Occupation in Four Occupational Therapy Education Contexts Guiding Questions for Focus Groups**

## I. Before the first meeting, send information on:

View of learning that we are coming from

Preparation of a scenario from interview protocol

Consider your role as an educator/instructor

Share with them what we see as their role in this research project

## II. Phase One: Educators' Views of Best OT Education Practice

- a. Data Collection Method: Focus Group interviews
  - **i.** Spend time setting up the process:
    - 1. Thanking them for participating
    - 2. Introductions
    - 3. Review consent form and ask for any questions
    - 4. Explain the process
  - **ii.** [We will have sent them ahead of time a "cheat sheet" on our stance toward teaching and learning: We understand teaching to be......] Ask here if they have questions about the information they received.
  - **iii.** Interview Questions [these prompts will have been sent ahead of time. Each person gets 10 minutes to tell their stories]:
    - 1. Describe the scenario from your own teaching practice that you felt went very well and that left you feeling very satisfied.
      - a. If they don't go there, ask What was most satisfying about that experience?
    - 2. Describe the scenario from your teaching that left you feeling dissatisfied.
      - a. If they don't go there, ask What was most dissatisfying about that experience?
    - 3. Researchers listen for and note the following:
      - a. What learning outcomes were they concerned with?
      - b. How did they set up the learning experience to achieve those outcomes?
      - c. How did they implement the learning experience?
      - d. How did they know what the outcomes were for the students?
      - e. What theories or concepts guided teaching?
      - f. What other factors influenced teaching?
      - g. others

b. Data Analysis: Qualitative analysis focused on mapping practitioners scenarios to the domains and concepts, and their interrelationships, of the Subject-Centered Learning Model

## III. Phase Two: Initial Presentation and Discussion of the Subject-Centered Learning Model

- **a.** Data Collection: Focus group
  - i. Group Process & Structure
    - 1. Member checking from first interview
    - 2. Presentation of the Subject-Centered Learning Model by academic-researchers
    - 3. Opportunity for clarifying questions from participants (practitioner-researchers and academic-researchers)
    - 4. Initial confirmation/disconfirmation of the Model by (practitioner-researchers and academic-researchers):
      - **a.** In what ways does the model represent or not represent what you do in teaching?
      - **b.** How could you see using the model in your next teaching session.
    - 5. Explain the worksheet and ask them to complete after 6 teaching sessions.
  - **ii.** Data Analysis: Qualitative analysis completed by academic-researchers focused on confirming and disconfirming the Model's domains and concepts and their interrelationships
- **b.** Data Collection: Worksheet to record each education session and email prior to next focus group.

## IV. Phase Three: Confirmation and Disconfirmation of the Subject-Centered Learning Model

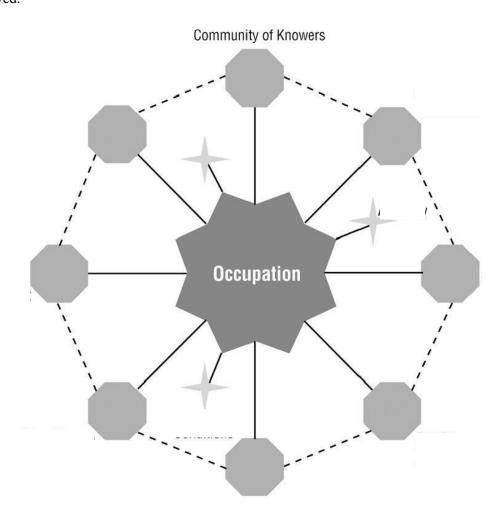
- a. Data Collection: Focus group
  - i. Group Process & Structure
    - 1. Guided Discussion Questions related to Having used the model as a guide for teaching:
      - a. Review worksheets and use as basis for initial teaching stories.
      - b. What are the strengths of the model?
      - c. What are the limitations of the model?
      - d. What implications for teaching does the model have?
      - e. In what ways can the Subject-Centered Learning model be improved?
    - 2. Guided Discussion Questions related to enhancing the model:
      - a. What learning outcomes best fit the model/which do not?
      - b. What teaching strategies best fit the model/which do not?
      - c. What learning outcome measures fit the model/which do not?
    - 3. Guided Discussion Questions related to Application of the model:

- a. Having now become familiar with the model, are there ways in which you would like to change your teaching?
  - i. If so, how? Why do you believe these changes are important?
  - ii. If not, why not?
  - iii. What would your use of this model be?
- 4. Reflecting back on our first interview, has your understanding of occupational therapy teaching practices or approaches changed in any way?
  - a. If so, how and why?
  - b. If not, why?
- 5. Member Checking: Review of key points of discussion

## APPENDIX D: SCIL-OT WORKSHEET

## **Subject Centered Integrative Learning Model Research Worksheet**

Please label the topics and the members of the community of knowers that this teaching session involved.



Explain how you prompted the link between the topics and the subject of occupation:

Explain how you prompted the links among members of the community of knowers:

Explain how you prompted a direct and personal connection between the learner/s and occupation:

What were your observations of the teaching/learning process related to the elements/interactions of the model?